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Adi EFAL-LAUTENSCHLÄGER

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Le chemin vers la philosophie :
la synthèse méthodique dans les écrits cartésiens
de Johann Clauberg

The way to philosophy:
Methodical synthesis in the Cartesian writings of
Johannes Clauberg

Directeur de thèse : M. Édouard MEHL

Jury

Mme Antonella DEL PRETE	Professore associato, Università della Tuscia, Viterbo	Rapportrice
Mme Sophie ROUX	Professeure, ENS-Paris	Présidente du jury
M. Mogens LAERKE	Directeur de Recherche CNRS, ENS-Lyon	Rapporteur
M. Philippe HAMOU	Professeur, Université de Paris Nanterre	Examineur
M. Édouard MEHL	Professeur, Université de Strasbourg	Directeur de thèse

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Résumé

La thèse propose une lecture des écrits philosophiques de Johannes Clauberg (1622-1665), menée sous l'angle de la question de la méthode philosophique. L'ouvrage situe la philosophie de Clauberg au sein du genre conceptuel du « methodisme, » un ensemble d'œuvres appartenant à la philosophie de la première modernité, dont le point de capiton historiographique est, sans doute, la philosophie de René Descartes. Le genre conceptuel du methodisme suggère une thématique de discussions autour du concept de la méthode, un questionnement qui n'est pas identique à une épistémologie générale. Nous définissons la manière dont le cartésianisme de Clauberg se forme aussi par l'impulsion méthodique qui n'est pas exclusivement cartésienne. Dans notre lecture des écrits claubergiens, la définition de la démarche philosophique est soulignée. En plus, nous suggérons que le methodisme de Clauberg est capable d'offrir une version unique de la méthode, dans laquelle les stades préalables de toute métaphysique, lesquelles qu'on voudrait traiter comme proto-philosophiques, reçoivent une ampleur déterminante. Nous commençons par une reconstruction du genre conceptuel du methodisme, en nous concentrant sur les XVIe et XVIIe siècles. Les deux modèles opposés du methodisme du XVIe siècle sont décrits : le methodisme de Petrus Ramus (1515-1572) et le methodisme de Jacopo Zabarella (1533-1589). Nous montrons que les concepts de l'analyse et de la synthèse sont essentiels au genre conceptuel du methodisme. En d'autres termes, il n'y a pas de discours sur la méthode en tant que genre conceptuel de la première modernité sans une discussion explicite sur l'analyse et la synthèse. Nous poursuivons par un rappel de la nature de la méthode cartésienne, posant au centre de l'enquête la question du savoir-faire méthodique. Nous discutons ensuite de plus près la méthode claubergienne, comparée au modèle de la méthode tel qu'on la reconstruit à partir des écrits antérieurs du genre conceptuel du methodisme. Nous démontrons la structure complexe d'analyse et de synthèse trouvée dans la philosophie claubergienne. Nous discutons de la nature analytique du doute et de la nécessité de l'étapes synthétique dans la méthode claubergienne. Sur cette base, nous construisons une description des aspects synthétiques de la philosophie de Clauberg : figuration, compréhension (*Verstehen*) et pédagogie thérapeutique, compris ensemble comme générant une proto-philosophie. Nous concluons l'enquête en proposant un modèle synthétique de la méthode claubergienne, en mettant en relation les éléments que nous avons étudié au cours de notre enquête.

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Introduction : les questions à aborder

1. Le « cas Clauberg »

Ce travail se consacre à un examen des principes de la méthode dans les écrits de Johann Clauberg. La vision habituelle de la philosophie de Clauberg est qu'elle propose une synthèse entre le cartésianisme et l'aristotélisme ;¹ néanmoins notre travail pousse vers une définition plus étroite du style philosophique claubergien. Il souligne la place des maîtres de Clauberg (directs et indirects) sur la formation de sa réception du cartésianisme. Il faut ainsi se rapprocher de la génération des philosophes allemands travaillant dans les premières décades du XVII^e siècle, adhérant aux styles philosophiques du « ramisme » et du « philippo-ramisme ». Ces penseurs, qui ont eu d'importantes influences intellectuelles au tournant du XVII^e siècle, sont présentés au chapitre 1.1. Le présent travail tente notamment de montrer comment les problèmes méthodiques de l'école ramiste, avec le questionnement cartésien des fondements de la méthode que Clauberg avait adopté, ont formé un modèle méthodique assez unifié. Comme tel, ce travail vise à proposer un compte-rendu de la formulation du concept de la méthode chez Clauberg, et à le placer dans la perspective de ses sources les plus évidentes.

Si des recherches notables ont été déjà faites sur le travail philosophique de Clauberg, cette pensée reste assez marginale dans les études cartésiennes. Dans les années récentes, le champ de l'école cartésienne a souligné les questions métaphysiques du dualisme et le problème de l'occasionalisme, en explorant les effets de la distinction réelle entre la *res extensa* et la *res cogitans* (Ariew 1999 ; Ariew 2014 ; Schmaltz 2002 ; Schmaltz 2016 ; Camposampiero, Priarolo, Scribano 2018) en soulignant la place de Dieu dans la vision cartésienne du monde. La plupart des

1 Francesco Trevisani, « Clauberg et l'Aristote réformé », en Jean-Claude Gens ed., *La logique herméneutique du XVII^e siècle : J.-C. Dannhauer et J. Clauberg* (Paris : Association « Le cercle Herméneutique », 2006), pp. 93-116.

travaux consacrés à la philosophie de Clauberg sont conçus comme des introductions à sa pensée.² Dans ce cadre, la philosophie de Clauberg est généralement vue comme premièrement et essentiellement occupée par des questions « ontologiques. » Néanmoins notre travail suggère d'examiner un autre aspect de la pensée claubergienne, en relation avec la question de la méthode, dans une approche que l'on peut considérer comme une présentation *technique* du processus cartésien du questionnement. Cette perspective technique, abritant des propos pédagogiques dans la philosophie de Clauberg, en se concentrant sur les stades primaires de la formation du philosophe, ne permet pas de négliger les aspects ontologiques de son corpus ; plutôt, cette perspective suggère une compréhension du travail de Clauberg qui est attentive à une des origines les moins discutées de son travail, à savoir la culture intellectuelle de l'humanisme tardif (le *Späthumanismus*). Effectivement la philosophie de la Renaissance, ainsi que la pensée humaniste en général posent encore aujourd'hui un défi historiographique pour l'histoire générale de la philosophie. Dans l'histoire canonique de la philosophie, on passe souvent directement de la philosophie médiévale à la philosophie moderne, en négligeant la philosophie de la Renaissance. Une des tâches de notre travail est de faire le point sur l'importance de la pensée humaniste pour le développement de la philosophie « canonique » pendant le XVII^e siècle. Cela pourrait offrir une image plus équilibrée de l'établissement de ce que l'on comprend généralement comme l'« early modern philosophy. »

Comme nous allons le montrer, champ « méthodologique » n'est pas synonyme d'épistémologique, et une différenciation doit être faite entre ces deux domaines de questionnement. Ce n'est pas la tâche de la méthodologie de déterminer *ce qui* pourrait être su ou bien quelle est la connaissance vraie, mais plutôt *comment* on doit procéder dans un processus de connaissance de quelque chose. La méthodologie a à voir avec la *qualité* de la recherche, dans sa manière de prendre place. C'est cette qualité de la recherche qui fait aussi la base technique de la recherche méthodologique. Cet aspect technique de la méthode, voyant la méthode comme une technique mentale, un savoir-faire mental (*know-how*), sera présenté dans le chapitre 1.2., et sera détaillé dans les chapitres suivants. Ainsi ce travail se concentre sur un aspect particulier du travail de Clauberg, qui est sa compréhension de la méthode ; cette tâche demande, entre autres,

2 Notamment dans Theo Verbeek, *Johannes Clauberg (1622–1665) and Cartesian Philosophy in the Seventeenth Century* (Berlin and New York, 1999). Voir aussi Guillaume Coqui, *La Logique de Clauberg et sa théorie cartésienne de la connaissance*, thèse de doctorat, Université de Dijon and Université de Sienna, 2008 ; Massimiliano Savini, *Johannes Clauberg, Methodus cartesiana et ontologie*, 2011 (Paris : Vrin, 2011) et Alice Ragni, « Ontologia e analogia entis tra Johannes Clauberg e Jacob Thomasius », *Archivio di Filosofia* 3 (2016), pp. 155-166.

de suggérer les lignes générales de sa théorie de la connaissance, dans la mesure où une telle théorie pourrait être déduite de ses écrits. Pour atteindre ce but, ce travail laisse relativement à l'arrière-plan les aspects métaphysiques et théologiques de la philosophie claubergienne, notamment dans son *Ontosophia*, dans ses versions différentes (l'*Ontosophia* a connu trois éditions : 1647, 1660, 1664), pré- et post-approbation de la philosophie de Descartes par Clauberg.

Ce travail s'intéresse surtout aux écrits qui sont directement imprégnés de la rencontre de Clauberg avec la méthode cartésienne et qui s'y engagent directement. Ces textes incluent en premier lieu *L'initiation du philosophe*, mais aussi la *Logica vetus et nova* (1654), et le *Defensio cartesiana* (1657). *L'Initiatio* et le *Defensio* sont des textes explicitement apologétiques du cartésianisme, et ils ont, au moins selon leur intention obvie, pour seul but de défendre la cause cartésienne par la présentation et l'explication de sa méthode.

Dans le cadre d'une lecture humaniste de Clauberg, ce travail s'intéresse à la relation entre la méthodologie de Clauberg et le mouvement herméneutique de son temps.³ Alors que cet aspect herméneutique du travail philosophique de Clauberg est assez marginal dans la recherche, notre travail tente de souligner son importance cardinale pour la compréhension de la philosophie de Clauberg.

Comme Hans Blumenberg l'avait noté,⁴ le rapport entre la science naturelle et l'herméneutique devient extrêmement important aux XVI^e et XVII^e siècles,⁵ et l'épistémologie de Clauberg est effectivement saturée de techniques et de considérations herméneutiques. L'épistémologie de Clauberg possède un caractère herméneutique, caractère qui est (du moins comme beaucoup le supposent) absent de la

3 Voir Claude Weber, « Clauberg et les Origines de la Langue Philosophique Allemande. Une Lecture de L'Ars etymologica Teutonum (1663) », in Verbeek ed., Clauberg, 95-112 ; Jacqueline Lagrée, « Sens et vérité chez Clauberg et Spinoza », *Philosophiques* 29 (2002) : 121-138 ; Jean-Claude Gens ed., 2006. *La logique herméneutique du XVII^e siècle* : J.-C. Dannhauer et J. Clauberg (Paris : Association « Le cercle Herméneutique », 2006) ; Édouard Mehl, « *La logique herméneutique du XVII^e siècle*. J. C. Dannhauer et J. Clauberg, (coll. « Phéno ») par Jean-Claude Gens », *Revue philosophique de la France et de l'Étranger* 200/2 (avril-juin 2010) : 258-259 ; Guillaume Coqui, « L'obscurité du sens chez Clauberg », *Methodos* [En ligne] 7 (2007), consulté le 26 juillet 2018. URL : <http://journals.openedition.org/methodos/656> ; DOI : 10.4000/methodos.656.

4 Voir Hans Blumenberg, *Die Lesbarkeit der Welt* (Frankfurt am Main : Suhrkamp, 1981).

5 Voir aussi Édouard Mehl, « L'herméneutique du Liber naturae », *Descartes et la fabrique du monde* (Paris : Presses universitaires de France, 2019), 127-170.

méthodologie de Descartes.⁶ Dans ce sens, la théorie claubergienne de la méthode a fourni une version unique du methodisme cartésien, regroupant sciences naturelles et sciences humaines, incluant la dialectique et l'herméneutique, néanmoins manquant du fondement mathématique, cet élément unique qui est considéré par beaucoup comme essentiel au projet cartésien. Dans ce sens, le methodisme cartésien qu'on trouve dans la pensée de Clauberg doit, effectivement, être vu comme une « dé-mathématisation » de la philosophie de Descartes. Clauberg reçoit le corpus cartésien par la voie de la question de l'opération propre de la raison. Et, dans cette tâche, du moins pour Clauberg, une place suffisante est donnée aux questions de la signification (*meaning*) et du perfectionnement de la raison, et une place moins décisive est donnée aux questions de la mesure et de la quantification. Ceci fait de la méthodologie claubergienne une sorte de cartésianisme démathématisé, et, pour quelques lecteurs, cette dé-mathématisation implique que Clauberg n'a pas vraiment eu de méthode dans le sens cartésien du terme.⁷ Néanmoins, cette appréciation accorde peu d'attention à la spécificité de la méthode claubergienne, et à la philosophie de la méthode comme genre conceptuel. La méthode ne se conclut pas exclusivement avec les opérations de la mathématisation, du calcul et de la mesure. En effet, comme nous le montrerons au chapitre 1.1, le questionnement général de la méthode dans son moment humaniste surgit d'une tradition qui avait très bien su commercer avec le concept, la définition, les problèmes et le but de la méthode dans une langue qui était relativement libre de considérations mathématiques.

Le but central de notre travail est de proposer une analyse de la nature spécifique du cartésianisme claubergien, ainsi que de poser ce cartésianisme spécifique dans un rapport avec l'héritage de la discussion relative au concept de la méthode, une tradition que Clauberg avait reçue de ses maîtres, tous issus des milieux réformés et humanistes. Pendant le XVI^e siècle, comme on va le voir au chapitre 1.1, le concept de la méthode était développé par un processus de réévaluation. Dans l'Europe du Nord, sous l'influence de la réforme des « arts » par l'humaniste calviniste Petrus Ramus (1515-1572), la tendance était de questionner la logique aristotélicienne, ou bien celle de la scolastique. En Italie, notamment dans le travail de Jacopo Zabarella (1533-1589), la

6 L. Danneberg avait suggéré que Descartes « [...] n'aurait jamais envisagé de concevoir une herméneutique, ou même d'intégrer ce genre de considérations dans ses réflexions relatives à la méthode. » Lutz Danneberg, « Logique et herméneutique au XVII^e siècle », in Jean-Claude Gens ed., *La logique herméneutique du XVII^e siècle : J.-C. Dannhauer et J. Clauberg* (Argenteuil : Le cercle herméneutique, 2006), 42.

7 Voir par exemple Vincent Carraud, « L'ontologie peut-elle être cartésienne ? L'exemple de l'Onstosophia de Clauberg, de 1647 à 1664 : De l'*ens* à la *mens* », in Theo Verbeek (ed), *Johannes Clauberg – 1622-1665*, et *Cartesian Philosophy in the Seventeenth Century*, Kluwer, Dordrecht, Boston and London, 1999, p. 27 : « Ce dont a d'abord manqué Clauberg, c'est la méthode [...] ».

théorie de la méthode était développée comme un retour critique aux sources aristotéliennes. Des deux côtés de ce processus de reconsidération de la méthode (entre Ramus et Zabarella), Aristote était posé comme la source primaire à interpréter : le deuxième auteur au cœur de la controverse était Galien (129-216). Si pour Zabarella, la méthode est principalement une partie de l'activité de la recherche scientifique, pour Ramus, la méthode est premièrement attachée à la pédagogie, la dialectique et la rhétorique, relevant de tâches civiles qui nécessitent la communication et l'échange public.

De plus, comme on va le montrer, si, pour Zabarella, la méthode est toujours *synthétique* (compositive), pour Ramus, toute méthode réelle doit être exclusivement *analytique*. Mais pour les deux, et en suivant la *methodus medendi* de Galien, c'est la science (ou l'art) de la médecine qui apparaît constamment comme la pratique-modèle, qui nécessite une méthode (Boss 1979 ; Freedman 1992). D'où viennent les recherches de trouver une méthode correcte, empruntant des éléments de la pratique médicale pour construire une « cure » de situations spécifiques dans la constitution psycho-physique de l'homme. On va voir que les questions relatives à l'art médical se trouvent constamment en arrière-fond des réflexions sur la méthode qu'on va trouver chez Clauberg, et on va voir que cet arrière-plan médical de la méthode pourrait déjà être trouvé chez Descartes. À côté du modèle médical aussi, d'autres arts sont souvent tenus comme des modèles pour la formation de la méthode : la rhétorique, la dialectique (l'art de discuter, ou dans de termes aristotéliens, la *topique*) et, notamment, la pédagogie, le processus de transformation de l'intelligence infantile en raison d'adulte. On va voir que, dans le cadre de la discussion claubergienne, la méthode fonctionne essentiellement comme un processus pédagogique, accompagnant l'étudiant dans ses pas initiaux dans l'appréhension du langage philosophique. En somme, Clauberg développe sa version de la méthode cartésienne comme un savoir-faire thérapeutique, comme une médecine de l'intelligence (*mens*), *rendant possible* le travail de la philosophie. Par exemple, dans la logique ancienne et nouvelle, dans les prolégomènes, Clauberg use explicitement de l'exemple de la médecine :⁸

Les bons médecins, dans la transmission des préceptes de leur art, mais aussi dans leur pratique, fuyant la témérité des empiriques, ont coutume d'examiner

8 Traduction Jacqueline Lagrée et Guillaume Coqui, Johannes Clauberg, *Logique ancienne et nouvelle* (Paris : Vrin, 2007), 31 ; Johannes Clauberg, *Logica vetus et nova, prolegomena*, §10 (Opera omnia philosophica (à partir d'ici OOP), Hildesheim, Olms, 1968), 2, 770 : « Et boni Medici non modo in artis suae praeceptis tradendis, veru, etiam in praxis [...] morborum sanandorum naturam, originem causas ante solent accurate explorare. Expurgare iidem consueverunt homores noxios, priusqua, salutaria medicamenta propinent. »

soigneusement la nature des maladies à soigner, leur origine et leurs causes. Ils ont l'habitude d'expurger les humeurs malignes avant d'administrer les médicaments salutaires.

Clauberg tire de l'exemple de la médecine un argument qui soutient l'opération du doute au commencement de tout processus méthodique. Comme les médecins premièrement nettoient chaque élément morbide du corps, et, uniquement après cette démarche, commencent à utiliser les médicaments thérapeutiques, le logicien doit commencer par l'éradication des parties déjà malades de l'intellect, et, seulement après ce stade initial, il est autorisé à continuer vers la détermination positive du sens. Dans la logique de Clauberg, et en suivant Descartes, le stade premier de la thérapeutique mentale est exclusivement accompli par la méthode du doute. Ainsi, le compte-rendu du doute cartésien comme le présente Clauberg doit prendre une partie centrale dans notre travail, étant donné que le concept de doute se constitue comme leitmotiv dans les écrits cartésiens de Clauberg. Nous allons démontrer de quelle manière Clauberg a analysé et refondu le concept de doute : au lieu de le considérer (comme le fait Descartes) comme une opération simple de l'esprit, et immédiatement intelligible, le doute était pour Clauberg surtout un processus mental composé de facettes et de strates variées, travaillant constamment au service d'un but d'anti-scepticisme. Le concept de doute est le sujet de la discussion des chapitres 1.2 et 2.1.

Comme Édouard Mehl l'a montré,⁹ l'Allemagne a joué un rôle séminal dans l'histoire du cartésianisme. C'est en Allemagne, effectivement, que la science cartésienne a été initiée, et il est certain que le cartésianisme a reçu un caractère séminal et fécond dans le substrat intellectuel allemand. Dans notre travail, nous examinons le troisième temps de la réception allemande du cartésianisme. Après le voyage de Descartes en Allemagne autour de 1619 (le premier temps du cartésianisme en Allemagne), une génération un peu plus âgée que Clauberg, notamment avec Tobias Andreae (1604-1676), le professeur de Clauberg, qui était déjà réceptif aux doctrines cartésiennes, a eu des contacts directs avec les auteurs du ramisme, et ont

9 Édouard Mehl, *Descartes en Allemagne, 1619-1620*, Le contexte allemand de l'élaboration de la science cartésienne, nouvelle édition (Presses universitaires de Strasbourg, 2019).

aussi été attachés aux milieux cartésiens des Provinces-Unies (Pays-Bas). Clauberg est le disciple de ce second temps du cartésianisme allemand. Il assume la tâche de se distancier du style philosophique ramiste, par l'aide critique de la boîte à outils cartésienne. Il faut souligner que cette distanciation n'est pas une séparation. Le rapport de Clauberg avec les racines humanistes et ramistes de sa pensée est un processus d'émendation : l'image générale qu'on reçoit du corpus claubergien, dans la perspective que suggère notre travail, est celle d'une pensée qui reste essentiellement ramiste, mais il s'agit d'un ramisme corrigé et consolidé par les principes de la philosophie cartésienne.

Notre projet ne constitue pas un compte-rendu biographique du travail de Clauberg. Néanmoins, les étapes significatives dans son chemin intellectuel sont importantes à noter. Clauberg est né en Westphalie, à Solingen, près de Düsseldorf. Il est apparemment né dans une famille huguenote, car son éducation a été faite dès son commencement dans des institutions reformées. Les études de jeunesse de Clauberg ont été accomplies en Allemagne. L'arène la plus importante, où il a été en contact avec la tradition humaniste reformée, était ses années au lycée de Brême (*Gymnasium*). Là, le maître le plus important de Clauberg était Gérard de Neufville (1590-1648).¹⁰ Neufville était calviniste, influencé par Jan Amos Comenius (1592-1670) et Francis Bacon (1561-1626, voir plus bas). Encore étudiant, Clauberg passa aux Provinces-Unies et compléta ses études par un *Disputatio* qu'il a écrit dans la province de Groningue, sous la direction de Tobias Andreae (mentionné plus haut). Andreae est resté lié à Clauberg pour le reste de la vie de ce dernier ; c'était un philosophe allemand qui avait émigré et enseigné en Groningue. C'est ainsi que l'on doit examiner les travaux de Clauberg sous le prisme du cartésianisme des Provinces-Unies.¹¹ Un autre nom important dans le milieu de Clauberg aux Provinces-Unies doit être mentionné : Frans Burman (1628-1679). Burman était un théologien calviniste de Hollande, affilié avec Johannes Coccejus (1603-1669), un théologien calviniste modéré venant d'Allemagne. En 1648, Burman rencontra Descartes dans la cité d'Égmond pour interroger Descartes sur ses opinions. La personne chargée de la transcription de cette conversation était notre Johann Clauberg. On peut alors

10 Gérard de Neufville était professeur de mathématique et de médecine au *Gymnasium* de Brême. Il a composé un traité important de physique. Sur sa philosophie, voir Domenico Collacciani, « Devenir cartésien ? La méthode de l'ontologie de Gerhard de Neufville à Johann Clauberg », *Les Études philosophiques* 203 (2020/3), 37–58.

11 Sur le cartésianisme du Provinces-Unies, voir Andrea Strazzoni, *Dutch Cartesianism and the Birth of Philosophy of Science : From Regius to Gravesande* (Berlin and Boston: De Gruyter, 2019).

présumer que Clauberg était proche des cercles cartésiens et calvinistes en Hollande. Clauberg était intégré dans ce cercle au point qu'il reçut la tâche « sacrée » de la transcription de l'entretien avec *le Philosophe* (tel que Clauberg nomme assez souvent Descartes dans ses écrits). Les relations de Clauberg avec les Provinces-Unies ont continué tout au long de sa vie, et la majeure partie de ses écrits y a été publiée.

Un voyage notable de Clauberg est son passage par Paris. Il y a probablement fréquenté le cercle de Claude Clerselier, où il rencontra Jacques Du Roure (décédé en 1685).¹² Du Roure était un des premiers cartésiens de la moitié du XVII^e siècle à Paris, et il est important pour notre travail, car il a composé un traité de présentation de la philosophie cartésienne contenant des parties sur la méthode.¹³ Après un bref séjour à Leiden, pour assister aux communications du cartésien Johann de Raey (1622-1702), Clauberg retourna dans son pays natal l'Allemagne, pour assumer la charge de professeur de théologie dans l'académie calviniste d'Herborn, qui était le centre de l'encyclopédisme ramiste.¹⁴

À Herborn, avec son collègue théologien Christoph Wittich (1625-1687), Clauberg portera le cartésianisme au sein de l'académie strictement calviniste et ramiste. Les deux penseurs furent ensuite contraints de quitter Herborn précisément à cause de leurs convictions cartésiennes. En 1650, Clauberg s'établit au Gymnasium de Duisburg, qui devient la nouvelle université de Duisburg. Clauberg y officie comme premier recteur, et il est finalement libre de professer la métaphysique et la méthodologie cartésienne. L'itinéraire de Clauberg et de son groupe de collègues signale clairement un milieu cartésien, calviniste-modéré, intéressé par les questions de la méthode, du doute, et de la médecine. Neufville, Andreae, Du Roure, De Raey : tous ont consacré des écrits aux questions de la médecine. Clauberg, néanmoins, avait choisi une voie un peu différente, dans laquelle la médecine était avant tout la médecine de l'âme.

2. La perspective ramiste

12 Voir Sophie Roux, « Premiers éléments d'une enquête sur Jacques du Roure », *Bulletin cartésien* 49 (2020) : 168-180.

13 Voir aussi *Nieuw Nederlandsch Biografisch Woordenboek* (NNBW) Deel I, 131-134. On Clauberg and Du Roure, notamment pages 169-170.

14 Ruben Alvarado, *The Debate that Changed the West: Grotius versus Althusius* (Aalten: Piscator, 2018), 20.

Quand Descartes avait porté son concept de méthode en direction de l'Europe du Nord, la philosophie florissante dans ce territoire (à côté de la philosophie conservatrice, souvent encore scolastique, et en tout cas aristotélicienne) était l'école connue du « philippo-ramisme ».¹⁵ Le chapitre premier de la rencontre du jeune Descartes avec la philosophie proéminente en l'Allemagne et les matières théologiques et cosmologiques discutées dans ce champ et à cette époque ont été décrits par Édouard Mehl.¹⁶ Il est clair que, pendant ce temps passé dans la partie nord de l'Europe, et surtout dans les Provinces-Unies (où, comme mentionné, Clauberg a rencontré le cartésianisme), mais aussi en Allemagne, Descartes absorba le climat changeant de la philosophie, de la science et de la théologie dans cette partie de l'Europe au tournant du XVII^e siècle. Du point de vue géopolitique, à cette époque, l'Europe était en pleine guerre des religions, et il est impossible d'omettre ce contexte religieux tumultueux dans l'étude de la philosophie du XVII^e siècle.¹⁷ Notre travail ne soulignera toutefois pas excessivement les aspects théologiques de Descartes et de Clauberg. Plutôt, nous souhaitons nous intéresser aux aspects thérapeutiques du chemin du methodisme, un chemin qui passe par Ramus, Descartes et Clauberg, offrant une thérapie mentale qui fonctionne comme une pédagogie philosophique, en émendant l'intellect et le préparant pour des travaux ultérieurs.

Il est ainsi clair que la biographie intellectuelle de Clauberg doit inclure l'élément calviniste pour comprendre sa philosophie. Clauberg et Ramus ont écrit dans un ordre du jour explicitement réformé, impliqué dans la politique intellectuelle de la Réforme. Clauberg était au moins compétent dans le domaine de la théologie calviniste, ayant enseigné la théologie calviniste à Herborn (1649-1650) ainsi qu'à Duisburg (1655-1665). Seule une petite partie de ses travaux est consacrée à ce que l'on peut qualifier de questions théologiques, et notamment son *De cognitione Dei et nostri* (1656). Ainsi, on note des éléments théologiques dans la pensée de Clauberg, et notamment d'une manière plus institutionnelle que chez Descartes. On doit aussi remarquer qu'être calviniste dans une Allemagne plutôt luthérienne avait rendu d'autant plus particulière et complexe la position de Clauberg, sachant qu'en certains lieux, l'hostilité entre

15 Sur le terme « philippo-ramisme », voir Joseph Freedman, « The Diffusion of the Writings of Petrus Ramus in Central Europe, c. 1570-c. 1630 », *Renaissance Quarterly* 46/1 (Spring, 1993), 99-100.

16 Édouard Mehl, *Descartes en Allemagne 1619-1620 : Le contexte allemand de l'élaboration de la science cartésienne*, 2^e édition revue et augmentée (Strasbourg : Presses universitaires de Strasbourg, 2019).

17 Pour une description récente des activités de Descartes pendant la guerre des religions, voir Harold J. Cook, *The Young Descartes : Nobility, Rumor, and War* (Chicago and London : Chicago University Press, 2018).

luthériens et calvinistes était féroce, tout comme celle entre catholiques et réformés en général. Néanmoins, l'orientation calviniste de Clauberg pointe plutôt vers une autre affiliation biographique, qui est celle liée aux Provinces-Unies.

Clauberg a fait une partie de ses études en Hollande, et il a maintenu ses relations avec les intellectuels des Provinces-Unies après son retour en Allemagne. La ville de Duisburg, où Clauberg devient le premier recteur de l'université nouvellement instituée, se trouve très proche de la frontière entre la Hollande et l'Allemagne. La Hollande était un des centres les plus proéminents du calvinisme. Néanmoins, c'est au sein du calvinisme hollandais que l'on trouve aussi les objections les plus féroces à la philosophie de Descartes.¹⁸ C'est effectivement comme une réponse aux publications anti-cartésiennes de deux penseurs hollandais motivés par des considérations théologiques, Cyriacus Lentulus (ca. 1620-1678) et Jacobus Revius (1586-1658), que Clauberg composé son *Defensio cartesiana*. Dans ce cadre de controverses, Clauberg avait pris parti au sein de la philosophie réformée contre les positions conservatrices, et pour un méthodisme radical et son *habitus du doute*, qui étaient proposés et formés par Descartes.

D'après les sources de notre travail, il est possible de placer la philosophie de Clauberg comme appartenant à la dernière génération de la philosophie réformée du philippo-ramisme ; dans ce cadre, il est possible de voir la philosophie de Clauberg comme appartenant au dernier humanisme (*Späthumanismus*) en Allemagne. Comme on le montrera dans les chapitres suivants, le caractère calviniste de la pensée de Clauberg a un rôle important dans l'orientation qu'a pris le méthodisme cartésien. En se tournant vers le XVIII^e siècle, le cartésianisme de Clauberg ouvrira la voie à la philosophie allemande de la fin du XVII^e siècle, comme celle de Ehrenfried Walther von Tschirnhaus (1651-1708), Gottfried Wilhelm Leibniz (1646-1716) ou Christian Thomasius (1655-1728). Dans les travaux de ces penseurs, appartenant déjà à l'époque des Lumières, on peut encore trouver les restes du méthodisme cartésien comme formulé par Clauberg. Tschirnhaus composa même un traité important se nourrissant de la même tradition méthodique qui fait le sujet d'étude de notre travail, *Medicina mentis*. Nous discuterons ce traité au chapitre 4.2. et nous le mettrons en rapport avec les modèles cartésiens et claubergiens de la méthode.

18 Andrea Strazzoni, « A logic to end controversies: The genesis of Clauberg's Logica vetus et nova », *Journal of early modern studies*, 2/2: 123-149. Theo Verbeek, *La Querelle d'Utrecht*, Paris : Les impressions Nouvelles, 1988 ; Theo Verbeek, *Descartes and the Dutch: Early Reactions to Cartesian Philosophy, 1637-1650* (Carbondale and Edwardsville: Southern Illinois University Press, 1992).

3. Le méthodisme comme genre conceptuel

Le champ de la discussion autour du concept de la méthode sera ici qualifié de « méthodisme », terme qui ne doit pas être confondu avec la confession réformée « méthodiste », née dans l'Angleterre du XVIII^e siècle. Le terme « méthodisme » apparaît dans notre enquête comme représentant un groupe de philosophes entre la seconde moitié du XVI^e et la fin du XVII^e siècle qui se sont intéressés à la définition de la méthode dans le cadre de leur projet philosophique. Le méthodisme est ici considéré comme un *genre conceptuel*. Quel est le sens de ce terme ?

Dans le discours philologique, un « genre » dénote une structure thématique qui subsiste à travers les âges et par une variété de travaux.¹⁹ Analogiquement, dans l'histoire de la philosophie, un « genre » peut servir de concept classificatoire, se référant à des problèmes spécifiques, retournant dans des variations différentes tout au long de l'histoire humaine. Dans notre cas, nous considérons le méthodisme comme un tel genre conceptuel. Quels sont les contenus épistémologiques de ce « genre conceptuel » ? Dans un cadre philosophique, un genre est une sorte de catégorie. Les 10 anciens genres (γέννη) trouvés chez Aristote sont ses *catégories*, comme Adolf Trendelenburg (1802-1872) les a présentés en 1833 : « 10 genres suprêmes qu'il a appelés catégories car ce sont les genres les plus généraux. »²⁰ Bien que suprêmes et généraux, ces genres ont une composition complexe : par exemple, un certain terme

19 Gérard Genette, *Des genres et des œuvres* (Paris : Seuil, 2012).

20 Adolf Trendelenburg, « Les catégories d'Aristote (traduction Alain Petit) », *Les études philosophiques* 183 (2018/3), 348 : « Le livre des Catégories est le commencement de la science logique ; il y est question des parties premières et simples de la raison et du concept ; Aristote, pour la manifestation des pensées, a divisé ce qui est (*to on*) non en individus pris singulièrement, en tant qu'ils se refusent à la connaissance du fait de leur multiplicité et de leurs changements, mais en dix genres suprêmes, qu'il a appelés catégories parce qu'elles sont les genres les plus généraux, qui ne sont plus subordonnés à rien, mais sont prédiqués de tout le reste, de sorte qu'il s'agit de parties simples et suprêmes de la pensée et du raisonnement, qui signifient des choses elles-mêmes simples [...]. »

pourrait apparaître tant sous la catégorie de « qualité » que sous la catégorie de « relation » (comme c'est le cas du terme *hexis* (ἕξις)). Les interrelations entre les genres sont plus complexes qu'on le pense de prime abord. De plus, comme Aristote le montre dans les *Catégories*, les catégories sont déduites d'un langage dans ses articulations quotidiennes et usuelles : Aristote fait de l'usage quotidien du langage la fondation de ses catégories.²¹ L'examineur des *genres* doit les établir d'un corpus de data qui est disponible, qui est toujours particulier et changeant ; notre *disposition* des genres doit être constamment raffinée pour arriver à une classification meilleure et plus précise.

Le savoir-faire de la classification générique, dans chaque domaine pratiqué, est un effort constant pour arriver graduellement aux définitions de plus en plus précises des choses et des états des matières. Néanmoins, un genre n'est pas seulement le résultat d'un acte de nomination d'une structure de sens récurrent, c'est une réalité mentale, existant en et par la pensée, une figure de pensée. En outre, le genre conceptuel a aussi une existence essentiellement historique : c'est un problème répété, permanent, qui n'est soulevé que pour être rouvert selon les nouvelles circonstances, les nouveaux défis, les nouvelles intelligences. On montrera dans les chapitres subséquents qu'au sein du chantier du genre conceptuel du méthodisme, la méthode de Descartes apparaît dans un point d'apex, au plus haut de l'hyperbole : non pas dans son commencement et apparemment aussi non pas comme sa fin définitive. Le cartésianisme a certes écrit un chapitre dans l'histoire du méthodisme, mais il n'a pas inventé ce genre conceptuel ni ses éléments, ou même les possibles solutions qu'il abrite. Ainsi, peu après la fin du XVII^e siècle, ce genre conceptuel du méthodisme a graduellement perdu de son effectivité et de son ampleur, en ouvrant la voie à un autre genre conceptuel, plus occupé par l'ambition d'ériger des *systèmes* philosophiques (comme dans les travaux de l'idéalisme allemand). C'est une des tâches historiographiques de notre travail que de suggérer un portrait du genre conceptuel du méthodisme, décrivant ses composantes centrales, avec ses difficultés et suggestions philosophiques.

Quand le méthodisme a-t-il définitivement disparu de la carte de la philosophie ? Cette importante question historiographique reste en dehors des limites de notre enquête. Ce qui est certain est que, pendant la seconde moitié du XVII^e siècle, on peut encore rencontrer des signes clairs de sa présence. Daniel Schneider assigna récemment à Spinoza une position épistémique qu'il a catégorisée sous le titre de

21 Aristote, *Catégories*, trad. F. Ildefonse et J. Lallot (Paris : Seuil, 2002).

« méthodiste cartésien ». ²² Si les questionnements de Schneider sont différents de ceux discutés dans notre recherche, il suggère cette définition de la position méthodiste, qui est aussi pertinente que celle qui est suggérée ici : « The methodist : we have a method or a way of distinguishing between what we know and we don't know. We can try to use this method to discover a set of things that we know and to provide an account of what knowledge is. » ²³ Comme Schneider le note, ceci n'est pas une lecture très acceptée de Spinoza, de le considérer comme un disciple du methodisme cartésien. Néanmoins, de notre point de vue, cette définition du methodisme est parfaitement pertinente pour Clauberg, et Spinoza aurait pu la trouver à partir des livres de ce dernier qu'il possédait dans sa bibliothèque. Il est alors possible de supposer que l'élaboration par Spinoza de la conception cartésienne de la méthode était aussi informée, au moins *a minima*, par la présentation claubergienne de Descartes. Il est aussi possible de déduire que contre l'ampleur que Clauberg met sur le concept du doute, il était crucial pour Spinoza de souligner la tendance anti-scepticisme que chaque méthode doit présupposer. On peut alors voir que, dans cette génération tardive du methodisme, déjà informée par le moment methodiste cartésien et ses interprétations initiales, la méthode est toujours conçue contre l'arrière-fond du scepticisme, et c'est en rapport avec le doute que le concept de la méthode est développé (que ce soit comme une complication du concept du doute, chez Clauberg, ou comme une réponse à la position sceptique en général, chez Spinoza). En ce sens, dans le cadre de notre enquête, nous essaierons de tracer une formalisation du methodisme, comme on la trouve chez Clauberg.

4. Méthode de recherche

La méthodologie de notre travail se base sur deux étapes : dans un premier temps, nous traçons le terrain et les termes du genre conceptuel du methodisme, tel qu'il était en formation entre le XVI^e et le XVII^e siècles ; dans un second temps, nous tentons de placer Clauberg (et Descartes) au sein de ce genre, en essayant d'argumenter que la classification de Clauberg comme methodiste est pertinente quand on s'intéresse au projet philosophique de Clauberg en général. Cette focalisation suggère la

22 Daniel Schneider, « Spinoza's epistemological methodism », *Journal of the history of philosophy* 54/4 (Octobre 2016), 576.

23 Ibid.

compréhension particulière que notre travail offre de la figure philosophique de Clauberg.²⁴

Notre travail cherche à offrir un compromis entre l'école cartésienne anglo-saxonne et l'école cartésienne française, offrant deux perspectives complémentaires sur la méthode cartésienne. Ce travail s'intéresse non seulement au cartésianisme, mais aussi à l'histoire de ses réceptions variées. Un des chapitres les plus pertinents de cette réception a eu lieu aux alentours des années 1950 en France, avec la querelle entre Ferdinand Alquié et Martial Gueroult (voir Macherey 2014), qui est significative par rapport à notre travail ; cette querelle s'est déclenchée autour de la définition du rationalisme cartésien, qui était rattaché à la question de l'ordre (Gueroult 1953 ; Alquié 1956), qui, comme on va le voir, va se montrer significatif pour la méthode cartésienne également dans le cas de Clauberg. Ainsi, notre travail aspire à ajouter un chapitre au champ étendu de l'historiographie cartésienne.

Mais l'historiographie cartésienne connaît aussi un chapitre beaucoup plus ancien. L'historiographie cartésienne avait déjà commencé dans les dernières années de la vie de Descartes, avec la compilation de ses travaux durant les années 1650 par Claude Clerselier (1618-1674) et avec la publication de sa biographie en 1691 par Adrien Baillet (1649-1706). En ce sens, il n'y a pas de doute que Descartes, en tant que figure philosophique, était aussi formé par ses historiographes.²⁵ Mais ce ne sont pas seulement des historiographes, mais aussi des philosophes, pendant le XVII^e siècle, qui ont produit leurs propres historiographies cartésiennes. Spinoza et Leibniz ont assez vite commenté la méthode de Descartes,²⁶ et les protagonistes du cartésianisme comme Antoine Arnauld (1612-1694) et Nicolas Malebranche (1638-1715) ont débattu les aspects théologiques et épistémologiques de la philosophie de Descartes.²⁷ Au sein de ces chapitres premiers de l'historiographie cartésienne, on rencontre aussi le travail de Johann Clauberg. Clauberg devient partie de cette chaîne d'historiographes du

24 Sur la notion de « figures philosophiques », voir Delphine Antoine-Mahut, « Philosophizing with a historiographical figure: Descartes in Degérando's *Histoire comparée des systèmes de philosophie* (1804 and 1847) », *British Journal for the History of Philosophy* 28 (2020) : 533–552.

25 Voir Steven Nadler, Tad M. Schmalz and Delphine Antoine-Mahut, *The Oxford Handbook of Descartes and Cartesianism*, Oxford and London, Oxford University Press, 2019.

26 Voir Tad M. Schmalz, « Spinoza and Descartes » in Michael Della Rocca ed., *The Oxford Handbook of Spinoza* (Oxford and New York, 2017), 63–83 ; C. Delisle Burns, « Leibniz and Descartes », *The Monist* 26/4 (October 1916) : 524-533 ; Jean-Pascal Anfray, « Leibniz and Descartes », in Antoine-Mahut, Nadler and Schmalz, *Handbook*, 721–737.

27 Denis Moreau, *Deux cartésiens : la polémique entre Antoine Arnauld et Nicolas Malebranche* (Paris : Vrin, 1999).

cartésianisme au plus tard en 1648, et probablement dès 1647, quand il était étudiant en Groningue, grâce à son maître, Tobias Andreæ, l'un des premiers cartésiens. La rencontre avec cette philosophie nouvelle changea la route intellectuelle de Clauberg, et de ce point de vue, il a dédié son travail à la promotion et la défense des idées cartésiennes ainsi qu'à la vocation de l'instauration de l'historiographie cartésienne. Il était alors aussi responsable des premiers écrits cartésiens qui peuvent déjà être regardés comme apocryphes, l'*Entretien avec Burman*.²⁸

Ainsi, si Descartes doit effectivement être regardé comme une figure philosophique, alors Clauberg fait partie de cette figure. Débats et travaux académiques de la réception cartésienne ont toujours été conscients de leur responsabilité de la manière où la philosophie de Descartes allait être comprise par les générations à venir, et c'est également vrai concernant Clauberg : très conscient de sa responsabilité historiographique, il a écrit ses apologies comme un historien de philosophie, par rapport au passé et au futur de sa pensée. Cette responsabilité historiographique pourrait, par exemple, se trouver dans son *Differentia inter cartesianum et alias in scholis usitatam philosophiam* (Groningen, 1680) : dans ce petit traité, Clauberg observe déjà les sous-sections variées du cartésianisme en cherchant à faire voir la place du cartésianisme au sein des usages scolaires de la philosophie.

Où sommes-nous aujourd'hui dans cette chaîne de l'historiographie cartésienne ? Il semble que, même si l'étude est continue, le champ se trouve dans la tension entre les deux écoles cartésiennes majeures : dans l'école française, les récentes monographies se placent dans la lignée des recherches cartésiennes fondatrices de Jean-Luc Marion en suivant les questions théologiques, phénoménologiques ou métaphysiques qui les ont motivées.²⁹ Récemment, Édouard Mehl a proposé une introduction étendue aux contextes de la cosmologie de Descartes,³⁰ en montrant le système complexe des affinités de la vision du monde de Descartes et l'avancement en matière d'astronomie, notamment au XVI^e et le commencement du XVII^e siècle. Mehl démontre la fabrication

28 René Descartes, *Entretien avec Burman : manuscrit de Göttingen* (2 édition), présenté, traduit et annoté par Ch. Adam (Paris : Vrin, 1975) ; René Descartes, *L'entretien avec Burman*, éd. Jean-Marie Beyssade (Paris : Presses universitaires de France, 1981) ; René Descartes, *Conversation with Burman*, trans. J. Cottingham (London : Clarendon Press, 1976).

29 Par exemple, on peut noter deux travaux de deux cartésiens de la dernière génération dans l'école de Jean-Luc Marion : Dan Arbib, *Descartes, la métaphysique et l'infini* (Paris : Presses universitaires de France, 2017) ; Oliver Dubouclez, *Descartes et la voie de l'analyse* (Paris : Presses universitaires de France, 2013).

30 Édouard Mehl, *Descartes et la fabrique du monde : Le problème cosmologique de Copernic à Descartes* (Paris : Presses universitaires de France, 2019).

d'un monde cartésien comme une démarche technique et artificielle, chargée de questionnements théologiques et attentive aux cosmologiques de la renaissance. En effet, c'est cette perspective technique et artificielle sur le cartésianisme que le présent travail entreprend également ; cependant, dans notre cas, nous aimerions comprendre ces dynamiques artificielles dans le domaine même *de la méthode*. Au sein des écoles anglophones, le dernier argument notable de réflexion concernant la méthode de Descartes a été soulevé par John Schuster³¹, dont la critique du concept historiographique de la méthode cartésienne sera approfondie dans le deuxième chapitre, 1.2. Plusieurs anthologies récentes réabordent la catégorie du cartésianisme avec un terrain de questionnement historiographique plus synthétique, réunissant les deux écoles (par exemple Nadler, Schmaltz et Antoine-Mahut 2019). Il semble que cette synthèse soit celle que le présent travail tente également d'aborder.

Le présent travail aborde ainsi la définition du cartésianisme à travers de la figure de Clauberg, étant un objet fertile pour traiter de la question de la réception du cartésianisme dans la partie nord de l'Europe au XVII^e siècle, en soulignant le problème de la méthode. En cela, on espère former un champ de discussion plus étroit qui puisse aider à voir plus clairement les prémisses épistémologiques de base de la réception de la philosophie cartésienne.

Il existe ensuite une question historiographique supplémentaire concernant la définition de la position philosophique générale de Clauberg. Il est admis de voir dans la philosophie de Clauberg un mélange de cartésianisme et de scolastique, ou, mieux, de cartésianisme et d'aristotélisme.³² Cependant, la présente recherche pointe vers une autre manière possible de classification. Au vu de la présente recherche, Clauberg est resté tout au long de sa carrière assez courte dans la lignée du philippo-ramisme : même la dernière version de son *Ontosophia* repose en grande partie sur des systèmes de dichotomies ramistes. En ce sens, ce que nous cherchons à articuler dans ce travail, c'est la manière dont la tradition du ramisme incluait une certaine réceptivité à l'égard du questionnement méthodique cartésien, comme si deux faisceaux de lignes différents se superposaient. Nous cherchons ici à articuler cette superposition, et la teinte particulière qui s'en est formée.

31 John Schuster, *Descartes-Agonistes, Physico-mathematics, Method and Corpuscular-Mechanism 1618-1633* (New York and Berlin: Springer, 2013).

32 Voir Nabeel Hamid, « Domesticating Descartes, Renovating Scholasticism: Johann Clauberg And The German Reception of Cartesianism », à paraître in *Reshaping Natural Philosophy : Tradition and Innovation in the Academic Milieu*, ed. Andrea Sangiacomo, numéro spécial de *History of Universities* (à paraître, 2021).

Tout au long des différents chapitres de la présente recherche, nous verrons que Clauberg avait constamment à l'esprit les trois publications centrales de Descartes : *Le Discours de la méthode*, *Les Méditations sur la philosophie première* et *les Principes de la philosophie*. En ce sens, il avait une perspective assez complète sur la philosophie cartésienne, lui permettant de faire une synthèse générale des trois écrits. Comme mentionné plus haut, étant certainement le responsable de la transcription du texte de l'*Entretien avec Burman* qui eut lieu vers 1647,³³ il disposait, au cours des années 1650, d'une vue déjà assez panoramique de l'œuvre de Descartes. Il reste cependant une question en suspens concernant les *Regulæ*. Les *Regulæ* n'ont pas été publiés du vivant de Clauberg. Cependant, il semble que plusieurs déclarations de Descartes apparaissant dans ce texte soient également énoncées par Clauberg, même de manière latente, sans jamais citer ce texte inédit. Faute de preuves que Clauberg ait connu les *Regulæ*, on peut néanmoins dire que sa lecture de Descartes était compatible avec ce qui se trouve dans ce texte juvénile. Ceci est important, car c'est dans les *Regulæ*, plus précisément dans la règle numéro 4, que Descartes se réfère explicitement, et pour la première fois, à la nécessité d'avoir une méthode, pour reprendre le fameux passage :³⁴

Pour rechercher la vérité des choses, une méthode est nécessaire.

Les mortels sont possédés d'une curiosité si aveugle qu'ils conduisent souvent leur esprit par des voies inconnues, sans aucune raison d'espérer, mais seulement pour voir si par chance ne s'y trouverait pas ce qu'ils cherchent : comme quelqu'un qui brûlerait d'un désir si brutal de découvrir un trésor qu'il serait sans cesse à errer par les rues, en cherchant si par hasard il n'en rencontrerait pas un qu'un voyageur aurait perdu. Ainsi travaillent presque tous les chimistes, la plupart des géomètres, et plus d'un philosophe. Et certes, je ne nie pas qu'ils ne vagabondent parfois assez heureusement pour rencontrer quelque chose de vrai ; mais je ne concède pas pour cela qu'ils soient plus habiles, seulement plus chanceux. Pourtant, il vaut bien mieux ne jamais penser à chercher la vérité d'aucune chose, que de le faire sans méthode ; car il est tout à fait certain que ce genre de travaux désordonnés et de méditations obscures brouille la lumière naturelle et aveugle les esprits ; et tous ceux qui s'accoutument ainsi à marcher dans les ténèbres affaiblissent tellement l'acuité

33 Pour un commentaire devenu classique, voir Jean-Marie Beyssade, *Etudes sur Descartes : L'histoire d'un esprit* (Paris, Seuil, 2001), 247-322.

34 AT X : 371-372 ; Traduction française dans *Œuvres complètes*, dir. J.-M. Beyssade et D. Kambouchner, *Œuvres complètes* (Paris : Gallimard, 2016), 343-345..

de leurs jeux que par la suite ils ne peuvent supporter le grand jour. C'est aussi ce que l'expérience confirme, puisque, nous le voyons bien souvent, ceux qui ne se sont jamais souciés d'étudier portent sur ce qui s'offre à eux des jugements beaucoup plus solides et plus clairs que ceux qui ont passé tout leur temps dans les écoles. Et par méthode, j'entends des règles certaines et faciles, telles que quiconque les aura exactement observées ne posera jamais rien de faux pour vrai et parviendra, sans que son esprit dépense inutilement aucun effort, mais en augmentant toujours par degrés sa science, à la connaissance vraie de toutes les choses dont il sera capable.³⁵

Les *Regulae* sont publiées pour la première fois en néerlandais en 1684 ; il est dès lors hautement probable que le projet de *Regulae* ait survécu aux Provinces-Unies, ou du moins soit arrivé en Hollande à un moment donné.³⁶ Et si ce texte circulait effectivement quelque part entre Amsterdam et Duisburg, alors il passait aussi, sous une forme ou une autre (orale ou écrite), par Clauberg, qui, comme nous l'avons noté ci-dessus, avait des liens très étroits avec le cartésianisme hollandais tout au long de sa vie plutôt courte. Autrement dit, si les *Regulae* étaient effectivement en circulation parmi les cartésiens néerlandais, alors il n'y a aucun moyen que cela ne soit pas passé également par Clauberg, à tout le moins en discussion, sinon sous forme écrite. Il n'est donc pas surprenant que dans les écrits méthodistes de Clauberg, nous trouvions des affinités avec

35 « *Necessaria est Methodus ad rerum veritatem investigandam. Tam caecâ Mortales curiositate tenentur, ut saepe per ignotas vias deducant ingénia, absque ullâ sperandi ratione, sed tantummodo periculum facturi, utrùm ibi jaceat quod quaerunt : veluti si quis tam flolidâ cupiditate arderet thesaurum inveniendî, ut perpetuò per plateas vagaretur, quaerendo utrùm forte aliquem à viatore amissum reperiret. Ita sludent fere omnes Chymistae, Geometrae plurimi, & Philosophi non pauci ; & quidem non nego illos interdum tam féliciter errare, ut aliquid veri reperiant ; ideo tamen non magis industrios esse concedo, sed tantùm magis fortunatos. Atqui longè satius est, de nullius rei veritate quaerendâ unquam cogitare, quàm id facere absque methodo : certissimum enim est, per ejusmodi studia inordinata, & meditationes obscuras, naturale lumen confundi atque ingénia excaecari ; & quicumque ita in tenebris ambulare assuescunt, adeò débilitant oculorum aciem, ut postea lucem apertam ferre non possint : quod etiam experientiâ comprobatur, cùm saepissimè videamus illos, qui litteris operam nunquam navârunt, longè solidiùs & clariùs de obvijs rébus judicare, quàm qui perpétuò in scholis sunt versati. Per methodum autem intelligo régulas certas & faciles, quas quicumque exactè fervaverit, nihil unquam falsum pro vero supponet, & nullo mentis conatu inutiliter consumpto, sed gradatim semper augendo scientiam, perveniet ad veram cognitionem eorum omnium quorum erit capax. »*

36 Sur la constitution du texte des *Regulae*, voir Jean-Paul Weber, *La constitution du texte des Regulae* (Paris : Société d'édition de l'enseignement supérieur, 1964) ; Richard Serjeantson and Michael Edwards travaille présentement sur une copie nouvelle révélée d'une ébauche des *Regulae*. On attende la publication de leurs trouvailles. Voir par exemple <http://www.crash.cam.ac.uk/events/24569>, consulté le 12.7.2021.

les principes que l'on trouve dans les *Regulæ*, et, ainsi, nous pourrions suggérer de désigner les écrits méthodistes de Clauberg comme un cartésianisme proto-*Regulæ*.

5. L'analyse et la synthèse comme concepts-clés dans l'établissement de la méthode

Dans la structure générale de la présente recherche, le lecteur rencontrera en permanence la discussion des termes « analyse » et « synthèse ». En effet, selon le constat de notre travail, et comme le montrera déjà le premier chapitre, les deux termes sont devenus immanents et indissociables de la question de la méthode dans la philosophie de la Renaissance et de la première modernité. Par conséquent, toute discussion sur la méthode chez Descartes et Clauberg doit rendre compte de manière large et approfondie de leur compréhension de l'analyse et de la synthèse.

Le mot latin analyse vient du grec ἀνάλυσις, qui signifie résolution ; le mot synthèse vient de σύνθεσις, signifiant composition. Les deux termes ont atteint le monde latin directement à partir du vocabulaire grec scientifique. Cependant, même si, dans notre vocabulaire, nous avons tendance à considérer ces deux termes comme complémentaires, l'ancienne tradition ne discutait pas nécessairement les deux comme étant liés l'un à l'autre. En premier lieu, c'était la notion d'analyse qui avait l'origine la plus stable et la plus respectable, qui se rapportait explicitement aux enquêtes mathématiques, et plus spécifiquement géométriques. Le terme « synthèse » n'avait pas de filiation aussi stable, et il était utilisé plus sporadiquement. Cependant, comme le premier chapitre de cette recherche le montrera, les deux termes sont devenus immanents et inséparables de la question de la méthode dans la philosophie de la Renaissance et du début de la modernité. On peut donc dire que l'un des caractères principaux du méthodisme des débuts de la modernité est l'insertion des deux termes dans une discussion explicite de la nature de la méthode, considérant d'ailleurs ces deux termes comme inséparables et diamétraux. Autrement dit, à la période qui nous intéresse ici, la méthode était a priori conçue comme une technique qui mêle nécessairement ces deux formes complémentaires d'enquête. Ce n'est donc pas que l'analyse et la synthèse *puissent nous aider* à caractériser la définition moderne de la méthode, mais plutôt que leur articulation très littérale et explicite fait *la définition de cette variante moderne de la définition de la méthode même*. Autrement dit, le discours qui tourne autour de la question de la méthode n'a cessé de remettre en question le rapport entre analyse et synthèse. Et c'est précisément le mélange entre ces

deux termes qui est au centre de la présente enquête. On montrera dans les chapitres suivants de quelle manière analyse et synthèse s'entremêlent d'une manière particulière dans le discours méthodiste de Clauberg ; il sera également précisé que c'est à travers ces deux termes que nous devons aborder notre compréhension de la méthode dans le contexte actuel. Nous montrerons que, d'une manière générale, la lecture claubergienne de Descartes prend, de manière peut-être surprenante, la conception cartésienne de la méthode dans une orientation synthétique.

Il convient de noter d'emblée que la discussion portant sur l'analyse et la synthèse a également un aspect disciplinaire : bien que l'usage aristotélicien des termes concerne principalement la physique et la logique, le domaine dans lequel nous voyons les discussions les plus élaborées de ces termes était la géométrie. La source la plus importante en la matière était Pappus d'Alexandrie (vers 290-vers 350 apr. J.-C.). Au début du XVII^e siècle, un tourbillon de discussions sur la géométrie de Pappus est entré sur le devant de la scène des discussions intellectuelles, à la suite de la publication de la traduction latine complète de la *Collectio* de Pappus, qui était elle-même un recueil de divers traités anciens de géométrie et de sciences connexes.³⁷ Descartes lui-même, dans *La Géométrie*, s'est engagé à résoudre une question que Pappus a laissée aux générations futures.³⁸ Dans ce cadre synthétique, Descartes a choisi une méthode dans laquelle on procède « comme si l'on connaissait l'inconnu »,³⁹ puis on continue en reculant, en analysant la conséquence de l'hypothèse de l'inconnu. Ce fut en fait le premier principe du développement de l'algèbre des débuts de la modernité, fondé sur la symbolisation de cette inconnue et de ses conséquences mathématiques.⁴⁰

Même si le débat traditionnel sur l'analyse était de nature explicitement mathématique, à l'époque de la Renaissance, le débat s'est étendu à d'autres domaines d'application aussi variés que la littérature, la rhétorique, la science, l'éthique et bien sûr la métaphysique. En ce sens, le topos d'analyse/synthèse implique aussi un

37 A. P. Treweek, « Pappus of Alexandria, The manuscript tradition of the *Collectio Mathematica* », *Scriptorium* 11/2 (1957) : 195-233.

38 Henk J. M. Bos, « Descartes' solution of Pappus' problem », *Redefining Geometrical Exactness: Descartes' Transformation of the Early Modern Concept of Construction* (New York: Springer, 2001), 313-314.

39 Emily R. Grosholz, « Descartes's Geometry and Pappus' Problem », *Cartesian method and the problem of reduction* (London and New York: Oxford University Press, 1991, 2011 online).

40 Le fondateur de l'algèbre de la première modernité est François Viète (1540-1603), qui a aussi reconnu les origines anciennes du terme. Voir par exemple Marco Panza, « François Viète, between analysis and cryptanalysis », *Studies in History and Philosophy of Sciences* 37 (2006) : 269-289.

questionnement sur la caractérisation du domaine philosophique. Descartes, à coup sûr, était tout à fait conscient du noyau mathématique de sa méthode philosophique. Chez Clauberg, cependant, la situation est différente, et la discussion qui tourne autour de l'analyse et de la synthèse dans son corpus tend à s'appuyer sur d'autres domaines, tels que la rhétorique, l'éthique, l'herméneutique, la linguistique et la philologie. En ce sens, nous pouvons effectivement détecter une dé-mathématisation qui se produit dans la version claubergienne du cartésianisme, et dans la compréhension de l'analyse et de la synthèse de Clauberg.

6. La définition du cartésianisme

L'une des questions sous-jacentes du présent travail est : que signifie être cartésien ?⁴¹ Autrement dit, quels principes fondamentaux faut-il adopter pour être considéré comme cartésien ? Il est plutôt révélateur que le récent, important et très actuel *Manuel Oxford de Descartes et du cartésianisme*, ne donne aucune définition générale du terme, et se contente plutôt d'apporter des études de cas particulières du cartésianisme.⁴² Sommes-nous pourtant condamnés à rester au niveau plutôt historiciste d'exemples singuliers de cartésianisme, laissant de côté toute tentative de définir ce qu'était la voix, la trace que Descartes a laissée pour rester des siècles après lui dans l'histoire de la philosophie moderne ? Il semble à l'auteur du présent travail que, si l'histoire de la philosophie est en droit de revendiquer, dans une certaine mesure, le privilège de faire de la philosophie tout court, alors ce privilège n'est accordé qu'à la condition de pouvoir sortir d'un historicisme total. C'est la suggestion méthodique du présent travail que, à travers le concept de genre conceptuel, on peut approcher ce genre d'approche historiciste équilibrée de l'histoire de la philosophie. Dans le présent travail, l'auteur tente d'aborder la question de la définition du cartésianisme du point de vue du philosophe se considérant définitivement comme cartésien, Johann Clauberg. En ce sens, nous visons à déterminer de manière « assez précise » le sens de la classification du style philosophique nommé « cartésianisme », mais en outre nous visons à configurer *une manière possible d'être cartésien*, la manière dont Clauberg construit cela. La question de la condition nécessaire à l'établissement d'un style conceptuel cartésien était consciemment présente dans

41 En suivant l'excellent recueil dirigé par Delphine Kolesnik-Antoine, *Qu'est-ce qu'être cartésien ?* (Lyon : ENS éditions, 2013).

42 Antoine-Mahut, Nadler and Schmaltz, *Oxford Handbook of Descartes and Cartesianism*.

l'œuvre de Clauberg. Il a lui-même consacré son œuvre à l'effort de définir la nature de la philosophie cartésienne. Par conséquent, Clauberg est un auteur idéal pour nous, à prendre comme paradigme pour l'examen de la nature et de la réalité du cartésianisme.

Il est clair que le « cartésianisme » et la « philosophie de Descartes » n'ont pas le même sens ni le même contenu. Il faut cependant garder à l'esprit que Descartes lui-même était très conscient de la diffusion de ses vues sur le continent, et a pris soin à bien des égards de nourrir la transmission de ses vues et la formation de ce que nous appelons aujourd'hui le « cartésianisme ». En effet, l'*Entretien avec Burman*, qui a été transcrit par Clauberg, est déjà un texte conçu afin de diffuser la pensée de Descartes.

Il est également à noter que, à la différence d'autres cartésiens qui ont développé le cartésianisme dans une direction qui répondra d'abord et avant tout à un agenda métaphysique voire scientifique spécifique, Clauberg montre une certaine *approche herméneutique au cartésianisme*. Les écrits de Descartes eux-mêmes sont pris (par Clauberg) comme des sources pour être lus, commentés, interprétés et présentés aux futurs lecteurs et élèves. En ce sens, la position de Clauberg est assez unique dans le panorama général du cartésianisme du XVII^e siècle. Chez Clauberg, Descartes n'est pas seulement considéré comme une inspiration philosophique, mais aussi comme une source textuelle, au même titre qu'un texte sacré, ou du moins « classique ».

L'une des intentions centrales du présent travail est de suivre une certaine ligne de différenciation entre le texte de Descartes et sa lecture cartésienne. La ligne de différenciation est affectée par les auteurs philosophiques, littéraires et théologiques qui ont influencé la formation intellectuelle de Clauberg. Ce qui est certain, c'est que, dans la tradition de l'érudition cartésienne, Clauberg a été constamment considéré comme un cartésien, l'un des premiers et des plus attentifs. Cependant, ce qui ressort de la lecture actuelle du corpus claubergien, c'est qu'il faut donner une vision plus équilibrée de Clauberg, qui tient compte de la philosophie humaniste, post-ramiste, réformée du XVII^e siècle. Peut-on alors dire, à titre d'orientation historiographique, que cette méthode est au moins effectivement de nature un peu historiciste ? Nous nous intéressons ici moins à refléter un système censé se trouver dans la pensée de Clauberg ou même dans celle de Descartes, et plus à essayer de suivre le caractère de la philosophie de Clauberg telle qu'elle est configurée dans son corpus philosophique. Cela n'a pas toujours été le cas dans l'érudition cartésienne. La lecture anti-historiciste la plus importante de la philosophie cartésienne a été proposée par Martial Gueroult. Ce qui caractérise l'historiographie de Gueroult, c'est son antipathie pour

l'historicisme,⁴³ aspirant à construire son interprétation de Descartes exclusivement à partir des éléments structuraux puisés à l'intérieur de ses propres textes. L'approche qui est suggérée dans le présent travail peut être qualifiée comme *modérément historiciste*, au sens où nous travaillons sur les premières enveloppes historiques de l'œuvre de Descartes. On cherche aussi à montrer que, du moins dans le cas de Clauberg, ce qui est pris comme élément central du cartésianisme, c'est la prise de conscience cartésienne des questions de méthode, avant même l'importance des questions de métaphysique. En ce sens, notre lecture du cartésianisme suit celle de Clauberg, et elle est moins « structurelle » et plus *dispositionnelle*, c'est-à-dire que nous essayons de *cerner le mode de fonctionnement* qui est suggéré par le corpus claubergien. Comme l'a suggéré Édouard Mehl, Clauberg évolue dans une voie qui considère le cartésianisme comme ancré dans le premier principe du doute.⁴⁴ Mais il faut être très prudent et très précis lors de l'utilisation de cette articulation. L'habitus méthodique du doute, comme le souligne Clauberg, n'est pas un scepticisme, mais plutôt, comme les chapitres suivants tenteront de le démontrer, une position stoïque. Le doute est cette position dans laquelle une distance est instituée entre les choses observées et l'esprit observateur. Cette distance est aussi un « chemin » : et la philosophie, ou plutôt *la proto-philosophie*, c'est-à-dire l'initiation philosophique, se pose comme un met-odos, un après-chemin, qui est un récit, un rapport, une démonstration de cette distance.

7. Aspects historiographiques du cartésianisme, de l'« ontologie » et de l'humanisme

Jusqu'ici, les diverses tentatives d'aborder le « cas Clauberg » tendaient à l'aligner sur un certain trope de l'histoire de la philosophie qui est comprise comme un groupe de penseurs ayant contribué à l'invention de l'« ontologie » moderne au cours du XVIII^e siècle. C'est principalement le cas grâce au traité *Ontosophia* de Clauberg, qui a été publié trois fois au cours de la vie de Clauberg en trois versions différentes. Le préfixe « onto » tend à faire supposer aux lecteurs de Clauberg qu'il s'agit d'un traité occupé essentiellement par la constitution d'une ontologie. En effet, il ne fait aucun doute que Clauberg s'est intéressé à la formulation du vocabulaire ontologique et de

43 Knox Peden, « Descartes, Spinoza, and the impasse of French philosophy: Ferdinand Alquié versus Martial Gueroult », *Modern Intellectual History* 8/2 (2011) : 370-371.

44 Édouard Mehl, « La question du premier principe dans *La Recherche de la Vérité* », in *Nouvelles de la République des Lettres* 1999 : 77-97.

ses règles.⁴⁵ Cependant, les découvertes de la présente recherche indiquent une direction différente dans l'interprétation de la philosophie et de l'« ontologie » de Clauberg : sur la base des autres écrits de Clauberg, comparés à ce qu'on trouve dans les pages de l'*Ontosophia*, il devient assez clair que Clauberg s'intéresse moins à l'édification d'une nouvelle manière entièrement autonome de discuter de la métaphysique qu'à l'établissement de la première plate-forme de *l'enseignement philosophique*, fournissant un vocabulaire élémentaire à celui qui souhaite poursuivre une voie métaphysique. Le présent travail propose une alternative à la classification ontologique des travaux de Clauberg.

Dans la perspective de la présente recherche, le travail de Clauberg ne se concentre ni exclusivement ni centralement sur des questions ontologiques. Son *Ontosophia*, dans ses trois versions, n'est pas un traité proposant une métaphysique, mais plutôt un manuel pour *l'appréhension du langage métaphysique*, qui est en grande partie emprunté à la tradition aristotélicienne (plutôt que simplement « scolastique »), mais aussi aux autres traditions humanistes. Il est clair que Clauberg n'était pas du tout un scolastique : sa manière d'argumenter est totalement différente de celle qui était encore en usage chez les derniers scolastiques de son temps. Comme on le sait, et comme Clauberg lui-même l'a clairement reconnu, la manière d'écrire la philosophie témoigne de sa nature. C'est d'ailleurs Clauberg lui-même, dans la plupart de ses écrits, qui présente la différence dramatique entre philosophie cartésienne et scolastique, soulignant la nécessité de faire place aux innovations cartésiennes dans la conception de la pratique de la philosophie elle-même. Dans le présent travail, Clauberg est présenté comme un penseur humaniste tardif, dans lequel les thèmes humanistes sont tempérés par l'attention renforcée portée au corpus cartésien, et, d'autre part, avec une très forte conscience dans les tendances en jeu dans le monde réformé dans les décennies antérieures. Comme nous le préciserons également, l'un des auteurs les plus cités dans l'*Opera omnia* de Clauberg n'est autre que Francis Bacon (1561-1626). Et c'est le méthodisme humaniste radicalement ouvert, auto-questionnaire mais optimiste de Bacon qu'il faut prendre en compte lorsque l'on essaie de rendre compte avec détermination de la conception claubergienne de la méthode. Mais si la tendance au questionnement, pseudo-sceptique, qu'on retrouve chez Clauberg est aussi baconiste que cartésienne, encore faut-il se demander : quel cartésianisme observons-nous dans le cas de Clauberg ? En d'autres termes, qu'est-ce

45 Il semble que dans ses recherches ontosophiques, Clauberg était aussi à l'écoute du travail de Jan Amos Comenius. Comenius avait placé son *Pansophia* dans le cadre de sa grande réformation de l'éducation. Ulrich Leinsle, « Comenius in der Metaphysik des Jungen Clauberg », in Theo Verbeek ed., *Johannes Clauberg (1622–1665)* (New York and Berlin: Springer, 1999), 1-12.

qui fait que Clauberg se réfère souvent dans ses écrits à Descartes comme « Le philosophe », titre qui n'était jusqu'à son époque réservé qu'à Aristote lui-même ? Qu'est-ce qui a fait de Descartes, pour Clauberg, le candidat au remplacement du grand régime aristotélécien ? Et si Clauberg lui-même n'était pas en mesure d'expliquer cela de manière succincte, comment comprendre et caractériser son « cartésianisme » ? Enfin, comment situer le cartésianisme claubergien par rapport à la génération un peu plus tardive du cartésianisme de la dernière partie du XVII^e siècle ?

Les réponses à ces questions historiographiques seront progressivement dévoilées dans les prochains chapitres du présent travail. Le présupposé général de l'auteur est le suivant : le cartésianisme de Clauberg n'est ni de nature ontologique, ni épistémologique. Le cartésianisme de Clauberg est plutôt celui lié à la définition de la philosophie elle-même, la définition de la philosophie comme discipline au sens moderne du terme. En effet, le tableau général que nous donnent les écrits de Clauberg sur la nature essentielle du cartésianisme est que la philosophie de Descartes, et en son cœur la méthode cartésienne, réinstaure, ravive littéralement, non seulement la pratique philosophique, mais aussi la philosophie comme domaine d'étude, de compétence et d'instruction. Descartes, comme Clauberg voit sa philosophie, offre comme une manière de réaborder le domaine philosophique et de le restaurer après des siècles de dégénérescence. En ce sens, le cartésianisme, pour Clauberg, ne signifie rien de moins que la redécouverte de la philosophie elle-même. Et cette fois non comme domaine métaphysique, ni comme domaine théologique, mais plutôt comme domaine méthodique, domaine du mouvement autodéterminé de la pensée.

8. La différence entre genre conceptuel et style philosophique

Dans le présent travail, et après des recherches dans les méthodes disponibles de l'historiographie de la philosophie, l'auteur se propose d'utiliser un terme de sa propre conception, à savoir le « genre conceptuel du méthodisme ». Il s'agit de désigner ce groupe de penseurs actifs tout au long des XVI^e et XVII^e siècles, qui se sont occupés de la compréhension, de la critique et du développement d'une procédure intellectuelle qui a été littéralement désignée comme « méthode ». Le « méthodisme » inclut non seulement les philosophes, mais aussi les théoriciens de la rhétorique, de l'art, de la logique, de la médecine et des sciences.

Il faut d'abord clarifier ce que l'on entend précisément par genre conceptuel. En premier lieu, il faut faire une distinction entre un style philosophique et un genre conceptuel : dans la mesure où un style philosophique renvoie à une certaine influence dans l'histoire de la philosophie, qui est souvent liée à des coordonnées déterminées dans l'espace et temps, un genre conceptuel est une unité mentale qui existe tout au

long d'une durée. Le genre conceptuel peut apparaître à la fois dans des écrits « purement » philosophiques et d'autres écrits théoriques ; il est juxtaposé à certains styles philosophiques, et peut aussi apparaître dans plusieurs d'entre eux de manière simultanée ou diachronique. L'auteur du présent travail se réfère au genre conceptuel à travers les termes de la philologie et de la critique d'art. Un genre, en littérature ou en philologie, est une figure, un certain problème, un certain état de fait, qui se répète à travers l'histoire ; se développant, variant, recevant à chaque fois un nouveau caractère ou une nouvelle nuance.⁴⁶ Le genre conceptuel doit être différencié du style philosophique, car un genre conceptuel peut réunir en lui-même plusieurs styles philosophiques (par exemple, le cartésianisme, l'humanisme, la scolastique, l'aristotélisme...). Un genre conceptuel repose sur un terme principal (dans notre cas, celui de « méthode »), terme qui a une longue histoire, et dont les éléments principaux se répètent continuellement. Les conséquences théoriques de tels états de choses conceptuels sont remises en question à plusieurs reprises dans l'histoire interne du genre conceptuel. En ce sens, le genre conceptuel se comporte comme une figure philosophique : le genre conceptuel est un sceau philosophique qui s'ouvre et se ferme à différents moments et lieux de l'histoire de la philosophie, produisant à chaque fois une empreinte différente sur la matière de la pensée.⁴⁷

Le présent travail porte donc sur le méthodisme comme genre conceptuel. Il est constitué d'une chaîne de textes et d'auteurs intéressés par les problèmes de méthode : ses origines, ses définitions, ses modalités, ses caractéristiques, ses applications. En ce sens, ce projet s'intéresse moins à montrer un cadre historiciste des choses « telles qu'elles se sont réellement produites », qu'à montrer un certain croisement entre un genre conceptuel et un style philosophique : *le genre conceptuel du méthodisme, et le style philosophique du cartésianisme*. Par cette juxtaposition du genre conceptuel et du style philosophique, nous espérons aboutir à une configuration claire et distincte d'une réalité particulière dans l'histoire de la philosophie, qui est celle de la pensée écrite de Johannes Clauberg.

Si l'on essaie de se situer dans le champ des historiographies fournies par les philosophes de la première philosophie moderne, on peut admettre que l'on ne suit pas l'orientation prédominante d'un Martial Gueroult, exigeant une « déduction de la réalité

46 Voir Adi Efal, « Generic classification and habitual subject matter », in Rens Bod Jaap Maat and Thijs Weststeijn (eds.), *The Making of the Humanities*, Volume III: The Modern Humanities (Amsterdam : Amsterdam University Press, 2014), 345-358.

47 Erich Auerbach, « Figura (1938) », *Scenes from the Drama of European Literature* [new edition] (Minneapolis : University of Minnesota Press, 1984), 9-76 ; Adi Efal, *Figural philology: Panofsky and the science of things* (London : Bloomsbury, 2016),

des systèmes ». ⁴⁸ La philosophie n'est pas toujours systématique et, bien souvent, ce n'est pas le système organique qui fait la voix d'un philosophe, mais plutôt ses instruments, les symboles philosophiques qu'il utilise et la manière dont il chemine dans les sentiers de certains styles conceptuels. Dans le cas de Clauberg, il est presque insensé de chercher un système, car c'était un philosophe d'un autre genre – et c'est précisément ce genre que nous essayons d'aborder dans les chapitres suivants. Ce que nous cherchons à articuler, c'est la figuration historique concrète du genre conceptuel du méthodisme, qui impliquait dans le cas de Clauberg aussi des questions permanentes provenant du style philosophique du cartésianisme.

9. Clauberg en tant que calviniste et acteur de la politique intellectuelle réformée au XVII^e siècle

Il ne fait aucun doute que Clauberg a participé à la politique intellectuelle du calvinisme du XVII^e siècle. Dès le Gymnase qu'il a visité à Brême, ⁴⁹ toutes les institutions qu'il a visitées dans son itinéraire savant étaient très engagées dans la politique du calvinisme. Il est également clair qu'il considérait lui-même les huguenots et les cartésiens comme partageant des histoires communes. Il commence en effet son essai sur la *Différence entre le cartésianisme et la philosophie scolastique* ⁵⁰ en proposant une stricte parallélisation entre les huguenots et les cartésiens. Tous deux sont, aux yeux de Clauberg, des groupes nouvellement constitués, souffrant du scepticisme de leur environnement.

Lorsque le discours des huguenots fut entendu pour la première fois en France, le peuple s'imagina non pas un homme, mais un monstre, de sorte qu'ils [les huguenots] ne pouvaient recevoir la place d'assemblée de la manière qu'ils méritaient. Et quand ils sont parvenus à être une congrégation, on a pu voir en quoi consiste être des huguenots, ils ont été très admirés et vus comme des hommes comme tous les autres, et ils pouvaient être tolérés. ⁵¹ Aujourd'hui, on

48 Martial Gueroult, *Philosophie de l'histoire de la philosophie* (Paris : Aubier, 1979).

49 Sur le rôle important de Brême dans la politique calviniste du 17^e siècle, voir Leo van Santen, *Bremen als Brennpunkt reformierter Irenik : Eine sozialgeschichtliche Darstellung anhand der Biografie des Theologen Ludwig Crocius (1586-1655)* (Leiden: Brill, 2014).

50 Johannes Clauberg, *Unterschied zwischen der cartesianischer und der sonst in Schulen gebrauchlicher Philosophie* (Duisburg: Adrian Wyngarten, 1657).

51 OOP II, 1219 (*Differentia*, Introitus, 1) : « Um primum in Galliis discursus de Higonotis audirentur, sibi quidam imaginabantur, il los ingentia monstra, aut minimum tales homines esse oportere, qui in nullo honesto conventu invenire locum mererentur. Cum autem forte in quadam congregatione accideret, ut quendam viderent, de quo dicebatur Hugonotum esse, summopere

*entend beaucoup parler de la philosophie cartésienne, et la foule pense qu'il doit s'agir d'une créature bizarre, nouvellement immergée dans un monde que personne ne peut ou ne veut tolérer.*⁵²

Pour Clauberg, les calvinistes et les cartésiens partagent un caractère similaire, celui d'une communauté nouvellement constituée, qui doit être progressivement reconnue par la société. Cependant, Clauberg était conscient du fait que les anciennes opinions coutumières habituées ne peuvent pas être corrigées par un mouvement pacifique et silencieux ; il faut plutôt faire une révolution dans sa pensée :

*Ainsi, dans le grand retravail des anciennes opinions, l'effroi s'éveille ; le travail vigilant paisible et tranquille ne parvient parfois pas à apporter la lumière, mais dégénère plutôt dans un mouvement inexplicable dans une obscurité difficile.*⁵³

Dès lors, le souhait d'apporter une véritable transfiguration de la pensée ne peut se faire toujours de manière pacifique et délicate, mais parfois une éthique plus dure doit être mise en œuvre. En cela également, selon Clauberg, le calvinisme et le cartésianisme partagent un caractère similaire, celui de produire un geste plus audacieux consistant à faire table rase afin de permettre le processus de reconstruction.

La protection même de la cause cartésienne signifiait prendre position au sein du mouvement calviniste. Comme nous le verrons, les deux grands critiques de Descartes contre lesquels Clauberg compose ses écrits polémiques et apologétiques étaient tous deux des calvinistes strictement orthodoxes, issus de l'école d'anti-Arminius, défendant strictement la doctrine calviniste de la prédestination.⁵⁴ La question de la prédestination a été très déterminante pendant la guerre des religions et

admirabantur ajubantque illum tamen hominem ut caeteros, ejusque conversationem non aversandam sed tolerabilem esse." »

52 Clauberg, J., *Unterschied*, 1: « Heut zu tage höret man viel reden von der Cartesianischen Philosophie, und etliche vermeinen, es müsse eine wunderliche ketzeren sein, so neulich in die Welt eingeschlichen [...]. »

53 OOP II, 1204 (*Initiatio* IX, §50) : « Sic sponte relabor in veteres opiniones, vereorque expergisci, ne placidae quieti laboriosa vigilia succedens non in aliqua luce, sed inter inextricabiles jam motarum difficultatum tenebras in posterum sit degenda. »

54 Martin van Gelderen, « Hot protestants: Predestination, the freedom of will and the making of the modern European mind », in Gijsbert van den Brink and Harro Höpfl eds., *Calvinism and the Making of the European Mind* (Dordrecht: Brill, 2014), 131–154.

le développement du protestantisme. La prédestination est la doctrine protestante qui soutient que le salut de l'homme est décidé à l'avance par l'autorité divine et que le libre arbitre ne peut pas déterminer son salut. Même au sein du calvinisme lui-même, la question de la prédestination était une cause de grandes querelles et divisions. Alors que les calvinistes orthodoxes défendaient strictement la doctrine de la prédestination au sens le plus fort, niant la place du libre arbitre dans le salut de l'homme, Arminius, de son côté, a pris une position modérée, mettant l'accent sur la place du libre arbitre dans la direction de sa route chrétienne vers le salut.

La plupart des écrits de Clauberg sont remarquablement non théologiques par nature, et ils ne se lisent pas en premier lieu comme des écrits théologiquement polémiques. Bien qu'il cite souvent la Bible et le Nouveau Testament, il ne construit pas ses écrits comme autant d'engagements explicites sur des questions théologiques. Du corpus d'écrits que l'on peut trouver dans son *Opera Omnia*, on obtient l'image que Clauberg voyait sa vocation comme liée au credo humaniste (qui était déjà une position chargée de théologie dans l'Europe du XVII^e siècle), tout en essayant de consacrer une attention aux questions des réformes de l'éducation. Même dans son livre le plus théologiquement orienté, le *De cognitione Dei et nostri exercitationes centum*,⁵⁵ il va dans le sens cartésien et se concentre sur la démonstration des limites de la raison humaine, ne franchissant jamais la frontière pour discuter de l'intelligence divine elle-même.

Si les écrits de Clauberg sont plutôt plus philosophiques que théologiques, c'est dans les écrits de son plus proche collègue, Christoph Wittich, que l'on trouve un engagement théologique à part entière avec la politique intellectuelle du calvinisme. Comme Clauberg, Wittich était partisan du cartésianisme, et ils ont été transférés ensemble de Herborn à Duisburg, en raison de leurs convictions cartésiennes qui n'étaient pas acceptées par les calvinistes les plus orthodoxes.⁵⁶ L'image générale que nous donnent les plus proches alliés de Clauberg, ainsi que la querelle de Clauberg avec Revius et Lentulus, critiques de Descartes, est celle d'une position de calviniste plutôt libéral, ou, du moins, de calviniste modéré. C'est avant tout par les capacités de doute que Clauberg s'engage au sein des positions réformées. Dans la mesure où Revius et Lentulus attaquaient Descartes précisément sur la base de son prétendu « scepticisme », Clauberg plaidait fortement en faveur d'une approbation du type spécifique du doute proposé par la méthode cartésienne. Ceci, cependant, pour

55 Duisburg: Wyngarten, 1656.

56 Kai-Ole Eberhardt, *Christoph Wittich (1625-1687) : Reformierte Theologie unter dem Einfluss von René Descartes*, Vanderhoeck und Ruprecht, Göttingen, 2019.

Clauberg ne doit pas être compris comme une hérésie portant une atteinte aux fondements de la foi chrétienne. Toujours dans ce contexte, on comprend l'importance de la méthode pour le projet claubergien, également dans le contexte de la théologie calviniste. La méthode est comprise comme une étape de préparation, dans laquelle l'initiation est faite au domaine de la pensée contemplative. La méthode, dont nous allons également explorer la dynamique interne dans ce travail, est comme un chantier protégé où l'on peut, et même on doit, se permettre de passer par l'auto-examen et l'auto-habilitation les plus stricts, afin de fournir la capacité d'établir l'habitude de l'infaillibilité. Ici, le cartésianisme joue un rôle décisif et irremplaçable.

10. Plan du présent travail

L'essai suivant est scindé en quatre parties, chacune étant divisée en plusieurs chapitres, et comporte un chapitre de conclusion étendu.

Partie 1 : L'art de raisonner. La première partie introductive de cet essai présente au lecteur le problème de la méthode dans le contexte cartésien, à la fois d'un point de vue historique et d'un point de vue structurel. Le premier chapitre présente les paramètres historiques, tandis que le deuxième chapitre présente une considération plus structurelle de la méthode de vision en tant que savoir-faire mental.

1.1. Des origines humanistes du problème de la méthode aux configurations philippo-ramistes de la méthode

Le chapitre introductif traite le développement historique de la discussion philosophique concernant la définition de la méthode au cours du XVI^e et du début du XVII^e siècle. Des sections spéciales sont consacrées aux définitions de la méthode proposées par Aristote, Ramus et Zabarella. On examine ainsi le rapport des considérations méthodiques avec la complétude (et l'art) de la logique : ce rapport existe déjà dans les écrits d'Aristote (principalement dans les *Analytiques* et dans la *Physique*).

1.1.2. La méthode comme savoir-faire du pas-encore-savoir

Le deuxième chapitre aborde la compréhension de la méthode en tant que savoir-faire mental. En tant que savoir-faire, la méthode doit être comprise comme une habitude, ou, mieux dit dans les termes de l'époque, comme un *habitus* de l'esprit. De nombreux endroits dans le corpus cartésien et claubergien rendent cette observation plausible. Cependant, la manière dont Clauberg a développé le savoir-faire cartésien est celle où l'hésitation et l'estimation apparaissent sur le devant de la scène. Ce chapitre suggère que le savoir-faire méthodique dans sa version cartésio-claubergienne a des implications réalistes : le savoir-faire méthodique témoigne d'une connaissance de son

propre esprit, mais aussi d'un répertoire d'un ordre déterminant des matières. Le chapitre aborde également le récent questionnement scientifique concernant l'importance de la question de la méthode pour l'entreprise cartésienne elle-même.

Partie 2 : Les deux visages de l'ordre. La deuxième partie se concentre sur les modes d'ordre que l'on peut trouver dans les méthodes de Descartes et de Clauberg. Nous commençons par l'ordre des raisons, qui est largement identifié avec l'analyse, continuons à l'ordre des matières, et enfin, nous discutons l'ambiguïté que l'on trouve dans le terme « analyse » et suggérons un modèle général de processus d'ordonnement à deux niveaux par l'analyse et la synthèse, que l'on retrouve dans la conception de la méthode de Clauberg.

2.1. L'ordre des raisons : analyse ?

Le chapitre s'appuie sur une différenciation entre l'ordre des raisons et de l'analyse, comme entre l'ordre des matières et la synthèse. Ceci est utile, car une telle différenciation nous aidera à voir plus clairement quels sont les ensembles complexes de sens que l'on trouve dans la dynamique de division et de composition dans la méthode claubergio-cartésienne. Le chapitre se concentre sur l'ordre des raisons chez Descartes, en essayant de préciser à la fois les origines et les suites de ce terme dans la pensée de Clauberg. Dans la lecture de Clauberg, l'ordre des raisons renvoie non pas tant à une manière biographique et confessionnelle de faire de la philosophie, mais avant tout à l'opération du doute, qui reçoit le caractère de première étape de toute enquête méthodique.

2.2. L'ordre des matières

Dans ce chapitre, nous approfondissons la notion d'ordre des matières. Nous réfléchissons à la relation entre l'ordre des matières et le concept traditionnel de « synthèse. » Nous clarifions ce que Descartes a mis en évidence concernant le concept d'« ordre des matières » en le liant à la synthèse. Nous considérons la question du raisonnement géométrique et comparons la détermination de Descartes de l'ordre des matières avec la conception de la méthode de Spinoza dans son essai *Tractatus de intellectus emendatione*. Nous détaillons à la fois le caractère synthétique de la méthode dans les travaux des philippo-ramistes et préalablement dans la philosophie de Zabarella. Nous clarifions quelle partie de ces suggestions synthétiques on peut observer dans les écrits de Clauberg, notamment dans la dernière version de son *Ontosophia*.

2.3. L'équivoque de l'analyse

Ce chapitre soutient que, dans le cadre méthodiste que nous essayons de distinguer dans le présent travail, l'analyse est par nature un terme synthétique. Nous montrons

que, déjà chez Aristote, il y a des indices allant dans ce sens. C'est ainsi que Zabarella a compris une méthode de type aristotélicien : c'est une enquête qui pousse nécessairement à fournir une synthèse des données avec les principes de la pensée. Nous soutenons que, contrairement à l'opinion de la majorité des spécialistes de Descartes, Descartes ne s'opposait pas en principe à la synthèse, seulement à un certain type de synthèse. De la même manière, Clauberg travaillait aussi à une sorte de synthèse, mais une synthèse qu'il faut distinguer de l'encyclopédisme de la génération précédente du philippo-ramisme, car chez Clauberg, le mode cartésien du methodisme était intégré au cadre de travail.

Partie 3 : Le recadrage du jugement et la figuration d'une pensée

Cette troisième partie s'occupe de la manière dont se produit le jugement, en tant qu'élément central de l'opération méthodique. En 3.1., nous passons au sujet du doute, défini, selon les termes de Clauberg, comme une « opération négative du jugement ». Après avoir passé en revue les règles de résolution méthodique, nous poursuivons en 3.2. avec l'étape synthétique de la méthode, délivrant des configurations mentales des matières à traiter.

3.1. L'usage négatif du jugement

Dans son *Initiation du philosophe*, Clauberg soutient fermement que le doute a en premier lieu une influence « négative » : au lieu de faire avancer sans arrêt les processus de pensée dans de nouvelles circulations d'opinions et de concepts, il faut arrêter et estimer le réservoir des savoirs que l'on a déjà. Le doute dans ce cadre est une stratégie d'ajournement du jugement, non de déconstruction. Le doute est donc présenté comme une action négative sur la volonté, c'est-à-dire comme une retenue de la volonté. Cette retenue est opérée par le travail d'analyse qui a été présenté dans les chapitres précédents. Le gage de l'analyse reçoit ainsi une nouvelle variation, dans laquelle l'unité synthétique déjà donnée est réduite à ses premiers principes, permettant à un second processus de synthèse d'avoir lieu.

3.2. Configurer les choses : la formation de l'objet

Le chapitre examine la question fondamentale : qu'est-ce qu'une « chose » dans le cadre claubergien-cartésien de la méthode ? En effet, en raison des caractères particuliers de la *res extensa* cartésienne, la seule manière d'aborder la conception d'une chose corporelle est de le faire à travers la *délimitation de sa figure*, avec ses « frontières » étendues. La qualité de la figure chez Descartes réside dans le fait qu'elle peut aider à rendre compte de toutes les nuances et irrégularités dans les formes des choses. Nous verrons que Clauberg est très sensible aux questions de constitution de l'objet de l'enquête. Seulement, pour Clauberg, les techniques de la figuration sont plutôt herméneutiques : la chose se définit selon les coordonnées de sa place à la fois

dans l'histoire et sous le regard de la logique. Nous nous demanderons en quoi la constitution claubergienne de l'objet s'aligne sur la manière dont Descartes a défini les objets propres de l'enquête méthodique, et dans quel sens on peut dire que la compréhension de l'objet par Clauberg est comme un objet mental.

Partie 4 : *Medicina mentis*. La quatrième partie de ce travail est ancrée dans une compréhension synthétique de la méthode de Clauberg. Nous examinons la théorie du jugement (cette fois positif) de Clauberg, et la mettons en relation avec la théorie du jugement de Descartes. On voit que le jugement joue un rôle dramatique et déterminant dans le processus méthodique, notamment dans le passage entre analyse et synthèse. On voit que, pour Clauberg, au stade du jugement, on s'approche déjà d'une vocation herméneutique, où l'on cherche le sens des choses en cause.

4.1. La théorie positive du jugement : la détermination du sens, l'herméneutique et la « linguistique cartésienne »

En 3.1., nous avons vu que Clauberg redéfinissait le sens du doute cartésien comme une manière d'ajourner le jugement. Au chapitre 4.1., on se demandera quelle est l'opération positive du jugement dans l'entendement claubergien de la méthode et quels en sont ses principes. L'aspect positif du jugement consiste en la formation de propositions correctement structurées considérées comme l'objet d'enquête configuré. Le chapitre mettra en évidence la place des considérations linguistiques et étymologiques dans l'œuvre de Clauberg. La place de l'analyse linguistique et de la synthèse du langage dans le cadre général de la méthode est présentée, et l'on suggère qu'en plus d'être une influence claire du ramisme, Clauberg tire également dans cet aspect des conclusions plausibles à partir d'un cadre cartésien. Cette synthèse s'achève chez Clauberg dans la troisième et dernière version de *Metaphysica de ente quæ recte ontosophia* (1664).

4.2. Méthode. Pédagogie ou thérapie ?

Ce chapitre est consacré au modèle médical et thérapeutique de la compréhension de la méthode. Dans les écrits de Clauberg, suivant les orientations ramistes, le but du processus méthodique est de préparer le terrain pour un processus ultérieur d'apprentissage et de découvertes dans d'autres domaines de la connaissance et de la pratique civile. Cette méthode n'est cependant pas seulement pédagogique, mais aussi thérapeutique, car elle suppose que l'état dans lequel on commence son enquête n'est pas sain ou mûr, nécessitant un processus de correction. La tâche la plus centrale que présente ce point de départ est de déterminer la définition du concept de « santé » dans le cadre méthodiste. Le concept de santé mentale amène aussi à la prééminence de la méthode comme un hypo-habitus, un sous-habitus primaire permettant tous les autres

habitus. Bien que la perspective thérapeutique se trouve déjà dans les formulations de méthode du XVI^e siècle, elle devient plus importante dans les dernières décennies du XVII^e siècle après Clauberg, comme dans les travaux de Spinoza (dans son *Tractatus de intellectus emendatione*) et Ehrenfried Walther von Tschirnhaus (dans *Medicina mentis*). Nous verrons que les notions que nous avons explorées jusqu'ici, celles d'analyse et de synthèse, et la différenciation que nous avons suggérée, en 2.3., entre la première synthèse, la première analyse, la deuxième analyse et la deuxième synthèse, peuvent également être utiles lorsque l'on aborde la question de la santé méthodique.

5. Conclusion : La méthode comme restauration. Reprenant et s'appuyant sur les chapitres précédents, la conclusion propose une manière synthétique de comprendre le méthodisme que l'on retrouve dans les écrits de Johann Clauberg. Autant dans les écrits de Descartes, la méthode est décrite comme un processus plutôt ouvert, dans les écrits de Clauberg, nous voyons la méthode comme allant vers un but préétabli, qui est la mise en place d'un *rappor*t entre l'auto-estimation et la compréhension des matières. En cela, Clauberg revient clairement sur l'héritage de l'école ramiste. La conclusion souligne le caractère « temporel » de la méthode de Clauberg, dans laquelle les techniques mnémoniques jouent un rôle plus important que chez Descartes. Autrement dit, la formation d'une proportion (un *habitud*o) entre l'ordre mental et l'ordre métaphysique est un processus qui demande nécessairement du temps, et dans lequel l'histoire mentale de l'individu pensant doit être considérée. Dans ce dernier chapitre, il est suggéré qu'une pensée, selon le modèle méthodique claubergien, est occasionnée, et dans une certaine mesure prédestinée, par la matière qu'elle juge et comprend. Les affaires mondaines sont des occasions d'alignement progressif de l'ordre des raisons et de l'ordre des matières.

Comprendre : la théorie positive du jugement et la correction herméneutique

4.1.1. Les intérêts herméneutiques de Clauberg contre l'attitude cartésienne ; 4.1.2. Le rôle actif du jugement dans la conception ramiste de « l'art » ; 4.1.3. Herméneutique dans le philippo-ramisme et dans le milieu de Clauberg ; 4.1.4. La place du jugement dans la *Logica*, dans le *Defensio* et dans l'*Initiatio* ; 4.1.5. L'importance de Bacon pour la méthode de Clauberg ; 4.1.6. L'ordre des matières et le livre de la nature ; 4.1.7. La vérité des choses, le jugement valide et l'estimation ; 4.1.8. L'ordonnance langagière de la philosophie ; 4.1.9. Jugement et falsification ; 4.1.10. Du diagnostic des choses à l'autodiagnostic et ensuite à l'ordre du monde

4.1.1. Les intérêts herméneutiques de Clauberg contre l'attitude cartésienne

Dans le processus de la méthode, après que l'étape du doute est terminée et qu'une figure de la matière discutée est établie, il faut reprendre l'enquête d'une manière positive, dans laquelle on établit une *compréhension* de l'affaire en cours:⁵⁷

On pet pas réanimer un voleur de qu'il était pendu : mais ça qu'on une fois rejeté comme douteux et fautif, on peut après raviver comme certain et vrai, et ainsi on doit faire, de qu'on perçoit que ça c'est le cas, mais non pas apriori.

Cette reprise du chemin, la formation d'un regard différent qu'auparavant, ce changement de perspective, renvoie le penseur initiant à son enquête, seulement une fois le processus de doute accompli. La *reprise* positive du chemin est un élément indispensable de la méthode. Dans ce chapitre, nous essaierons de comprendre ce qu'est cette reprise, et comment on entre dans la détermination du sens d'une certaine matière. Il faut aussi rappeler que la tendance humaine à l'erreur reste constante sur

57 OOP II, 1146 (*Initiatio* III, §34) : « Furem semel suspensum in vitam revocare nequis; at quæ semel tanquam dubia et falsa rejecisti, potes postea *resumere* tanquam certa et vera, et debes resumere, simul ac percepisti talia esse, non autem antea. »

son chemin, et même si l'erreur n'est pas un péché, il y a toujours une tendance au sophisme qui peut nuire à ce que Descartes appelle l'« industrie », et parlant et du malin génie de Descartes, et de nos démarches méthodiques: ⁵⁸

Engageant l'industrie, dont je peux me tromper

En cette manière, je me trompe. (On peut dire) Je permets, alors je suis parfois déçu. Ici, par contre, où le (malin) génie est discuté, on ne s'agira pas d'une manière passive et permettant, mais (d'une manière) hautement active et positive ; il (le malin génie) engage tout son énergie en me décevant ; dans la même manière, il sème les ruses.

Clauberg nous dit que dans la culture technique nouvellement construite du début de la période moderne, l'homme est constamment mis en contact avec de grandes industries d'invention, de mécanique, de sciences, mais elles peuvent toutes tromper le penseur, comme la tendance constante à l'infidélité qui existe chez le croyant. Néanmoins, nous devons poursuivre notre enquête. Autrement dit, même si la synthèse est toujours hasardeuse, il faut continuer d'établir et de développer notre industrie.

Dès lors, la question est de savoir comment avancer après avoir arrêté son mouvement mental, quelles précautions on doit garder dans la poursuite du sens, et quels sont les produits attendus de cette étape positive du jugement. C'est pourquoi, dans le présent chapitre, nous souhaitons d'aborder la fourniture d'une caractérisation précise de l'art de synthèse de Clauberg. Dans les chapitres précédents, nous avons déjà montré en quoi il est possible de considérer la méthode cartésienne comme essentiellement synthétique. La méthode de Clauberg s'appuie sur une impulsion synthétique que l'on retrouve aussi dans certains écrits de Descartes, et surtout dans les *Principes* et leur idée de l'Arbre de la philosophie. De plus, on ne peut pas comprendre la *Géométrie* et la *Dioptrique* de Descartes sans l'aide d'une synthèse, que Descartes utilisait consciemment. La synthèse dans ce dernier sens de la géométrie signifie l'hypothèse de la solution recherchée pour un certain problème, et elle reconstruit le chemin vers celui-ci. Si l'on pousse cette stratégie de modélisation

58 OOP II 1202 (*Initiatio IX, T*) : « *Industriam in eo posuisse ut me falleret* : (...) “[L]ocutus fuerit passivè et permissivè: *ego ut fallar, me decipi, permittere ut interdum fallar*; hîc autem, ubi de Genio sermo est, non passivè et permissivè, sed maximè activè et positivè loquatur: *omnem suam industriam in eo posuisse ut me falleret*; item, *insidias tetendit*. »

synthétique un peu plus loin, on voit aisément qu'elle est applicable non seulement en géométrie, mais aussi dans tous les autres domaines des arts et des sciences. Ce modèle est, naturellement, artificiel : ce n'est pas quelque chose que nous percevons dans nos sens, mais plutôt quelque chose que nous construisons et érigeons. Édouard Mehl a utilisé le terme de « la fabrique du monde » pour souligner ce caractère artificiel de la modélisation cosmologique chez Descartes.⁵⁹ Voyons ce qu'est précisément la stratégie de Descartes dans *Le Monde*, afin de pouvoir convaincre son lecteur. Descartes construit une fable qui rend les choses *pas trop faciles* à comprendre.⁶⁰

*La plupart des esprits se dégoûtent, lorsqu'on leur rend les choses trop faciles. Et pour faire ici un Tableau qui vous agrée, il est besoin que j'y emploie de l'ombre aussi bien que des couleurs claires. Si bien que je me contenterai de poursuivre la description que j'ai commencée, comme n'ayant autre dessein que de vous raconter une fable.*⁶¹

D'une part, on peut considérer ce paragraphe important comme une stratégie rhétorique, voire pédagogique, qu'il faut bien entendu reconnaître dans l'entreprise cartésienne. Cependant, nous pouvons aussi prendre cela au sérieux sur le plan métaphysique et épistémologique. La stratégie rhétorique n'est qu'une demi-vérité. La modélisation qu'effectue Descartes témoigne aussi d'une vraie foi de Descartes dans la capacité véridique de synthèse : du besoin, du côté du philosophe, de produire une image parlante pour son auditeur, afin que ce dernier soit « captivé » par ses ombres et lumières intéressantes.

Alors, comment cette méthode synthétique et constructive se situe-t-elle par rapport au besoin de comprendre certains textes, choses ou problèmes ? Cette stratégie relève-t-elle du domaine de la logique claubergienne, c'est-à-dire de son art de l'interprétation ? Et surtout, comment cette synthèse créatrice d'intérêt et de complexité se situe-t-elle par rapport à l'exigence de simplicité de l'évidence de l'intuition (la demande de « synopsis ») ? Il se peut que, dans le cadre claubergien, le juste milieu entre synopsis et industrie se trouve dans la démarche de l'interprétation.

59 Édouard Mehl, *Descartes et la fabrique du monde* (Paris : Presses universitaires de France, 2019).

60 Voir James Griffith, *Fable, Method, and Imagination in Descartes* (London : Palgrave Macmillan, 2018).

61 Descartes, *Œuvres* XI, 48.

Dans la tradition ramiste, interprétation signifie application, c'est-à-dire : si j'arrive à placer correctement mon objet observé dans un certain genre, je commence aussi à lui donner une application propre. Pour Clauberg, le processus est similaire, mais pas identique à la procédure ramiste de jugement. Pour Clauberg, une bonne compréhension des questions en jeu signifie appliquer tout ce qui est validé comme étant propre à la question en jeu, et jeter, activement, tout ce qui est inapproprié, falsifié ou non pertinent. En ce sens, le cadre de compréhension reste synthétique. Cette direction du processus de compréhension par un certain modèle fixe, construit, synthétisé, devrait à juste titre être appelée « modélisation ».

Mais comment maîtriser cette nécessité de modélisation, cette artificialité de la solution assumée ? C'est là que le concept de *Verstehen*, la compréhension, dans *Herméneutique*, entre en scène. La synthèse dont on discute ici, dans le cadre de Clauberg, n'est pas seulement celle de l'interprétation, mais plus particulièrement celle de la compréhension. Si nous comprenons une phrase, un texte, comme *La Logique* de Clauberg essaie de le suggérer, nous pouvons, au moins dans une certaine mesure, savoir que nous ne construisons pas seulement notre vérité modélisée, mais, en revanche, on comprend au moins quelque chose qui se trouve dans la matière discutée. Ce chapitre montre que chez Clauberg, la compréhension prend forme comme un diagnostic et un autodiagnostic : l'estimation de l'état d'esprit du chercheur ou de l'initié à la philosophie.

Ainsi, le présent chapitre rend compte des thématiques du sens et de la compréhension (*Verstehen*) qu'on retrouve dans la philosophie de Clauberg, tout en gardant un œil sur les questions abordées dans les chapitres précédents. Dans le cadre de l'adaptation de la méthode cartésienne, Clauberg a introduit des enjeux explicitement herméneutiques, alors qu'ils sont absents, ou du moins latents, dans la méthode de Descartes. *La Logica vetus et nova* de Clauberg est en fait un essai sur les pratiques de lecture et de compréhension : se lire soi-même, comprendre nos préjugés et leurs corrections, puis la lecture des œuvres des autres. La logique, comme nous l'avons déjà montré, culmine dans la capacité de juger les œuvres des autres. L'action de lire pourrait être envisagée à la fois sous son aspect analytique et sous son aspect synthétique : dans la *Logica* de Clauberg, ce n'est qu'au niveau de la seconde analyse que s'accomplit la compréhension des textes d'autrui. En ce sens, toute la logique claubergienne est construite comme une sorte de *préface à l'art de l'herméneutique*. Elle est en effet présentée comme relevant de la *logique herméneutique*. Cependant, c'est comme processus d'analyse, et non de synthèse, que Clauberg décrit cette démarche, menant à ce que l'on a suggéré d'appeler la seconde analyse, ou analyse

synthétique. Le savoir-faire qui est exigé dans les logiques claubergiennes est la capacité d'appliquer des principes de compréhension sur des cas particuliers, notamment concernant des œuvres d'autres auteurs (ou sur le travail de soi pris comme produit par un « autre »). La suggestion du présent chapitre est que c'est cette topologie qui est le sens de l'herméneutique méthodique dans la méthode de Clauberg. Cela convient-il aussi pour caractériser la méthode cartésienne ? C'est une question qui sera abordée à la fin de ce chapitre.

La détermination de la « compréhension » (Verstehen), fournit, à vrai dire, le moment synthétique des démarches proto-philosophiques qui sont prescrits par Clauberg. La compréhension fait un moment positif de la méthode, quand l'élément examiné est *assumé*, par le moyen de sa conception. La synthèse compréhensive effectivement précède, au moins *ontosopiquement*, sinon chronologiquement, la démarche du doute. Ainsi, Clauberg nous dit, que comme l'écriture sainte, c'est-à-dire la Bible, contient aussi des éléments de questions et d'interrogations, néanmoins Dieu n'est pas doutant et ne procède pas ni du moins connu au mieux connu, ni du mieux connu ou moins connu. Dieu n'a pas besoin de méthode. Autrement dit, même si nos expressions dans la transmission de notre méthode puissent ressembler à une rhétorique sceptique, ce fait ne doit pas nécessairement avouer que nous sommes doutant, ou pire- que nous sommes de sceptiques. Encore une fois on voit que pour Clauberg la manière de la transmission de la méthode, c'est-à-dire son aspect pédagogique, fait une partie essentielle de la méthode même. Aussi, il faut remarquer dans le paragraphe suivant la distinction entre la méthode *interne* et la méthode *externe*, une division qui est essentielle pour Clauberg.

*[...] Dieu, qui ne doute pas jamais de rien, et ne procède pas du su au insu en discutant, néanmoins propose de questions et des arguments. Mais exactement comme lui, qui mène une enquête avec son mot extérieur, ne serait pas, à cause de ce fait, continuellement en doute, ainsi lui qui fait les orations externes en doutant, n'est pas immédiatement ou continuellement en doute.*⁶²

Alors la méthode est essentiellement une enquête de compréhension, qui a parfois un visage sceptique, et néanmoins la synthèse du sens doit être toujours le principe

62 OOP II, 1141 (Initiatio 60, II, 7): « Et potest è dictis explicari, quomodo Deus, qui nunquam de ulla re dubitat, neque à noto ad ignotum argumentando procedit, in Bibliis nihilominus quaestiones et argumentationes proponat. Quemadmodum autem is qui quærit exteriore voce, non propterea ipse continuo animo dubius est: ita nec ille qui externa oratione dubia utitur, mentem illico dubiam habet. »

guidant de notre démarche. Pour Clauberg, la méthode d'interprétation, que nous devrions en premier lieu apprendre d'Aristote dans son *Herméneutique*,⁶³ est cette science fondamentale qui permet les méthodes particulières de tous les autres arts :

*Mais même si les théologiens, dans leur interprétation des lieux de l'Écriture sainte, ont tendance à s'occuper de leurs propres interprétations, et même les juristes aussi, donnent les interprétations (seulement) des textes législatifs, il ne faut pas en conclure que la méthode correcte d'interprétation vient d'autre que de la logique.*⁶⁴

La question se pose de savoir si la méthode doit nous fournir une connaissance concrète du monde ou si elle n'est destinée qu'à la préparation de l'esprit pour pouvoir apprendre ou connaître le monde. Nous avons soutenu plus haut que la seule connaissance que la méthode devrait fournir est celle de tout ce que nous ne savons pas [encore] faire : elle est censée fournir une estimation de cette matière que nous ne connaissons pas encore « par sa nature même » (dans la détermination aristotélicienne), une estimation de ce qui demande encore à être connu. Cet inconnu-estimé est alors configuré (comme nous avons montré en 3.2.) puis il sert comme modèle, une figure qui oriente l'articulation du jugement positif. Le jugement que chaque processus méthodique doit fournir tôt ou tard concerne la détermination du domaine dans lequel le problème, ou l'objet inconnu, doit se situer pour poursuivre la voie de l'enquête. Ainsi l'arbre de la philosophie dans les *Principes de la philosophie*, ou les trois traités qui suivent le *Discours de la méthode*, le domaine de la philosophie « appliquée » qu'on peut éventuellement nommer les philosophies secondaires : la philosophie appliquée soit à la science, soit à la morale, soit à la technique en général. En fait, il semble que, pour Descartes, le processus méthodique et le jugement qu'il produit servent à *déterminer dans quel domaine il faut poursuivre son enquête*. En d'autres termes, c'est un jugement sur le domaine dans lequel nous pourrions connaître un peu mieux l'objet selon sa nature propre. Cette réception du jugement a des précédents à la fois aristotéliciens et ramistes. Cette manière d'expliquer une chose (ou

63 *De Interpretatione* ou *On Interpretation* (Greek: Περὶ Ἑρμηνείας, *Peri Hermeneias*), voir Aristote, « De interpretatione », trad. J. Ackrill, *Complete Works*, J. L. Barnes édition (New Jersey : Princeton University Press, 1985), 25–38.

64 OOP I, 781–2 (*Logica, prolegomena*, §123): « *Quamvis autem Theologi in loco de Scriptura sacra de ejus interpretatione soleant agere, quamvis etiam Jurisperiti de Legum interpretatione tractent, non tamen inde licet concludere, rectam interpretandi methodum ad singulas potius disciplinas, quam ad Logicam spectare.* »

un texte) est techniquement achevé par le principe herméneutique de la clarification d'une expression par ce qui la précède:

Si le lecteur est encore douteux concernant l'auteur quant à la fin pour laquelle on propage le doute, quelle est le but de tel commencement d'une philosophie, alors tels philosophes ne savent pas cette lois herméneutique: ce (l'argument) qui suit, est clarifié par ce (un autre argument) qui l'antécède; tels philosophes ont (bien) hâte à blâmer l'auteur (Descartes). Et c'est pourquoi le lecteur est informé du titre du livre, dans la préface, que les Méditations en général sont dirigées vers une démonstration rationnelle et certaine de la distinction entre le corps et l'âme humaine, qui est immortelle, et Dieu.⁶⁵

Le processus herméneutique, par conséquent, procède comme une séquence, qui commence par la clarification d'éléments simples, et procède à l'examen de questions plus complexes qui apparaissent dans un certain texte. C'est exactement ainsi que procède la logique de Clauberg. Au dernier paragraphe des prolégomènes de la *Logica*, Clauberg écrit :

Nous reconnaissons cependant que cette analyse herméneutique n'a pas toujours été nécessaire. Parce que les anciens, dont il ne repose pas de monuments écrits de très peu, nous en avons très peu besoin. C'est la raison pour laquelle ils ne l'ont pas traité, et Aristote, dans le livre De l'interprétation, n'en trace que les premières lignes. Mais maintenant, comme nous sommes dans l'ordinaire chargés dans une masse de livres et que les théologiens comme les juristes ont à leur disposition les principaux écrits, cette science est devenue bien nécessaire à tout le monde, particulièrement à ceux qui s'appliquent à la théologie et à la jurisprudence ; ou mieux encore, à tous pour ceux qui ont l'habitude de se disputer entre eux sur la pensée des auteurs célèbres, ces hommes qui, dans notre mémoire ou celle de nos aînés, sont plus nombreux que ceux qui s'occupent de la vérité des choses considérés pour elles-mêmes. Comme, dans ce siècle pervers, nombreux sont ceux qui savent trop vouloir déformer les mots avec un sens étrange, prenant à tort ce que les écrivains anciens ont bien présenté, il appartient à l'herméneutique analytique de séparer

65 OOP II, 1211 (Initiatio XI, §43) : « Si [...] incertus ab autore relictus fuisset Lector, [...] quò tendat ejusmodi Philosophiæ exordium, tum fortassis illi qui nesciunt regulam hanc Hermeneuticam: sequentia declarant antecedentia, Philosophi reprehendendi occasionem inde potuissent arripere. At nunc monitus fuit Lector in libri titulo, in dedicatione, in præfatione, eò dirigi Meditationes hasce omnes, ut existentia Dei et Animæ humanæ à corpore distinctio atque immortalitas demonstrarentur rationibus certissimis. »

*non seulement l'idée de l'interprétation du tempérament de la critique de ce que le logicien pourrait reconnaître comme ce qui est une interprétation vraie, et ce qui est une dérogation (ou critique, a.e.), qui est un bon interprète, et qui est dérogatoire, et hostile [au texte]. Commençons maintenant par le traitement, par l'ordre des quatre parties de la logique.*⁶⁶

Pour désigner ces faux herméneutes qui se satisfirent en pratiquant la critique, Clauberg utilise le terme « caluminateur » : est-ce un hasard total que c'est bien ainsi qu'il se réfère à Revius et Letulus, les deux grands accusateurs de Descartes au temps de Clauberg ? Il semble que la réponse soit négative. Il ne s'agit pas d'un pur hasard, mais d'un caractère stylistique révélateur : en effet, dans la *Logique*, Clauberg n'intègre pas seulement la méthode cartésienne au ramisme et à l'aristotélisme, mais fournit aussi ses outils d'interprétation pour traiter les critiques dérogatoires de Descartes, et suggérer une interprétation correcte des écrits de Descartes eux-mêmes. Il faut le préciser : Clauberg se réfère à Descartes, mais aussi à ses accusateurs, comme des sources textuelles, qu'il faut commenter, interpréter et défendre ou rejeter. Même l'*Entretien avec Burman* est, en fait, construit comme des chapitres de commentaires sur plusieurs textes-lieux importants chez Descartes. Autrement dit : le cadre de la présentation par Clauberg des voies de la raison est herméneutique et interprétatif en son essence. Il assume *le rôle du commentateur afin de transmettre le contenu cartésien*. Sa façon de penser est « durch und durch » de nature herméneutique. Et cette raison herméneutique a ses racines dans la culture intellectuelle ramiste dont Clauberg est issu.

66 OOP II, 782 (*Logica* IV, §124): « Fatemur interim Hermeneuticam illam analyticam non fuisse omni ævo æquè necessariam. Nam *Veteres* , apud quos aut nulla aut pauca admodum exstabant monumenta scripta, minùs ea indigebant. Quæ causa est, cur ab illis non fuerit tradita, & ab Aristotele in lib. de Interpretatione vix primis lineamentis adumbrata. Nunc verò cùm librorum copia ferme oneremur, ac Theologi simul & Jureconsulti principia habeant scripta, maximè illa cuique necessaria est, præsertim Theologiæ & Jurisprudentiæ studiosis; imò omnibus iis , qui de Scriptorum illustrium mente digladiari solent, **cujusmodi & patrum & nostra memoria sunt longè plures , quàm qui de rerum per se consideratarum veritate solliciti**. Et cùm dentur perverso hoc seculo plurimi, qui optimè dicta in alienum sensum detorquere student , sinistrâ accipientes , quæ magni Scriptores dextrâ præbuerunt, Hermeneuticæ analyticæ est, non tantùm Interpretis ideam , sed etiam Calumniatoris indolem delineare, ut internoscere queat vir Logicus , quæ vera interpretatio, quæ calumnia, quis bonus Interpres, quis Calumniator & Sycophanta malitiosus. At nunc ad quatuor Logicæ partes ordine tradendas accedamus. »

4.1.2. Le rôle actif du jugement dans la conception ramiste de l'art

Selon Craig Walton, pour Ramus, le jugement équivalait à une opération spirituelle : la quête du salut est la quête du jugement.⁶⁷ Dans les évaluations de l'homme de ses propres inventions, la responsabilité du jugement « est la plus lourde ».⁶⁸ Chez Ramus, on parle de deux niveaux de jugement : l'un existe au niveau de la construction d'une phrase, dans la mesure où le deuxième niveau de jugement concerne l'usage du premier jugement, après avoir acquis des connaissances supplémentaires sur l'objet. Pour Ramus, le jugement fait partie intégrante de l'établissement d'un art. L'application des règles aux cas particuliers constitue le cœur même du processus « artistique ». Ramus a soutenu que le jugement est la localisation de la chose dans son propre genre.

Afin d'engendrer un art ou une science, pour Ramus, il faut procéder de ce qui nous est le mieux connu, c'est-à-dire, pour Ramus, les principes clairs et généraux, à ce qui est connu par lui-même, c'est-à-dire, pour Ramus, aux cas particuliers en discussion. Pour Ramus, la méthode n'est requise que lorsqu'il s'agit d'enseigner les principes, et non lorsqu'il s'agit de les « découvrir ». L'enseignement et le transfert de savoir-faire sont au cœur de la conception de l'art de Ramus. Mais pour Zabarella, pour Descartes et pour Clauberg, comme nous l'avons montré, la génération (« découverte ») des principes et leur transfert font une seule et même tâche. Ramus pense que sa compréhension de l'art est aussi la manière dont Aristote, Galien et Platon ont compris la méthode, c'est-à-dire que cette méthode n'est pertinente que dans l'application des principes, pas dans l'établissement des principes. Aussi, dans le cas de la logique, l'opinion de Ramus est que ce qui est déterminant en ce qui concerne cet art, c'est d'abord et avant tout, encore une fois, son application. Il semble que Descartes puisse être d'accord avec lui sur ce point. Le bon sens cartésien n'est pas d'apprendre les règles du raisonnement pour elles-mêmes, mais plutôt de faire agir la raison comme si elle agissait spontanément, devant les choses, en temps réel, exigeant l'action du jugement.

Nous avons vu dans le chapitre sur la figuration (3.2.3) que, dans l'établissement du jugement, Clauberg va effectivement dans le sens assez

67 Craig Walton, « Ramus and the Art of Judgment, » *Philosophy & Rhetoric* 3/3 (Summer, 1970) : 159.

68 Ibid.

questionnable du troisième type de méthode que Zabarella et Ramus déconsidèrent : la voie des définitions. Rappelons-nous que dans son essai sur l'unité de méthode, Ramus s'est fortement opposé à la troisième méthode de Galien.⁶⁹ Qu'elles soient imprégnées de motivations ramiste, zabarelliste ou cartésienne, il semble que la plupart des écrits de Clauberg œuvrent à l'établissement d'un système de définitions et d'applications dans des problèmes spécifiques. Dans ce cadre d'établissement de grilles de classification, Clauberg aborde souvent les problèmes philosophiques d'un point de vue philologique ou étymologique. Par exemple, dans l'*Initiatio* :

On peut ajouter du trésor philologique l'étymologie de ces mots, ainsi que les mots de Menochius:⁷⁰ quelqu'un est appelé doutant, quand il peut choisir entre, etc. Et Isidore, Orig. lib. 10. ainsi dit douteux, incertain si de deux routes. Du grec ἀμφιβητέω, comme marchant dans les deux sens de ἀμφίς et βάω. En allemand : Zweifeln.⁷¹

On voit que Clauberg se tourne vers les différentes langues parlées et écrites qu'il connaît, le grec, l'allemand et le français, pour voir ce qu'il peut comprendre du sens du concept de doute à partir du langage lui-même. En plus de tirer ses références des écrits des autres (comme c'est le cas dans le style classique des écrits chez les scolastiques), Clauberg va en fait dans une orientation plutôt aristotélicienne (dans les *Catégories*), où il tire ses exemples de l'usage courant de diverses langues. Il est en effet aussi remarquable de voir que Clauberg ne se contente pas d'apporter un exemple dans une langue, ou plutôt sa propre langue, mais prend plutôt soin d'apporter des exemples de différentes langues, faisant ainsi apparaître ce qui est similaire entre celles-ci.

On peut alors dire que, d'un côté, Clauberg hérite de l'importance ramiste du jugement : la plupart de ses écrits sont composés comme des dispositions d'applications de principes par des cas spécifiques ; de l'autre côté, la méthode claubergienne cherche constamment des définitions de matières, par la voie de la compréhension (*Verstehen*). Ce stade dernier du jugement, déjà, n'est pas ramiste, mais surtout il arrive de l'école herméneutique, qui avait évidemment aussi une présence notable dans la pensée méthodique de Clauberg.

69 Ramus, *Methodus*, 18.

70 Giacomo Menocchio, 1532-1607. Comme dans son *De praesumptionibus, conjecturis, signis & indiciis commentaria*, 2 vol., (Padova: Tarinus, 1594).

71 OOP II, 1132 (*Initiatio*, §5) : « Addamus è penu Philologica ipsarum vocum etymologiam, ad quam pertinent illa Menochii verba: dubius dicitur, qui cùm duas vias habet etc. Nam isidorus Orig. lib. 10. Sic ait : Dubius, incertus, quasi duarum viarum. Sic graec. ἀμφιβητέοι, quasi in utramque partem eo, ab ἀμφίς et βάω. Germ. Zweifeln/ quasi (...). »

4.1.3. L'herméneutique dans le philippo-ramisme et dans le milieu de Clauberg

L'époque et le milieu de Clauberg correspondent aussi à l'âge de la puberté de l'herméneutique moderne. Le terme « Hermeneutica » a été réinitialisé par le Strasbourgeois Johann Conrad Dannhauer (1603-1666)⁷², qui a opéré ce que Daniel Bolliger a récemment appelé une « existentialisation » de la dialectique.⁷³

L'engagement interprétatif avec des textes plus ou moins anciens était bien sûr déjà amorcé avant Dannhauer, tout au long de la culture humaniste. Ramus lui-même était déjà profondément engagé dans une relecture de textes anciens. Cependant, l'herméneutique initiée par Dannhauer était spécifiquement orientée vers l'occupation avec les textes sacrés religieux, et surtout l'Ancien et le Nouveau Testament.

Jaqueline Lagrée a caractérisé la *Logique* de Clauberg comme une partie organique du développement de l'herméneutique en tant que discipline.⁷⁴ Ce mouvement, selon Lagrée, est aussi celui qui conduit à l'herméneutique de Spinoza, que l'on retrouve dans le *Traité politico-théologique*.⁷⁵ Cependant, du point de vue de la présente recherche, il y a plutôt une rupture qu'une droite continuité entre les méthodes herméneutiques de Clauberg et de Spinoza. Pour Clauberg, l'herméneutique relève intrinsèquement de la logique, des textes sacrés et de la métaphysique ; c'est-à-dire que la théorie de l'interprétation et de l'expression du jugement sur le texte que nous trouvons dans la *Logique* est une théorie générale de la raison qui doit appartenir en fait à tout objet que l'esprit humain rencontre sur son chemin. Chez Spinoza, cependant, il est clair qu'il y a d'une part une méthode qui se trouve dans sa métaphysique, qui est évidemment synthétique ou « géométrique », et d'autre part celle que nous trouvons dans le *traité théologico-politique*,⁷⁶ qui est, en fait, plutôt analytique dans son caractère, traitant d'une analyse partie par partie d'un texte.

72 Clauberg avait bien connu les travaux de Dannhauer, qui apparaît plusieurs fois dans le corpus claubergien.

73 Daniel Bolliger, *Methodus als Lebensweg bei Johann Conrad Dannhauer. Existentialisierung der Dialektik in der lutherischen Orthodoxie* (Berlin and New York : De Gruyter, 2020).

74 Jaqueline Lagrée, « Spinoza et Clauberg, de la logique novantique à la puissance de l'idée vraie », in *Méthode et Métaphysique* (Paris, Presses universitaires de France, 1989), 19-46.

75 Sur l'herméneutique chez Spinoza et son traité politico-théologique, voir Norman O. Brown, « Philosophy and Prophecy: Spinoza's Hermeneutics », *Political Theory* 14/2 (May 1986) : 195-213.

76 Aussi Jean-Marie Auwers, « L'interprétation de la Bible chez Spinoza. Ses présupposés philosophiques », *Revue théologique de Louvain* 21-22 (1990) : 199-213.

Le strasbourgeois Dannhauer est, comme indiqué plus haut, le fondateur de l'« herméneutique générale » (*hermeneutica generalis*), dont le but est défini (*finis hermeneuticæ*) comme l'exposé des discours ainsi que la discrimination infaillible entre le vrai sens et le faux.⁷⁷ Meier-Oeser a souligné l'importance de la « théorie des suppositions » en herméneutique à la fois chez Melanchton, chez Dannhauer, ainsi que dans les travaux de Clauberg lui-même.⁷⁸ Pour Dannhauer, l'interprétation et l'exposé des textes ont aussi un aspect existentiel, dans lequel cette activité même est présentée comme un mode de vie.⁷⁹ Dans cette tradition, la logique aussi peut recevoir son « turn » herméneutique.⁸⁰ Et Clauberg fait une figure centrale de cette logique herméneutique.

Plus tard, la figure historique de Ludwig Meyer (1629-1681) servira de faisceau de connexion entre la logique herméneutique de l'âge de Clauberg et l'herméneutique proto-scientifique qu'on peut trouver dans le *Tractatus theologico-politicus* de Spinoza.⁸¹ Meyer a même écrit un traité important proposant une interprétation philosophique de la Bible qui était, pendant des décennies, attribué à Spinoza.⁸² Le travail de Meyer a manifesté un lien vivant entre le cartésianisme des Provinces-Unies et le cartésio-ramisme allemand que l'on trouve chez son ami Eherenfried Walther von Tschirnaus, dont l'œuvre *Medicina mentis* sera discutée dans le chapitre 4.2. de notre travail. Meyer a introduit le cartésianisme dans le domaine de l'herméneutique, et il était aussi très proche des cercles de Spinoza en Hollande.⁸³ Nous parlons ici, en effet, de l'entrée de la question *du sens* au centre du discours philosophique des débuts de la modernité : le vrai sens valable, différencié d'un sens faux. La question ici n'est pas celle de la construction du langage, mais plutôt *de la signification par le langage*.

77 Johann Conrad Dannhauer, *Idea boni interpretis et malitiosi caluminatoris quæ obscuritate dispulsa* (1630, 3rd edition, Argentorati: Joani Philippi Mülbii, 1652). Voir aussi Setphan Meier-Oeser, 2013. « The Hermeneutical Rehabilitation of Supposition Theory in Seventeenth-Century Protestant Logic », in: E. P. Bos ed., *Medieval Supposition Theory Revisited* (Dordrecht and New York: Brill, 2013), 464-481.

78 Meier-Oeser, *Hermeneutical rehabilitation*, 475.

79 Bolliger, *Methodus*.

80 Julius Goebel, « Notes on the History and Principles of Hermeneutics », *The Journal of English and Germanic Philology* 17/4 (October 1918) : 602-621.

81 Hamburg : Apud Henricum Künraht, 1670.

82 *Philosophia S. Scripturæ interpres : exercitatio paradoxa, in quâ, veram philosophiam infallibilem S. Literas interpretandi normam esse*, unknown publisher, 1666.

83 Jacqueline Lagrée, « Louis Meyer et la “Philosophia S. Scripturæ Interpres” : Projet cartésien, Horizon spinoziste », *Revue des sciences philosophiques et théologiques* 71/1 (janvier 1987) : 31-43 ; Lodewijk Meyer and S. Shirley trans., *Philosophy as the interpreter of Holy Scripture* (1666) trans. S. Shirley (Milwaukee : Marquette University Press, 2005).

La naissance de l'herméneutique était sans doute liée à la mentalité protestante.⁸⁴ La question du symbolisme des textes sacrés était constamment présente au XVII^e siècle. Le contexte calviniste concernant la signification des symboles est également pertinent pour le cas de Clauberg.⁸⁵ L'attitude calviniste est intrinsèquement divisée entre l'effort incessant pour rendre le monde compréhensible et la nature intrinsèquement indéchiffrable de la volonté de Dieu qui est incarnée par la doctrine calviniste de la prédestination. Si nous imageons cela avec le vocabulaire de l'optique, la pratique consistant à comprendre le livre du monde fonctionne comme le fait de fournir des lunettes ajustées au lecteur, offrant ainsi la capacité de voir correctement la réalité elle-même.

La lecture du sens de la réalité est intimement attachée aux questions de l'analyse et de la synthèse. La conception de la méthode herméneutique de Dannhauer était plus analytique que synthétique :

*Certes, l'objet de l'herméneutique n'est rien d'autre que celui qui est l'occupation du livre d'Aristote Peri hermeneias (Περὶ Ἑρμηνείας), non pas dans une raison synthétique, qui apprend à exprimer le sens mental dans un discours, mais une raison analytique, par laquelle le mode de l'interprétation de l'oraison est transmis, qui s'étend à [ces objets qui sont] autres que sa propre voix ou sa propre écriture.*⁸⁶

Il s'agit bien d'une définition identique à celle que nous avons rencontrée dans la compréhension de Clauberg de la logique analytique : c'est celle qui trouve le sens correct des œuvres des autres. La source directe de l'utilisation par Clauberg du terme « analyse », dans sa logique, est alors l'herméneutique de Dannhauer. Dans le contexte de la philosophie réformée, la logique était largement comprise comme appartenant à une vocation herméneutique, et les termes de logique et de compréhension (*Verstehen*)

84 Voir Gerhard Ebeling, « L'herméneutique entre la puissance de la parole de Dieu et sa perte de puissance dans les temps modernes », *Revue de théologie et de philosophie* 126 (1994) : 39-56 ; Ladislav Tkáčik, « Hermeneutics and Protestantism », *Introduction to Philosophical Hermeneutics* (Bern: Peter Lang, 2016).

85 Alexandre Ganoczy and Stefan Scheld, *Die Hermeneutik Calvins: Geistesgeschichtliche Voraussetzungen und Grundzüge* (Wiesbaden : Franz Steiner Verlag, 1983) ; Dirk van Miert, Henk J. M. Nellen, Piet Steenbakkers, and Jetze Touber eds., *Scriptural Authority and Biblical Criticism in the Dutch Golden Age: God's Word Questioned* (Leiden: Brill, 2018).

86 Johann Conrad Dannhauer, *Idea boni interpretis et malitiosi caluminatoris quae obscuritate dispulsa* (1630, 3rd edition, Argentorati: Joani Philippi Mülbii, 1652), 24 : « [...] certum est non aliud hermeneuticae objectum esse, quam in quo libri Aristotelis Perihermeneias sunt occupati : quos ego sic dictos existimo, non ratione synthéseos, quasi doceant sensa mentis oratione exponere, sed ratione analyseos, quia tradunt modum interpretandi orationes jam dum ab alio seu voce seu scriptura prolatas. »

étaient intimement liés. Autrement dit, nous assistons ici à une transmutation du sens même de la logique, dans laquelle la logique est de plus en plus conçue comme l'art de comprendre. Et la *Logica* de Clauberg participe à cette transmutation générale.

4.1.4. La place du jugement dans la *Logica*, dans le *Defensio* et dans l'*Initiatio*

On voit que Clauberg suivait le style philosophique de la logique herméneutique. L'herméneutique logique est une méthode qui devrait être utilisable dans n'importe quel domaine de la science et de l'art, et, en ce sens, nous nous situons bien dans le credo ramiste de la « méthode unique », qui est compatible avec la conception cartésienne de la science, et avec la conception générale de l'herméneutique aristotélicienne.

La fonction de l'herméneutique logique est d'établir un ensemble de règles d'interprétation qui doivent être pertinentes et applicables dans tous les domaines de l'art humain :

En fait, nombreuses règles existent pour l'enquête du vrai sens, et elles ont toutes la même utilité, commune aux théologiens, jurisconsultes, entre autres. [...] Nous ne sommes pas capables de transmettre ces règles universelles de l'interprétation que par la logique, car celle-ci est une manière d'interprétation, une manière de savoir le vrai sens de quelque chose qui est dit.⁸⁷

Ce point est important à noter, car la conception de la logique et donc de l'herméneutique chez Clauberg peut être considérée comme non aristotélicienne (au sens où, dans la réception traditionnelle, l'aristotélisme croyait que chaque science devait avoir sa propre méthode individuelle, correspondante, adéquate à des objets d'un certain genre) et l'on peut en effet parler d'une méthode unifiée s'appliquant à tous les sujets discutés. Dans la *Logica*, à la quatrième partie, nous voyons venir la logique herméneutique. Cela vient comme une seconde analyse, non pas l'analyse de soi, mais l'analyse des textes des autres, extérieurs à l'intellect qui exerce l'enquête. Cette seconde analyse, comme nous l'avons suggéré au chapitre 2.3., constitue l'aboutissement de la méthode claubergienne. Cependant, cette analyse est

87 OOP I, 781-782 (*Logica*, Prolegomena, VI, §123): « Nam verum sensum investigandi regulæ multæ sunt, eædemque utilissmæ, Theologo, Jurisconsulto et aliis omnibus communes. (...) non possunt autem communes isti interpretandi canones alibi tradi quàm in *Logica*, quia modus interpretandi est, modus verum alicujus dicti sensum cognoscendi. »

intrinsèquement synthétique, car elle se rapporte à un objet provenant de l'extérieur de l'âme pensante. De cette manière, au quatrième chapitre de la logique, on atteint la position consistant à peser les propositions déjà divisées et ordonnées :

*La quatrième partie, dans laquelle les concepts, les définitions, les divisions, l'ordre des pensées, les jugements, les propos, les questions, les preuves et les disputes des hommes sont pesés au trébuchet de la droite raison droite (rectae rationis).*⁸⁸

Ainsi, l'herméneutique et sa théorie des suppositions font pour nous un élargissement important de notre compréhension de la pratique du doute dans la méthode claubergienne. La procédure du doute fait partie d'un plan herméneutique, dans lequel les connaissances que nous possédons déjà sont estimées, et leur sens est déterminé. En ce sens, *le doute herméneutique* que l'on rencontre chez Clauberg est l'étape fondatrice de la reconstruction du langage philosophique, de la restructuration du vocabulaire philosophique. Il nous guide à travers la procédure consistant à prendre nos blocs de construction philosophiques pré-donnés et à découvrir leur véritable sens, afin de déterminer lesquels d'entre eux nous aimerions conserver, et lesquels doivent être jetés. Ce que nous apprenons de cette orientation herméneutique très importante de l'œuvre de Clauberg, c'est la place de la *détermination de la signification des choses*, qui peut être vu, en effet, comme une partie adéquate à une entreprise de la sorte cartésienne. Ainsi, ce que l'on voit ici, remarquablement, c'est en vérité un point de rencontre, qui n'est pas du tout ni simple ni bien reconnu, entre le cartésianisme et l'herméneutique.

4.1.5. L'importance de Bacon pour l'herméneutique de Clauberg

Comme mentionné, Clauberg mentionne assez souvent Francis Bacon dans ses écrits, ce qui est bien sûr surprenant, surtout si l'on prend en compte la compréhension habituelle de la philosophie de Clauberg comme une sorte de scolastique tardive. Clauberg estime que Bacon est un penseur extrêmement important, et il le convoque souvent à l'appui de la méthode de Descartes. Cela rend évident que, pour Clauberg, la réception de la position cartésienne a à voir avec la réception du doute humaniste, et pas seulement le renouveau de la tradition aristotélicienne. Par exemple, voici comme

88 Traduction Coqui et Lagrée, 233 ; OOP II, 866 (*Logica*, IV, titre) : « In qua hominum conceptus, definitiones, divisiones, ordo cogitationum, iudicia, effata, quaestiones, probationes, disputationes ad rectae rationis staterem appenduntur. »

Clauberg présente Bacon : « Ce chancelier, Bacon de Verulam, mérite sa célébration parmi les savants, concernant le doute qui est prescrit par lui, il est agréable de comparer son doute avec lequel conféré par Descartes [...] ». ⁸⁹

C'est aussi de Bacon que Clauberg tire les lignes de son quasi-empirisme :

Prudence :

La prudence dans la philosophie soit que concernant chaque considération de sens (les perceptions des sens), si longue qu'on ne peut pas pleinement le falsifier, on puisse encore en certaine manière encore nous appuyer sur eux. Maintenant, le premier de tous les principes de la connaissance humaine, qui (aussi) soutient la métaphysique, devrait être tel qu'on puisse les considérer dans une manière complète (sinon ils ne soient pas métaphysiquement certains, et la fondation soit aussi moins certain) et donc, ils manquent les principes des sens. ⁹⁰

C'est aussi de Bacon que Clauberg tire les lignes de son propre rapport aux règles de la société civile, et surtout du partage entre philosophie de la vie civile et métaphysique. Pour Clauberg, Bacon est vu comme affilié à Descartes, d'abord et avant tout du point de vue de l'usage du doute dans l'acquisition du savoir. Il faut rappeler que le professeur de Clauberg au Gymnase de Brême, Gérard de Neufville (1590-1648), professeur de médecine, de mathématiques et de physique, était un lecteur de Bacon. ⁹¹ Ainsi Clauberg était-il initié déjà très tôt à la pensée de Bacon. Cependant, il semble que si, pour le baconiste, le doute concerne aussi les domaines

89 OOP II, 1212 (Initiatio XII, §2): « Et quia Cancellarius ille, Bacon de Verulamio, merito suo celebratur inter doctos, ideo ejus dubitationem, quam philosophaturis praescribit, cum Cartesiana libet conferre. » Sur Bacon voir Dana Jalobeanu, "Core experiments. Natural histories and the art of experiential literata: the meaning of baconian experimentation." *Societate si Politica* 5 (2011): 88-104; Giglioni, Guido, "Learning to read nature: Francis Bacon's notion of experiential literacy (experiential literata)," *Early Science and Medicine* 4-5 (2013): 405-34; Dana Jalobeanu, *The art of Experimental Natural History: Francis Bacon in Context* (Bucharest: Zeta Books, 2015).

90 OOP II, 1184 (Initiatio IX, §II): "B : Prudentiæ scilicet Philosophicæ esse ait nunquam *planè* considerare sensibus; non interim negat nos iis aliquo modo posse fidere. Sed quia prima omnis humanæ cognitionis principia, quæ suppeditat Metaphysica, debent esse talia, ut iis possimus *planè* considerare (aliàs enim non erunt Metaphysicè certa, multò minùs omnis certitudinis fundamenta) idcirco sensus pro talibus principiis haberi nequeunt."

91 A noter quelques publications de Neufville : *Theorica et practica arithmetica, methodice disposita, selectis exemplis declarata et evidentibus demonstrationibus firmata* (Bremen 1624). Aussi *Sitionum miscellaneorum, ex universa medicina desumtarum decades III*, 1616 (Basel : Ioh. Iacobi Genathii, Acad. Typographi, 1616). Sur le cartésianisme dans le Gymnasium de Brême après la mort de Clauberg, voir Reimund B. Sdzuj, « Zum Cartesianismus am Bremer Gymnasium illustre Johann Eberhard Schwelings Dissertation De anima brutorum (1676) », in *Frühneuzeitliche Disputationen* (Wien, Köln, Weimar: Böhlau Verlag, 2017), 179–198.

de l'usage humain, pour Descartes, le doute concerne explicitement les choses métaphysiques, qui ne sont pas directement traduisibles dans le domaine de l'usage : *Et nous rencontrons ici la distinction métaphysique cartésienne la plus fréquente, de sorte qu'on pourrait faire la distinction entre la contemplation de la vérité et l'usages de la vie, afin de pouvoir considérer beaucoup de choses dans la vie commune comme certaines, en même temps que dans la théorie elles seraient encore dubitables. Et car les adversaires de Descartes négligent cette distinction, ils prennent l'opportunité de moquer le doute cartésien, et par conséquent, (aussi de moquer) sa métaphysique qui provient de ce doute.*⁹²

L'habitus fondamental que Clauberg veut promulguer dans sa méthode est celui de la tempérance du jugement et de la capacité d'investir du temps dans la pondération de la chose selon la raison :

*Ainsi, le disciple de notre philosophie est préparé progressivement, car aucune autre règle est implantée en lui en philosophant tellement de fois, autant qu'il ne serait plus capable de faire un jugement prématuré et aléatoire, par contre il contrôlerait l'élan de son âme, jusqu'au point où il aurait considéré les matière données, avec une attention adéquate, vers le balance de la raison rectifiée.*⁹³

C'est donc la tempérance de la disposition au jugement que Clauberg cherche à corriger. La précipitation mentale est en effet considérée comme le péché originel en matière de raison et en matière de philosophie. La question est, en effet, de savoir comment la correction de la volonté influence notre manière d'établir le sens. Ce problème va être abordé dans le chapitre 4.2. de notre travail, où nous présenterons la théorie de la médecine de l'intellect (*Medicina mentis*). Clauberg ajoute, en suivant Francis Bacon, que le doute qui est développé dans les enquêtes philosophiques doit être aussi amené à la compréhension des arts et des sciences plus « exactes » :

92 OOP II, 1158 (*Initiatio*, V, §31) : « Et hic primò occurrit distinctio in Metaphysica Cartesiana frequentissima, ut inter usum vitae et contemplationem veritatis discernas, atque inde discas, multa in vita communi posse haberi pro certis, quæ tamen in theoria dubia sunt. Et quia ex distinctionis hujus neglectu adversarii Dubitationem Cartesianam, et per consequens ejus inde exorsam Metaphysicam cavillandi occasionem sumunt. »

93 OOP II, 1136 (*Initiatio*, I, § 20) : « Et hæc autem omnia sensim disponitur ac paratur Philosophiæ nostræ discipulus, cùm nulla Logicæ regula toties ei in philosophando inculcetur, quàm ne temerè et præproperè judicium ferat, sed cohibeat animi impetum, donec rem debita cum attentione ad rectæ rationis trutinam ponderaverit. »

*Quant aux disciplines mathématiques et les arts mécaniques (qui sont reconnues par Verulam comme ayant leurs fondations dans la nature et dans la lumière de l'expérience) ne par ailleurs pas aspirent à leurs propres culminations et perfection.*⁹⁴

C'est-à-dire que si on commence avec le livre de la nature, et que l'on passe par la mise en doute et l'établissement de la signification des matières, on doit aussi augmenter notre démarche jusqu'aux activités techniques et enfin à la mathématisation de la réalité. Il existe peu de doute que c'est un argument qui convient aussi aux motivations cartésiennes.

4.1.6. L'ordre des matières et le livre de la nature

Le cadre de la lecture et de la détermination du sens renvoie aussi à une possibilité de penser le concept de l'ordre des matières. Cette étape de visualisation de l'ordre des choses est parallèle au moment de ce que nous avons appelé « synopsis » ou « intuition imposée », après la division du problème, où nous pouvons en fait visualiser ce qui se trouve devant notre esprit observateur. Le sens claubergien ne doit ainsi pas être compris de manière anachronique comme une interprétation personnelle, mais plutôt comme une intuition, une vision qui détermine ce qui est à trouver dans les matières qui sont disposées devant notre regard, comme le propose en réalité le terme allemand *Anschauung*. Clauberg dit que « l'ordre de la doctrine sépare les hétérogènes et unit les homogènes. Il faut savoir séparer ce qui est hétérogène.⁹⁵ » La lecture méthodique doit suivre l'ordre de la nature, et de cette manière on prend l'habitude de lire le monde.

Dans la *Logia contracta*, Clauberg présente une distinction entre ordre et méthode : *Ordre et méthode sont différents dans la Logique que nous avons désignée ; et une distinction vraie existe entre eux, dans laquelle la méthode appartient à la connaissance et au jugement singuliers et séparés, mais corrects ; ceux-ci prennent lieu dans les actes*

94 OOP II, 1213 (*Dubitatione*, XIII, §18) : « Neque aliter disciplinas Mathematicas et artes Mechanicas (quas in natura et experientiae luce fundatas esse agnoscit Verulamius) ad culmen et perfectionem suam contendere deprehendimus. »

95 OOP II, 827 (*Logica* II, §IX) : « Ordo doctrinae separat heterogenea, conjugit homogenea. »

*premier et second de la logique ; ordre, de l'autre côté, appartient à la conjonction générale qui est disposée dans une manière apte. [...]*⁹⁶

Clauberg pose la méthode comme prioritaire à l'ordre : au premier moment, la méthode est dirigée vers la compréhension correcte dans un acte de pensée séparée ; ordre, de l'autre côté, est comme une présentation générale, une synthèse des dispositions des matières. Ordre chez Clauberg est alors comparable à *l'ordre des matières* de Descartes. La mise en ordre appartient déjà au mouvement positif au sein du domaine proprement philosophique. C'est, en ce sens, chez Clauberg, ça qui fait la philosophie première. La méthode, de l'autre côté, est plus proche de ce que Descartes avait appelé l'ordre des raisons, dans lequel un acte spécifique de connaissance est corrigé et proprement compris. C'est effectivement ce passage *de la méthode à l'ordre* que fait le mouvement de lecture de la nature, mot après mot, phrase après phrase, dans une composition de l'ordre des matières de notre monde, qui est capturé par le geste philosophique de Clauberg. Dans le cadre de travail de la méthode, on tourne effectivement autour du problème des erreurs, qui sont toujours, chez Clauberg, des erreurs de lecture. Nous devons donc trouver le début de l'erreur, et l'extraire de notre esprit, afin de recommencer à planter notre arbre de la connaissance : « Et si l'on veut arracher un arbre de la terre, il n'est pas nécessaire d'imputer les feuilles isolées ou les branches isolées, mieux vaut aller directement à la racine, d'où tout commence. »⁹⁷ Bacon aussi, et son interprète De Neufville, présentent la tâche d'interprétation de la nature à travers un processus de purge et de purification, afin que les idoles de l'esprit puissent être mises de côté :

Le Quatrième, et dernier (règle), et c'est le principal (dit Neufville, parmi les choses qu'il ne peut pas prouver dans le Nouvel Organon de Bacon), dont le même auteur, afin d'interpréter la nature, exige que l'esprit soit purgé de toutes les opinions préconçues ou idoles, comme il dit, afin d'être laissé libre et purifié au moyen de la

96 OOP II, 933 (*Logica contracta*, § 251) : « Ordo et methodus aliis quidem in Logica idem designant, aliis verò ita distinguuntur, quòd methodus pertineat ad singula seorsum recte intelligenda et judicanda, de quo in primo et secundo Logices gradu actum ; ordo autem ad omnia conjunctim apte disponenda, de quo agemus in præsentia. »

97 OOP II, 1181 (*Initiatio IX*, §9) : « Ita si velis arborem aliquam in terram prosternere, non est necesse, ut singula folia demas, ramos singulos amputes, radicem evelle, cadet illico tota. »

*négarion et la renonciarion à tout ce qui se trouve faux, avec une détermination ferme et solennelle [...]*⁹⁸

Cette purge de la nature des fausses idoles de l'opinion ramène à une seconde enfance permettant d'entrer dans le royaume de la vérité. Ici encore, Clauberg fait une référence explicite à Bacon :

*Le royaume de l'homme, qui est fondé sur les sciences, autant que pour le royaume des cieux, dans lequel on ne peut entrer que dans la personne d'un enfant; Livre I Le Nouvel Organon, Aphorisme 68. Idem.*⁹⁹

Ainsi nous apprenons que c'est par les opérations artificielles de purger le sens de la nature par sa relecture que nous atteignons la deuxième enfance de notre esprit, nous permettant de cheminer vers la vérité des choses. C'est par l'épuration de notre langage et d'autres signes de la réalité (c'est-à-dire les figures et les signes) que nous arrivons à cette seconde enfance. Même la *Physique*, chez Clauberg, est traitée maintes fois selon des catégories linguistiques, ayant leur essence dans la dénomination de la chose :

Or toute Philosophie, quant à la matière sur laquelle elle agit, essayant de nommer la chose elle-même [remipsam], et parce que personne puisse faire cette nomination dans une manière meilleure, ou plus intelligible, que lui qui a premièrement étudié la nature les caractères des choses; ainsi il est habituelle dans la philosophie cartésienne de décrire la chose-même premièrement, dans une manière solide, depuis son origine, et après enfin à nommer la même chose par son nom, ou juger concernant

98 OOP II, 1212 (*Initiatio* XII, §3) : « Quartum et postremum idque præcipuum est (inquit D. de Neufville: videlicet inter ea quæ in Novo Verulamii Organo probare nequeat) quod idem Auctor (Bacon) ad interpretationem naturæ, requirit mentem puram, hoc est, ab omnibus præconceptis opinionibus seu idolis, ut loquitur, liberatam atque expurgatam, idque per abnegationem et renunciationem earundem, constanti et solenni decreto factam [...] »

99 OOP II, 1125 (*Initiatio*, prolegomena, §7) : « Bacon de Verulamio Novi Organi. Lib. I. aph. 68. Intellectum ab omnibus idolis, id est, præconceptis opinionibus, esse liberandum et expurgandum docet, ut non alius ferè sit additus ad regnum hominis, quod fundatur in scientiis, quàm ad regnum cœlorum, in quod, nisi sub persona infantis, intrare non datur ; ut ibidem ait. [lib. I Organi Novi. Aph. 68.] » (Traduction Lorquet, Paris : Hachette, 1857, 27 : « Nous avons parlé de chacune des espèces d'idoles et de leur vain éclat ; il faut, par une résolution ferme et solennelle, les proscrire toutes, en délivrer et en purger définitivement l'esprit humain, de telle sorte qu'il n'y ait point d'autre accès au royaume de l'homme, qui est fondé sur les sciences, qu'il n'y en a au royaume de cieux, dans lequel il n'est donné à personne d'entrer, si ce n'est sous la figure d'un enfant. »).

*son nom adéquate. En ça, on suit la règle première de l'invention, qui exige que la matière soit en premier temps comprise, et puis; en deuxième temps, un jugement d'elle pourrait être rendu.*¹⁰⁰

En somme, la nature nous est donnée, pour Clauberg, essentiellement, comme un livre qu'il faut apprendre à lire. Cette lisibilité de la nature se retrouve dans la religion antique dans le rapport entre divinités et nature, où la nature elle-même est comprise comme l'expression de la volonté divine :

*Pour la même raison, nous sommes sûrs de l'affirmation sans aucun doute que Dieu existe, que seulement Il existe (comme dieu, ae), que les choses corporelles existent, etc. [...], c'est pourquoi, malgré cela, à l'initiation de la philosophie nous cherchons et examinons, est-ce que de propositions similaires puissent être lues dans le livre de la nature, avec l'aide des astres, qui illuminèrent perpétuellement tous les peuples anciens.*¹⁰¹

100 OOP II, 1231 (*Differentia*, XI, LXIV) : « Unaquæque Philosophia res, de quibus agit, nominibus suis insignit, & quia nemo hoc melius & intelligibilis præstare potest, quam qui naturam & proprietates rerum prius perscrutatus fuit; idcirco Cartesianæ Philosophiæ mos est, rem ipsam prius solidè ab origine sua describere, & tum demum eandem nomine suo appellare, aut de nomine ejus judicare, hac in parte non tantùm primam inventionis regulam sequendo, quæ postulat, ut res primo intelligatur, tumque de illa feratur judicium. »

101 OOP II, 1149 (*Initiatio*, IV, §9) : « Simili ratione nos pro certo et indubitatio semper ponimus, Deum esse, et unum esse, et æternum esse, esse res corporeas etc. [...] hoc non obstante, initio Philosophiæ quærimus atque examinamus, an hæc talia possint quoque legi in libro naturæ, beneficio illarum stellarum, quæ omnibus perpetuò gentibus luxerunt. »

Les lois de la nature, qui ont déjà été comprises par les peuples anciens, ont leur garant et par Dieu et par le processus de la vérification méthodique. Notons ici aussi la compréhension quasi « anthropologique » de Clauberg, voyant dans les croyances des peuples anciens les signes de leur rationalité. C'est à nouveau l'expression d'un décret de l'ordre du monde qui doit être appris et digne de confiance, mais cela seulement par le pouvoir du langage.

4.1.7. La vérité des choses, le jugement valide et l'estimation

Nous avons vu que les jugements négatifs et positifs sont indispensables à l'enchaînement de la méthode. Nous sommes conduits, par Clauberg, de J1 à J2, où J1 est estimé et placé dans une chaîne de sens plus large. Par conséquent, la production de J2 est le produit final de la méthode. Les deux jugements ont un caractère synthétique : J2 est ce que nous avons défini comme SA, la seconde analyse des éléments que nous avons élucidés dans le premier processus de mise en doute. SA produit un sens pour la chose certaine que l'on étudie. Comment se situe le jugement par rapport à l'intuition (dans le cadre cartésien) ? Selon Frédéric Van de Pitte, chez Descartes, il faut toujours tenir compte de la dualité formée entre l'intuition et le jugement comme constitutionnelle.¹⁰² Dans la mesure où l'intuition nous donne la certitude, le jugement nous donne la nécessité. Le jugement, selon Van de Pitte, est l'outil épistémologique chez Descartes qui s'appuie le plus souvent sur le processus de déduction. La question est de savoir comment relier cet ordre déductif aux choses particulières que l'on rencontre sur son chemin. Autrement dit, comment accéder à la vérité des choses pendant notre processus de lecture de la nature même ? Pour Clauberg, ce problème se pose en termes de compréhension d'un certain individu porteur de telles propriétés qui ont aussi une signification universelle :

Yeux, tête, mains, corps, de l'être humain, sont des [concepts] généraux, c'est-à-dire le respect universel des yeux, des mains, et comme tels que je peux avoir, d'où cet individu, cet homme, les autres sont référés aux espèces et au genre humain [plus généralement].¹⁰³

102 Frederick P. Van de Pitte, « Intuition and Judgment in Descartes' Theory of Truth », *Journal of the History of Philosophy* 26/3 (juillet 1988) : 453-470.

103 OOP II, 1188 (*Initiatio* IX, §23, B) : « Oculi, caput, manus, corpus, scilicet humanum, sunt generalia, hoc est, unviersalia respectu talium oculorum, manuum etc. quales ego me puto habere, nam hæc ad individuum & hunc hominem, illa ad speciem & hominem referuntur. »

Le changement que la méthode peut apporter à la réalité s'effectue au niveau du contenu, au niveau du sens, non au niveau de la surface, au niveau de ce qui se trouve avant le chercheur comme une matière à comprendre. Tout ce qui appartient aux mœurs civiles peut rester tel qu'il est, mais la philosophie peut, et même doit changer la manière dont on comprend le « littéral », c'est-à-dire ce qui est lu dans la réalité telle qu'elle est. Le littéral doit rester tel qu'il est, mais quelque chose dans sa compréhension, c'est-à-dire dans la profondeur de sa constitution, est en train d'être corrigé. C'est comme si nous faisons un *regressus* de manière zabarelliste, où le donné s'expliquerait par ses causes, et ses causes se démontreraient comme l'origine de ce que nous rencontrons devant nous comme un problème à résoudre. On ne peut donc pas dire que la philosophie cartésienne, au moins celle qui est à trouver chez Clauberg, est essentiellement passive :¹⁰⁴ la philosophie méthodiste, en général, est essentiellement une activité promotrice d'activité. L'activité qui s'accomplit cependant est celle de la détermination du sens : effectuer un changement dans la profondeur des sens préétablis des matières habituelles et littérales. C'est à cause de cette activité profondément herméneutique, qui laisse la réalité littérale comme elle est, mais qui change son *sens*, sa compréhension, que l'on suggère ici le méthodisme cartésien comme une démarche épistémique qui est effectivement proche d'un processus de *lecture*. Mais nous devons mieux définir ce qu'est ce littéral que nous lisons dans le monde.

4.1.8. Atteindre le littéral : l'ordonnance langagière de la philosophie

Dès l'époque des *Regulae*, Descartes exprime sa conviction que l'ordre peut servir de fondement à la formation d'un langage universel, un langage qui serait celui de la vraie philosophie, dans lequel les pensées elles-mêmes seront bien ordonnées. Cela facilitera l'apprentissage efficace de l'utilisation des langues étrangères :

Je trouve qu'on pourrait ajouter à ceci une invention, tant pour composer les mots primitifs de cette langue, que pour leurs caractères ; en sorte qu'elle pourrait être enseignée en sort peu de temps, et ce par le moyen de l'ordre, c'est-à-dire, établissant

104 Jean-Luc Marion, *Sur la pensée passive de Descartes* (Paris : Presses universitaires de France, 2013).

*un ordre entre toutes les pensées qui peuvent entrer en l'esprit humain, de même qu'ils peuvent entrer en l'esprit humain, de même qu'il y en a un naturellement établi entre les nombres ; et comme on peut apprendre en un jour à nommer tous les nombres jusqu'à l'infini, et à les écrire en une langue inconnue, qui sont toutefois une infinité de mots différents, qu'on peut faire le même de tous les autres mots nécessaires pour exprimer toutes les autres choses qui tombent en l'esprit des hommes.*¹⁰⁵

Il est clair que Descartes envisageait ici une compréhension de la rationalité qui est de caractère linguistique. L'*ordre* que Descartes essaie de donner dans sa raison est parallèle à celui qui est actif dans le langage. Il ne s'agit pas nécessairement d'une théorie du langage, mais plutôt d'une élucidation de la connaissance elle-même par le fonctionnement du langage. Surtout, le paragraphe ci-dessus souligne que c'est à travers d'un ensemble minimal de signes que l'on peut arriver à exprimer « toutes les autres choses qui relèvent de l'esprit humain ». Ce fondement langagier de la compréhension de la raison et de son ordre est partagé et accentué par Clauberg. On peut même comprendre Clauberg comme prenant extrêmement au sérieux le potentiel linguistique que suggère la philosophie de Descartes, et essayant de fournir un vocabulaire élémentaire à part entière au langage philosophique. La vraie philosophie est le fondement qui nous permet de séparer les pensées des hommes en unités distinctes et claires, qui sont la condition préalable de toute vraie science :

*« [...] sans cette philosophie (la vraie philosophie), il est impossible de numéroter et d'ordonner (les mettre par ordre) toutes les pensées des hommes ou même de les séparer en pensées claires et simples, ce qui est à mon avis le grand secret pour acquérir de solides connaissances (la bonne science).*¹⁰⁶

Clauberg est également connu pour être l'un des premiers à pratiquer la rationalité de la recherche de sens à travers les étymologies, qui est connue des étapes ultérieures de la philosophie allemande.¹⁰⁷ Dans les écrits de Clauberg, on trouve souvent des paragraphes consacrés au sens que l'on peut trouver dans certaines articulations

105 Lettre à Mersenne, 20 novembre 1629 : Descartes, *Œuvres I*, 80-81.

106 Ibid.

107 Howard Eiland, « Heidegger's Etymological Web », *Boundary 2* 10/2 (Winter 1982) : 39-5.

linguistiques. Massimiliano Savini avait suggéré que chez Clauberg, on doit parler d'une « sémiotisation » du processus noétique, dans lequel « tout étant est signifiable ». ¹⁰⁸ En cela, il marche sur les pas de l'un des humanistes, le calviniste Joseph Justus Scaliger (1540-1609), qui est également connu pour être l'un des fondateurs de la philologie moderne. ¹⁰⁹ En 1663, Clauberg publia l'*Ars etymologica teutonum*. Dans ce traité, il se concentre sur les origines de la langue allemande et le sens qui est impliqué dans les formes linguistiques. Il faut souligner que l'art des étymologies de Clauberg n'est pas philologique au sens scientifique du terme : ¹¹⁰ il ne se dit pas scientifique des origines du discours accepté. Mais plutôt, son intention est herméneutique : il souhaite obtenir du langage lui-même des aperçus et une compréhension concernant les choses qui sont représentées dans le langage, et son observation linguistique peut facilement être critiquée du point de vue scientifique. Cependant, les mots sont pris par Clauberg comme des configurations au sens que nous avons discuté dans le dernier chapitre : ce sont des signes qui représentent des choses et, en tant que tels, nous devons les étudier, sous la compréhension de la logique analytique, la logique de la compréhension de la production des autres. En cela, les étymologies peuvent servir à saisir un certain sens que l'on veut déchiffrer ou élucider.

4.1.9. Herméneutique, signification et falsification

Il faut souligner que l'herméneutique, chez Clauberg, est importante pour le développement de la méthode non seulement au stade constructif, synthétique, mais déjà au stade du doute, le stade de la proto-philosophie génétique. Dans le paragraphe suivant, on voit que Clauberg utilise des termes herméneutiques pour parler du processus d'élimination et de falsification de propositions intenable :

Tous ceux-ci doivent être éradiqués, au même temps et une fois pour toujours, par l'arrêt de l'assentiment général, jusqu'à leurs ultimes épreuves, considérations et

108 Savini, *Clauberg*, 247.

109 Dirk van Miert, « Joseph Scaliger, The Power of Philology (1590–1609) », *The Emancipation of Biblical Philology in the Dutch Republic* (Oxford and London: Oxford University Press, 2018), 22-52. Il faut distinguer le Scaliger père Julius Caesar Scaliger (1484–1558) du Scaliger fils (Joseph Justus Scaliger, 1540–1609). Les deux savants ont été bien connus à Clauberg, qui se réfère aux deux Scaligers 45 fois dans l'*Opera Omnia*.

110 John T Waterman, « Johann Clauberg's "Ars etymologica Teutonum" (1663) », *Journal of English and Germanic Philology* 72/3 (July 1973) : 390-402.

examens. Cependant, pour tous ceux qui sont pris dans l'examen comme faux, ils doivent être niés. Dans les règles de l'herméneutique, les prédications sur un sujet sont permises, quand le mot doit être compris [intelligenda] selon la matière du sujet. De là, il est évident que les opinions ne peuvent être autrement éradiquées par nous, comme ces deux modes me l'indiquent, ni ne peuvent être touchés [fingi] autrement. Ce même renversement est illustré par l'exemple du panier plein de pommes, dont beaucoup ont été corrompues [Dans la 7^e réponse].¹¹¹

Alors la « conception » (*fingere*) des matières de l'interprétation doit commencer, être initiée, par une démarche d'éradication des pommes pourries. En ce sens, l'herméneutique que Clauberg nous sollicite à prendre en commencement de notre initiation à la philosophie n'est pas celle d'un maintien des raisons traditionnelles (personnelles ou collectives) comme elles ont été tissées par les transferts conceptuels ; on parle ici plutôt d'une herméneutique radicale, éradicatrice, sanitaire, qui recommence toute lecture par un non-savoir et non par une présentation respectueuse de la pluralité d'opinions existantes. On voit donc que l'exemple cartésien connu du panier de pommes est lié, par Clauberg, aux règles de l'herméneutique. Pour Clauberg, les deux « méthodes » se soutiennent mutuellement. Si nous suivons les règles de l'herméneutique, nous pouvons atteindre en premier lieu l'élimination non seulement des écarts superficiels par rapport aux vérités, mais aussi de ce qui est à la base de nos fausses opinions. C'est aussi une manière de se débarrasser d'une compréhension et d'interprétations du monde anciennes et inacceptables :

Donc si quelque arbre est planté dans la terre, si l'on veut se débarrasser de toutes les feuilles, il n'est pas nécessaire de couper toutes les branches particulières ; on ne coupe que la racine, et l'arbre tombera aussitôt, dans sa totalité.¹¹²

111 OOP II, 1173-1174 (*Initiatio IX*, §2, G) : « Omnia sunt evertenda simul et semel per assensûs cohibitionem, donec fuerint probata, expensa, examinata. Quæ autem in hoc examine falsa esseprehendentur, etiam evertenda sunt per negationem. Hermeneutici canones sunt: Tale esse prædicatum quale permittitur à subjecto, Verba esse intelligenda secundùm subjectam materiam. Cùm ergo opiniones non possint à nobis aliter everti, quàm duobus istis modis à me indicatis, nec subjecta materia aliam eversionem admittat, neque alia fingi debet. Simile hanc eversionem illustrans jam adduximus è sept. Resp. à corbe pomis pleno, inter quæ multa corrupta.»

112 OOP II, 1181 (*Initiatio IX*, §9, A) : « Ita si velis arborem aliquam in terram prosternere, non est necesse, ut singula folia demas, ramos singulos amputes, radicem evelle, cadet illico tota. »

L'initiation à la philosophie, qui s'effectue au premier moment comme un processus rigoureux d'élimination conduit par le doute, est donc également soutenue par le processus herméneutique et l'ensemble de ses règles. Dès lors, nous pouvons déterminer plus clairement que l'herméneutique a un rôle à jouer dans l'initiation à la philosophie ; c'est un membre de l'ensemble des mesures qui peuvent aider l'initiateur à séparer le vrai du faux. La production de sens doit donc être réglée et limitée par la règle de la falsification, mettant de côté tout ce qui n'est pas pertinent au sujet en discussion.

4.1.10. Du diagnostic des choses à l'autodiagnostic, et au-delà à l'ordre du monde

Si le jugement reste non seulement au début, mais aussi à la fin de la démarche méthodique chez Clauberg, alors il s'agit d'un processus d'estimation parallèle : une estimation de soi qui se coproduit avec l'estimation des choses. Ce qui se produit comme l'entre-deux du processus d'estimation, c'est le sens de la chose observée. C'est ce qu'il ressort de l'aspect herméneutique que nous avons essayé d'exposer dans ce présent chapitre. Cela revient à ce que l'on appellera « un autre empirisme » : c'est un empirisme informé par Bacon, Zabarella et Descartes, pas encore d'ailleurs par John Locke. Cet autre-empirisme est celui qui voit dans la perception sensible un caractère actif : la perception sensible elle-même est à la racine de toute philosophie ; mais il n'est pas vrai que tout se résume à la perception sensorielle et à son organisation (comme, du moins grosso modo, dans le « plein empirisme »). Cependant, on peut voir chez Zabarella, Descartes et Clauberg un certain activisme de la perception sensorielle, tentant de souligner la responsabilité active de l'homme vis-à-vis de sa perception sensorielle. Dans ce cadre, la tâche principale de la philosophie est de rectifier la perception sensorielle.¹¹³ Notons que cette interprétation du cartésianisme est très différente de celle que lui donne la lecture idéaliste de Descartes :¹¹⁴ l'accentuation qu'on retrouve chez Clauberg n'est pas sur le moment du Cogito, mais plutôt de la configuration de la perception sensorielle d'une manière active selon le vrai jugement et la lumière naturelle de la raison. Dans ce cadre, la philosophie doit considérer l'expérience sensorielle, dans le sens où les premiers

113 Cecilia Wee, « Descartes and active perception » in José Filipe Silva and Mikko Yrjönsuuri eds, *Active Perception in the History of Philosophy: From Plato to Modern Philosophy* (New York and Berlin: De Gruyter, 2014), 207–221.

114 Lewis Robinson, « Le “Cogito” cartésien et l'origine de l'idéalisme moderne », *Revue philosophique de la France et de l'Étranger* 123, 5/8 (May-August, 1937) : 307-335.

principes humains de la cognition servent de base à notre compréhension de la perception sensorielle. Les principes, qui sont le produit du processus méthodique de cet autre-empirisme, sont le rapport (ou « habitudo » en latin) entre les choses perçues et l'auto-inspection constante de la raison individuelle de penseur. Dans ce que nous avons proposé d'appeler l'analyse synthétique, à partir de la vérité connue à laquelle nous sommes arrivés dans le processus d'analyse, nous procédons par étapes déductives successives jusqu'à reconstruire le problème, qui, de cette manière, est amené à sa solution. Peut-être sommes-nous alors arrivés au point où nous pouvons apporter une suggestion à la question du sens de la « métaphysique cartésienne » selon la compréhension claubergienne. La métaphysique est le franchissement de la frontière entre l'analyse et la synthèse, entre le doute et la détermination du sens.

Comme nous l'avons dit plus haut (1.2.9. : « Qu'est-ce que l'âme ? »), le « je » du chercheur est extrêmement important dans la conception claubergienne de l'analyse. Mais ce « je » n'est pas à vrai dire aussi un « moi » : c'est plutôt un point de départ individuel, situé parmi quelques paramètres spatio-temporels toujours changeants, et motivé par variété des usages. En plus, c'est un point de départ qui est destiné à devenir l'objet de soi-même, la matière de soi-même, dans le processus toujours unique de l'estimation du soi.

En fait, Descartes commence la philosophie non pas à partir de l'être, mais plutôt de l'esprit (ab mente), non de n'importe quel esprit, mais de son propre esprit, chose existante et singulière. Il progresse de cet esprit unique à Dieu, qui n'a pas à être considéré absolument selon tous les attributs, comme c'est le costume de tous les autres métaphysiciens, mais vraiment seulement selon les attributs qui concernent les principes et les fondements de la philosophie.¹¹⁵

L'auto-estimation¹¹⁶ qui est ordonnée par Clauberg est, fondamentalement, une estimation de nos tendances habituelles de jugement, qui sont a priori construites main dans la main avec nos dispositions épistémologiques et nos structures de connaissance. Dans le cadre des travaux de Clauberg, il s'agit en fait de remettre constamment en question les connaissances encyclopédiques que nous avons acquises. En ce sens, la compréhension de Clauberg du processus méthodique signifie une critique constante

115 OOP II, 1166, (*Initiatio* VIII, §5) : « Cartesius verò incipit Philosophiam non ab ente, sed à mente, non ab mente qualibet, sed sua propria, re singulari et existente, ab hac ad Deum progreditur, non absolutè secundùm omnia attributa considerandum, ut aliis Metaphysicis in more positum; verùm secundùm ea tantùm, quæ pertinent ad principia et fundamenta. »

116 Voir Jean-Luc Marion, « Connaître à l'estime », *Questions cartésiennes III : Descartes sous le masque du cartésianisme* (Paris : PUF, 2021), 95–130.

de l'« architecture urbaine » du savoir encyclopédique, qui est construite par le philippo-ramisme. On ne peut trouver de meilleur terme pour ce processus que la déconstruction. Et cette déconstruction est, en effet, un processus laborieux :

Mais c'est laborieux

Parce que dès le plus jeune âge, notre esprit est si enclin à juger que nous ne sommes pas capables de contrôler cette [tendance] si facilement. Les habitudes de vie reposent sur ce qui est ancien. Nous jouissons de la liberté d'imagination, comme le démontrent la philosophie vulgaire et le bon sens. Concernant le sommeil, quelque part Scaliger dans Exercit. [Dit que] Ce [Sommeil] est la récréation de l'abandonné par Dieu, qui arrive non seulement au corps, mais aussi à l'âme, de la liberté, et en tant que serviteur du seigneur de lui encore et encore pour échapper au temps de cette nature à tout moment, au moyen du sommeil.¹¹⁷

Notons ici en premier lieu la référence à l'humaniste de la Renaissance Julius Caesar Scaliger (1484-1558), père de l'humaniste et philologue calviniste Joseph Justus Scaliger (1540-1609), qui était sans doute aussi connu de Clauberg. L'ouvrage auquel Clauberg se réfère ici est *l'Exotericæ Exercitationes*, qui est un traité de philosophie naturelle, suggérant une approche néo-aristotélicienne de l'hylémorphisme. La méthode est décrite ici par Clauberg comme un travail, comme un labeur, dont notre esprit est toujours enclin à s'endormir, comme une sorte de libération. Même si nous voulons nous endormir, en gardant notre corps et notre âme dans l'état de repos des préjugés, nous devons nous mettre au travail et à l'effort d'estimation. La philosophie, en ce sens, arrive comme une correction, une mise en question du processus herméneutique :

Si le lecteur est encore doutant concernant la fin pour laquelle on propage le doute, et quel est le but de cette manière d'initiation d'une philosophie, c'est que, peut-être, ce lecteur ne connaît pas cette règle herméneutique : ce qui suit

117 OOP II, 1203-1204 (*Initiatio* IX, §49) : « Sed laboriosum est : Quia mens nostra ab ineunte ætate tam prona et præceps est ad judicandum, ut non possit se facile cohibere. Ad consuetudinem vitæ, scilicet antiquæ. Imaginaria libertate fruimur, quatenus in vulgari Philosophia et vulgari rationis usu persistimus. De somno alicubi Scaliger in Exercit. quod à Deo factus non solùm ad corporis recreationis, sed etiam ad animæ libertatem, cùm servus eo tempore liber sit atque etiam dominus evadat aliquando, per insomnia. »

*est éclairé par l'antécédent ; tel lecteur pourrait avoir hâte à blâmer l'auteur [Descartes].*¹¹⁸

En herméneutique, on travaille à l'intérieur du corpus et du canon de la tradition, et on tente de faire correspondre notre lecture à ce qui a été dit auparavant. Le philosophe doit pourtant douter de cette autorité du précédent. La méthode est donc un effort, c'est un travail fondé sur l'obligation de lire ce qui a été lu auparavant, mais non *de la manière* dont cela a été lu auparavant. Ceci est très différent du divertissement des préjugés, qui sont faciles à faire. Nous devons nous réveiller, selon les termes de Clauberg, du sommeil de la raison, que l'on retrouve dans la philosophie commune. En ce sens, nous ne nous corrigeons pas seulement nous-mêmes, mais nous corrigeons aussi l'histoire et le passé. Nous ne choisissons que les propositions traditionnelles qui résistent à l'épreuve du doute et de la déduction. Clauberg souligne que Descartes veut attaquer non pas les choses dont on doute généralement, mais seulement celles qui sont considérées comme vraies par l'esprit commun, et qui servent à tort de base à notre science :

*Il ne parle pas de ces choses qui sont mises en doute par tout le monde, mais plutôt de ces choses qui sont pour la plupart considérées comme vraies, si ce sont les principes que nous avons pensé avoir compris de façon concluante, ou bien les conclusions que nous nous avons cru savoir.*¹¹⁹

Pour Clauberg, l'erreur dans l'art signifie ignorer l'art lui-même. Il faut connaître l'art que l'on veut pratiquer, pour pouvoir le pratiquer : ses études et sa science. Nous avons essayé dans ce chapitre de rendre compte de ce qu'est un jugement correct, selon Clauberg, et de ce qui est, au contraire, incorrect. Il faut cependant souligner que ce niveau de jugement correct n'est toujours pas celui équivalent à la certitude

118 OOP II, 1211 (*Initiatio*, XI, §43) : « Si [...] incertus ab authore relictus fuisset Lector, quò fine dubia proponantur, quò tendat ejusmodi Philosophiæ exordium, tum fortassis illi qui nesciunt regulam hanc Hermeneuticam : sequentia declarant antecedentia, Philosophi reprehendendi occasionem inde potuissent arripere. »

119 OOP II, 1182 (*Initiatio*, IX, §10.B) : « Non loquitur de iis quæ dubiæ veritatis sunt apud omnes, sed quæ maximè vera putantur, sive sint principia, quorum putavimus nos habere intelligentiam, sive conclusiones, quarum scientiam nobis esse credidimus. Ex intelligentia autem et scientia componitur sapientia, vide Log. Meæ q. 186. Artem et prudentiam (hi enim complent quinque habitus intellectuales Aristoteli 5. Ethî enarratos) non respicit hic Author noster, ut eas in dubium trahat, quia ambæ versantur circa res faciendas et agendas: atqui Philosophus nunc solùm versatur circa res contemplandas. »

métaphysique, qui est tracée par la lumière naturelle. Voici comment Clauberg définit l'état le plus élevé de certitude métaphysique, qui selon lui est suggéré et fourni par les adeptes de la voie cartésienne :

[Sinon nous avons] la certitude métaphysique, qui est requise dans la stabilisation de toute philosophie stable. Et pour cela il est dit « d'où je sais », c'est-à-dire quelle raison je donne [quam causam dabo] à partir de la lumière naturelle.¹²⁰

Nous allons maintenant passer, au chapitre 4.2., à une description complète de la santé mentale, obtenue grâce au processus d'auto-édification.

120 OOP II, 1192 (*Initiatio*, IX, §32) : « Certitudine scilicet Metaphysica, qualis hîc requiritur, in fundamentis omnis Philosophiæ stabiliendis. Unde igitur scio, hoc est, quam causam dabo ex naturæ lumine, quam ex Philosophia per scientiæ illius, quâ hactenus usus sum, principia, rationem adducam, quæ vim habeat efficacissam demonstrandi, Deum non voluisse talem mihi naturam dare, ut res tales percipiam, quales tamen revera non sunt, quia summam ille habet in omnia potentiam liberrimeque agendi potestatem. »

The Way to Philosophy:

Methodical Synthesis in the Cartesian
Writings of Johannes Clauberg

Abstract

The thesis proposes a reading of the philosophical writings of Johannes Clauberg (1622-1665), conducted from the perspective of the question of philosophical method. The work locates the philosophy of Clauberg in the conceptual genre of Methodism, a group of works belonging to the philosophy of the first modernity, whose historiographical quilting point is, without doubt, the philosophy of René Descartes. We will define the way in which Clauberg's Cartesianism is also formed by the methodical impulse which is not exclusively Cartesian. In our reading of the Claubergian writings, the definition of the philosophical procedure is emphasized. We begin with a reconstruction of the conceptual genre of Methodism, focusing on the 16th and 17th centuries. The two opposing models of 16th century Methodism are described: The Methodism of Petrus Ramus (1515-1572) and the Methodism of Jacopo Zabarella (1533-1589). We show that the literal concepts of analysis and synthesis are essential to the conceptual genre of Methodism. In other words, there is no discourse of method as a conceptual genre of early modernity without an explicit discussion of analysis and synthesis. We continue with a review of the nature of the Cartesian method, posing at the center of the investigation the question of the methodical know-how. We then discuss more closely the Claubergian method, compared to the model of the method as reconstructed from previous writings of the conceptual genre of Methodism. We demonstrate the complex structure of analysis and synthesis found in Clauberg. We discuss the analytical nature of doubt and the necessity for the stage of in the Claubergian method. Upon this foundation we construct a description of the synthetic aspects of Clauberg's philosophy: figuration, comprehension (*Verstehen*), and therapeutic pedagogy as proto-philosophy. We conclude the investigation by offering a synthetic model of the Claubergian method, by inter-relating the elements that we studied during our investigation.

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Introduction: What is at stake

1. The Clauberg Case

This work is dedicated to an examination of the principles of method in the writings of Johannes Clauberg, especially those principles that can be extracted from his essay “The initiation of the philosopher,” dating from 1655 and printed in Leiden and Duisburg. In Clauberg scholarship it is generally the view that Clauberg’s philosophy poses a mixture of Cartesianism and Aristotelianism, but the present project works towards a narrower definition of Clauberg’s philosophical style, emphasizing the (direct and indirect) influence of Clauberg’s teachers on the formation of his reception of Cartesianism. This concerns the generation of German philosophers working in the first decades of the 17th century who followed such philosophical styles as Ramism and Philippo-Ramism which were prominent intellectual influences at the turn of the 17th century; these are presented in Chapter 1.1. Especially, the present research aims to show how the methodical concerns of the ramist school together with the Cartesian ground questioning that Clauberg adopted forms a unified methodical model. As such, the research aims to provide an account of the Claubergian formulation of the concept of method and to place it in a perspective of its most evident sources.

Though research has been carried out regarding the philosophical work of Clauberg, his philosophy is still relatively marginal in the scholarship of Cartesianism. In recent years the scholarship on Cartesianism has highlighted the metaphysical question of dualism and the problem of occasionalism, exploring the implications of the real distinction Descartes poses between the *res extensa* and the *res cogitans* (see for example Ariew 1999; Ariew 2014; Schmaltz 2002; Schmaltz 2016; and Camposampiero, Priarolo, Scribano 2018) and placing emphasis on the place of God in the Cartesian worldview. Most of the monographs dedicated to the work of Clauberg

are introductions to his thought.¹²¹ In this framework it is well accepted to view Clauberg's philosophy as essentially and primarily occupied with ontological issues. The present project however suggests looking at another aspect of Clauberg's thought, the one related to the problems of method, in an approach that can be regarded as a *technical* presentation of the Cartesian process of reasoning. This technical perspective, highlighting pedagogical issues of Clauberg's philosophy and focusing on the primary stages of the formation of the philosopher, does not necessarily demand disregarding the ontological aspects of his corpus; instead, it suggests a perspective on Clauberg's work which is attuned to one of the less discussed origins of his work: the intellectual culture of Humanism. As is well known, the position of the age of Humanism and of Renaissance philosophy in general in the history of philosophy presents a grave historiographical challenge. In the conventional, canonical history of philosophy, one often passes directly from the medieval to the Early Modern period, neglecting Renaissance philosophy. One of the tasks of our present project is to highlight the importance of Humanism for the development of canonical philosophy during the 17th century. This will propose perhaps a more balanced picture of the establishment of what one usually understands as Early Modern philosophy.

As we shall see, the considerations regarding method are not synonymous with epistemology, and a differentiation must be made between these two domains of questioning. It is not the task of methodology (in the sense of *Methodenlehre*, the teaching of method) to determine *what* can be known or what is true knowledge; it is much more to find out *how* one should proceed in a proper process of getting to know something. Methodology, hence, deals with the *quality* of research, in its manner of taking place, not primarily with the quantitative data attained by that research. This technical aspect of method, viewing method as a mental *techné* or mental know-how, is extensively presented in Chapter 1.2 and further elaborated in subsequent chapters.

The present project takes a deep look into one particular aspect of Clauberg's work, his understanding of method; this will involve, partially, also supplying general lines of description of his theory of knowledge to the extent that such theory can be deduced from Clauberg's writings. In doing this we intentionally leave aside the strictly

121 Especially in the already veteran Theo Verbeek, ed., *Johannes Clauberg (1622–1665) and Cartesian Philosophy in the Seventeenth Century* (Berlin and New York: Springer, 1999); Guillaume Coqui, “La Logique de Clauberg et sa théorie cartésienne de la connaissance” (PhD diss., University of Dijon and University of Sienna, 2008); Massimiliano Savini, *Johannes Clauberg, Methodus cartesiana et ontologie* (Paris: Vrin, 2011) and recently Alice Ragni, “Ontologia e analogia entis tra Johannes Clauberg e Jacob Thomasius” *Archivio di Filosofia* 3 (2016): 155–166.

metaphysical aspects found in Clauberg's work, mostly in his *Ontosophia* and notably in its earlier versions (*Ontosophia* was published three times—1647, 1660 and 1664—in different corrected versions, both before and after Clauberg's endorsement of Descartes' philosophy). The project therefore concentrates on the writings directly influenced by Clauberg's encounter with the Cartesian method that engage actively with them: These include in the first place “The initiation of the philosopher,” the *Old and New Logic* (*Logica vetus et nova*, 1654), and the *Defense of Cartesianism* (*Defensio cartesianiana*, 1657). The *Initiatio* and the *Defensio* are explicitly apologetic texts of Cartesianism, and they have, at least at first glance, no aim other than defending the Cartesian cause through a presentation of its method.

Within the framework of the humanist reading of Clauberg, the project comes to terms with the relation between Clauberg's methodology and the development of the domain of Hermeneutics in his time.¹²² The hermeneutical aspect of Clauberg's philosophical work is relatively marginal in the scholarship addressing the Claubergian corpus, and the present research aims to emphasise their cardinal importance for the understanding of Clauberg's overall philosophy. As was emphasised by Hans Blumenberg,¹²³ the relation between natural science and Hermeneutics became extremely important in the 16th and 17th centuries,¹²⁴ and Clauberg's epistemology is indeed saturated with hermeneutical techniques and considerations. Clauberg's epistemology has a definitive hermeneutic character which is, at least supposedly, almost absent from Descartes' methodology.¹²⁵ In that sense Clauberg's theory of method furnishes a unique version of Cartesian methodism, combining the natural sciences with the human sciences, including both dialectics and hermeneutics but alas

122 See Claude Weber, “Clauberg et les Origines de la Langue Philosophique Allemande. Une Lecture de *L'Arts etymologica Teutonum* (1663),” in *Clauberg*, ed. Theo Verbeek, 95–112; Jacqueline Lagrée, “Sens et vérité chez Clauberg et Spinoza,” *Philosophiques* 29 (2002): 121–138; Jean-Claude Gens, ed., *La logique herméneutique du XVIIe siècle : J.-C. Dannhauer et J. Clauberg* (Paris: Association “Le cercle Herméneutique”, 2006); Édouard Mehl, review of *La logique herméneutique du XVIIe siècle. J. C. Dannhauer et J. Clauberg*, (coll. « Phéno »), by Jean-Claude Gens, *Revue Philosophique de la France et de l'Étranger* 200, no.2 (April-June 2010): 258–259; Guillaume Coqui, “L'obscurité du sens chez Clauberg,” *Methodos* [En ligne] 7 (2007), Consulted 26 juillet 2018. URL: <http://journals.openedition.org/methodos/656> ; DOI : 10.4000/methodos.656.

123 See Hans Blumenberg, *Die Lesbarkeit der Welt* (Frankfurt am Main: Suhrkamp, 1981).

124 See also Édouard Mehl, “L'herméneutique du Liber naturæ,” *Descartes et la fabrique du monde* (Paris: Presses Universitaires de France, 2019), 127–170.

125 L. Danneberg argued regarding Descartes, that “(...) [I] n'aurait jamais envisagé de concevoir une herméneutique, ou même d'intégrer ce genre de considérations dans ses réflexions relatives à la méthode.” Lutz Danneberg, “Logique et herméneutique au XVIIe siècle,” in Gens, *La logique herméneutique*, 42.

lacking a mathematical foundation, the one element widely considered as the most essential to the Cartesian project. In this sense the Cartesian methodism we find in Clauberg's thought can indeed be viewed as a de-mathematisation of Descartes' philosophy. Clauberg receives the Cartesian corpus of thought mostly through the centrality of the proper operation of reason. In this task, at least for Clauberg, much importance is given to questions of meaning and correction, and less is given to questions of measure and quantification. This makes of Clauberg's methodology a de-mathematised Cartesianism, and for some scholars this de-mathematisation means that Clauberg had no real method in the Cartesian sense of the word.¹²⁶ However, the view of the present project is that this judgment of Clauberg's method is not accurate. Method does not stand and fall exclusively on the pillars of mathematisation, calculation and measuring. In fact, as we demonstrate in Chapter 1.1, the general questioning of method in the humanist era erupted from a tradition in which the concept, definition, problematics and aim of method were addressed in a language that was relatively free from mathematical considerations.

The central aim of the current project is to suggest an understanding of Clauberg's Cartesianism as being weak so as to pose this specific Cartesianism in relation to the discussion revolving around the concept of method, a tradition that Clauberg adopted from his teachers, who all arrived from Reformed-humanist milieus. During the 16th century, as is extensively shown in Chapter 1.1, the concept of method was going through a process of re-evaluation, both in southern and northern Europe. In northern Europe, heavily influenced by the reformation of the arts begun by the Calvinist humanist Petrus Ramus (1515–1572), the tendency was to put Aristotelian and especially Scholastic logic through a thorough questioning. In Italy, most notably and seminally in the work of Jacopo Zabarella (1533–1589), the theory of method developed through a return to the Aristotelian sources and their revision. On both sides of this process of rethinking of method (the Ramist and the Zabarellist), Aristotle stood as the first source to be interpreted; the other author standing at the heart of the controversy was Galen (129–216). If for Zabarella method is first and foremost related to scientific research, for Ramus method is first and foremost related to pedagogy, to dialectics and to rhetoric, that is to say to civil tasks involving public communication. Furthermore, as we shall demonstrate, if for Zabarella real method is always *synthetic* (or compositive), for Ramus any real method must be exclusively *analytic*. However, for both, following

126 See for example Vincent Carraud, “L’ontologie peut-elle être cartésienne ? L’exemple de l’*Onstosophia* de Clauberg, de 1647 à 1664 : De l’*ens* à la *mens*,” in Verbeek, *Johannes Clauberg*, 27 : “Ce dont a d’abord manqué Clauberg, c’est la méthode [...]”

Galen's influential *methodus medendi*, it is the science (and art) of medicine that appears once again as the model for the practice in which method is necessary (Boss 1979; Freedman 1992). Hence, reflections around the problem of finding the right method also involve essential elements adhering to the practice of the art of medicine, which has the peculiar character of using science to solve specific problems in the human psychophysical constitution. We will see that several questions originating in the art of medicine stand constantly in the background of the reflections on method that we find in Clauberg, and we will see that the medical background of method can be found already in Descartes. In addition to the model of medicine, as noted above several other arts are frequently taken as models for the formation of method: rhetoric, dialectic (the art of discussion), and most importantly, as we shall present in later chapters of this work, pedagogy, the process of transformation of the infant mind into that of an adult.

Hence, Clauberg develops his own version of Cartesian method as therapeutic know-how, as a medicine of the mind, enabling the beginning of the work of philosophy. For example, in his *Logica vetus et nova* in the prolegomena, Clauberg explicitly uses the example of medicine:

*The good medics (medici), not only in the transmission of the precepts of their art, but also in their practice, in shying away from the temerity of the empiricists, have the custom to examine carefully the nature of the maladies to heal, their origins and their causes. They have the habit of purging the malignant humours before administering the healing medicaments.*¹²⁷

Clauberg takes from the example of medicine an argument which supports the operation of doubt at the beginning of any methodical process: As the medics first clean away morbid elements from the body and only then begin to use the healing medicaments, so also should the logician begin with the eradication of already existing ill parts of the mind. This, in Clauberg's logic and following Descartes, is accomplished exclusively by the method of doubt. Providing an account of Cartesian doubt according to Clauberg must be a central theme in our inquiry as it also stands as a repeated theme in Clauberg's Cartesian writings. We demonstrate in what manner Clauberg analyses and re-synthesises the concept of doubt. Not taking it as a one-chunk concept, doubt is rather

127 Johannes Clauberg, *Logica vetus et nova*, prolegomena, §10 (*Opera omnia philosophica*, Hildesheim: Olms, 1968) (Hereafter the Opera omnia will be quoted as OOP), II, 770: "Et boni Medici non modò in artis suæ præceptis tradendis, verùm etiam in praxi, fugientes empiricorum temeritatem, morborum sanandorum naturam, originem, causas antè solent accuratè explorare. Expurgare iidem consueverunt humores noxios, priusquam salutaria medicamenta propinent."

for Clauberg a multi-faceted and multi-layered process of thought, always working at the service of an antiseptic end goal. The concept of doubt is the subject of Chapters 1.2 and 2.1.

The first chapter of this research presents in general terms the development of the theory of method from the middle of the 16th to the middle of the 17th century, placing Descartes' method at the middle point of this development. Here, an account is provided of the discussion on method within the cycles of the Philippo-Ramists.¹²⁸

As Édouard Mehl has shown,¹²⁹ Germany played a seminal role in the history of Cartesianism. It is in Germany, in fact, that Cartesian science was initiated, and it is certain that Cartesianism received a seminal and fecund character under the German intellectual epidermis. In this present project, we look at the third moment of the German reception of Cartesianism. After Descartes' passage through Germany around 1619, the first moment of Cartesianism in Germany, the second moment occurred when the figure of Tobias Andreae (1604–1676) appeared; this was Clauberg's professor, already receptive to Cartesian doctrines and in direct contact with the later authors of Ramism, which was a part of the Dutch Cartesian milieu. Clauberg was *a disciple of the second German Cartesian moment*. He assumed the task of distancing himself from his Ramist philosophical style with the critical help of the Cartesian toolkit. Note that distancing oneself is not disengaging oneself. Hence, Clauberg's relationship with the humanist and Ramist roots of his thought is one of emendation. The general picture one obtains from the Claubergian corpus resulting from the perspective this present project suggests is one of a system of thought which remains essentially Ramist, being emended, rectified and solidified by the Cartesian creed.

The present project does not attempt a biographical account of Clauberg's work. However, it is important to point out the significant stations in his intellectual route. Clauberg was born in western Germany, then Westfalia, in Solingen, near Düsseldorf. He was most likely born to a Huguenot family as his education was carried out from early on in Reformed institutions. All Clauberg's studies during his youth were accomplished in Germany. The most important arena in which he encountered the Reformed humanist tradition was at the Bremen Gymnasium. There,

128 See Joseph Freedman, "The Diffusion of the Writings of Petrus Ramus in Central Europe, c. 1570-c. 1630," *Renaissance Quarterly* 46, no.1 (Spring 1993): 98–152; Howard Hotson, *Commonplace Learning: Ramism and its German Ramifications, 1543-1630* (Oxford: Oxford University Press, 2007).

129 Édouard Mehl, *Descartes en Allemagne, 1619-1620, Le contexte allemand de l'élaboration de la science cartésienne*, nouvelle édition (Strasbourg: Presses Universitaires de Strasbourg, 2019).

Clauberg's most notable teacher was Gerard de Neufville (1590–1648).¹³⁰ Neufville was a Calvinist, influenced by both Jan Amos Comenius (1592–1670) and Francis Bacon (1561–1626, see below). It seems that already in Bremen, if not earlier, Clauberg was initiated to the Hebrew language, which he learnt and even integrated at some points in his writings. Still a student, Clauberg moved to Holland and completed his studies in a *disputatio* that he wrote in Groningen under the supervision of Tobias Andreae, who remained an ally of Clauberg throughout the latter's life. Andreae was a German-born philosopher who emigrated to Groningen and taught there. One can generally say that the movement between Germany and the Netherlands constituted the core of Clauberg's milieu, and one should indeed view Clauberg's work as being painted on the landscape of Dutch Cartesianism.¹³¹ Another important name in Clauberg's milieu is Frans Burman (1628–1679), a Dutch Calvinist theologian affiliated with the moderate German Calvinist Johannes Coccejus (1603–69). In 1648 Burman met Descartes at the city of Egmond (by the seashore in Amsterdam) to interview him regarding his views. The transcriber of that interview was no other than Johannes Clauberg. Hence, it can be assumed that Clauberg was closely affiliated with the Dutch Calvinist Cartesian circles, having received this utmost sacred task of transcribing an interview with *The Philosopher* (as Clauberg calls Descartes time and again in his writings) himself. In fact, Clauberg's relations with the Netherlands continued throughout his life, and a great part of his writings were published in Dutch cities.

A notable voyage that Clauberg made was in 1648 to Paris, where he most likely met the Clerselier circle and Jacques Du Roure (died 1685).¹³² Du Roure was one of the earliest Cartesians in mid-17th century Paris, and he is especially important for our inquiry as he composed a full treatise on Cartesian philosophy which contained a fair amount of discussions of method.¹³³ After a brief visit to Leiden to attend the lectures of the Cartesian Johannes De Raey (1622–1702), Clauberg returned to his

130 Gérard de Neufville was a professor of mathematics and medicine at the *Gymnasium Illustre* at Bremen and wrote an important treatise on Physics. On his general philosophy see Domenico Collacciani, "Devenir cartésien ? La méthode de l'ontologie de Gerhard de Neufville à Johann Clauberg," *Les Études philosophiques* 203 (2020/3): 37–58.

131 On Dutch Cartesianism see the recent and most needed Andrea Strazzoni, *Dutch Cartesianism and the Birth of Philosophy of Science: From Regius to Gravesande* (Berlin and Boston: De Gruyter, 2019).

132 See Sophie Roux, "Premiers éléments d'une enquête sur Jacques du Roure," *Bulletin cartésien* 49 (2020): 168–180.

133 See *Nieuw Nederlansch Biografisch Woordenboek* (NNBW) Deel I, 131-134. On Clauberg and Du Roure see especially page 169–170.

homeland Germany to assume the position of professor of theology at the well-known Calvinist Academy at Herborn, which was a centre of Ramist encyclopaedism.¹³⁴

At Herborn, together with his fellow theologian Christoph Wittich, Clauberg brought Cartesianism into the strictly Calvinist Ramist academy, and they were both forced to leave the academy due to their Cartesian convictions. In 1650 Clauberg settled in the Duisburg Gymnasium, the newly erected university in the town. He served as its first rector and was free to profess Cartesian metaphysics and methodology. Clauberg's itinerary and group of colleagues points very clearly to a milieu which was Cartesian, moderately Calvinist and interested in questions of method, doubt and medicine. Neufville, Andreae, Du Roure and De Raey all dedicated writings to question of medicine. Clauberg himself, however, took a slightly different route, one in which medicine became primarily a medicine of the mind.

2. The Ramist Perspective

At the time Descartes was carrying his own concept of method into northern Europe, the philosophy that was newly flourishing there (in addition to conservative, sometimes still Scholastic, Aristotelianism) was Philippo-Ramism.¹³⁵ The earliest encounters of the young Descartes with the prominent philosophy in Germany and the theological as well as the mathematical and cosmological matters under discussion in this intricate environment was thoroughly charted by Édouard Mehl.¹³⁶ It is clear that during this time in the northern part of Europe, mostly around the Netherlands (where Clauberg got to know Descartes' philosophy) but also in Germany, Descartes was absorbing the changing climate of philosophy, science and theology which was active in north-central Europe at the turn of the century. From the geopolitical point of view, during those times Europe was struggling its way out of the wars of religion; therefore, there is no way of disentangling the philosophy of the 17th century from its tumultuous religious

134 Ruben Alvarado, *The Debate that Changed the West: Grotius versus Althusius* (Aalten: Piscator, 2018), 20.

135 On the problematics of the term 'Philippo-Ramism' see Joseph Freedman, "The Diffusion of the Writings of Petrus Ramus in Central Europe, c. 1570-c. 1630," *Renaissance Quarterly* 46, no.1 (Spring 1993): 99–100.

136 Mehl, *Descartes en Allemagne*.

environment.¹³⁷ Our present inquiry however does not seek to over-emphasise the theological aspects of Descartes' and Clauberg's discussions. Instead, we aim to focus on the therapeutic aspects in the history of ideas as it passes through Ramus, Descartes and Clauberg, a therapy of the mind which works as a pedagogy, emending the mind and preparing it for later inquiries.

Future exploration into Clauberg's intellectual biography needs to include some account of the Calvinist element of his philosophy. Both Clauberg and Ramus wrote from a clearly Protestant agenda, and all major philosophical practitioners of Ramism were highly involved in the intellectual politics of the Reformation. Clauberg himself was at least interested and competent in Calvinist theology as he taught the subject at Herborn (1649–1650) and Duisburg (1655–1665). A small part of his work is dedicated to what can be classified as theological questions, most notably his *De cognitione Dei et nostri* (1656). Hence, it is clear that at least some theological element is present in Clauberg's thought, notably in a more institutional extent than in Descartes' work. One should also note that being a Calvinist in a mainly Lutheran Germany made Clauberg's position even more particular and complex as we know that at some points the hostility between Lutherans and Calvinists was as ferocious as that between Catholics and Reformed. However, Clauberg's Calvinist orientation points to another biographical affiliation, that with the Netherlands. Clauberg studied in Holland and maintained his relations with the scholars and intellectuals of the Provinces after his return to Germany. Duisburg itself, the city in which Clauberg directed the newly erected (Calvinist) university, is very near the border between Holland and Germany, and Holland was one of the most dominant centres of Calvinism of the period. However, within Dutch Calvinism one also finds some of the fiercest objections to Descartes' philosophy.¹³⁸ In this sense Clauberg was taking a position within the divided milieu of Calvinist philosophy against the traditionalists as a protagonist of Descartes. In fact, it was in response to the anti-Cartesian publications of two Dutch thinkers moved by theological Calvinist concerns, Cyriacus Lentulus (ca. 1620–1678) and Jacobus Revius (1586–1658), that Clauberg composed his *Defensio cartesiana*. So, in this framework of controversies, Clauberg was *taking sides within Reformed philosophy* against

137 For a recent description of Descartes' activities within the wars of religion see Harold J. Cook, *The Young Descartes: Nobility, Rumour, and War* (Chicago and London: Chicago University Press, 2018).

138 See Andrea Strazzoni, "A logic to end controversies: The genesis of Clauberg's *Logica vetus et nova*," *Journal of early modern studies* 2, no.2: 123–149. On the complex reception of Cartesianism in Holland, see Theo Verbeek, *La Querelle d'Utrecht* (Paris: Les impressions Nouvelles, 1988); Theo Verbeek, *Descartes and the Dutch: Early Reactions to Cartesian Philosophy, 1637–1650* (Carbondale and Edwardsville: Southern Illinois University Press, 1992).

conservatism and in favour of the radical methodism, including its *habitus of doubt* as proposed by Descartes.

Based on the reading performed in the present research, the philosophy of Clauberg can indeed be seen as belonging to the latest generation of the Reformed philosophy of Philippo-Ramists. In this framework it is possible to see Clauberg's philosophy as pertaining to the very late stage of late Humanism (Späthumanismus) in Germany. As will become clear in the following chapters, the Calvinist character of Clauberg's thought played a determining role in the orientation he bestowed on Cartesian methodism. Clauberg's Cartesianism also paved the way for German philosophers at the end of the 17th century such as Ehrenfried Walther von Tschirnhaus (1651–1708),¹³⁹ Gottfried Wilhelm Leibniz (1646–1716) and Christian Thomasius (1655–1728).

3. Methodism as a Conceptual Genre

The discussion around the concept of method is referred to in this present research as “methodism,” not to be mistaken for the Methodist Reformed Confession originating in 18th century Britain but related to the platform of the philosophy of the Reformation ; the term is used to refer to a group of philosophers appearing from the second half of the 16th to the end of the 17th century who were principally interested in defining the concept of method as part of their philosophical project. Methodism, as it is viewed in the present research, is a *conceptual genre*. What is understood here by this term?

In philology a genre denotes a thematic structure that endures through the ages and through a variety of human works.¹⁴⁰ Similarly, in the study of philosophy a genre can serve as a classificatory concept referring to specific problems and returning in various instances and variations through the ages. In our case we take method to be such a conceptual genre. What are the epistemological tenors of the term “conceptual genre”? The ancient Aristotelian 10 *genres* (γέννη) are his *Categories*¹⁴¹ as Adolf Trendelenburg (1802–1872) presented them in 1833: “10 supreme genres, that he

139 Tschirnhaus composed an important treatise drawing on the tradition of *medicina mentis*, which is discussed in Chapter 4.2 in relation both to the Cartesian and the Claubergian models of method.

140 Gérard Genette, *Des genres et des œuvres* (Paris: Seuil, 2012).

141 Aristotle, *Categories. On Interpretation. Prior Analytics*. Translated by H. P. Cooke, Hugh Tredennick. Loeb Classical Library 325 (Cambridge, MA: Harvard University Press, 1938).

called categories because they are the most general genres.”¹⁴² However supreme and general, the system is complex; for example, the same term can appear both under the category “quality” and the category “relation” (for example the term *hexis* [ἕξις]); hence, the inter-relations between the genres are more complex than it appears at first glance. Moreover, as Aristotle demonstrates in the *Categories*, the categories are deduced from language and its everyday articulations. Aristotle returns throughout this treatise to quotidian usage as his most important reference point. The researcher of *genera* must establish them from the corpus of data available, which is always particular and changing; a set of genres (or disposition of genres) must be constantly refined in order to arrive at a more precise classification of the matter at hand.¹⁴³ Hence, the craft of generic classification, in whatever field one practices it, is a constant effort to reach gradually more precise definitions of entities and states of affairs. Nevertheless, a genre is not merely the result of an act of naming a recurring structure of meaning; it is a mental reality, existing in and as thought, a figure of thought; it is a permanent, repeating problem which is solved only to be opened again with new circumstances, new challenges and new minds. We show in subsequent chapters that within the framework of the conceptual genre of methodism, Descartes appears at a middle point in the story, not in its beginning and apparently not in its end. Cartesianism, amongst its other important undertakings, indeed wrote a chapter in the history of methodism, but it neither invented the problem, its elements nor even possible solutions. Indeed, shortly after the end of the 17th century, the methodist genre sank more or less into oblivion, opening the way to a new conceptual genre occupied much more with the ambition to erect philosophical *systems* (as in the works of the German Idealists). It is one of the historiographic aims of the present project to

142 Adolf Trendelenburg, “Les catégories d’Aristote (translation Alain Petit),” *Les études philosophiques* 183 (2018/3): 348: “Le livre des Catégories est le commencement de la science logique ; il y est question des parties premières et simples de la raison et du concept ; Aristote, pour la manifestation des pensées, a divisé ce qui est (to on) non en individus pris singulièrement, en tant qu’ils se refusent à la connaissance du fait de leur multiplicité et de leurs changements, mais en dix genres suprêmes, qu’il a appelés catégories parce qu’elles sont les genres les plus généraux, qui ne sont plus subordonnés à rien, mais sont prédiqués de tout le reste, de sorte qu’il s’agit de parties simples et suprêmes de la pensée et du raisonnement, qui signifient des choses elles-mêmes simples (...).”

143 Not the entire Aristotelian and Scholastic tradition took *Categories* and *Genera* to be synonymous. Some argued that in as much as the *Categories* are merely linguistic entities and hence can undergo change and emendation, the the genus has an ontological existence, which makes it stable, eternal, and hermetically differentiate from other genera. On this see: Jorge J. E. Garcia, “Categories vs. Genera: Suárez’s difficult balancing act,” in *Categories and What Is Beyond*, edited by Gyula Klima and Alexander Hall (Cambridge: Cambridge Scholars Press, 2011), 1–16.

suggest a portrait of the conceptual genre of methodism that describes its central components, difficulties and suggestions.

When did methodism fade completely, if at all, from the chart of philosophy? This is a historiographical question that remains outside the limits of this inquiry. What is certain is that during the second half of the 17th century, one still encounters clear signs of its presence. In a helpful article, Daniel Schneider assigns to Spinoza an epistemic position and typifies him with the title of “Cartesian methodist.”¹⁴⁴ Though Schneider’s issues are different from those discussed in the present research, he provides a definition of the methodist position which is also pertinent to what is discussed here: “The Methodist: We have a method or way of distinguishing between what we know and what we do not know. We can try to use this method to discover a set of things that we know and to provide an account of what knowledge is.”¹⁴⁵ As Schneider points out, this is not a very common reading of Spinoza; however, it is plausible and consistent with the Cartesianism that we find in Clauberg and which Spinoza also found in Clauberg’s books which he had in his library. Hence it is plausible to suppose that Spinoza’s elaboration of the Cartesian concept of method was also impregnated, at least to a minimal extent, by Clauberg’s presentations of Descartes. It is also implausible to deduce that it opposes the emphasis Clauberg puts on the concept of doubt or that for Spinoza it was so dramatically crucial to emphasise the anti-scepticist tendency that each method must presuppose. We can see that in this later generation of methodism, already inculcated in the Cartesian methodist moment, method is always conceived against the background of scepticism, and it is in relation to doubt that the concept of method is developed, either as a complication of the concept of doubt (in Clauberg) or as an answer to the scepticist position altogether (in Spinoza). In this sense, at least in the framework of our present inquiry, we trace the rather late development of methodism as it is found in Clauberg and in the generation following his work.

144 Daniel Schneider, “Spinoza’s epistemological methodism,” *Journal of the history of philosophy* 54, no.4 (October 2016): 576.

145 Ibid.

4. The Method of the Present Research

Hence, the methodology of the present research operates on two levels of inquiry. At the beginning we trace the scope and inner terms of the conceptual genre of methodism as it took shape from the 16th to the 17th centuries. Next, we locate Clauberg (and Descartes) in the midst of the genre, arguing that the classification of Clauberg as a methodist is plausible when we pinpoint Clauberg's philosophical project as a whole. This also suggests the particular understanding our present project offers regarding the philosophical figure of Clauberg.¹⁴⁶

The present research seeks to follow both the Anglo Saxon and the French traditions of Cartesian scholarship, offering two complementary perspectives on Cartesian method. While studying Clauberg, the project seeks to engage not only with Cartesianism but also with the history of its various receptions. One of the most relevant chapters of this reception occurred around the 1950s in France. Here took place the notorious quarrel between Ferdinand Alquié and Martial Gueroult (see Macherey 2014), which is significant to this current research; the quarrel revolved around the definition and character of Cartesian rationalism as well as around the question of order (Gueroult 1953; Alquié 1956) that, as we shall see, proves to be important for the understanding of Cartesian method in the case of Clauberg. In this way the work aspires to add a chapter to the general and extended pool of scholarship centred around Cartesian historiography.

Cartesian historiography however has a much older chapter. Cartesian historiography began at the end of Descartes' own life (if not already during his life) with the compilation of his works in the 1650s by Claude Clerselier (1618–1674) and the publication of Descartes' biography in 1691 by Adrien Baillet (1649–1706). In this sense there is no doubt that Descartes, as a philosophical figure, was invented by his historiographers.¹⁴⁷ However, not only historiographers but also philosophers in the 17th century were doing their own Cartesian historiographies. Both Spinoza and Leibniz

146 On the notion of 'philosophical figures' see Delphine Antoine-Mahut, "Philosophizing with a historiographical figure: Descartes in Degérando's *Histoire comparée des systèmes de philosophie* (1804 and 1847)," *British Journal for the History of Philosophy* 28 (2020): 533–552.

147 See Steven Nadler, Tad M. Schmalz and Delphine Antoine-Mahut, eds., *The Oxford Handbook of Descartes and Cartesianism* (Oxford and London: Oxford University Press, 2019).

were quick to comment in retrospect on Descartes' methods,¹⁴⁸ and Descartes' followers like Antoine Arnauld (1612–1694) and Nicolas Malebranche (1638–1715) debated theological and epistemological aspects of Descartes' philosophy.¹⁴⁹ Within these earlier chapters of Cartesian historiography we also find the work of Johannes Clauberg; he joined the chain of early historiographers of Cartesianism at the latest in 1648 (probably during 1647), when he was staying in Groningen, through his then teacher Tobias Andreae, one of the earliest Cartesians. The acquaintance with this new philosophy changed Clauberg's intellectual route, and from that point onwards he dedicated his work to promoting and defending Cartesian ideas and establishing Cartesian historiography. At that time he was also responsible for the first copy of one of Descartes' writings that was already seen as apocryphal, *Conversation with Burman*.¹⁵⁰ Hence, if "Descartes" is to be regarded as a philosophical figure, then "Clauberg" takes a part in that figure.

Debates and scholarly endeavours of Cartesian reception have been conscious of the grave responsibility for the manner in which Descartes' philosophy will be interpreted in future generations. Clauberg was also very much self-conscious of the historiographical responsibility he carried; he wrote his defences also as a historian of philosophy, looking both to the past and the future of thought. This historiographical responsibility can be seen, for example, in his posthumous *Differentia inter cartesianum et alias in scholis usitatam philosophiam* (Groningen, 1680); in this small volume, Clauberg looks at the various sub-groups of Cartesianism and tries to show the exact place of Cartesianism within the available scholarly usages of philosophy.

Where are we nowadays within the domain of Cartesian historiography? It seems that the domain of Descartes scholarship rests always more or less in the tension formed between the two major schools: In the French school, most of the important recent monographs are in line with the seminal Cartesian teachings of Jean-Luc Marion, and they follow him in thinking of Descartes with theological, phenomenological or

148 See Tad M. Schmaltz, "Spinoza and Descartes," in *The Oxford Handbook of Spinoza*, edited by Michael Della Rocca (Oxford and New York, 2017), 63–83; C. Delisle Burns, "Leibniz and Descartes," *The Monist* 26, no.4 (October 1916): 524–533; Jean-Pascal Anfray, "Leibniz and Descartes," in Antoine-Mahut, Nadler and Schmaltz, *Handbook*, 721–737.

149 On this see the enlightening Denis Moreau, *Deux Cartesiens: La Polemique Entre Antoine Arnauld et Nicolas Malebranche* (Paris: Vrin, 1999).

150 René Descartes, *Entretien avec Burman : manuscrit de Göttingen* (2 édition), présenté, traduit et annoté par Ch. Adam (Paris: Vrin, 1975); René Descartes, *L'entretien avec Burman*, edited by Jean-Marie Beyssade (Paris : Presses Universitaires de France, 1981); René Descartes, *Conversation with Burman*, trans. J. Cottingham (London: Clarendon Press, 1976).

metaphysical agendas in the background.¹⁵¹ Recently, Édouard Mehl provided a much needed introduction to the context(s) of Descartes' cosmology,¹⁵² pointing out the intricate system of affinities in Descartes' vision of the world accompanying his era's advancements in astronomy, notably in the 16th century and the beginning of the 17th century. Mehl demonstrates the fabrication of a world by Descartes as a technical, artificial endeavour interwoven with theological concerns and in tune with Renaissance cosmologies. Indeed, it is this technical, artificial perspective on Cartesianism that the present project also undertakes; however, in our case we seek to understand these artificial dynamics within the domain of method itself. Within the English-speaking schools, the last thought-provoking argument regarding Descartes' method was raised by John Schuster,¹⁵³ whose critique of the historiographic concept of Cartesian method is thoroughly considered in Chapter 1.2. Several recent anthologies re-address the category of Cartesianism with a more synthetic historiographical ground of questioning, bringing the two schools together (for example Nadler, Schmaltz and Antoine-Mahut 2019). It is this synthesis that the present project tries to approach.

The present thesis approaches the definition of Cartesianism through the figure of Clauberg based on the problem of method, this being a fertile venue through which to engage with the question of the reception of Cartesianism in northern Europe in the 17th century. However, it is only through the pinhole of the definition of method that we engage with this chapter of Cartesianism. In this the present research seeks to form a narrower field of discussion that may help illuminate the basic epistemological premises of the reception of Cartesian philosophy.

There exists a question regarding the definition of Clauberg's general philosophical position. It is accepted to see in Clauberg's philosophy a mixture of Cartesianism and Scholasticism, or better Cartesianism and Aristotelianism.¹⁵⁴ However, the present research points to another possible manner of classification.

151 For example see the two works in the Marion tradition: Dan Arbib, *Descartes, la métaphysique et l'infini* (Paris: Presses Universitaires de France, 2017); Oliver Dubouclez, *Descartes et la voie de l'analyse* (Paris: Presses Universitaires de France, 2013).

152 Édouard Mehl, *Descartes et la fabrique du monde: Le problème cosmologique de Copernic à Descartes* (Paris, Presses Universitaires de France, 2019).

153 John Schuster, *Descartes-Agonistes, Physico-mathematics, Method and Corpuscular-Mechanism 1618-1633* (New York and Berlin: Springer, 2013).

154 See for example recently in Nabeel Hamid, "Domesticating Descartes, Renovating Scholasticism: Johann Clauberg And The German Reception of Cartesianism," Forthcoming in *Reshaping Natural Philosophy: Tradition and Innovation in the Academic Milieu*, edited by Andrea Sangiacomo, special issue of *History of Universities* (forthcoming).

Clauberg remained throughout his rather short career a member of the school of Philippo-Ramism. In fact, the last version of his *Ontosophia* is to a large extent based on systems of Ramist dichotomies. In this sense what we try to articulate in the present work is that Ramism included a certain receptivity regarding Cartesian methodological questioning, as if two different beams of light were superimposed on one another. We seek here to articulate this superimposition and the special hue which it forms.

Throughout the various chapters of the present research, we see that Clauberg had constantly in mind Descartes' three central publications: *The Discourse on Method*, *Meditations on first Philosophy* and *Principles of Philosophy*. In this sense he had quite a comprehensive perspective on Cartesian philosophy, enabling him to make a general synthesis of the three writings. As mentioned above, being almost certainly the one responsible for transcribing the text of the interview with Frans Burman which took place around 1647,¹⁵⁵ Clauberg had at his disposal during 1650 already a quite panoramic view of Descartes' oeuvre. There is, however, a pending issue regarding the *Regulae*: it was not published during Clauberg's lifetime. However, it seems that several statements Descartes makes in the *Regulae* are also stated by Clauberg, even if latently, without citing this unpublished text. Lacking any evidence for Clauberg having known of this writing, we can nevertheless say that his reading of Descartes was compatible with what is found in the *Regulae*. This is important as it is in the *Regulae*, more specifically in Rule 4, that Descartes refers explicitly and for the first time to the necessity of having a method:¹⁵⁶

We need a method if we are to investigate the truth of things. So blind is the curiosity with which mortals are possessed that they often direct their minds down untrodden paths, in the groundless hope that they will chance upon what they are seeking, rather like someone who is consumed with such a senseless desire to discover treasure that he continually roams the streets to see if he can find any that a passer-by might have dropped. This is how almost every chemist, most geometers, and many philosophers pursue their research. I am not denying that they sometimes are lucky enough in their wanderings to hit upon some truth, though on that account I rate them more fortunate than diligent. But it is far better never to contemplate investigating the truth about any matter than to do so without a method. For it is quite certain that such haphazard studies and

155 See on this also the helpful commentary of Jean-Marie Beyssade, *Etudes sur Descartes: L'histoire d'un esprit* (Paris, Seuil, 2001), 247–322.

156 *Œuvres* X: 371–372; *Works* 1, 13.

*obscure reflections blur the natural light and blind our intelligence. Those who are accustomed to walking in the dark weaken their eye-sight, the result being that they can no longer bear to be in broad daylight. Experience confirms this, for we very often find that people who have never devoted their time to learned studies make sounder and clearer judgements on matters which arise than those who have spent all their time in the Schools. By 'a method' I mean reliable rules which are easy to apply, and such that if one follows them exactly, one will never take what is false to be true or fruitlessly expend one's mental efforts, but will gradually and constantly increase one's knowledge till one arrives at a true understanding of everything within one's capacity.*¹⁵⁷

The *Regulæ* was first published in Dutch in 1684. It is then highly probable that a draft of the work survived in the Netherlands, or at least arrived in Holland at some stage.¹⁵⁸ If this text was indeed circulating somewhere between Amsterdam and Duisburg, then it was also passing, in some form (oral or written) by Clauberg, who, as we noted above, had very close connections with Dutch Cartesianism throughout his rather short life. Therefore, if the *Regulæ* was indeed in circulation amongst the Dutch Cartesians, then it is highly improbable that this did not pass also to Clauberg, at the very least in discussion if not in a written form. Hence, it is not surprising that in Clauberg's

157 Descartes, *Writings* I, 13; Descartes, *Œuvres* X, 371–372: “*Necessaria est Methodus ad rerum veritatem investigandam. Tam cæcâ Mortales curiositate tenentur, ut sæpe per ignotas vias deducant ingénia, absque ullâ sperandi ratione, sed tantummodo periculum facturi, utrùm ibi jaceat quod quærunt: veluti si quis tam solidâ cupiditate arderet thesaurum inveniendi, ut perpetuò per plateas vagaretur, quærendo utrùm fortè aliquem à viatore amissum reperiret. Ita student fere omnes Chymistæ, Geometræ plurimi, & Philosophi non pauci; & quidem non nego illos interdum tam feliciter errare, ut aliquid veri reperiant; ideo tamen non magis industrios esse concedo, sed tantùm magis fortunatos. Atqui longè satius est, de nullius rei veritate quaerendâ unquam cogitare, quàm id facere absque methodo: certissimum enim est, per ejusmodi studia inordinata, & meditationes obscuras, naturale lumen confundi atque ingénia excæcari; & quicumque ita in tenebris ambulare assuescunt, adeò débilitant oculorum aciem, ut postea lucem apertam ferre non possint: quod etiam experientiâ comprobatur, cùm saepissimè videamus illos, qui litteris operam nunquam navârunt, longè solidiùs & clariùs de obvijs rebus judicare, quàm qui perpétuò in scholis sunt versati. Per methodum autem intelligo régulas certas & faciles, quas quicumque exactè servaverit, nihil unquam falsum pro vero supponet, & nullo mentis conatu inutiliter consumpto, sed gradatim semper augendo scientiam, perveniet ad veram cognitionem eorum omnium quorum erit capax.*”

158 On the constitution of the text of the *Regulæ*, see Jean-Paul Weber, *La constitution du texte des Regulæ* (Paris: Société d'édition de l'enseignement supérieur, 1964); Richard Serjeantson and Michael Edwards (University of Cambridge) are currently working on a newly found copy or early draft of the *Regulæ*, which is considered to change our view of Descartes' early methodology. Their findings and conclusions are not yet published and are only hinted-at in conference presentations. For example <http://www.crassh.cam.ac.uk/events/24569>, consulted 12.05.2020.

methodist writings we find affinities with the principles found in the *Regulæ*; so, we suggest referring to Clauberg's methodist writings as *proto-Regulæ* Cartesianism.

5. Analysis and Synthesis as Core Concepts in the Establishment of Method

In the overall structure of the present research, the reader will continuously find discussions of the terms analysis and synthesis. This is because according to the findings of our project and as the first chapter of this research makes clear, the two terms became immanent to and inseparable from the question of method in Renaissance and Early Modern philosophy. Hence, any discussion of method in Descartes and Clauberg must provide a wide and thorough account of their understanding of analysis and synthesis.

The Latin word "*analysis*" originates in the Greek ἀνάλυσις, meaning resolution; the word "synthesis" comes from σύνθεσις, meaning composition. Both terms, hence, reached the Latin-speaking world directly from the scientific Greek vocabulary. However, even in our accepted vocabulary, we tend to look at these two terms as complementary; the ancient tradition did not necessarily discuss the two as related to one another at all. In the first place, the notion of *analysis* had the more stable and respectable origin as it related explicitly to mathematics, specifically to geometry. The term synthesis did not have such a stable affiliation, and it was used more sporadically. However, as the first chapter of this research makes clear, the two terms became immanent to and inseparable from the question of method in Renaissance and Early Modern philosophy. We can say, therefore, that one of the main characters of Early Modern methodism is the insertion of the two terms into an explicit discussion of the nature of method, taking these two terms as inseparable and diametrical. In other words in the period that interests us here, method is a priori conceived as a technique which necessarily mixes these two complementary forms of inquiry. Hence, it is not that analysis and synthesis *can* help us characterise the Early Modern definition of method; it is rather that their very literal and explicit articulation results in this Early Modern variation of the definition of method. The discourse around the question of method has continuously examined the relationship between analysis and synthesis, and it is exactly the mixture of these two terms that stands at the centre of the present inquiry. The following chapters demonstrate the ways in which analysis and synthesis are interwoven in a particular manner in Clauberg's methodist discourse; it will also be made clear that it is through these two terms that we need to approach our understanding of method in the present context. We will demonstrate that in general, the Claubergian reading of

Descartes takes the Cartesian conception of method, perhaps surprisingly, into a *synthetic* orientation.

One should also note at the outset that the discussion revolving around analysis and synthesis also has a disciplinary aspect: Though the Aristotelian usage of the terms relates mostly to physics and logic, the field in which we see the most elaborate discussions of these terms is geometry. The most important source in this matter is Pappus of Alexandria (c. 290–350). At the beginning of the 17th century, a swirl of discussions of Pappus' geometry appeared on the stage of intellectual discussions following the publication of the full Latin translation of Pappus' *Collectio*, which was itself a compendium of various ancient treatises in geometry and related sciences.¹⁵⁹ Descartes himself, in the *Geometry*, engaged in solving a question that Pappus left to future generations.¹⁶⁰ In this framework, Descartes chose a method in which one proceeds “as if one knows the unknown”¹⁶¹ and then continues by moving backwards, analysing the consequences of the assumption of the unknown. This was in fact the first principle of the development of Early Modern algebra, based on the symbolisation of this unknown and its mathematical consequences.¹⁶² Even though the traditional discussion regarding analysis was explicitly mathematical in nature, during the period of the Renaissance the discussion extended to other domains of application as varied as literature, rhetoric, science, ethics and, of course, metaphysics. In this sense the topos of analysis/synthesis also involves questioning the characterisation of the philosophical domain. Certainly, Descartes was quite aware of the mathematical core of his philosophical method. With Clauberg, however, the situation is different, and the discussion revolving around analysis and synthesis in his corpus tends to rely on other domains such as rhetoric, ethics, hermeneutics, linguistics and philology. In this sense

159 See A. P. Treweek, “Pappus of Alexandria, The manuscript tradition of the *Collectio Mathematica*,” *Scriptorium* 11, no.2 (1957): 195–233.

160 See Henk J. M. Bos, “Descartes' solution of Pappus' problem,” in *Redefining Geometrical Exactness: Descartes' Transformation of the Early Modern Concept of Construction* (New York: Springer, 2001), 313–314.

161 See Emily R. Grosholz, “Descartes's Geometry and Pappus' Problem,” *Cartesian Method and the Problem of Reduction* (London and New York: Oxford University Press, 1991, 2011 online), DOI:10.1093/acprof:oso/9780198242505.003.0002, consulted 20.01.2021. See also Judith V. Grabiner, “Descartes and Problem-Solving,” *Mathematical Magazine* 68, no.2 (April 1995): 83–97.

162 The founder of early modern algebra and the usage of analysis was not Descartes but François Viète (1540–1603), who also acknowledged the ancient origins of the term. See for example: Marco Panza, “François Viète, between analysis and cryptanalysis,” *Studies in History and Philosophy of Sciences* 37 (2006): 269–289.

we can indeed detect a *de-mathematisation* that happens in the Claubergian version of Cartesianism and in Clauberg's understanding of analysis and synthesis.

6. The Definition of Cartesianism

One of the underlying, haunting questions of the present project is, what does it mean to be a Cartesian? In other words which fundamental principles are essential to adopt to be considered a Cartesian? It is rather telling that the recent, wide-reaching and up-to-date *Oxford Handbook of Descartes and Cartesianism* does not provide a general definition of the term, instead presenting particular case studies of Cartesianism.¹⁶³ Are we, however, indeed condemned to remain at the level of singular examples of Cartesianism, leaving aside any attempt to define the voice, the trail that Descartes left behind to remain for centuries after him in the history of modern philosophy? It seems that if the history of philosophy is entitled to claim to a certain extent the privilege of doing philosophy *tout court*, then this privilege is accorded only on the condition of stepping outside an all-encompassing historicism. It is the methodological suggestion of the present project that it is through the concept of the *conceptual genre* that one can approach such a balanced historicist approach to the history of philosophy. In this present project, the author tries to approach the question of the definition of Cartesianism from the perspective of one philosopher who definitely viewed himself as Cartesian: Johannes Clauberg. In this sense we are interested both in determining in a precise manner the meaning of the classification of the philosophical style called Cartesianism; furthermore, we are interested in showing *one possible way of being a Cartesian*, the way Clauberg constructed. The question of the necessary conditions for establishing a Cartesian conceptual style was consciously present in Clauberg's own work. He himself dedicated his lifelong oeuvre exactly to defining the nature of Cartesian philosophy. Hence, Clauberg is an ideal author to take as paradigmatic for the examination of the nature and *reality* of Cartesianism.

It is clear that "Cartesianism" and the "philosophy of Descartes" do not have the same meaning or referents.¹⁶⁴ However, one needs to keep in mind that Descartes

163 Antoine-Mahut, Nadler and Schmaltz, *The Oxford Handbook of Descartes and Cartesianism*.

164 Jean-Luc Marion recently wrote: "From what should one free Descartes. From the misinterpretations imposed on him by Cartesianism." (My translation). "De quoi faut-il libérer Descartes ? Des contresens que le cartésianisme lui a imposé." Jean-Luc Marion, *Questions*

himself was very much aware of the spread of his views around the continent, and in many ways he took care to nourish the transmission of his views and the forming of what we presently call Cartesianism. Indeed, the *Conversation with Burman*, transcribed by Clauberg, was already intended to propagate Descartes' views.

It is also notable that differently from others who developed Cartesianism in a direction which answers first and foremost to a specific metaphysical or even scientific agenda, Clauberg exhibits a certain *hermeneutical* approach to Descartes. Descartes' writings themselves are taken as sources to be read, commented upon, interpreted and presented to future readers and pupils. In this sense Clauberg's position is rather unique. Descartes is not only looked on as a philosophical inspiration but also as a textual source, similar to a sacred, or at least classical, text.

One of the central intentions of the present thesis is to follow a certain line of differentiation between Descartes' work and its Cartesian reading. This line of differentiation is formed through philosophical, literary and theological authors who were influential in Clauberg's intellectual formation. What is certain is that in the tradition of Cartesian scholarship, Clauberg has been considered a Cartesian, one of the earliest and the most attentive. However, what arises from the present reading of the Claubergian corpus is that a more balanced view of Clauberg must be provided, one which takes into account the humanist, post-Ramist, Reformed philosophy of the 17th century. Can we say, then, as a historiographical orientation, that our present method is at least a bit historicist in nature? We are interested here less in mirroring a supposed system found in the thought of Clauberg, or even in that of Descartes, and more in trying to discover the character of Clauberg's philosophy as it is presented in his corpus. This has not always been the case in Cartesian scholarship. The most important anti-historicist reading of Cartesian philosophy was proposed by Martial Gueroult. What characterises Gueroult's historiography is his antipathy towards historicism¹⁶⁵ as he aspires to build his interpretation of Descartes exclusively from the structural elements found internally in Descartes' own texts. The approach suggested in the present work can be described as *moderately historicist* in the sense that we are indeed examining the primary historical development of Descartes' work. It is also shown that at least in the case of Clauberg, what is being taken as a central element of Cartesianism is the awareness of questions of method, even before questions of

cartésiennes III : Descartes sous le masque du cartésianisme (Paris: Presses Universitaires de France, 2021), 13.

165 Knox Peden, "Descartes, Spinoza, and the impasse of French philosophy: Ferdinand Alquié versus Martial Gueroult," *Modern Intellectual History* 8, no.2 (2011): 370–371.

metaphysics. In this sense our reading of Cartesianism follows that of Clauberg: It is less structural and more dispositional; that is to say we are trying to pinpoint the mode of operation suggested by the Claubergian corpus. As Édouard Mehl suggested, Clauberg walks on a path which sees Cartesianism as anchored in the first principle of doubt.¹⁶⁶ But we must be careful and precise when using this articulation. *Dubitatio*, as it is critiqued by Clauberg, is not a scepticist but, as the following chapters demonstrate, rather a *stoic* position. Doubt is that position in which a *distance* is instituted between observed things and the observing mind. This distance is also a “way,” and philosophy, or rather proto-philosophy (i.e. philosophical initiation) is presented as a method, an “after-a-way,” which is an account, a report, a demonstration of the *distance*.

7. Historiographical Aspects of Cartesianism, Ontology and Humanism

So far, the various attempts to approach the Clauberg case have tended to align him with a certain trope in the history of philosophy which is understood as a group of thinkers who contributed to the invention of modern ontology over the 18th century.¹⁶⁷ This is mainly the case thanks to Clauberg’s treatise *Ontosophia*, which was published three times throughout Clauberg’s life in three different versions. Indeed, there is no doubt that Clauberg was interested in formulating an ontological vocabulary and its rules.¹⁶⁸ However, the findings of the present research point in a different direction in the interpretation of Clauberg’s philosophy and ontology: On the basis of Clauberg’s other writings and compared with the formulations found in *Ontosophia*, it is rather clear that Clauberg is less interested in erecting an entirely *self-standing*, *new* manner of discussing metaphysics¹⁶⁹ and more in establishing the first platform of philosophical

166 See Édouard Mehl, “La question du premier principe dans La Recherche de la Vérité,” *Nouvelles de la République des Lettres* 1999: 77–97.

167 See recently Alice Ragni, “L’objet en général. L’orgueil de l’ontologie de Clauberg à Leibniz,” (PhD diss., Université de Paris Sorbonne 4, 2016). See <https://www.theses.fr/2016PA040105>, consulted 27.7.2021; Alice Ragni, “Ontologia e analogia entis tra Johannes Clauberg e Jacob Thomasius,” *Archivio di Filosofia* 3 (2016): 155–166.

168 It seems that in his ontosophic researches, Clauberg himself was influenced by Jan Amos Comenius. Notably, Comenius placed his *Pansophia* in the general framework of his grand reformation of education. On this see Ulrich Leinsle, “Comenius in der Metaphysik des Jungen Clauberg,” in Verbeek, *Johannes Clauberg*, 1-12.

169 Massimiliano Savini has rightfully suggested the term of the “dédoulement de la métaphysique” regarding Clauberg’s relation to Metaphysics. In this, he notes the duality of the

education, providing an elementary vocabulary intended to prepare oneself to pursue the way of metaphysics. The present project suggests an alternative to the ontologist classification of Clauberg's work: It is neither concentrated exclusively nor centrally on ontological questions. His *Ontosophia*, in its three versions, is not a treatise proposing a metaphysics but rather a manual for the apprehension of metaphysical language, mostly borrowed from the Aristotelian (rather than the merely Scholastic) tradition. It is clear that Clauberg is not any kind of a Scholastic: In the first place, his manner of argumentation is completely other than the one still in usage by the late Scholastics of his time. As we know, and as Clauberg himself clearly avowed, the manner of writing philosophy testifies to its nature. Moreover, it is Clauberg himself in most of his writings who presents the dramatic difference between Cartesian and Scholastic philosophy, emphasising the need to make way for Cartesian innovations in the conception of the practice of philosophy itself. In the present project, Clauberg is presented as a late-humanist thinker. Humanist themes are tempered with the strengthened attention given to the Cartesian corpus and with a strong awareness of the tendencies at play in the Reformed world in the decades preceding his own. As we will also make clear, one of the most cited authors in the *Opera omnia* of Clauberg is none other than Francis Bacon (1561–1626). It is the radically open, self-questioning but optimistic humanist methodism of Bacon that we need to take into account when we try to provide a resolute account of the Claubergian concept of method. However, if the self-questioning, pseudo-scepticist tendency we find in Clauberg is as Baconian as it is Cartesian, we must ask ourselves which Cartesianism we are observing in the case of Clauberg. In other words what makes for Clauberg the ground for his referring often in his writings to Descartes as The Philosopher, a title which was until Clauberg's times reserved to Aristotle himself? What made Descartes for Clauberg the candidate for the replacement of the great Aristotelian regime? If Clauberg himself was unable to explain this in a succinct manner, how should *we* understand and characterise his Cartesianism? Finally, how should one locate Claubergian Cartesianism in relation to the later generation of Cartesianism in the last half of the 17th century? The answers to these historiographical questions are gradually revealed in the coming chapters of the present project. However, the general presupposition of the author is the following: Clauberg's Cartesianism is neither ontological nor epistemological in nature; it is rather related to the definition of philosophy itself *as a discipline in the modern sense of the term*. Indeed, the general picture we get from Clauberg's writings on the essential nature of Cartesianism is that

adjoining of the Cartesian first philosophy to the already existing schemes of the *Schulmetaphysik*. See especially Savini, *Clauberg*, 188.

Descartes' philosophy, and in its heart *Cartesian method*, establishes anew, literally revives, not only philosophical practice but also philosophy as a domain of study, of competence and of instruction. Descartes, as Clauberg sees his philosophy, shows a way to re-approach the philosophical domain and restore it after ages of degeneration. In this sense Cartesianism, for Clauberg, means nothing less than the re-discovery of philosophy itself, this time not as a metaphysical or theological but rather as a methodological domain, a domain of the self-determining movement of thought.

8. The Difference Between a Conceptual Genre and a Philosophical Style

In this present inquiry the reader will often encounter an expression which must be elucidated, as it is a concept furnished as a tool suited for the problems posed in the present inquiry: “the conceptual genre of methodism.” The author of this present research uses that term to refer to that group of thinkers, active throughout the 16th and the 17th centuries, who were occupied with the understanding, criticism and development of an intellectual procedure which was literally designated as a method. This conceptual genre of methodism includes not only philosophers but also theoreticians of rhetoric, art, logic, medicine and the sciences.

However, one must first clarify what is meant exactly by a *conceptual genre*. In the first place, a distinction must be made between a philosophical *style* and a conceptual *genre*. While philosophical *style* refers to a certain influence in the history of philosophy which is at many times related to certain determinate coordinates in space and time, a conceptual *genre* is a mental token which exists throughout the history of thought; it can appear both in purely philosophical and other theoretical writings; it is certainly juxtaposed to certain philosophical styles, but it can also appear in several of them simultaneously or diachronically. This present work addresses the notion of conceptual genre using the terms of philology and art criticism. A genre, in literature or philology, is a figure, a certain problem, a certain state of affairs which repeats throughout history, developing, varying and receiving each time a new character or a new nuance.¹⁷⁰ This must be differentiated from a *philosophical style* because a conceptual genre can unite within itself several philosophical styles (for example Cartesianism, Humanism, Scholasticism, Aristotelianism). A conceptual genre is a principal term (in our case, one

170 See my Adi Efal, “Generic classification and habitual subject matter,” in *The Making of the Humanities, Volume III: The Modern Humanities*, edited by Rens Bod, Jaap Maat and Thijs Weststeijn (Amsterdam: Amsterdam University Press, 2014), 345–358.

of method), a term that has a history of *longue durée* in which its principal elements continuously repeat. The theoretical consequences of such conceptual states of affairs are repeatedly questioned in the internal story of the conceptual genre. In this sense conceptual genre behaves like a philosophical *figure*.¹⁷¹ It is like a philosophical seal that is opened and closed at different times and places in the history of philosophy, producing each time a different perspective on the matter of thought.

The present thesis hence relates to methodism as a *conceptual genre* made up of a chain of texts and authors occupied with problems of method, its origins, definitions, modalities, characteristics and applications. In this sense this project is less interested in presenting a historicist framework of things “as they really came about.” On the contrary it is more interested in demonstrating a certain crossing between a conceptual genre and a philosophical style: the conceptual genre of methodism and the philosophical style of Cartesianism. Through this *juxtaposition of conceptual genre and philosophical style*, we hope to reach a clear and distinct configuration of *one particular reality* in the history of philosophy, that presented in the writings of Johannes Clauberg.

If we try to locate ourselves in the field of historiographies provided by philosophers of the Early Modern period, we can indeed admit that we do not proceed in the predominant orientation of a Martial Gueroult, demanding a “deduction of the reality of systems.”¹⁷² Not all philosophy is systematic, and many times it is not the organic system that makes the voice of the philosopher but rather his instruments, the philosophical tokens that he uses and the manner in which he weaves herself into the trails of certain conceptual styles. In the case of Clauberg, it is almost senseless to look for a system as he was a philosopher of another kind, and it is exactly this kind that we try to approach in the following chapters. What we are looking to articulate is the concrete historical figuration of the conceptual genre of methodism, which involved in the case of Clauberg permanent questions arriving from the *philosophical style* of Cartesianism.

171 See Erich Auerbach, “Figura (1938),” in *Scenes from the Drama of European Literature* [new edition] (Minneapolis: University of Minnesota Press, 1984), 9–76; and my own Adi Eyal, *Figural philology: Panofsky and the science of things* (London: Bloomsbury, 2016),

172 Martial Gueroult, *Philosophie de l’histoire de la philosophie* (Paris: Aubier, 1979).

9. Clauberg as a Calvinist and Reformed Intellectual Politics in the 17th Century

There is no doubt that Clauberg took part in the intellectual politics of 17th-century Calvinism. As stated above, after the Gymnasium he visited Bremen.¹⁷³ All the institutions he visited in his scholarly itinerary were highly engaged in the politics of Calvinism. It is also clear that he saw the Huguenots and Cartesians as sharing joint histories. He begins his essay “The Difference between Cartesianism and the Scholastic philosophy”¹⁷⁴ by providing a strict parallelisation between the Huguenots and the Cartesians. Both are, according to Clauberg, newly formed groups suffering from the scepticism of their environment, sharing a similar fate:

When people were talking about the Huguenots for the first time in France, the people thought they were great monsters, or at least that they were such people to whom a place in a decent society could not be given. And when they did in fact happen to be in some company, so that one could [actually] see a man who called himself a Huguenot, they were very surprised and said he was a man like all others, and not at all difficult or quarrelsome to live or talk with.¹⁷⁵ Today one hears a lot of talk about the Cartesian philosophy, and the crowd thinks that it must be some bizarre creature, newly submerged in a world that no one can or wants to tolerate.¹⁷⁶

For Clauberg the Calvinists and the Cartesians share a similar fate, a one of a newly established commonwealth that must be acknowledged gradually by the general

173 See on the place of Bremen in the Calvinist politics of the 17th century: Leo van Santen, *Bremen als Brennpunkt reformierter Irenik: Eine sozialgeschichtliche Darstellung anhand der Biografie des Theologen Ludwig Crocius (1586-1655)* (Leiden: Brill, 2014).

174 Johannes Clauberg, *Unterschied zwischen der cartesianischer und der sonst in Schulen gebrauchlicher Philosophie* (Duisburg: Adrian Wyngarten, 1657).

175 OOP II, 1219 (*Differentia*, Introitus, 1): “Cum primùm in Galliis de Hugonotis homines loquerentur, erant qui putabant ingentia illos monstra, aut minimum tales homines esse oportere, quibus locum ullum in honesto consortio concedere nefas fit. Cum autem fortè in coetu quodam usu veniret, ut viderent hominem, qui Hugonotus esse dicebatur, summo mirabantur opere ajebantque, illum utique hominem esse ut alios, et in convictu seu conversatione non difficilem aut morosum.”

176 Clauberg, J., *Unterschied*, 1: “Heut zu tage höret man viel reden von der Cartesianischen Philosophie, und etliche vermeinen, es müsse eine wunderliche ketzeren sein, so neulich in die Welt eingeschlichen (...)”

society. However, Clauberg was aware that ancient, habituated opinions cannot be emended by a peaceful and quiet movement; rather, one needs to make a revolution in one's thought:

Thus, I slip towards ancient opinions, and I dread awakening; for when vigilant labour succeeds peaceful quiet, from then on I'll have to face the light instead of the inexplicable darkness of suppressed difficulties (literally: so that the vigilant labour of wakefulness that succeeds peaceful tranquility does not have to endure some insight, but [can remain in] the inextricable darkness of suppressed difficulties).¹⁷⁷

Hence, effecting a real transfiguration of thought can only be accomplished in peaceful and delicate ways, but sometimes a harsher ethic must be put to work. Also, according to Clauberg, Calvinism and Cartesianism share a similar character, one of creating a clean slate to enable the process of rebuilding.

The very protection of the Cartesian cause meant taking a position within the Calvinist movement itself. As we shall see, the two great critics of Descartes against whom Clauberg directs his polemical writings were both strictly orthodox Calvinists, arriving from the anti-Arminius school, meaning that they were strictly *defending* the Calvinist doctrine of predestination.¹⁷⁸ The question of predestination was very much a determining one during the war of religions and the development of Protestantism. Predestination is the Protestant doctrine which holds that human salvation is decided in advance by Godly authority and that free will cannot determine one's salvation. Even within Calvinism itself, the question of predestination was a cause of great quarrels and divisions as the orthodox Calvinists strictly defended the doctrine of predestination in the strongest sense, denying the place of free will in man's salvation. Arminius, on his part, took a moderate position, emphasising the place of free will in one's Christian route towards salvation.

Most of Clauberg's writings are non-theological in character, and they do not read in the first place as *theologically* polemical writings. Though he often cites from the

177 OOP II, 1170 (*Dubitatione* IX, §50): "Sic sponte relabor in veteres opiniones, vereorque expergisci, ne placidæ quieti laboriosa vigilia succedens non in aliqua luce, sed inter inextricabiles jam motarum difficultatum tenebras in posterum sit degenda."

178 See Martin van Gelderen, "Hot protestants: Predestination, the Freedom of Will and the making of the modern European mind," *Calvinism and the Making of the European Mind*, edited by Gijsbert van den Brink and Harro Höpfl (Dordrecht: Brill, 2014), 131–154.

Bible and the New Testament, he does not engage explicitly with theological issues. From the corpus of writings found in his *Opera Omnia*, one gets the idea that Clauberg saw his vocation as related to the humanist creed (which was already a theology-laden position in 17th-century Europe), while he tried to dedicate special attention to reform in education. Even in his most theologically oriented book, the *De cognitione Dei et nostri exercitationes centum*,¹⁷⁹ Clauberg goes in the Cartesian direction and concentrates on demonstrating the limits of human reason, never in fact crossing the border to discuss divine intelligence itself.

If Clauberg's writings are rather more philosophical than theological, it is in the writings of his closest colleague, Christoph Wittich, that one finds a full-blown theological engagement with the intellectual politics of Calvinism. Like Clauberg, Wittich was a partisan of Cartesianism, and they were transferred together from Herborn to Duisburg because of their Cartesian convictions which were not accepted by the more orthodox Calvinists.¹⁸⁰ The general picture one gets from Clauberg's closest allies, as well as from Clauberg's quarrel with Descartes critics Revius and Lentulus, is that of a rather *moderate Calvinist*. Before everything, it is through the capacities of doubt that Clauberg engages within the Reformed positions. In as much as Revius and Lentulus attacked Descartes exactly on the basis of his alleged scepticism, Clauberg strongly argued for an endorsement of the specific kind of doubt that Cartesian method proposes. This, however, must not be understood in Clauberg's case as a heresy offending the fundamentals of the Christian faith. The importance of method to the Claubergian project in the context of Calvinist theology is well understood. The method is understood as a *preparation* stage in which an initiation is made into the arena of contemplative thinking. We also explore the method's inner dynamics in this project. The method is like the protected domain where one can, and indeed must, allow oneself to endure the strictest self-examination and self-habilitation to establish the habit of infallibility. In this project, Cartesianism plays a decisive and irreplaceable role.

179 Duisburg: Wyngarten, 1656.

180 See Kai-Ole Eberhardt, *Christoph Wittich (1625-1687): Reformierte Theologie unter dem Einfluss von René Descartes* (Göttingen: Vanderhoeck und Ruprecht, 2019).

10. The Divisions of this Work

This work is divided into four parts, each of which is divided into several chapters, and an extended concluding chapter.

Part 1: The art of reasoning. The first introductory part of this thesis presents the reader with the problem of method in the Cartesian context, both from historical and structural points of view. The first chapter presents the historical parameters, and the second chapter presents the more structural consideration of viewing method as mental know-how.

1.1. From the humanist origins of the problem of method to the Philippo-Ramist configurations of method

The introductory chapter discusses the historical development of the philosophical discussion regarding the definition of method over the 16th and the early 17th centuries. Sections are dedicated to the definitions of method suggested by Aristotle, Ramus and Zabarella. The chapter examines the relationship between methodical considerations and the competence (and art) of logic; this relation exists already in the writings of Aristotle, mainly in the *Analytics* and the *Physics*.

1.1.2. Method as the know-how of not-yet-knowing

The second chapter engages with the understanding of method as mental know-how. As know-how, method should be understood as a habit or, in the language of the period, habitus of the mind. Numerous instances in the Cartesian and Claubergian corpuses make this observation plausible. However, the manner in which Clauberg developed Cartesian know-how is one in which *hesitation* and *estimation* take the frontstage. It is suggested that methodological know-how in its Cartesian-Claubergian version has realist implications; methodological know-how calls for a knowledge of one own's mind but also of a repertoire of a determining *order of matters*. The chapter also engages with recent scholarly questions regarding the importance of method to the Cartesian endeavour itself.

Part 2: The two faces of order. The second chapter concentrates on the modes of order that one can find in Descartes' and Clauberg's methods. We begin with the order of reason (*l'ordre des raisons*), which is widely identified with analysis. We continue to the order of matters (*l'ordre des matières*), and finally we discuss the ambiguity found

in the term “analysis” and suggest a two-layered process of ordering through analysis and synthesis which is found in the Claubergian conception of method.

2.1. The order of reasons: Analysis?

This chapter focuses on a differentiation between the order of reasons and analysis and between the order of matters and synthesis. This is useful as such a differentiation will help us see to a clearer extent what complex clusters of meaning are found in the dynamics of division and composition in the Claubergian-Cartesian method. The chapter concentrates on the order of reasons in Descartes, trying to make clear both the origins and the continuations of this term in Clauberg’s thought. In Clauberg’s reading, the order of reason refers not so much to a biographical, confessional manner of doing philosophy but first and foremost to the operation of doubt, which is the first step in any methodical inquiry.

2.2. The order of matters

In this chapter we take a deeper look at the notion of the order of matters. We discuss the relationship between the order of matters and the traditional concept of synthesis. We elucidate what Descartes highlighted regarding the concept of the order of matters by linking it with synthesis. We consider the question of geometric reasoning and compare Descartes’ determination of the order of matters with Benedictus Spinoza’s conception of method in the early essay “*Tractatus de intellectus emendatione.*” We go into detail regarding both the synthetic character of method in both the works of the Philippo-Ramists and the philosophy of Zabarella. We elucidate which of these synthetic suggestions can be observed in Clauberg’s writings, notably in his last version of *Ontosophia*.

2.3. The equivocation of analysis

This chapter argues that within the methodist framework that we attempt to distinguish in the present project, analysis is inherently a synthetic term. I show that already in Aristotle there are hints going in this direction. This was also how Zabarella understands an Aristotelian kind of method; it is an inquiry which necessarily provides a synthesis of the givens in the principles of thought. The chapter argues that differently from the view of most Descartes’ scholars, Descartes does not in principle object to synthesis, only to a certain kind of synthesis. In a similar manner, Clauberg also works towards a sort of synthesis, but his is a synthesis that must be distinguished from the encyclopedism of the earlier generation of Philippo-Ramism because in Clauberg the Cartesian mode of methodism is integrated into the working frame.

Part 3: Reframing judgment and the figuration of a thought

This third part is occupied with the manner in which judgment as a central element of the methodological operation is produced. In 3.1 we turn to the subject of doubt, defined in Clauberg's terms as a "negative operation of judgment." After we discuss the rules of methodological resolution, we proceed in 3.2 to the synthetic stage of method, issuing mental configurations of the matters at hand.

3.1. The negative usage of judgment

In his *Initiation of the philosopher*, Clauberg argues strongly that doubt has in the first place a negative influence; instead of the thought process proceeding into further circulations of opinions and concepts, one must halt and view the reservoir of what one already has. Doubt in this framework is a strategy of postponement of judgment, not of deconstruction. Doubt is therefore presented as a negative action on the will, that is to say as a restraint of the will. This restraint is effectuated by the work of analysis presented in previous chapters. The token of analysis hence receives a new variation in which the already given synthetic unity is reduced to its first principles, allowing a second process of synthesis to take place.

3.2. Figuring out things: The formation of the object

This chapter discusses the basic question, What is a "thing" in the Claubergian-Cartesian framework? Indeed, due to the special characters of the Cartesian *res extensa*, the only manner to approach the conception of a corporeal thing is through the delineation of its figure, which accounts for its extended borders. The quality of the figure in the Cartesian framework is first and foremost the fact that it can help to account for all nuances and irregularities in the form of things. We will see that Clauberg is very much attuned to questions of the constitution of the object of inquiry. However, for Clauberg the techniques of figuration are rather hermeneutical: The thing is defined according to the coordinates of its place both in history and under the scrutiny of logic. We ask in what manner the Claubergian constitution of the object is in line with the way Descartes defines the proper objects of methodological inquiry and in what sense one can say that Clauberg understands the object as a mental object.

Part 4: *Medicina mentis*. This fourth part of the thesis is embedded in a synthetic understanding of Clauberg's method. In 4.2 we examine Clauberg's theory of (this time positive) judgment and place it in relation to Descartes' theory of judgment. We see that judgment plays a dramatic, determining role in the methodological process, notably in the passage from analysis to synthesis. We see that Clauberg, at the stage of judgment,

approaches already a hermeneutical vocation in which the *meaning* of the matters at hand is sought.

4.1. Understanding: The positive theory of judgment and hermeneutic emendation

In 3.1 we saw that Clauberg redefined the meaning of Cartesian doubt as a way of postponing judgment. In Chapter 4.1 it is examined what is the positive operation of judgment within the Claubergian understanding of method and what are its principles. The positive aspect of judgment consists in the formation of correctly structured propositions regarding the configured object of inquiry. The chapter will highlight the place of linguistic and etymological considerations in the work of Clauberg. The place of linguistic analysis and synthesis of language in the general framework of the method is presented, and it is suggested that in addition to having a clear influence of Ramism, in this aspect Clauberg is drawing plausible conclusions from a Cartesian framework. This synthesis of Clauberg's work is completed in the third and last version of *Metaphysica de ente quae recte ontosophia* (1664).

4.2. Mental habit as therapy and as a pedagogy

This chapter is occupied with the *medical, therapeutic* model of the understanding of method. In Clauberg's writings, following the Ramist orientations, the aim of the methodical process is to prepare the ground for a subsequent process of learning and discovery in other domains of knowledge and civil practice. This method, however, is not only pedagogic; it is also therapeutic as it assumes that the state in which one begins inquiries is not a sane or ripe one, necessitating a process of *emendation*. The most central task this starting point presents is determining the definition of the concept of health in the methodist framework. This concept also brings into focus the pre-eminence of the problem of viewing method as a hypo-habitus, a primary sub-habitus enabling all the other habitus. Though the therapeutic perspective is found already in the 16th-century formulations of method, it becomes more prominent in the later decades of the 17th century following Clauberg's lifetime, for example in the work of Spinoza (*Tractatus de Intellectus Emendatione*, c. 1677) and Ehrenfried Walther von Tschirnhaus (*Medicina Mentis*, 1687). We will see that the same notions we have explored thus far, those of analysis and synthesis, and the differentiation we suggested in 2.3 between *first synthesis*, *first analysis*, *second analysis* and *second synthesis* can be helpful when approaching the question of methodological health.

5. Conclusion: Method as restoration: Resuming and building on the former chapters, the conclusion suggests a synthetic manner with which to understand the methodism

found in the writings of Johannes Clauberg. In as much as in Descartes' writings method is described as an open-ended process, in Clauberg's writings we see method as proceeding towards a pre-established aim: the installation of a relation between the process of auto-estimation and the understanding of matters. In this, Clauberg clearly returns to the legacy of the Ramist school. The conclusion emphasises the durational character of Clauberg's method in which mnemonic techniques play a more prominent role than in Descartes. In other words, the formation of a proportion between the mental and metaphysical orders is a process that necessarily demands time and in which the history of the thinking individual must be constantly considered. In this concluding chapter, it is suggested that a thought, according to the Claubergian methodical model, is predestined by the matter which it judges *and understands*. Worldly matters are occasions for the gradual alignment of the order of reasons and the order of matters.

Part 1: The Art of Reasoning

1.1. The Conceptual Genre of Methodism

1.1.1. The historical framework of the conceptual genre of methodism; 1.1.2. The Aristotelian framework of method; 1.1.3. The Galenic definitions of method; 1.1.4. The founders of humanist methodology: Ramus, Zabarella and Bacon; 1.1.5. Ramus on method and its unity; 1.1.6. Zabarella on the methods; 1.1.7. Ramism and Zabarellism in Germany: Alsted, Keckermann, Timpler, Martini and Comenius; 1.1.8. Method as an intellectual habitus; 1.1.9. Reformation and method; 1.1.10. The methodist commitment

1.1.1. The Historical Framework of the Conceptual Genre of Methodism

During the 16th century in Italy, England, Germany and France, one finds an impressive number of authors occupied with rereading Aristotle, and in their writings one finds a central place given to the subject of method.¹⁸¹ As is well known, the literal meaning of the word *methodos* in Greek (μέθοδος) is *following a way*. The concept of method itself goes back at least to Aristotle, most importantly to the *Organon* and more specifically to the *Topics (The Problems)*¹⁸² and to the *Second Analytics*.¹⁸³ However, it is first and foremost to the *Topics* that one should turn to learn how to construct and direct a process of interrogation in all domains of knowledge and the arts, and it is to this book that

181 For an extended and informative list of works dealing with Method in the 16th century, Neal Ward Gilbert, *Renaissance Concepts of Method* (New York: Columbia University Press, 1960), 233–236.

182 Aristotle, *The Complete Works*, edited by J. Barnes, vol. 1 (New Jersey: Princeton University Press, 1984), 167–277.

183 Jean-Marie Le Blond, *Logique et Méthode Chez Aristote: Études Sur la Recherche des Principes Dans la Physique Aristotélicienne* (Paris: Vrin, 1939).

Petrus Ramus turned his attention.¹⁸⁴ In the *Topics* Aristotle discusses the reasoning behind arguing being understood as dialectics, that is to say as the art of conversation; the truth that is found is not an absolute one, and it is not intended to scientifically determine this. Instead, the *Topics* presents the discussion to address matters that are not absolutely certain and are rather doxastic, sound, justified opinions. Aristotle calls this method dialectic, and Ramus follows in his steps. Ramus was neither the first nor the only thinker to approach Aristotelian logic from the vantage point of the *Topics* instead of the *Analytics*. However, Ramus supplied an articulation of dialectics that created a real shift in its reception.

In the 16th century, both in Italy and in northern Europe, one finds ample evidence of discussions regarding the subject of method. In northern Europe, as mentioned in the introduction, we find the Philippo-Ramists occupied in various ways with forming a mixture between the thought of two great philosophers of the Reformation: the already mentioned Calvinist Petrus Ramus and Philippe Melanchton (1497–1560), a Lutheran. In the works of both Ramus and Melanchton, one finds deep-rooted ambivalence regarding Aristotelian philosophy: Though they both engage in incisive criticisms of Aristotelianism, those criticisms are erected in the first place against the Scholastic manner of presenting Aristotle. In their writings, we find also a specifically Early Modern kind of Aristotelianism, considered as a primary source for wisdom and method, though the primary challenge was for both thinkers to read Aristotle *correctly*, putting aside the Scholastic tradition. The generation of the Philippo-Ramists (Clauberg’s teachers) elaborated, systematised and deepened the Ramist and the Melanchtonian determinations. Our historiographical account must include a brief description of the era from the 16th to the 17th century. Among the Philippo-Ramist thinkers at the turn of the 17th century are included Rudolph Snellius (1546–1613), Rudolph Goclenius (1547–1628), Clemens Timpler (1563–1624), Bartholomäus Keckermann (1572–1609), Gerardus Vossius (1577–1649), Johann Heinrich Alsted (1588–1638), Jan Amos Comenius (1592–1670) and Clauberg’s own friends and colleagues Tobias Andreae (1604–1676) and Christoph Wittich (1625–1687), both fellow Cartesians. We see that the history of Cartesianism in northern Europe includes an important Philippo-Ramist chapter, and this stands at the centre of the present

184 See Terri Palmer, “The Dictates of Reason: Bacon, Ramus, and the Naturalization of Invention,” OSSA Conference Archive 80 (1997),

<https://scholar.uwindsor.ca/ossaarchive/OSSA2/papersandcommentaries/80>

consulted 19.11.2020.

inquiry. In a recent study, Marco Sgarbi (2016)¹⁸⁵ suggests that the above-mentioned authors furnished a method that he calls “facultative logic,” a logic based on being an art, an installed capacity of the mind. This facultative logic originated during the return to the writings of Aristotle, energised by the dissemination of new commentaries on Aristotelian writings.¹⁸⁶ Sgarbi views this facultative logic as opposed to the logic of ideas. Facultative logic is concerned with the logical use of the natural powers of the mind in knowing an object. Sgarbi’s intention is to demonstrate that it is this kind of facultative logic that paved the way for the Kantian critique of the faculties and their propagation. The story that the present project tries to tell, however, is more limited in scope; it dwells on the Cartesian moment of the understanding of method and reconsiders to what extent it owes its character to humanist philosophy. The discussion around method can, however, be perceived within the framework of facultative logic. Clauberg’s *Logica vetus et nova* is an example of this facultative logic. The question is, in the view of the present project, whether it is indeed logic which guides the way towards the definition of method or rather *method itself*. A further question is whether this methodist platform is indeed already at this facultative stage or should it rather be viewed as a technique or an art, a mental art. Indeed, our reading shows that the methodist path also has its ancient origins. Hence, the occupation with method also has a historiographical meaning for philosophers, one of re-engagement with classical philosophy, notably with Aristotle and Galen.

Many of the discussions regarding the meaning of method return to the figure of Galen.¹⁸⁷ Galen (129–c. 200–216) was a pre-Christian, Roman philosopher and medical practitioner who produced a corpus of writings about the science of medicine, influenced notably by the philosophy of Aristotle but especially by Stoicism, which he also fiercely criticised.¹⁸⁸ During the Middle Ages and throughout the Renaissance, the Galenic corpus in many versions and translations from the Greek original was still regarded as authoritative in the domain of medicine. In the 16th century, however, one begins to observe a strengthening movement criticising Galen. Galen’s views on method are mostly found in his *On the Constitution of the Art of Medicine* (2016). Galen’s

185 Marco Sgarbi, *Kant and Aristotle: Epistemology, Logic, and Method* (New York: Suny Press, 2016).

186 See Charles H. Lohr, “The sixteenth-century transformation of the Aristotelian division of the speculative sciences,” in *The Shapes of Knowledge from the Renaissance to the Enlightenment*, edited by D. R. Kelley and R. H. Popkin (Dordrecht: Springer, 1991), 49.

187 See Gilbert, *Renaissance concepts of method*, 13–24.

188 Christopher Gill, “Galen and the Stoics: Mortal Enemies or Blood Brothers?,” *Phronesis* 52, no.1 (2007): 88–120.

methodology is, to speak in general terms, a synthetic work. It combines discussion of empirical study, formal reasoning and the applications of method. As we shall see, he was also interested in demonstrating a method balanced between analysis and synthesis, which many of the discussions of methodology in the 16th century revisited and reviewed, most significantly Jacopo Zabarella and Petrus Ramus, whom we will discuss shortly. In the 17th century, most particularly around Germany, the theory of method arrived from two directions: Ramist, revolving around a reform in pedagogy, and Aristotelian-Zabarellist, analysing the Aristotelian conception of method and analysis by returning to Aristotelian physics and analytics. Both these humanist thinkers present an elaborate theory of method, and they both try to reform the manner by which one establishes as well as practices methodical proceedings. Though there exist notable similarities between the two thinkers, there are also evident and essential differences between them. In the first place, they explicitly differ in the aim they each place at the end of the methodical procedure: For Ramus, at the further end of method stands *usage* (*usus*): the application of principles to particular cases. For Zabarella, at the far end of method stands the scientific, causal explanation of phenomena. We will see that the two versions of understanding of method are relevant in the Cartesian framework under discussion. Both directions complement each other, and below we present a description of the systematic relations between these two conceptual styles and the Cartesian method that Clauberg openly endorsed and promulgated.

In addition to Galen, there is another figure who repeatedly appears in Clauberg's methodical writings: the anti-Aristotelian Sir Francis Bacon (1561–1626). Bacon is also very much occupied with questions of method, though he believes that a unified method is not necessary to establish applicable knowledge. We return to the Baconian version of method in the following sections of this research.

Method was a central topic of discussion in 16th-century Europe. In the *Physics* (184^a 10–22) Aristotle demands interpretation and elucidation, and all the suggested commentaries claim to follow the Aristotelian definition to some extent, even while arguing against typical interpretations. Ramus' interpretation of the lines in question make it possible for him to maintain that his method was strictly Aristotelian.¹⁸⁹ The problem was to determine whether method is a way of *acquiring* knowledge or a way of *demonstrating* it. Discussions about methodological issues changed in this period from merely proposing commentaries on Aristotle to applying Aristotle's methods in a wide range of domains, including medicine and geometry. The concepts of analysis and

189 Petrus Ramus, *Dialectica* (Basel: Eusebium, 1569), 513–515.

synthesis, for example, were borrowed from geometry and gradually became the main principles of method in other domains. The problem for many logicians was that it was impossible to find relevant discussions of these concepts in the *Prior* and *Posterior Analytics*, despite the titles of these treatises.¹⁹⁰ It became obvious that more than one method might exist and that there was a difference between *methodus* and *ordo*. The latter term came to be applied to a pedagogical method, a way of teaching or displaying. However, it was also necessary to think about natural vs. artificial *methodus* and *ordo* in addition to considering the correct way of proceeding from the general to the particular and vice versa.

1.1.2. The Aristotelian Framework of Method

The central text which stood at the centre of the quarrel was Aristotle's *The Physics*, Book 1, 184a10:¹⁹¹

*When the objects of an inquiry [metodos], in any department, have principles [archai], causes [aitia] or elements [stoikia], it is through the acquaintance with these that knowledge [epistemon] and understanding is attained. For we do not think that we know a thing until we are acquainted with its primary causes or first principles and have carried our analysis as far as its elements.*¹⁹²

190 Gilbert, *Renaissance concepts of method*, 27–32.

191 Aristotle, *Complete Works*, 315 (trans. Hardie and Gaye).

192 Aristotle's source from the *Physics*: “[184a] Ἐπειδὴ τὸ εἰδέναι καὶ τὸ ἐπίστασθαι συμβαίνει περὶ πάσας τὰς μεθόδους, ὧν εἰσὶν ἀρχαὶ ἢ αἰτία ἢ στοιχεῖα, ἐκ τοῦ ταῦτα γνωρίζειν (τότε γὰρ οἰόμεθα γινώσκειν ἕκαστον, ὅταν τὰ αἰτία γνωρίσωμεν τὰ πρῶτα καὶ τὰς ἀρχὰς τὰς πρώτας καὶ μέχρι τῶν στοιχείων), δῆλον ὅτι καὶ τῆς περὶ φύσεως ἐπιστήμης πειρατέον διορίσασθαι πρῶτον τὰ περὶ τὰς ἀρχάς.

πέφυκε δὲ ἐκ τῶν γνωριμωτέρων ἡμῖν ἡ ὁδὸς καὶ σαφεστέρων ἐπὶ τὰ σαφέστερα τῆ φύσει καὶ γνωριμώτερα· οὐ γὰρ ταῦτα ἡμῖν τε γνώριμα καὶ ἀπλῶς, διόπερ ἀνάγκη τὸν τρόπον τοῦτον προάγειν ἐκ τῶν ἀσαφεστέρων μὲν τῆ φύσει ἡμῖν δὲ σαφεστέρων ἐπὶ τὰ σαφέστερα τῆ φύσει καὶ γνωριμώτερα.

ἔστι δ' ἡμῖν τὸ πρῶτον δῆλα καὶ σαφῆ τὰ συγκεχυμένα μᾶλλον· ὕστερον δ' ἐκ τούτων γίνεται γνώριμα τὰ στοιχεῖα καὶ αἱ ἀρχαὶ διαιροῦσι ταῦτα. διὸ ἐκ τῶν καθόλου ἐπὶ τὰ καθ' ἕκαστα δεῖ προῖέναι· τὸ γὰρ ὅλον κατὰ τὴν αἴσθησιν γνωριμώτερον, τὸ δὲ καθόλου ὅλον τί ἐστι· πολλὰ γὰρ περιλαμβάνει ὡς μέρη τὸ καθόλου. πέπονθε δὲ [184b] ταῦτο τοῦτο τρόπον τινὰ καὶ τὰ ὀνόματα πρὸς τὸν λόγον· ὅλον γὰρ τι καὶ ἀδιορίστως σημαίνει, οἷον ὁ κύκλος, ὁ δὲ ὀρισμὸς αὐτοῦ διαιρεῖ εἰς τὰ καθ' ἕκαστα. καὶ τὰ παιδία τὸ μὲν πρῶτον προσαγορεύει πάντας τοὺς ἄνδρας πατέρας καὶ μητέρας τὰς γυναῖκας, ὕστερον δὲ διορίζει τούτων ἑκάτερον.”

As in many other cases, here also the Aristotelian formula looks simple and concise; however, it hides within itself various extremely problematic challenges. For example, in order to know what is the unknown (or better the known in its own nature), one should generally estimate what parts are missing in one's knowledge. Effectively, the definitions of analysis and synthesis concentrate on the problem of defining that which is sought, that is to say they concentrate on the estimation of that which is missing in an existing state of knowledge. We see, therefore, that methodical procedure necessitates an estimation of that which one does not yet know, or at least it necessitates an estimation that one is not aware that one knows something. We will show that this estimation of the not-yet-known constitutes a central part of Clauberg's conception of Cartesian method. The activity of *estimation* indeed lies of the heart of the present project's understanding of Claubergian rationality and within it the understanding of Claubergian hermeneutics. The estimation of the unknown is that which makes the interpretative process possible and makes of it, as is gradually demonstrated in the coming chapters, a process which entails *a pre-supposed synthesis* at its beginning and at its end. In the following chapters, we suggest a characterisation of the predetermined synthesis which directs the inquiry in Clauberg's methodism.

1.1.3. The Galenic Definitions of Method

Both Ramus and Zabarella express critical views regarding Galen's theory of method. Ramus refers to Galen as someone who does not read correctly the writings of Aristotle, and Zabarella thinks that Galen missed the importance of the concept of method altogether. Ramus also criticises Galen for distinguishing between the analytic, the synthetic and a third, definition-oriented method. For Ramus, as we shall see, there is only one (Aristotelian) method, and it is the analytic one. However, that for Ramus means something quite different from what is usually understood by the term.

Richard Durling¹⁹³ introduces the various elements of the Galenic understanding of method dispersed throughout various places in the Galenic corpus. According to Durling there are four different methods proposed in Galen and in ancient philosophy as a whole: demonstration, division, resolution and composition.¹⁹⁴ The demonstrative

193 Richard Durling, "Method in Galen," *Dynamis. Acta hispanica ad medicinae scientiarumque historiam illustrandam* 15 (1995): 41–46.

194 Durling, *Method in Galen*, 41.

method is more or less understood as scientific demonstration or proof;¹⁹⁵ this method is also related to logic and to the possibility of stating and defending general principles in physical reality. Next is the method of division (διααιρετική), one which moves from first and general principles through intermediate differences towards forming units that do not allow for further division. The third method is what is in general called analysis (ἡ ἀναλυτικὴ μέθοδος); it teaches how to ascend, through intermediates, to the first principles. This is the method employed in geometry, arithmetic and astronomy.¹⁹⁶ The last method of the four is synthetic or compositive (συνθετικὴ μέθοδος), which is also the therapeutic method in which all natural states are cured by their contraries.¹⁹⁷ Indeed, the orientation of the present reading of Clauberg goes in this direction towards a medical, synthetic method. Additionally, in matters of the mind we can proceed through a therapeutical method in which the unnatural disposition will be cured by the found and established principles of truth. Regarding most authors he interprets, including Galen, Ramus keeps a rather well-balanced view. On the one hand he finds the elements that must be amended in Galen's conception of method. On the other hand he praises Galen for his motivations: "Galen sought freedom in philosophy; he aimed above all at the experience, practicality, usefulness and the purpose of things."¹⁹⁸ In this, of course, Ramus aligns his own concept of method with that of Galen's. In Durling's examination of Galen's *methodus medendi* can be found not merely two but at least four methods, as we saw above: demonstrative (experimental), resolute/analytic, synthetic/medical and universal (compounding knowledge).¹⁹⁹ Hence, Ramus' focussing exclusively on analysis and synthesis results in a selective reading of Galen, choosing these two specific kinds of method to be representative of all methods. Galen is a central reference not only for Ramus but also for Melanchton and Zabarella. Melanchton even uses Galen's definition of method to introduce his own understanding of the term. Melanchton presents the Galenic versions of the ways of methods: the resolute,

195 Ibid., 43.

196 Ibid., 44.

197 Ibid., 45.

198 Ramus, "One method," 129; Petrus Ramus, *Quod sit unica doctrinae instituendae methodus* (Paris: Wechel, 1557), 14verso: "Galenus in philosophia liber esse voluit: rerum experientiam, utilitatem, usum, finem maximè sibi proposuit, nec ullis magistris pepercit."

199 Durling, *Method in Galen*.

compositive and definition based.²⁰⁰ We now proceed with placing Ramus' criticism of Galen in relation to the approaches of Zabarella and Bacon.

1.1.4. The Founders of Humanist Methodism: Ramus, Zabarella and Bacon

As mentioned above, the two great renovators of the question of method in the 16th century were Jacopo Zabarella and Petrus Ramus. Zabarella taught philosophy and mathematics at the University of Padua, and he became widely known quite quickly.²⁰¹ Ramus was in his turn also extremely influential during the second half of the 16th century in Europe and France and especially in Germany, Holland and England. Francis Bacon, working in England, contributed the most profound criticism of the concept of method.²⁰² The traces of these three versions of 16th century methodism are clearly found in Clauberg. As mentioned in the introduction, one often misses the determining Baconian ingredient in Clauberg's philosophical machine. The radical suggestion of Bacon is that no universal method can exist as such. One must learn to be always flexible, evolving and emending his tools of rationality, directing him towards capturing things themselves. Though all three thinkers of method find their way into Clauberg's philosophy, it seems that the immediate context of Clauberg's intellectual milieu is principally a Ramist one. We will see, however, that indeed all three thinkers join forces in Clauberg's writings to enrich and strengthen his Cartesian convictions.

However, because Ramism stands as the immediate milieu which influenced Clauberg's work, it is important to elaborate a bit regarding that important figure. Petrus Ramus was in the first place a humanist reformer of education, seeking to bring all the arts, including logic, to a direct, precise, clear and efficient usage by the students. Unlike

200 Philippe Melanchton, *Erotemata dialectices* (Wittenberg: Iohannes Lufft, 1547), 243–244:

“Nec dubium est, hac appellationes apud Galenum idem significare, quod apud Geometras, cum ait tres esse doctrinarum vias, resolutionem, compositionem, et definitiones. Resolutio est, ut cum ex signis morbum, locum effectum, et causas quærimus. Econtra compositio, cum initio corporis partes describuntur, deinde morborum causæ, postea signa. Sed definitiones vocantur Regulæ et definitiones sine demonstrationibus, ut aphorismi. Quanquam autem Plato quærit, utra via in artibus utendum sit, tamen sciendum est, utriusque viam usum esse. Nec difficile est iudicare, quæ doctrinarum partes à priori quæ à posteriori extruantur.”

201 See Nicholas Jardine, “Keeping Order in the School of Padua: Jacopo Zabarella and Francesco Piccolomini on the Offices of Philosophy,” in *Method and Order in Renaissance Philosophy of Nature. The Aristotle Commentary Tradition*, edited by D. Di Liscia, E. Kessler and C. Methuen (Aldershot: Ashgate, 1997), 183–209.

202 See Dana Jalobeanu, *The Art of Experimental Natural History: Francis Bacon in Context* (Bucharest: Zeta Books, 2015).

Zabarella and Bacon, who tended to remain within their home havens, Ramus travelled across Europe, eventually being killed at the Sorbonne in the Saint Bartholomew's night massacre of 1572. In his lifetime, however, Ramus was heavily active in France: He was a professor at the University of Paris at the time of Henri IV and was assassinated, according to the story, in his offices at the Sorbonne next to the river Seine.²⁰³ After his death, his influence spread to Britain (principally to Cambridge) as well as to Germany and the Lowlands. The influence of Ramus on the central European educational system was immense. According to Selderhuis,²⁰⁴ the popularity of Ramus is based on his educational as well as his theological views. The crux of Ramism involves understanding method as a movement from general principles to individual cases. We will return to the characters of Ramism as a pedagogical movement extensively.

On the other side of the discussions regarding method in the 16th century we have the writings of Jacopo Zabarella, which explicitly address the definition of method(s) with great attention given to the Aristotelian formulations. Zabarella, however, is not interested in the reform of scholarly institutions (as was Ramus) but rather with the establishment of scientific criteria. He seeks to make clear how scientific inquiry proceeds and what are its general principles, limitations and end results. By the end of the 16th century, Zabarella had been widely received in Germany. Thinkers such as Clemens Timpler (1563–1624), Kornelius Martini (c. 1568–1621) and Bartholomäus Keckermann (c. 1572-1609) cite him amply in their methodological writings, and their reference to Zabarella is sometimes used as an anti-Ramist instrument.²⁰⁵ However, in Clauberg's writings I did not find many references to Zabarella.²⁰⁶ However, to Keckermann, who was a Zabarellist, he refers more than 10 times in the *Opera Omnia*. We will see that both Zabarellist and Ramist traits can be detected in Clauberg's method.²⁰⁷

203 John Guillory, "Marlowe, Ramus, and the Reformation of Philosophy," *ELH* 81, no.3 (2014): 693–732.

204 Herman J. Selderhuis, "Die Heidelberger Artistenfakultät zur Zeit der Schüler Melanchton," in *Philosophie der Reformierten*, edited by Günter Frank and Herman J. Selderhuis (Stuttgart: Frommann-Holzboog, 2012), 54.

205 Riccardo Pozzo, *Adversus Ramistas: Kontroversen über die Natur der Logik am Ende der Renaissance* (Basel: Schwabe, 2012), 11.

206 Hotson, *Commonplace*, 140 note 59.

207 One of the rare notices to the inner, latent presence of Keckermann in Clauberg's work is in Lutz Danneberg, "Logique et herméneutique au XVII siècle," in Gens, *La logique herméneutique*, 43.

However different are their two methodological orientations, both Ramus and Zabarella place great importance on the definition of method. Both accomplish their own suggestions for the definition of method through the re-examination of Aristotle. Both place analysis and synthesis at the heart of their inquiries. Both think that analysis and synthesis are cohesive to each other in that they collapse together. Both seek to establish a habitus of wisdom. Both think Galen's interpretation of method is not valid. Both, of course, are convinced that that they represent the correct Aristotelian conception of method. For Ramus, the aim is to achieve a full process of *analysis*, and in this process, synthesis plays a secondary role. For Zabarella, it is *synthesis* which serves as the important process, and in this process analysis serves only as the preparatory stage. The question whether a third method exists was answered by both thinkers in the *negative*. For both Ramus and Zabarella, no third method exists. For Ramus, only one method exists: analysis. For Zabarella, there is no third method, but the synthetic method that achieves the process of *regressus* includes both analysis and synthesis.

We see then that Renaissance humanism provided many approaches to the understanding of method. However, should one equate this with a revision of *logic*? Should it be understood as a humanist, Aristotelian *logic*? During the 16th century there was a renewed interest in Aristotle's logic, energised by new translations of the *Organon*. In 1554 an important edition came out in Venice of *Aristotelis Stagirae organum* by Boethius Severino. Towards the end of the century, from the 1560s and 1570s onwards, bilingual editions became ever more prevalent.²⁰⁸ The 16th century is characterised by a certain Aristotelianism, though this general tendency does not result in one single doctrine or attitude; as Charles B. Schmitt wrote,²⁰⁹ "The single rubric Aristotelianism is not adequate to describe the range of diverse assumptions, attitudes, approaches to knowledge, reliance on authority, utilisation of sources, and methods of analysis found among the Renaissance followers of Aristotle." Indeed, each reader of Aristotle had his own questions in mind, and defences of Aristotelianism could be combined or detached from preoccupations with the Scholastic tradition.

As for Zabarella, even if he saw himself in the first place as a follower of Aristotle, he did not do this uncritically. As he himself wrote, "I will never be satisfied with Aristotle's authority alone to establish something, but I will always rely upon

208 Charles B. Schmitt, *Aristotle and the Renaissance* (Cambridge and London: Harvard University Press, 1983).

209 Ibid., 10.

reason; such a thing is truly both natural and philosophical for us, and I will also seem to imitate Aristotle in using reason, for in fact he seems never to have put forward a position without utilising reason.”²¹⁰ As a general rule, most of the engagements with the Aristotelian *organon* at the end of the 16th century are to some extent humanistically informed. They aspire to return to Aristotle in a fresh, unprejudiced manner after putting aside the orthodox readings of Aristotle in the Scholastic corpus. For Zabarella, this indicates even a stronger conviction that Aristotelian reason is still valid and relevant to the demands of contemporary science.

The third important figure is Sir Francis Bacon, writing in the later part of the 16th and the beginning of the 17th century in England, who openly took a strong position *against* Aristotelianism in general. For Bacon any improvement in human knowledge depends on finding ways to begin the inquiry of science from the facts alone, without any one system pre-arranging the matters at hand. Bacon’s demand for this scientific clean slate has been repeatedly compared to Descartes’ demand to rebuild our philosophy from scratch and throw all the rotten apples out of the basket. Here is how Clauberg himself presented Bacons’ achievement:

*The contemplation of this thing (the communion between the arts and the sciences) prompted the illustrious Bacon of Verulam to posit in his Book "On the augmentation of the sciences" a certain primary philosophy, truly universal, that would be the receptacle of the axioms that are not proper to particular sciences, but which generally agree with most of them.*²¹¹

In the methodist conceptual genre that we try to define in the present chapter, one encounters a constant striving to readdress Aristotelian logic without however leaning exclusively on the Scholastic tradition of its reception. Indeed, the accepted view that Ramus was simply and roughly anti-Aristotelian is only partially true. One can even suggest that the opposite is true. One of Ramus’ most important treatises, “That there is

210 Quoted and translated in *Ibid.*, 11: “Nunquam etiam sola Aristotelis autoritate ad aliquid comprobandum contentus ero, sed rationem semper adhibebo; hoc enim vere ingenium ? ac philosophicum est et hac quoque ratione videbor Aristotelem imitari, quippe qui nihil unquam sine ratione rinuntiasse videtur.” Zabarella, Manuscript of Milano, Ambrosiana D. 481 inf. Published in “Una Oratio programmatica di G. Zabarella (a cura di Mario dal Pra),” *Rivista critica di storia della filosofia* 21 (1966): 290.

211 OOP II, 693 (*Exercitatio* LIX, §13): “Huiusce rei contemplatio Illustrem Baconem de Verulamio movit, ut in suo de augmentis ac dignitate scientiarum libro inter desiderata poneret *Philosophiam aliquam primam*, vere universalem, quæ receptaculum esset Axiomatum, quæ particularium scientiarum non sint propria, sed pluribus, earum in communi competant.”

but one method of establishing a science” (*Quod sit unica doctrinae instituendae methodus*), published independently in 1557, carries the subtitle “according to the opinion of Aristotle, and against the commentators of Aristotle, especially Galen.” So, Ramus tells us explicitly that he wants to follow the writings of Aristotle but does not follow a certain tradition of their reading: the Galenic tradition. What is the meaning of this refusal to use the Galenic understanding of method? Indeed, this refutation of Galenic method was shared by Zabarella.²¹² Both thought that Galen's solution of the third way of method was unacceptable.

It is not only that Ramus thought that a unified method is necessary for the practice of the various arts; it is also his view that this was the original opinion of Aristotle himself. Ramus believes, however, that this unified method is thoroughly *analytical*, that is to say it is not inductive and not synthetic. “Analytic method” means for Ramus a reasoning process which moves from general and clear principles to particular cases of application, never from the particular to the general. For Ramus a method always begins with the assumption of a set of known, general principles and then proceeds to the application of the general principles in specific, particular cases with specific tools. Ramus thinks, moreover, that this is also the way to practice and teach arts of all sorts, including logic. First, one learns and interiorises the principles (or genres, in Aristotelian terms), and then one proceeds to addressing the particular case, establishing the specific differences and reaching the essence of the thing at hand, that which Aristotle calls the *ousia*.²¹³ In this sense Ramus' approach is quite different from Bacon's inductive method as Ramus prefers to trust only the level of particular objects and particular tasks.²¹⁴ Bacon is, like Ramus and Zabarella, a thinker occupied with questions of method: He thoroughly criticises the given technics and objectives of philosophising. The symmetrically opposite tendencies of Bacon and Ramus highlight the common intellectual genre to which they both belong. Both Ramus and Bacon profess that what is needed in philosophy is nothing less than a radical reform of procedures. However, for Bacon, in contrast to Ramus and Zabarella, no fixed method is necessary to approach the true science of things. Bacon famously suggested an optimal method²¹⁵ to find middle ground between the empiricists and the rationalists.

212 See Josè Manuel Garcia Valverde, “Introduction,” *Giacomo Zabarella, De rebus naturalibus vol. 1* (Leiden: Brill, 2016), 1–50.

213 In the *Categories*; see Aristotle, *Complete Works*, ed. Barnes, vol. 1, 4–7 (2a1-4b19).

214 See Jalobeanu, *Art of Experimental Natural History*.

215 Francis Bacon, *The New Organon* [1620], edited by L. Jardine and M. Silverthorne (Cambridge: Cambridge University Press, 2000), 79 (Book 1, aphorism XCV).

The empiricists are like ants, collecting small fragments of reality and carrying them one by one in a chain back to their lodgings; the rationalists are like spiders, weaving in advance their nets of ideas to catch everything that comes their way. Instead, the model of method that Bacon prefers is analogous to the behaviour of bees: They collect honeydew from flowers to turn it into a useful instrument, like the hive:

Not unlike this is the true business of philosophy; for it neither relies solely or chiefly on the powers of the mind, nor does it take the matter which it gathers from natural history and mechanical experiments and lay it up in the memory whole, as it finds it, but lays it up in the understanding altered and digested.

It is not implausible to think of Ramus as a spider and of Zabarella as more of an ant; however, they both see their methods as proposing a balanced, compositive method that also behaves like the bee, uniting general principles to specific cases.

1.1.5. Ramus on Method and its Unity

In his *Dialectics* (1555), Ramus gives the following definition of method:

*Method is a disposition, by which between several things the first note is disposed in the first place, the second in the second [place], the third in the third, and like that consequently. This name signifies all discipline and dispute, and nevertheless in the same manner is taken as the shortening of the way: and by this metaphyse it is practiced in the Schools by the Greeks and Latins.*²¹⁶

There is here a certain similarity with Descartes' presentations of method. Descartes frequently speaks of the need to make thought efficient by not wasting time boating around imaginary islands. Descartes' method attempts to find proper shortcuts in the search for the truth of things. The definition of order in Ramus is equivalent to the order of reasons in Descartes, where that which is found first should be presented first, then the second, the third and so on. This relates also to the way that Descartes presents his

216 Petrus Ramus, *Dialectique* (Paris: Wechel, 1555), 119: "Méthode est disposition, par laquelle entre plusieurs choses la première de notice est disposée au premier lieu, la deuziesme au deuziesme, la troiziesme au troiziesme et ainsi consequement. Ce nom signifie toute discipline et dispute, neantmoins communement est pris pour asresse et abbregement de chemin: et par ceste metaphore est pratiqué en l'eschole par les Grecs et Latins."

thoughts not only in the *Rules* but also in the *Meditations*, where the evidence for the existence of corporeal things is presented at the end of the discussion, after the process of reasoning. The Ramist passage quoted above points towards a direction of understanding of the *order of reasons* as being the essential part of method: Method is a process in which the first matter acknowledged is the first to be disposed of, the second matter the second to be disposed of, and so on. ‘Method’ commonly signifies any discipline or dispute, but it is also being used to denote a shortcut. Let us for a moment pause and ask, Why is this order of reasons a shortcut in our processes of thought? The answer is that if we use the rules of method, we can avoid expending unnecessary labour on examining points that we are not yet able to comprehend. However, if we follow the rules of method, we can be sure of proceeding step by step in a manner that in any case carries us towards our goal. Now the question is, How can we arrive at these rules of method to provide this stable entrance into and advancement of the acquisition of knowledge? In fact, it seems that Ramus falls short of providing a compact and consistent set of principles for such an entrance. This is what both Descartes and Clauberg try to approach.

A similarity between Clauberg and Ramus which seems minor but is quite notable for our inquiry is that for both Clauberg and for Ramus, method is developed and accomplished as part of the practice of liberal arts. For Ramus, the discussion around the definition of method is related to the definition of the liberal arts, which Ramus categorises among the exoteric arts, parallel to the traditional trivium of grammar, logic, and rhetoric, and the esoteric arts, equivalent to the quadrivium, traditionally consisting of arithmetic, geometry, music and astronomy, as well as mathematics, physics, metaphysics and ethics. The exoteric arts according to Ramus are easier to approach and of general utility; with them he began his pedagogical reform.²¹⁷ However, the sum of his reflections regarding method revolve around both the exoteric and esoteric arts. Logically, the most useful kind of method that Ramus highlighted is the method of prudence, regarding which he said, “We must go on to the method of prudence, which advises about disposition according to the condition of persons, things, times and places.”²¹⁸ The method of prudence is the process of moving from the general to the concrete; the general must be set before the concrete, which is understood as *the less known*. The method of prudence, hence, is a method of application of principles. This

217 Philippe Hamou, “Sur les origines du concept de méthode à l’âge classique : La Ramée, Bacon et Descartes,” *Revue LISA / LISA e-journal*, Presses universitaires de Rennes, 2014, XII (5), <https://hal.archives-ouvertes.fr/hal-02326900/>, consulted on 15.11.2020.

218 See Wayne A. Rebhorn, *Renaissance debates on Rhetoric* (Ithaca: Cornell University Press, 1999), 152.

can only be initiated after a process of judgment has already taken place. According to Ramus, all method arrives *after invention and judgment* and *before annunciation and syllogism*.²¹⁹ In that sense, method for Ramus is not a primary but rather a secondary step in the process of learning. Additionally, for Ramus method must lean on an order, an order that carries the method to the stage of the enunciation and the syllogism. The discussions concerning the relation between method and order are typical of the Philippo-Ramist tradition, and, obviously, order became a central Cartesian trope after Descartes' differentiation between the order of reasons and the order of matters (The entire Part 2 of the present project is dedicated to the question of order).

For Ramus method in itself consists of habituating to general principles with the direct intention of applying these to particular cases; within this framework, he differentiates between two kinds of method, of which one leans on the innate capacities of the learner, and the second must be learned so to speak in an artificial manner. Ramus' closest colleague and collaborator, Omer Talon has phrased those principles after Ramus in the following manner:

*Method is the arrangement [disposition] of many good arguments. It is twofold, method of teaching and method of prudence. Not that both kinds do not make use of prudence, but rather that the latter has almost no training or art in it, depending merely on man's natural judgment and prudence.*²²⁰

If one logically completes Ramus' argument, one gets the idea that *the method of prudence* is something like a natural methodological disposition, depending on man's inborn, natural reason. The method of teaching is inherently technical, and it demands a process of habituation; it is artificial and must be acquired as an *art*. In the next chapter, we ask what kind of art is implied in the Cartesian, and more particularly in the Claubergian, understanding of method.

In the last edition of the *Dialectics* to be published in Ramus' lifetime (1569), one finds another version of method:

219 See Hamou, *origines du concept de méthode*.

220 Omer Talon, *Dialectici commentarii très authore Audomaro Talao editi* (Lutetiae: Ludovicus Gardinus, 1546), 83: "Methodus est multorum et bonorum argumentorum dispositio: ea duplex est, altera doctrinae, altera prudentiae, non quòd utraque prudentiae non sit, sed quòd altera doctrinae et artis nil fere habeat, sed ex hominis naturali iudicio prudentiaque pendeat."

*Method is a disposition by which, out of many homogeneous enunciations, each known by means of a judgment proper to itself (...) or by the judgment of syllogism, that enunciation is placed first which is first in the absolute order of knowledge, that next which is next, and so on. And thus there is an unbroken progression from universals to singulars. But this one and only way one proceeds from antecedents entirely and absolutely known to the declaration of unknown consequents. This is the only method Aristotle teaches.*²²¹

Here again we see the emphasis on a certain continuity of method for Ramus: It is a continuous passage from the known to the unknown. For Ramus (as in the usage in Renaissance vocabulary) invention (*invenire* in Latin) goes in the opposite direction: It proceeds from the unknown to the known; it reveals the first principles out of the not-well-known data which is found in the first moment of an inquiry. In other words invention (discovery), both in the arts and the sciences, begin with that which is better known to us, the effective experience that we get through our senses, and proceeds to that which is ‘known by itself,’ the principles or the causes.

For Ramus the claim that there is only one method is made in the first place to discredit the (Galenic) idea that analytic and synthetic methods are genuinely different kinds of methods. Not so, says Ramus: All method is essentially *analytic*. What did that mean to him? For Ramus analytic method begins with universal, simple and already well-established principles and proceeds to the application of these principles in the various domains of knowledge. In that sense analysis is strongly connected with skill and know-how. Analysis, in Ramist terms, can be simply understood as *application*. We will see that this process of application leads also to the possibility of producing *judgment*. Method in the Ramist framework is not an introductory but rather an advanced stage in the development of an inquiry. It comes *after* the principles are elucidated and well established. Method, in this Ramist sense, is first and foremost connected with the *application* of principles. Moreover (and this will also be pertinent and important for Clauberg), method is strictly connected with usage (*usus*). For Ramus, analysis in this sense must do with application. It is the process of application that takes the general and applies it to the singular cases. Any analytic method, in the Ramist sense,

221 Petrus Ramus, *Dialectica A. Talaei praelectionibus illustrata* (Basel: Per Eusebium, Episcopium et Nicolai, 1585), 455-456: “Methodus est dispositio, qua de multis enunciatis homogeneis, suoque vel sylogismi iudicio notis, disponitur primo loco absoluta notatione primum, secundo secundum, tertio tertium, et ita deinceps: ideoque ab universalibus ad singularia perpetuo progreditur. Hac enim sola et unica via proceditur ab antecedentibus omnino et absolute notioribus ad consequentia ignota declarandum eamque solam Methodum Aristoteles docuit.”

must do essentially with application of principles. Ramus was convinced that this is also how Aristotle understood the term. Ramus has a vision of one unified method: not many, not two, not three but only one true method. Ramus' method aspires to unite that which is known to us, *notiora nobis*, with that which is known in nature, *notiora naturae*. We must begin our method with the general and proceed towards that which is more particular. However, the place to begin must be first and foremost with the generally given. It is like a movement towards an object which from a distance looks general but from close up reveals its particularities and personal character. In the art of reasoning, one should begin with a general argument, proceed to *axiomas* (propositions), and only through this method arrive at the construction of a syllogism. This is the Ramist way of teaching logic and acquiring logical know-how. However, all the other arts should be learned and practiced in the same way. First, one begins with the most general theories and then one proceeds to the division of the theory into its particularities of application. This approach has also an organicist character, beginning with the entire organism and then proceeding to the description of the place and task of each of the organs, rather than beginning from the organ and proceeding to the understanding of all the organs. Hence, also in the presentation of human knowledge, Ramism proceeds through a series of dichotomies, going from the most general to the most precise and specific. For Ramus this is the natural way in which method should proceed, not from the particular to the universal but rather from the universal to the particular. If the arts would follow this order, they would be as natural as they could be. In this sense Ramus' art of reasoning does not culminate in judgment (*judicium*) but rather with *dispositio* (arrangement). In fact, it is only at the level of disposition, of the arrangement of true sentences, that one attains the method. We should note that Clauberg's method has many affinities with that of Ramus: For Clauberg there are also general principles that must be attained before any inquiry can proceed. Notably, in all versions of Clauberg's *Ontosophia*, it is through pairs of divisions that the whole system of basic terms is presented. Additionally, for Clauberg it is the aim of application (*usus*) that stands at the horizon of any logical inquiry. Another point that makes Clauberg close to Ramus is the preeminence of the humanities in the reconsideration of the art of reason and, in the case of Clauberg's philosophy as a whole. The humanities are taken as the central reference point and as the reservoir of knowledge from which one takes arguments and references. Literature, the Bible, commentaries, historical and rhetorical primary sources all should be at the philosopher's disposal. That was also the case for Ramus, but of course it was less the case for Descartes. However, as we shall see in the following chapters, after laying out the importance of the humanities and erudition, Clauberg proceeds in a Cartesian step, pleading for the importance of doubt (explored later in this research). Ramus emphasises the importance of an acquaintance not only with classical masterpieces but also ancient

languages. That is part of his humanism. A real application of given and verified knowledge can be made only through a true fluency in techniques of reading and understanding. The frequent usage of the classics is a technique to be surely also found in Clauberg. A point to consider here is that in the Ramist approach, this process is carried out not only in the sciences and humanities but also in all the arts, including those referred to as creative arts (like music, architecture or poetry). Art is indeed an application of general, given principles in particular cases and tasks. It is in this way that analysis and synthesis in the Aristotelian sense can be collapsed together into Ramus's simple method—the method of the acquisition and application of knowledge which has been already attained. Ramus argues that Galen plainly misinterpreted Aristotle's concept of method, by turning the one, unified method of Aristotle, into a set of possible, different methods:

*Galen produces three methods, whereas Aristotle teaches that there are three simple movements. one in an upwards direction from the lowest point, another in a downwards direction from the highest point, and a third in a circle about the lowest point.*²²²

Ramus wants to take the Aristotelian rather than the Galenian interpretation of method. In as much as Aristotle talked about one method in which several movements are assigned, Galen divided methodical procedures into three separate methods. However, for Ramus there is only one method to follow:

*This response brings about what must be placed first, what is second and what third. You reveal the same things in all the other arts and sciences. Because of this, there is no third method. Galen made three methods; Aristotle made three movements: the one ascends, συνθετικῆ, and then ὀρικῆ and what should be the third? What turns around the foundation? Therefore, the two primary proposed the methods of Galen, according to their places, to define ὁδὸν and ἄνοδον in so many words.*²²³

222 Ramus, "One method," 149 ; Ramus, *Methodus*, 20recto: "Tres methodos Galenus efficit: tres motus simplices Aristoteles facit, unum ab imo sursum, alterum à summo deorsum, tertium in orbem circa imum."

223 Ibid.: "Hoc enim responso nescires quid primum, quid secundum, quid tertium ponere debuisses. Experire idem in reliquis artibus, idem reperies. Quare tertia hæc methodus, nulla est methodus. Tres methodos Galenus efficit: tres motus simplices Aristoteles facit, unum ab imo sursum, alterum à summo deorsum, tertium in orbem circa imum : prima Galeni methodus ἀναλυτικῆ, est deorsum, seunda, συνθετικῆ, est sursum, tertia igitur ὀρικῆ Qualisnam erit? In

Ramus' humanist approach is notable in this matter as what he is actually addressing is the tradition of interpretations of Aristotle. In this framework Ramus tries to repudiate the view that a synthetic method exists. For him synthetic procedure must be considered as secondary to the analytic method. He describes what he views as the absurdities of the synthetic method in the following manner:

Use the synthetic method first. Suppose this confused subject matter belongs to the art of grammar. According to this method of Galen, what will you do? If in the first place you put what is most specific, in the intermediate place the subalterns, and in the last place what is most general, as the definition of Galen would have it, what will you accomplish? You will also teach letters and syllables. Moving backwards in this way, you will rise from what is subsequent by nature to what is prior by nature. In the darkness you will offer a light to the wayfarer in order to show him a safer course; but you will undoubtedly hide him in the shadow of your body as he strays behind and wanders. And in this darkness will you be able to get the lad to learn syntax before he knows that its parts exist? Of course, it is utterly impossible! What greater stupidity than this, I ask, can be imagined of thought of in teaching the arts?²²⁴

Ramus is moved by a widespread humanist impulse to retrieve the meaning of ancient texts (here Aristotle) in a direct manner free from the presuppositions of traditional readings. Ramus thinks, against the views of Galen, that in Aristotle one finds only one, consistent method binding all his various specialised writings. He thinks that only *one method exists* and that in this method there is one order to be followed:

How are the arts to be established? 'Let the better-known elements take precedence' this method says. An idea of vast complexity is thus embraced in a word. Yet nothing has ever caused greater difficulty to the philosophers, the masters of the arts, and the doctors. If Aristotle surpassed other philosophers in anything, he surpassed them on this very point. Our bitter controversy over logic

orbémne convertetur circa imum? Si duas primas methodos Galenus nudè proposuisset, non tot verbis et locis definisset óðòn άνοδov.”

224 Ramus, *One method*, 147; Ramus, *Methodus*, 19–20.

*revolves almost entirely on this point: that logic has been described in the logical Organon according to an order not fit or appropriate for the use of the arts.*²²⁵

In the last sentence quoted above, we meet the basic criticism of Ramus regarding Aristotle’s method as it appears in the *Organon*: that it was conceived in a non-artistic manner, that is to say a manner which does not give a sufficient account of the difficulty of usage and application. This is where Ramus suggests his own corrected version of method, applicable and ready to serve civil aims. The following scheme helps structure our understanding of the Aristotelian conception of method according to Ramus:

Figure I: Analysis and synthesis in the method according to Ramus

Form of method	Analysis	Synthesis (not a method according to Ramus but rather a preparatory stage)	Definition (Galen) (not an accepted method according to Ramus)
Begins with	Principles	Particular cases	Particular matters
Works towards	Particular applications	Abstractions and principles	Classifications
Tools	Exercise, habituation	Invention, genesis	Language analysis not pertinent for itself according to Ramus

In 1637 when Descartes published in French his essay *Discourse de la méthode* as an introduction to the three treatises regarding dioptrics, meteorology and geometry, the subject of method itself was not unknown or under-discussed; it already carried several meaningful connotations shaped throughout the second half of the 16th century. In the French arena, it was Ramus who was the most notable figure, occupying himself with the concept of method, being the influential and controversial pedagogue that he was. No one in France contributed more to the critique of the Scholastic university system in

225 Ramus, *One method*, 119; Ramus, *Methodus*, 5.

Paris than Ramus, who was teaching at the Sorbonne and had his office there.²²⁶ Ramus' occupation with method, as we have seen, took place during the 16th century's wide-ranging discussion regarding the concept of method and its constitutive elements. Ramus' thoughts about method were received in France with much suspicion, not only because of their reformatory nature but also due to his religious confession: Ramus (like Clauberg) was an ardent Calvinist, a Huguenot.²²⁷ As Descartes studied at a Jesuit college, the chances that he would have been exposed to Ramus' texts during his school years are meagre. Additionally, in Paris at the beginning of the 17th century under the restored Catholicism of Louis XIII and Cardinal Richelieu, the focus was on cleaning out the remnants of the fleeting 16th-century Calvinist reform movement at the university, which to a large extent was influenced by Ramus.²²⁸ These remnants, however, were profound. Ramus worked diligently towards the modification of university studies, mostly as opposition to the dominant, conservative Scholastic method: the syllogism. The important point for Ramus was that of usage: whether what is learned is usable and whether it is taught in a manner which can be used. Usage and applicability are not only questions of practical existence: mental usage and application are also contained in this Ramist doctrine. Within this framework, instead of more syllogisms, the operation of division was recommended by the Ramists: All human activities, arts, techniques and products must be ordered according to a clear system of divisions, allowing one to find the place of one's object of knowledge. The basic operation of the Ramist method is hence one of placement.

The affinities between Descartes and Ramus have been widely commented upon and debated in previous research, although (it seems) without reaching any conclusive results. The most influential research on this topic, notwithstanding its shortcomings, is André Robinet's *Aux sources de l'esprit cartésien- l'axe La Ramée-Descartes*. Many critics of this book argue against the affiliation of Descartes with the Ramist reform. Frederic de Buzon, for example, argues that in as much as mathematics is essential to

226 On the night of Saint Bartholomew see Frank Pierrepont Graves, *Peter Ramus and the educational reformation of the sixteenth century* (New York: Macmillan Company, 1912), 105–107.

227 Warren C. Scoville, “The Huguenots and the Diffusion of Technology. I,” *Journal of Political Economy* 60, no. 4 (August 1952): 294–311; Steven J Reid, Ms Emma Annette Wilson eds, *Ramus, Pedagogy and the Liberal Arts: Ramism in Britain and the Wider World* (London and New York: Routledge, 2018); Howard Hotson, *Commonplace Learning: Ramism and Its German Ramifications, 1543-1630* (Oxford: Oxford University Press, 2007).

228 See Jean-Marie Le Gall, “Ramus et la réforme de l'Université de Paris en 1562,” in *Les Transformations des universités du XIIIe au XXIe siècle*, actes du colloque tenu à l'Université du Québec à Montréal, Septembre 2003, edited by Yves Gingras and Lyse Roy (Québec: Presses Universitaires du Québec, 2006), 41–68.

Descartes' conception of method, for Ramus mathematics remains only a rudimentary part of method, a business of learning the computational methods of the ancients.²²⁹ The above quoted passage is notable regarding this point as it reminds one of Descartes' determination in the first rule of the *Regulae* that the science he suggests to his readers *is not an art*; rather, it exclusively depends on judgment and prudence. From this point of view at least, Descartes's method is in the terms of Noa Naaman-Zauderer, more *deontologically determined than technically* construed. Descartes, according to this Ramist reading, aspires to concentrate his science on the second kind of method according to Ramus, the method of *prudentialia*, as Ramus seeks to develop the method of nature, which he conceives of as an *art* demanding *skill*, practice and *usage*. However, if one takes note of Descartes repeated insistence on the need to be efficient and simple in one's mental operations as well as the sheer technicality of the *Regulae* in suggesting very precise rules of conduct to one's mind, one should indeed rethink the importance of the notion of art in the Ramist (or at least the Humanist) sense to a proper understanding of method.

The relation between method and art develops into the problem of the habitual nature of method, or of the understanding of method as habitus, which will be of interest in the coming parts of this work. The younger Descartes of the *Regulae* formed already his own conception of method, though he did not publish the *Regulae* during his lifetime. The reference to the problem of the relation between method and habitus comes already at the first rule. Here, Descartes suggests that even if there is some similarity between method and the habitus of art, one must recall that the science that he suggests is not a habitual artistic practice of any sort. Even when this assertion of Descartes' is viewed as a criticism against Scholasticism, *the assertion can also be understood as a polemic against Ramism*. Descartes writes:²³⁰

Whenever people notice some similarity between two things, they are in the habit of ascribing to the one what they find true of the other, even when the two are not in that respect similar. Thus, they wrongly compare the sciences, which consist wholly in knowledge acquired by the mind, with the arts, which require some bodily aptitude and practice. They recognize that one man cannot master all the arts at once and that it is easier to excel as a craftsman if one practises only one skill; for one man cannot turn his hand to both farming and harp-

229 Frédéric de Buzon, "Mathématiques et dialectique : Descartes Ramiste ?," *Les Études Philosophiques* 4, no.75 (2005): 455–467.

230 Descartes, *Writings*, I, 9; Descartes, *Œuvres* X, 359-360.

playing, or to several different tasks of this kind, as easily as he can to just one of them. This has made people come to think that the same must be true of the sciences as well. Distinguishing the sciences by the differences in their objects, they think that each science should be studied separately, without regard to any of the others. But here they are surely mistaken. For the sciences as a whole are nothing other than human wisdom, which always remains one and the same, however different the subjects to which it is applied, it being no more altered by them than sunlight is by the variety of the things it shines on. Hence there is no need to impose any restrictions on our mental powers; for the knowledge of one truth does not, like skill in one art, hinder us from discovering another; on the contrary it helps us.

Hence, Descartes thinks of his own science as being different from a simple art, a simple exercise, a repeated habit. He seeks to make his science general, all-encompassing and not specific; he wants his science to be applicable to any domain of life and not be restricted to a specific kind of activity, as are the arts. However, it is erroneous to understand Descartes as saying that his science is simply *not an art and simply not a habitus*. Descartes presents a finer argument: In reality what is suggested in this determining rule is an idea of a new level of art, of *techné*, a *meta-techné*. It is indeed an art but not a specific art related to specific practices; it is rather an art applicable to *any possible domain* of human activity. In this, Descartes places himself, of course, also clearly against the accepted Scholastic-Aristotelian view that sees a need to separate the various arts. Descartes wants to suggest in his method a conception of one, encompassing meta-art which will be immediately and uncorporeally installed, making a long and particular habituation superfluous and redundant. For Ramus, though, it is the process of a particular *application* which makes the heart and very core of method. Method, in this sense, is *inherently* technical: It regards the operations of the arts in particular cases and is interested, in the first place, with usage. In this sense the technicalities of Descartes and Ramus are quite different: Descartes aspires to establish a quantifiable, immediately applicable language of reason, while Ramus seeks a way to apply the principles, and method itself is occupied with the acquisition of this capacity of application.

Though one cannot find a direct discussion of Ramus in Descartes' writings, it is hardly likely that nothing of Ramus' reforms and ideas passed through Descartes' vicinity. After he was assassinated during the massacre of Saint Bartholomé, Ramus became known and influential in France as well as throughout the lands which became

the chosen territories of Descartes: Germany, and the Netherlands: the Reformed lands. Although there is no positive proof that Descartes knew Ramus, we know for sure that he was aware of the work of one of Ramus' most important followers whom we already mentioned: Jan Comenius.²³¹ Doubtlessly, Descartes' milieu was already processing the aftermath of the Ramist reform. One cannot deny the similar critical attitude of Ramus and Descartes regarding Scholastic philosophy. This does not mean that Descartes should be understood as a Ramist; it rather means that both thinkers took part in a general, ongoing philosophical questioning regarding the problem of method. It is clear that the topos of method comes to the forestage both in Descartes and Ramus in similar, if not identical, terms. Another point of common measure between Descartes and Ramus is their conception of worldly reality. Both view reality as a tempest against which they must erect their methods. For example, in Ramus' *Dialectics*, he states, "Although one be tossed about in the ocean by a storm, since one cannot hold to the right course, one will change sail and, with the aid of whatever wind is blowing, bring the ship safely to port."²³² One cannot help but be reminded here of Descartes' dream, related by his biographer Adrien Baillet (1649–1706): "He felt a tempestuous wind which, carrying him in a sort of turbulence, made him spin three or four rounds on his left leg. But this was not everything. The difficulty that he had to hold himself made him believe to fall on every step."²³³ According to Baillet, this dream occurred around 1619, at the time Descartes was visiting Germany and conversing with the mathematician Isaac Beekman (1588–1637). Beekman himself belonged to intellectual circles in the Netherlands that were extremely receptive to Ramist ideas. One encounters here, both in Ramus and Descartes, the repetition of the metaphor of navigation and voyage which is central to the logic of method, walking in a storm being analogical to the variety of contingencies life places in the paths of humans: natural catastrophes, plagues, political events and theological revolutions, to name just a few. When walking in this storm, one must learn to bend his sails in response to external events so that one can give all obstacles their expressions and still proceed on his inquiry. This relation to reality amounts indeed to a

231 See Jeroen van de Ven and Erik-Jan Bos, "Se nihil daturum- Descartes' unpublished judgement of Comenius's *Pansophiae Prodromus* (1639)," *British Journal of the History of Philosophy* 12, no.3 (2004): 369–386.

232 Petrus Ramus, *Institutionum dialecticarum libri tres* (Paris: David, 1552), 268–269: "Et tamquam in Oceano tempestate jactetur (quoniam rectum cursum tenere non potest), velificationem mutabit, et quibus ventis poterit, incolumem navem ad portum deducet."

233 My translation from the French : "... il sentit un vent impétueux qui, l'emportant dans une espèce de tourbillon , lui Et faire trois ou quatre tours sur le pied gauche. Ce ne fut pas encore ce qui épouvanta. La difficulté qu'il avait de se traîner faisant qu'il croyait tomber à chaque pas." A. Baillet, *Vie de M. Descartes* (Paris: Daniel Horthemelz, 1691), II, I, I, 81.

certain kind of realism: a mechanistic kind of realism, where the things of outer reality cause *literal movements* in the human being; they are encountered by the human being on her way, demanding her to respond properly in order to proceed forward in her quest.

In Descartes' dream he finds himself tossed around in a windy storm, eventually seeking refuge in a Christian college only to learn that he forgot to greet an acquaintance properly in the street and that his body was bent from the twists and forces of the wind. He wakes up with a sore left side and takes this dream to be a bad omen. This suggests that within method, one should not neglect the circumstances of life, ethics and habits, as well as the frailty of the body itself. If one reads Descartes with Ramus's ship in mind, could it be that it is the human being that serves as the twisted sail, allowing one to proceed on one's inquiries? That is to say as human persons, both Descartes and Ramus seek ways to configure *themselves* in reaction to the forces of nature, while also trying to proceed forward in their endeavours and inquiries. We will see in the coming chapter that this self-configuration against nature is something that one finds quite clearly in Clauberg's version of method. In any case, we have here two similar descriptions, pointing to the endeavour to keep human reason proceeding against the distractions that pose themselves. According to Ramus one must develop an industry of shifting and bending sails to be able to sail forward in the storm. For Descartes one must develop a certain "robotics" to stay on a straight line in the different storms bending one astray. Somewhere between these two tactics of sailing, and perhaps as a synthesis of them, we find Clauberg's method. Though it has been never proven that Descartes explicitly knew Ramus' texts or ideas, Clauberg's case, as we mentioned already, is different. Ramism was at the peak of its influence in the German universities in the years of Clauberg's studies. Hence, this synthesis between a Cartesian and a Ramist ship is indeed one of the central principles of Clauberg's method.

The project of method, as it is presented in Descartes' *Regulæ*, is a purification and condensation of logic such that an immediacy of reasonable reaction to various problems is enabled. There is however no evidence that Descartes was directly influenced by Ramus and his doctrines. However, Marin Mersenne (1588–1648), who was indeed pivotal to Descartes' career, knew Ramus' method well and esteemed it.²³⁴ Hence, it is in any case clear that Descartes' closest circles were not free from Ramist influence. The Ramist revolution was well underway, more in the Low Countries and Germany than in France, when Descartes was working there. It is very

234 Rafael Ramis-Barceló, "The Reception of Petrus Ramus in Catholic Thought," *Revue des Sciences Philosophiques et Théologiques* 103, no.2-3 (2019): 379–406.

unlikely that Descartes did not know at all about Ramus' work as he was precisely one of the thinkers outside the consensus of Catholic canonical university philosophy, but it is not necessarily a self-conscious influence that interests us here but rather the affinities and similarities in manners of questioning found in the works of the two thinkers. In other words it is not claimed here that Descartes was commenting on Ramist principles in any way. Nevertheless, I would like to insist that a repressed vein of methodism is found in the history of philosophy in the late Renaissance and beginning of the Enlightenment (in which Descartes participated) a vein that sees in philosophy a craft and a technique.

We noted above Descartes' insistence in his *Regulae* that what separates his science from being an art is the unification of his method: Descartes' believes that wisdom is only one; it can be spread into several activities and matters; however, it remains one. We must acknowledge that Ramus' conception of his method was also as a unified approach that must be applicable to all the arts and matters, while remaining one and the same:

*Do this not in some one art, but in every one of the arts, in grammar, rhetoric, logic, arithmetic, geometry, music, astronomy, physics, ethics, and any discipline you please. You will learn this with the greatest facility, and with the greatest facility bring it into use (the purpose of all the arts on record). And all those arts seem to their authors to be systematized and arranged according to this method, provided you consider the art as a whole in its totality, for in a given part there may not be sufficient accuracy.*²³⁵

Both Descartes and Ramus, hence, view their methods as functioning as infrastructures applicable to any case. The effort must be made, however, to establish the method and distil its rules and principles. The theory of method occupies itself exactly with those rules and principles. We shall see, furthermore, that in the Cartesian framework, it is this foundation of the unity of method that allows one also to establish what will be elaborated below as the order of matters, which expresses this spreading and diffusion

235 Ramus, "One method," 146; Ramus, *Methodus*, 18verso: "[N]on in una arte aliqua, sed in omnibus omnino, in Grammatica, Rhetorica, Logica, Arithmetica, Geometria, Musica, Astrologia, Physica, Ethica, et quavis omnino disciplina, facilimmè eam disces, facillimè eam ad usum deduces, qui finis est omnium scriptarum artium. Atque hoc modo artes illæ omnes (quamvis in parte aliqua fortasse non satis accuratè) tamen si summam spectes universam, collocatæ suis authoribus videntur et dispositæ."

of rays through the plurality and variety of matters, establishing what is received as the order of the world.

1.1.6. Zabarella on the Methods

Working simultaneously in Paris and Padua, Zabarella made suggestions which were almost diametrically opposed to those of Ramus, but he pursued his investigations quite independently of Ramist doctrines. In as much as Ramus saw himself as a critic of Aristotle, Zabarella viewed himself as a follower of Aristotle. His expressed view was that method is directed not to analysis but rather to *synthesis*. However, his understanding of analysis and synthesis is quite different from Ramus', being grounded in a different view of method itself. Zabarella sees method as basically leading to empirical science, just as Ramus sees method as basically related to the arts. For Zabarella method aims at the investigation of nature. For Ramus method is oriented towards the adequate application of principles to all the activities of humans. But, more precisely, how does Zabarella see the intricate relationship between analysis and synthesis? Let us begin with analysis: For Zabarella analysis is important and necessary in any methodological process, but it is not sufficient:²³⁶ Even if synthesis begins with analysis as the first stage of method, synthesis, which provides a *full causal account of a certain phenomenon*, is the only complete goal of method. Synthesis, for Zabarella is not a technique to be applied in specific cases; it is rather a technique to demonstrate in what manner a certain cause leads to a certain phenomenon, and it constitutes the central task of any methodical procedure. Zabarella is heavily influenced by the medieval Averroist interpretation of Aristotle, and he is especially inquisitive regarding the manner in which the science of medicine forms the kernel of any method:

The aim of logic is to transmit the path and the method that we have to utilize in order to attain the knowledge of things (...) Logic teaches therefore the methods which will be vain to know, if they would not transmit us nothing utile to attain the knowledge of things. Therefore the nature of logic is to be the instrument of sciences, and to teach how the concepts of things must be disposed so that we can

236 Jacopo Zabarella, *La Nature de la Logique En Deux Livres*, trans. Dominique Bouillon (Paris: Vrin, 2009).

*attain the knowledge of these that we do not know by the help of those that we know.*²³⁷

Zabarella develops his observations regarding synthesis as a central part of his general theory of science, which is in the first place influenced by his readings of Aristotle.²³⁸ Zabarella distinguishes between pre-scientific and scientific habitus.²³⁹ Logic, according to his views, belongs to the pre-scientific habits. Zabarella's 'Habituslehre' of logic continued to be influencing in the European philosophical discourse according to Ricardo Pozzo, at least until Kant's *Critique of Pure Reason*.²⁴⁰ The goal of this instrument, however, is to enable the intellect to conceive of all the other habitus (in the plural) (Zabarella, *Logica*, I, XI). Hence, logic is like a meta-habitus, and when one possesses this meta-habitus, one can in fact enter into all the other habitus. It seems that the concept of method in Descartes' philosophy, as we saw above in the first rule of the *Regulae*, goes in a similar direction. Zabarella did have a great influence in Germany through Timpler and Keckermann, and hence his views on the method are also important for an account of Clauberg's philosophy.²⁴¹ As we shall see, even if Zabarella is never mentioned by Clauberg, the Zabarellist conception of science finds its way to the heart of Clauberg's formulations of the methodical procedure. Unlike Ramus, who begins the methodical procedure from the first principles and proceeds towards their application, Clauberg thinks that one must begin the inquiry from the generation of these principles, through the process of cleansing that doubt proposes.

Zabarella's conception of method puts forward a process of inference; it makes connections between several propositions in a manner that under the logic of cause and

237 Zabarella, *Nature de la Logique*, 88–89: “Le but de la logique est de transmettre la voie et la méthode que nous devons utiliser pour atteindre la connaissance des choses. (...) La logique enseigne donc des méthodes telles qu’il serait tout à fait vain de les connaître, si elles ne nous procuraient rien d’utile pour atteindre la connaissance des choses. C’est pourquoi la nature de la logique est d’être l’instrument des sciences, et d’enseigner comment les concepts des choses doivent être disposés, pour que nous atteignons la connaissance de ceux que nous ignorons au moyen ceux que nous connaissons.”

238 H. Ganthaler, “Weiterbildung der aristotelischen Wissenschaftslehre bei Jacopo Zabarella (1533-1589),” in *Der Aristotelismus an den europäischen Universitäten der frühen Neuzeit*, edited by Rolf Darge, Emmanuel J. Bauer and Günter Frank (Stuttgart: Kohlhammer, 2010), 99–110.

239 Ricardo Pozzo, “Umdeutungen der aristotelischen Habituslehre in der Renaissance,” in *Aristotelismus in der frühen Neuzeit*, 269.

240 Ibid., 270.

241 See Joseph S. Freedman, “The Career and Writings of Bartholomew Keckermann (d. 1609),” *Proceedings of the American Philosophical Society* 141, no.3 (September 1997): 305–364.

effect explains reality as a closed system of causal relations. In Descartes' *Regulae* one finds a striving to establish a system of relations. However, Stephen Gaukroger thinks that a correct understanding of Cartesian reason must include an essential element of inference.²⁴² For Clauberg the causal system is rarely apparent. He begins always, as a good Ramist, with the ordering of certain principles and then shows in what sense these principles fit the empirical case. It is as if he corrects Ramism with the help of Cartesianism and a certain kind of Zabarellism, as if to say, "Okay, then we should begin with the already furnished principles, but we need to make sure that we have indeed the correct set of principles with which we can work."

For Zabarella, resolute, analytic order does not contribute to discovery of speculative science.²⁴³

There were some who held that [...] natural science could not be conveyed using any order other than compositive, but that it was nevertheless discovered using resolute order, and so the resolute was useful not to its conveyance, but to its discovery: Aristotle wrote this science using compositive order, but he used resolution for discovery of hidden causes, and he proceeded from posterior effects to prior causes.

For Zabarella compositive order is the only sufficient method. The resolute order can serve only as a first stage in the overall compositive order:

*It is therefore manifest that compositive order alone is appropriate both for conveying and discovering contemplative sciences. For the nature of the things to be known is presented in the same way both to those who by contemplating and labouring want to discover the science of them and to those who decide to convey it to others.*²⁴⁴

242 Stephen Gaukroger, "Descartes' Concept of Inference," *Cartesian Logic: An essay on Descartes's Conception of Inference* (Oxford: Clarendon Press, 1989).

243 Zabarella *On methods*, Book II chapter VIII, §1, 172-173; "Aliqui fuerunt, aui putaverunt scientiam naturalem alio quidem ordine, quàm compositivo, tradi non potuisse, tamen inventam fuisse ordine resolutivo, proinde resolutivum non ad ipsius traditionem, sed ad inventionem utilem existisse; Aristoteles namque eam scientiam scripsit ordine compositivo, sed ad causarum absconditarum inventionem resolutione usus est [...]"

244 Ibid., Book II, chapter 8, §10, 180–181: "Manifestum est igitur, scientiis contemplativis tum tradendis tum inveniendis solùm convenire ordinem compositivum, eadem enim sese offert rerum cognoscendarum natura et illi, qui contemplando ac laborando earum scientiam invenire vult et illi, qui eam aliis tradere constituit."

The following table may be helpful in clarifying Zabarella's reading of Aristotelian method:

Figure II: Resolutive, compositive and regressive methods in Zabarella

Mode of method	Analysis (Resolutive method)	Synthesis (Compositive method)	Regressive
Begins with...	Effects (mixed data)	Causes, genres (general causal principles)	Analysis and synthesis
Works towards...	Formal and efficient causes, principles	Disposition: Inference and deduction of the chart of causes	Perfect science: Full explanation (<i>consideratio</i>). Composition of resolution and composition of second order
Main tools	Demonstration (<i>quia</i>) of the fact. Comparison between causes and effects and understanding of their relation	Syllogistic (logic): <i>Demonstratio propter quid</i> (demonstration by formal cause)	Complete explanation (effects-causes-effects): Demonstration of the necessity of an empirical case. How does a certain cause lead to a certain effect?

Considering the above discussion, we can put Zabarella and Ramus within a heraldic symmetry between the two opposed approaches to method within the framework of Renaissance methodism, as one can see in the following figure (Figure III):

Figure III: **General comparison between Ramus’ and Zabarella’s conceptions of method**

Ramus	Zabarella
Method is essentially related to the arts .	Method is essentially related to science (not to logic, which is an instrumental habitus).
Synthesis serves analysis.	Analysis serves synthesis.
Analysis is practical; it is the application of principles in particular cases.	Analysis is epistemological in character; it serves to discover the cause of observable facts.
Analysis is the full acquisition of an art; it is virtuosity, an acquisition of a habitus.	<i>Regressus</i> supplies the full, comprehensive and satisfying account of experience.

Timothy Reiss²⁴⁵ attempts to find a relationship between Zabarella and Descartes on the subject of method. He proposes that the discussion of

[E]vidence in Descartes’ lets us trace a path from Jacopo Zabarella’s rethinking of Aristotle to Descartes’ ‘own’ method. I do not argue connection or direct influence. Such claims are mostly pointless and usually fruitless endeavours: (...) I do want to give a sense (1) of how Descartes reworked neo-Scholastic thinking about method, and (2) of the extent to which, in doing so, he summed up sixteenth-century debate on the subject.

245 Timothy Reiss, “Neo-Aristotle and method Between Zabarella and Descartes,” in *Descartes’ Natural Philosophy*, edited by Stphen Gaukroger et al. (New York and London: Taylor & Francis, 2000), 195–227.

This position is close to the one of the present research. It is argued that Descartes' philosophy of method can be seen as the culmination of a process that was well underway during the 16th century. Descartes' work depended, even if not in a self-conscious manner, on the thorough work which had already been done regarding the term of method in Humanist philosophy, nevertheless Descartes contributes a dramatic turn in the understanding of the term. The Cartesian turn in the interpretation of method constitutes a mixture of two aspects, the first being the interpretation of method in the direction of mathematics. The other aspect of the Cartesian turn of method is the inherently philosophical understanding of this term, that is to say wedding this term to the very structure of philosophical inquiry. Until Descartes, method was in fact mostly related to medicine, rhetoric or logic. Descartes declared that philosophy must have a method, and this is, from the viewpoint of the present project, the most important Cartesian move.

As in the case of Ramus, there is no textual evidence testifying whether Descartes knew of Zabarella's readings of Aristotle. Although, for example, one can observe a direct influence of Zabarella in Germany through the transfer of Zabarella's philosophy by authors such as Keckermann and Timpler,²⁴⁶ in France there was no *notable* or direct influence of Zabarella during the first half of the 17th century. In any case I could not find in this time period any notable scholars in France (comparable to Keckermann and Timpler) who viewed themselves as followers of Zabarella. It is even less likely that Descartes would search for Zabarella's writings while he from very early on placed himself apart from re-reading the classical philosophers merely for erudite reasons. In this sense and with this background, Descartes' and Zabarella's motivations were quite different: Whereas Zabarella was indeed interested in supplying the correct understanding of Aristotle's methodology, Descartes was far from any erudite motivation. For Zabarella the task was not to imitate Aristotle but rather to represent and analyse his philosophy with the utmost clarity and accuracy. Moreover, if for Zabarella logic became in fact the mother habitus of all the sciences, Descartes insisted that his new science should not be looked at as a habitude. We shall examine this more closely in the coming chapter when discussing the nature of Cartesian know-how.

The philosophy of Zabarella had a strong influence on the Reformed philosophers at the turn of the 17th century, as Charles B. Schmitt wrote: "It is interesting that, with

246 See Gilbert, "The clash of Aristotelian and Ramist methodology in Germany," *Concepts of method*, 213–220.

relatively few exceptions, Protestants Aristotelians were influenced by Catholic ones, but not vice-versa. Both Zabarella and Suarez—almost as different as night and day in their approach to Aristotle—were widely read and influential in Lutheran Germany.”²⁴⁷ In fact, as I mentioned, Keckermann turns consistently to Zabarella in discussing logic, method and their Aristotelian foundations.

1.1.7. Ramism and Zabarellism in Germany: Alsted, Keckermann, Timpler, Martini and Comenius

In 1554 an important translation of the entire Aristotelian organon was published in Venice as *Aristotelis Stagirae organum* by Boethius Severino.²⁴⁸ Towards the end of the century, from the 1560s and 1570s onwards, bilingual editions became ever more prevalent. Hence, the end of the 16th and the beginning of the 17th century was pregnant with discussions and evaluations of the entire Aristotelian organon, and Clauberg’s philosophy came along to join the same wave of Aristotelian scrutiny. One could say that the German *Methodenlehre* of the 17th century developed from the Ramist and the Zabarellist influences.

Alsted and Comenius were as Calvinist as Clauberg, meaning that they were less committed to the Lutheran philosophy of Philipp Melanchton, and if any figure served as a model for them it was Ramus. If some principles in the discussions of method of Melanchton and Ramus are similar, there are also great differences between them. In fact, pertaining to Philippo-Ramism, the place of Keckermann is special in this group as he expressed critical views against the Ramist understanding of method. He was a great admirer of Zabarella, whose determination regarding logic he quotes and uses amply.

Through the reception of Zabarella and thanks to it, Aristotelianism became a central part of university life in Germany and central Europe in the 17th century.²⁴⁹ However, this Aristotelianism was developed as an alternative to Scholastic logic. In

247 On Zabarella in 17th century Germany see Irena Backus, “The teaching of logic in two Protestant academies at the end of the 16th century: the reception of Zabarella in Strasbourg and Geneva,” *Archiv für Reformationsgeschichte* 80 (1989): 240–251; Charles B. Schmitt, *Aristotle and the Renaissance* (Cambridge and London: Harvard University Press, 1983), 28.

248 by Vincenti Valgaris ex official erasmiana.

249 Rolf Darge, Emmanuel J. Bauer und Gunter Frank, “Einleitung,” in *Der Aristoteismus an den europäischen Universitäten der frühen Neuzeit* (Stuttgart: Kohlhammer 2010), 9-14.

the Philippo-Ramist framework the question of the application of the contemplative arts to civic life is highlighted, and hence the question of application is a fundamental one for the entire Philippo-Ramist group. They all thought within a framework of Reformed theology, considering ways to administrate human life, which meant principally civil life. They wrote in an encyclopaedic manner, exploring the organisation of all existing knowledge in a unified system that can make possible not only the remembering but also the application and the co-application of different fields of knowledge. Timpler, Keckermann and Martini were adherents of Zabarelism. Keckermann, for example, was actually a fierce critic of Ramus. In 1612 Keckermann writes, “Logic is an art of the direction of the mind in the cognition of things.”²⁵⁰ Notably, Keckermann thinks that logic has an *epistemological* task: It must direct the mind in its cognition of *things*. The primacy of things in the process of knowing is rather Zabarellist in its orientation. Ramus is not so much interested in the cognition of things but rather in the application of principles and in the classification of *works*. We have in this definition two components that we will see also in Descartes and Clauberg: The first is the task of *the direction of the mind*, and the other is the question of *the knowledge of things*. However, what characterises the Cartesian approach to the knowledge of things is that things themselves merely constitute a certain figure of the *res extensa*.

1.1.8. Method as a Mental Habitus

In the concluding chapters of this project, it will be demonstrated in what manner Clauberg presents Descartes’ method as a process of habituation in which doubt plays the initial role of the preparation of the mind for that process. In this one is returned to the concept of wisdom (*Weisheit*), understood essentially as a virtue, and as a virtue within an Aristotelian framework, wisdom must be understood as a habitus. In about 70 places in his *opera omnia*, Clauberg refers to the concept of habitus, always in a framework which is strictly Aristotelian and Scholastic. Though at no place does Clauberg refer directly to Thomas Aquinas, it seems that the Scholastic understanding of habitus was known to Clauberg as he refers to the Scholastic theory of habitus by Grace, the habitus which is “infused” into man by God: “Habitus can be established in two ways: either it is infused by God, as the gift of language in the Apostles Act II; or

250 Bartholomeus Keckermann, *Systema Logicae compendiosa compendiosa methodo adornatum pro iis, quorum captus artem brevem ac facilem desiderat : cum Progymnasmatibus usus logici* (Hannover: Apud Haeredes Wilhelmi Antonii, 1612), 7: “Logica est ars dirigens mentem in cognitione rerum.”

it is acquired by study, as the knowledge of languages in us.”²⁵¹ The language of science must be acquired by learning, as a habitus.

The issue here is to pinpoint precisely the nature of the methodological habitus. In the following chapters we try to approach an answer to this question. Are we within the sheer conception of a Scholastic habitus? Or perhaps rather something happens to the concept of habit in the 17th century, perhaps energised by Cartesianism? We are arriving here at a truly crucial, essential question which is posed behind the infrastructure of the present thesis: What happens to the concept of habitus in the Early Modern period, and how does this intellectual process relate to the question of method and the establishment of the arts and sciences? Not much exists in the scholarship to supply a definitive answer to this last historiographical question.²⁵² Here is my suggestion for the description of the matter: It seems that in the Early Modern period, the concept of habitus in the philosophical framework received a genuine turn, which was in fact divided into two parallel processes: On the one hand we see the emergence and the predominance of discussions regarding the bad habits of thought; this means that while, in general, the Scholastic theory of habitus was concentrated on a positive theory of the development of virtue, in the Early Modern period, we see rather a concentration on the theories of corrupted habits and ways to emend and correct them. We can see this happening in Renaissance humanism and in almost all the great thinkers of Early Modern philosophy: Descartes, Spinoza, John Locke (1632–1704), David Hume (1711–1776) and George Berkeley (1685–1753), to name a just a few. This works generally as a criticism of Scholastic theory of virtue as habitus. On the other hand, we see another important element, one of mechanics, which enters into the scenery of habitus: Instead of primitive habit, we see more a technological model of thinking which establishes itself in a great part of the philosophy produced in Europe from 1600 to 1800, in which a real installation of a new and pure automatism of thinking is sought, for example in Étienne Bonnot de Condillac (1714–1780). This habituation of a higher order creates a new paradigm in the history of the development

251 OOP II, 915 (*Logica contracta*, §34): “Habitus vel à Deo infusus, ut donum linguarum in Apostolis Act II. vel studio *acquisitus*, ut linguarum scientia in nobis.”

252 A lot of research exists already regarding the place of habit in the British Empiricists. However the question regards the earlier 17th century chapter. On this see for example Dennis Des Chene, “From habit to traces,” in *A History of Habit- from Aristotle to Bourdieu*, edited by Sparrow and A. Hutchinson (Maryland: Lexington, 2015), 121–132.

of the concept of habit, leading straight to the 19th century, where the metaphysical, mystical and even theological characters of habits were re-discovered.

Clauberg joins to a great extent the first process described above, surging from the humanist criticism of Scholastic habitus. Similarly to the Humanists, Clauberg works extensively on the problem of pre-existing, improper habits and the re-habituation of the mind to the truth of things according to newly verified standards. Moreover, on that point Clauberg not only joins Ramism but also Zabarellism. Zabarella is known for his insistence that logic is a habitus,²⁵³ and Zabarella's conception of method itself leans on his understanding of logic in general. Zabarella understands logic as a *habitus instrumentalis*,²⁵⁴ an instrumental habit. In his doctoral thesis, submitted in 1646 in Groningen, Clauberg uses exactly this articulation found in Zabarella concerning logic being an instrumental habitus: "First philosophy is principal habitus, which exists for itself; Logic on the other hand is however an instrumental habitus, which is not for itself, but is directed to another end."²⁵⁵ However, note the difference between first philosophy and logic according to Clauberg: In as much as first philosophy is a principle habitus, logic is merely an instrumental habitus. Clauberg adds that in as much as first philosophy must do with science and even with wisdom (*sapientia*), logic is not a science and not a wisdom.²⁵⁶ The question is, How should one locate the place of method? Should it be placed between the principal and the instrumental habitus? Between wisdom and logic?

Who arrives at acquiring this habitus? The philosopher. In short, logic should be a principal instrument of the philosopher. But what does it mean, determining that method is a habit? It means that it is not a one-time event of thought but rather an acquired capacity that we must exercise, and we must make of it a *second nature*. Assuming the methodist commitment means taking on a certain *hesitant* position regarding all knowledge, a position hailing the *gradual maturation of any valid*

253 Pozzo, *Habituslehre*, 259–272.

254 For example Zabarella, *Opera Logica* (Venice: Apud Meietum, 1578), 16, 17, 92; Zabarella, *Nature de la logique*, 82–89. Reiss, "Neo-aristotle," 206; Sgarbi, *British Empiricism*, 59 note 31.

255 Johannes Clauberg, *Thesium Philosophicarum: Logicae ab aliis Disciplinis quibuscum vulgo confundi assolet distinction, Moderatore Tobia Andreae* (Groningen: Johannis Nicolai, 1646), §XXVIII: "Prima Philosophia est habitus principalis, qui propter se est atque addiscitur: Logica habitus est instrumentalis, qui non est propter se; sed ad alium finem in habitibus realibus acquirendum naturam suam ordinatur."

256 Ibid.: "XXX. Primæ Philosophiæ habitus ex intelligentia primom principiorum et scientia conclusionum ex illis educatorum est compositus, qua ex compositione Sapientiae titulo ab Aristotele ornata: Logica neque intelligentia est neque scientia, multò minùs sapientia."

judgment. This also demands a certain sincerity in the initiated philosopher towards himself: One must be constantly dealing with self-estimation and self-observations, determining whether one is allowed to proceed on the path towards the truth of things.

1.1.9 Reformation and Method

Having presented along general lines the intellectual landscape of the development of methodism from the 16th to the 17th century, we now move on to the theological aspect of this historiography. Can one speak about a latent structural relation binding Reformed theology and the proliferation of the discussions around the concept of method? At least some of the scholarship considers this a plausible proposition. If not strictly Reformed, one can with certainty say that the discussion around the concept of method and its usages is typical of 16th-century Renaissance philosophy. One seminal historian who points in this direction was Max Weber (1864–1920). In his 1905 exposition of Protestant ethics, Weber suggests that Protestant worldly asceticism demands from the person practicing it a *methodical character*; this methodical character entails order, precision, intention and contentment. This methodical disposition must do with what Weber designates as “vocation,” the *Berufung* of the individual, appointing him his place and task in this world: “A man without a calling thus lacks the systematic, methodical character which is, as we have seen, demanded by worldly asceticism.”²⁵⁷ Weber therefore finds that there is a relation between personal predestination and the demand to acquire ‘methodical capacities. It is exactly the fact that something at least is determined in advance that necessitates method as a rectification of the mind seeking to reach the truth of things. It is, in general, this relation between the predestined human path and the manner in which one works through them which is vital to the present research in relation to Clauberg’s philosophy. How can thought processes serve as a means towards self-determination? This is the question that always remains in the background of the present inquiry.

One should not forget that the philosophy of the Reformation was far from constituting a homogenous group, but rather it was extremely divided and quarrelling within itself, not only the Lutherans versus the Calvinists; within these groups

257 Max Weber, *Die protestantische Ethik und der "Geist" des Kapitalismus (1905/1920)* (Berlin and New York: Springer, 2016).

themselves we see extremely complex divisions and quarrels. One must draw strict lines of distinction between the various Protestant groups, that were at some points quite hostile to each other.²⁵⁸ Also within strict Philippo-Ramism one can see very different positions; for example Keckermann wrote a strong criticism of Ramus with the help of Zabarella, and Alsted was more of a Ramist. Clauberg clearly took part in the discussions and divisions within Calvinist philosophy, and as we shall see, he defended Cartesianism in a stand he took against a certain position within Calvinism itself. In Herborn Clauberg was a professor of theology, though he preferred to teach philosophy. In Duisburg he was able to concentrate on teaching philosophy, leaving his friend Wittich to concentrate on theological questions.

1.1.10. Summary: The Methodist Commitment

The practice of method was central to the Reformed mentality and its ascetic habitus, and Reformed methodism regarded not only science but more fundamentally economy, family life, public life and work ethics, as Max Weber demonstrated. Indeed, it seems that drawing lines to bind method, Reformation and Cartesianism also has, except for its very evident epistemological character, a strong *ethical*, or rather *moral*, tenor that I would suggest calling “the methodist commitment.”

The methodist commitment, as the present project tries to demonstrate in the following chapters, consists of two parts: The first part demands that one is willing to put at risk quite a lot in order to reach the *truth of things*, which is equal to, as this project will show, reaching a *valid judgment*: Risking one’s possessions means putting all existing ingredients of knowledge into question. This element of doubt is very much a subject of inquiry for Clauberg,²⁵⁹ and this is why the present project also pays much attention to this part of his thought. The first methodist demand is of an analytical character: It is antiseptic and hygienic, carving away the inessential and aspiring to retain only what is necessary and irreducible. Indeed, this atom of thought which is necessary and irreducible may consist of any “simple nature” in Descartes, and more specifically, it is the moment of the *Cogito* that serves as such a cornerstone. The carving

258 See Günter Frank and Herman J. Selderhuis, eds., *Philosophie der Reformierten* (Stuttgart: Frommann-Holzboog, 2012).

259 As in his *Defensio Cartesiana* (1652), and in the *Initiatio philosophi* (1655), where the concept of doubt takes the center stage.

away of the inessential means putting into doubt all given items until something internal to the process itself stops the possibility of putting into doubt.

The second element of the methodist commitment demands that the epistemological capital regained by the methodical process will be transferrable to other domains of inquiry: This is what can be called the *extensive-pedagogical demand*. As will be shown throughout the following chapters and more so in the last chapters of this project, Clauberg takes this pedagogical demand very seriously and points towards a way of supplying a pedagogic understanding of Cartesian method. He thinks of philosophy as an inherently pedagogic pursuit, and he views the methodological process as essentially and primarily one of self-emendation and becoming an adult. The second demand of methodism in its Ramist style is analytic as it implies the application of principles to diverse circumstances or test cases. In Clauberg's logic, this task is presented as a hermeneutic action, the action of *understanding something other than one's own mind*. We see in the later parts of this project that both parts of the methodist demand can be conceived as two parts of judgment.

The methodist commitment is nowhere more apparent in philosophy than in the period between Zabarella and Tschirnhaus. Hence, this commitment is one of the characteristics of Early Modern philosophy. However, essentially and for the most part, at least in the formal stages of presentation, Scholastic syllogism was the standard form in which thought processes were constructed. Indeed, the methodist concern stems from the occupation with this formal aspect of philosophical reasoning, from the focus given to the *how* rather than to the *what*. It is hence a question of the quality of knowing.

However, something happens in what one can roughly call Early Modern philosophy. The methodist commitment is observable in the Early Modern tissue of intellectual history, and it works like a bundle of threads, spreading and knotting around the figure of Descartes. It is already in the 16th century that one gets a first glimpse into the problem of organisation and the order of inquiry. The theory of method in Humanist thought is developed within the tensioned continuum between syllogistic logic and humanist scepticism. On the one hand there were quite influential philosophers in the 16th and 17th centuries who still practiced the system of Scholastic syllogism, for example Francisco Suárez (1548–1617).²⁶⁰ On the other hand one finds throughout the 16th century the appearance of more and more thinkers promoting sceptical positions, for instance Michel de Montaigne (1533–1592), Pierre Charron (1541–1603) and

260 See Frank Grunert und Kurt Seelmann, eds., *Die Ordnung der Praxis. Neue Studien zur spanischen Spätscholastik* (New York and Berlin: De Gruyter, 2001).

Francis Bacon). For most of the Humanists, the system of syllogism no longer sufficed to apprehend the particularity of the real; however, the sceptical attitude that one finds in Montaigne and his follower Pierre Charron is too unorganised to be used as the basis for a first philosophy.

As taught in the Jesuit colleges, the logical technique used to arrive at certain determinations was arranged in advance by syllogism and Scholastic forms of argumentation that existed before any inquiry began. Moreover, within the Scholastic framework there are logical principles that cannot be put at risk as the methodical commitment demands, and, importantly for us, the differentiation between the various domains of practice and inquiry is one of the pillars of Scholastic philosophy, but it stands against the ideal of the unity of science, which I associate with the pedagogic-extensive methodical demand. It is exactly against this separation of the various areas of knowledge that Descartes speaks at the opening of the *Regulae*. Against the strict differentiation between the several arts and sciences, Descartes poses his theorem of the unity of science,²⁶¹ a methodical theorem that, as shown above, is not very far from Ramus's principle of the one, united method. Instead of different intellectual habits determined according to their objects, Ramus and Descartes suggest a general, unified mental habitus. Now, what is this general habitus, and what constitutes this habitus in the first place? Philipp Melanchton supplied us with this passage regarding the definition of method:²⁶²

Since the noun "method" signifies a straight and economical way or road, so dialecticians transfer this noun to the meaning of the most direct order in an explanation. Here method signifies a straight or direct way of order of investigating and explaining either simple questions or propositions. The Greeks

261 Robert McRae, *The Problem of the Unity of the Sciences: Bacon to Kant* (Toronto: University of Toronto Press, 1961).

262 My translation.; Melanchton, *Erotemata dialectics* (Wittenberg: Iohannes Lufft, 1547), 105–106: “Ut autem aliàs nomen methodos significat rectam et compendiarium viam: ita Dialectici ad ordinem explicationis rectissimum transtulerunt hoc nomen. Ac significat hoc loco μεθοδος rectam viam seu ordinem investigationis, seu explicationis, sive simplicium quæstionum sive propositionum. Et sic Græci definiunt: μεθοδος ἔστιν ἐξίς ὁδοποιητικὴ μετὰ λόγου, id est: Methodos est habitus, videlicet scientia, seu ars, viam faciens certa ratione, id est, quæ quasi per loca inuia et obsita sentibus, per rerum confusionem, viam invenit et aperit, ac res ad propositum pertinentes eruit ac ordine promit.”

thus define it: Method is an acquired habit establishing a way by means of reason. That is to say, method is a habit, that is, a science or an art, which makes a pathway by means of a certain consideration; that is, which finds and opens a way through impenetrable and overgrown places, through the confusion of things, and pulls out and ranges in order the things pertaining to the matter proposed.

So, we see that for Melanchton as for Zabarella, method is naturally taken as a habit and as an *art*. The method is laconically explained as the paving of a way, a progression through locations that are primarily impenetrable in the shortest and most orderly way possible. It is to Melanchton's definition of method that many of the later humanists turn as a starting point. Indeed, within the domain of medical philosophy, it was Paracelsus who burned the books of Galen. In any case one should bear in mind that the context of reviewing the meaning of method was in fact produced from within a medical context. Galen says that "this threefold procedure (*ratio*) of teaching the arts (*artes*) and curriculum subjects (*doctrinae*) which the Greeks call method" is a useful thing. We learn from this citation that method consists of a ratio; we learn that it concerns the transfer and acquisition of the arts, and we know that method was considered a useful thing, not in any way a theoretical apparatus.

A process of method presupposes that understanding involves a process that takes place within some extended parameters. In other words there exists a gap, a distance between the beginning and the end of the inquiry. These extended parameters involve a starting point and an end point, somewhere from which one comes and somewhere to which one aims and proceeds. The epistemological status of the two positions is quite different in as much as the starting point is that which is already known, and the end point is the unknown, or better yet, as Aristotle phrased it in the beginning of the *Physics* in a definition to which we will return in a later chapter: the aiming point is *that which is better known for itself* (and **not** only for us). As long as thought is taking place, or better said thought is taking shape, on the way to the unknown, one certainly knows that something is still missing, that is to say at least some error is involved in one's knowledge. The question is what is missing. The answer for Ramus, Descartes and Aristotle is that what is *less known* is the particular case or the singular contingent meeting with the circumstances of reality. Otherwise said, that which puts a method in motion and that which demands correction are the results of erroneous perception. The process should begin with the universals that are well known and verified and proceed with caution towards the particular. It is in order to arrive to the particular case, to see

sharply, that Descartes construes his sets of rules and principles for the development of a method. However, as always the method is provisory, and it can always change and be amended. In fact, Cartesian method works all the time as a process of parallel emendation: one path occurs at the level of sense, trying to reach the best possible figuration of the perceived object, and on the methodist level, one constantly corrects one's rules and principles. The truth is found in an equilibrium between these two elements.

The question of ordering the arts concerns, in the first place, as in Descartes, the question of the preliminary stage or the beginning point of the acquisition of the art. I think that for many methodists, the question as to how to begin an inquiry, the question regarding the sufficient basis to begin a questioning, is a central one. This is evident in both Descartes and Ramus. So, one needs to begin with the elements which are better known and to move from them towards that which is less well known. This is the proper order of inquiry which stands at the heart of the method. This means that one should begin with general principles and then move to particularities. This order achieves, in Descartes, the guaranty of the unity of science. Ramus' view was that Aristotle himself established one method for the arrangement and applications of the arts and that one must look for ways to enhance the unified method of Aristotle with the particularities of usage.

As will be elaborated in the following chapters, our historiographic argument is that by the time Clauberg was exposed to the Cartesian method, its reception was already laden with Ramist premises and manners of thinking that he received directly from his teachers in Bremen, Herbronn and Holland. The method of doubting for Clauberg is clearly defined as a manner of *questioning*. He also thinks that this questioning is not necessarily new but was initiated by the ancients. The method of questioning that must pass through a determining stage of doubt is what brings us into certitude:

Now that these things have been demonstrated, this objection, taken from a diversity of questions and doubts, will be turned into a defence, using such kind of syllogistic. That [kind] is the method that Plato's and other ancient' Dialectics, [such as] Aristotle's Problematica and Scholastica, the peripatetic and Christian catechism, and other Erotematica all approved of. These things [methods: Dialectica, Problematica, etc., ae] should not be wholly disapproved of. The method of progressing through doubt in the direction of certitude, also Plato's, etc. Ergo. The initiation of all these methods is made by questioning, which we overturn when they coincide with doubts, in such a way that just like by

querying we acquire knowledge, as in the vernacular proverb: “with questions one becomes wise”. So by doubt we arrive at certitude. As in the Dutch: if you never doubt, you are never sure.).²⁶³

In the next chapter we take a more structured look at Cartesian method and try to make a bit clearer what we mean by this term and in what manner Clauberg aligns his thought according to the Cartesian modelling of method.

263 OOP, II, 1141 (*Initiatio* II §8): “His ita demonstratis, *objectionem* illam, à quaestionis et dubitationis differentia petitam, in *defensionem* convertimus, tali utentes syllogismo (syllogismos enim vult Schola) Qualem methodum et Platonis aliorumque Veterum *Dialogica*, et Aristotelis *Problematica* et *Scholastica* peripateticorum, et *Catechetica* Christianorum, aliorumque *Erotematica* comprobant, illa utique non est vituperanda. Atqui methodum per dubitationem progrediendi ad certitudinem, et Platonis etc. Ergo. Nam in omnibus illis methodis initium fit à quaestionibus, quas cum dubitationibus coincidere jam evicimus, adeo ut, quemadmodum quaerendo scientiam adipiscimur, secundùm proverbium vernaculum: *Mit fragen wird man weise*. Ita dubitando veniamus ad certitudinem [...]”

1.2. The Know-how of Not Yet Knowing

1.2.1. Is method a skill?; 1.2.2. Descartes' method; 1.2.3. Is there a Cartesian method?;
1.2.4. The know-how of method: Methodology, style of thought and elimination
Methodology, style of thought and elimination; 1.2.5. Method and logic; 1.2.6.
Method: a mental know-how; 1.2.7. Methodical doubt and the art of not yet knowing
how; 1.2.8. The notion of *prima philosophia* according to Clauberg; 1.2.9. Who
knows? Or: What is the soul?; 1.2.10. Reaching the point of the initiation of thought

1.2.1. Is Method a Skill?

The present chapter draws the fundamental guidelines for understanding the conception of method in the Claubergian sense. It argues that Clauberg indeed has a unique and plausible manner of understanding the functioning of Descartes' method. The general and primary observation is that in as much as for Descartes method amounts to know-how, trying to supply the philosopher with a certain set of principles to deal with the problems that arrive on the way.²⁶⁴ The Claubergian method is different in character; it is a method developed more as a general *approach*, an *attitude* for dealing with objects which are inherently taken as artificial, already furnished and ready for the inspection of the researcher. In other words if for Descartes the object of inquiry comes generally from *nature* (however problematic and complex this nature is), for Clauberg in almost all cases, the objects are already artificial (languages, authors, ideas, Artefacts),

264 For an enlightening treatment of the “know-how” aspect of Descartes' method, see Denis Kambouchner, “La méthode en pratique”, in *La méthode*, edited by Patrick Wotling (Paris: Vrin, 2019), 101–131.

furnished in the past by other authors and calling for the inspection of the philosopher.²⁶⁵ We return to concentrate on the problem of the objects of inquiry in Chapter 3.2. If for Descartes, as we shall shortly clarify, method is indeed conceived as a certain, encompassing meta-skill, for Clauberg the methodical skill is primary conceived as an introductory stage for any inquiry. The nature of this skill is installed and habituated in a state when one is still in a stage of not yet knowing. The premise of the *docta ignorantia* is taken however in a moderate manner, which is not the one of Nicholas of Cusa (1401–1464).²⁶⁶ As for Clauberg this stage of not-yet-knowing is conceived as temporary, as the stage of initiation leading to an established acquisition of knowledge. The *Docta Ignorantia* indeed expressed the ideas of the times, and it is clear that this work was known to Descartes: The paradigm of the *docta ignorantia* is found in Regius' letter to Descartes of the 3rd or 4th of January 1642.²⁶⁷ As Édouard Mehl put it (my translation): “The meditating ego discovers the extension of her ignorance.”²⁶⁸ The methodical procedure is indeed directed to the estimation of our ignorance, that is to say the definition of what one does not yet know. Clauberg's methodism, as is demonstrated in future chapters, focuses to a large extent on an explanation of this estimation of the extension of our ignorance.

As we saw in the last chapter, during the 16th and 17th centuries many authors referred to method through the lenses of art or skill. What is the product of this *techné*? It is mental order which makes the chaotic and mixed contents of the mind orderly and simple. In fact, according to Hans Blumenberg it is exactly this nominalist blur that energises the entire epistemology of modernity, so indeed method is revealed to us as standing exactly as the transmitter between nominalist reality and technical, ordered knowledge.²⁶⁹

265 The two exceptions in Descartes' writings of Clauberg in this sense are the two *Physics*: the *Physica* (Amsterdam, 1664), and the *Physica contracta* (Frankfurt, 1681 [posthumously]), that are read as summaries and commentaries on the physics that one can find the *Principia philosophiae* of Descartes. See also Frédéric de Buzon, “La nature des corps chez Descartes et Clauberg: Physique, mathématique et ontologie,” in *Chemins du Cartésianisme*, edited by Antonella Del Prete and Raffaele Carobone (Paris: Garnier, 2017), 85–108.

266 See Eugene F. Rice, Jr., “Nicholas of Cusa's Idea of wisdom,” *Traditio* 13 (1957): 345–368.

267 Descartes, *Œuvres III*, 506: “Quod tam sæpe jactat de *doctam ignorantiam*, dignum est explicatione. Nempe, cum scientia humana fit admodum limitata, et totum id quod scitur, ferè nihil sit, comparatum cum ijs quæ ignorantur, doctrinæ signum est, quod quis liberè fateatur se ignorare illa quæ re veram ignorat.”

268 See Édouard Mehl, “Descartes et L'égalité des esprits,” *L'enseignement philosophique* 64/2 (2014): 32: “L'ego méditant découvre l'étendue de son ignorance.”

269 Hans Blumenberg, *Die Legitimität der Neuzeit* (Frankfurt am Main: Suhrkamp, 1996).

The most important contributor to the understanding of method as an art was Petrus Ramus, whose work we presented in the previous chapters. As noted there Ramus emphasises the importance of the *usage* of method as an inherent part of its structure. In his treatise on the unity of method, he criticises both Aristotle and his interpretations for not taking into account the usage of logic:

*For the commentators on the logical organon there is one perpetual cause of error-they did not know how to use logic. They never used analysis. They never considered the force of an argument and a proposition, the syllogism containing the middle term, or the method of every art. They did not remember that experience or lack of experience with an art is what determines its success or failure.*²⁷⁰

For Ramus it is important to show that method should be understood as an art and that this art must be *really practiced*: One must acquire real experience in this art in order to gain the related know-how.

1.2.2. Descartes' Method

Descartes' insistence on the importance of method for any true inquiry finds its earliest expression in his posthumously published *Rules for the direction of the mind* (1628, the '*Regulæ*'). Because the *Regulæ* was not published in Descartes' lifetime, there is no explicit evidence that Clauberg knew of the work; nevertheless, it seems that the principles that Clauberg draws from his reading of Descartes are concomitant with what we find in the *Regulæ*. Moreover, we should bear in mind that Clauberg was certainly familiar with another text of Descartes, *Conversation with Burman*, which most probably Clauberg himself transcribed.²⁷¹ This interview entails many useful clarifications of the Cartesian attitude towards method, and it is considered to be a more popular presentation of Descartes' views. However, in order to have at our hand a clearer point of clarification than what we get from the Claubergian interpretation of

270 Ramus, "One method," 125; Ramus, *Methodus*, 8.

271 See René Descartes, Frans Burman, Jean-Marie Beyssade, *L'entretien avec Burman* (Paris: Presses universitaires de France, 1981); René Descartes, *Entretien avec Burman : manuscrit de Göttingen* (2 édition) traduit et annoté par Charles Adam (Paris: Vrin, 1975).

Cartesian method, we should build for ourselves a clearer picture of what a Cartesian type of method entails.

The element of method appears as such already in the fourth of the *Rules*, where Descartes says, “We need a method if we are to investigate the truth of things.”²⁷² Even though it sounds as if this rule is straightforward, simply stating the importance of method, De Oliveira emphasises ²⁷³ that this rule itself poses philological problems by its very existence. One problem is that there is a major discrepancy between the two Latin editions of the *Rules*. In as much as in the Hanover edition (which Leibniz got hold of during his stay in Paris), part of the fourth rule is located in an appendix at the end of the work, and in the other original Latin version, the rule is entirely within the text with both its parts. The conceptual problem arising from the two versions is that of the relation between method and the notion of *mathesis universalis*.²⁷⁴ The *mathesis*, as David Lachterman underlines, furnishes the capacity of teaching through the aid of comparisons.²⁷⁵ Indeed, can Cartesian method function as a *mathesis universalis*, as a comprehensive mathematisation of nature? This is the very question that stands at the heart of the present project. It seems that at least for Clauberg, the answer is clear: Method is distinguishable from *mathesis universalis* in the mathematical sense, and it can function without it. *Mathesis* itself according to Clauberg should be understood under the meaning of “professing,” which is “passing onwards” in its Greek origin. In this sense we can think about Clauberg’s method as a *de-mathematisation* of the Cartesian model. Claubergian method can entirely stand without the need for the instruments of mathematics. However, this does not open the way merely for a Cartesian method independent from mathematical rationality but also for a reconsideration of the *technique* which is required in order to proceed in a methodical manner. If Cartesian method does not lean exclusively on the rules of arithmetic and geometry, then the principles of its operation must have other foundation for their description. In the Claubergian formulation of Cartesian method, we are talking about the establishment of a *habitus of reason*, and the acquisition of this habitus is developed through a

272 Descartes, *Writings*, I, 15; Descartes, *Œuvres* X, 371.

273 Érico Andrade M. De Oliveira, “La genèse de la méthode cartésienne: la mathesis universalis et la rédaction de la quatrième des Règles pour la direction de l’esprit,” *Dialogue* 49 (2010): 174–175.

274 Ibid., 175.

275 David R. Lachterman, *The ethics of Geometry: A genealogy of modernity* (London and New York: Routledge, 1989), 177.

pedagogical process. As such, reason is trained to *understand reality*, not more and not less, and methodical proceedings express this know-how.

Clauberg summarises clearly and quite faithfully the known “four rules of method” of Descartes that one can find in the *Discourse de la méthode*. In general, the first rule is not to take for certain anything that is not certain. If the first rule is clearly analytic, the second, third and fourth rules work towards putting all findings in such an order that the truth can be easily apprehended. In this present project, we concentrate on the double dynamics of pulling apart and putting together using the Cartesian method. However, before diving into this question of analysis and synthesis in method, we must pose for ourselves the disturbing question, Did Descartes indeed have a method?

1.2.3. Is There a Cartesian Method?

Can we give a satisfying account of Cartesian philosophy *without using* the concept of method? Does a theory of knowledge suffice to understand the relation of Cartesian philosophy to the acquisition of knowledge? In a fully realist framework, the mediation of a method is not necessary; if, for Descartes reality had been directly approachable as such, method would not have been such an underlined theme in his writings. However, exactly because in the Cartesian framework there is some problem with the appearance of things, we must have a method in order to know their truth. We shall see that if for Descartes a method is necessary, so is it in the case of Clauberg, even in a reinforced manner. For Clauberg, in fact, it seems that the way to attain things becomes the aim itself. We must find out what kind of inquiry requires a method in Descartes and what kind of an inquiry, what science, demands method in Clauberg. In the first chapter we saw that the method the humanists were mostly considering was related to the art of dialectic: first reaching propositions about things and then transmitting these propositions onwards in the best possible manner. In this sense methodical questioning has indeed a pedagogic nature and orientation. There is, however, a question regarding whether science itself demands a method. The question of whether science demands a method at all depends on our relation to realism: If one holds a metaphysical position of scientific realism arguing that reality as such is approachable to the investigator, then one can assume that no medium between the researcher and reality is needed, and hence no method is needed. Method shall serve from this perspective only as a distortion of

the truth of things. This idea has raised quite a controversy in recent decades. John Schuster notoriously declared the cult of method in Descartes as redundant.²⁷⁶

Although the message has perhaps not yet spread widely as would be desirable in Cartesian studies and intellectual history generally, we now have excellent grounds for accepting, on the basis of the work of some historians and sociologists of science, the general proposition that no doctrine of method, whether Descartes' or anybody else's, ever has guided and constituted the actualities of scientific practice- conceptual or material- in the literal ways that such methods proclaim for themselves. This raises immediate and catastrophic implications for some traditions of Cartesian studies.

Schuster argued that we must relate to Descartes' conception of method as part of his intellectual rhetoric, not of the essence of his teachings and scientific explorations. However, note that in the above passage Schuster refers to "some historians and sociologists of science" who give us the untimely observations on the alleged redundancy of method for scientific practice. Note also the expression "no doctrine of method, whether Descartes' or anybody else's." The point is clear: Schuster's attack is directed against the concept of method in general, not against the specific kind of method we are investigating here. Also note that Schuster directs his enquiries towards an understanding of Descartes' oeuvre as a sheer scientific practice: While our present project does not assume the task of making such a perspective plausible or refutable, it is clear that through his reading of Descartes' method, Clauberg did not understand it as a scientific practice but rather as a medicine of the mind.

As we saw in a previous chapter, in 16th century Philippo-Ramism method is clearly presented as a mental *know-how*: It consists of a set of elementary rules of conduct, easy to teach, being induced a posteriori from the *prior experience* of thinking and aimed at providing a better basis to proceed in making propositions. Cartesian method, however, is a special kind of mental know-how: It is not only a set of such rules for the sake of themselves, but it is interested moreover in making these elementary rules of conduct the basis for a new (meta)physics. In that sense, analysing prior experience is only done in order to reach the grounding basis for a new synthesised rule of conduct. The question

276 John Schuster, *Descartes-Agonistes: Physico-mathematics, Method & Corpuscular-Mechanism 1618-33* (New York and Berlin: Springer, 2013), 8–9.

becomes thereafter whether method should only be conceived as a style of thought pertaining to an inner decorum of how one should behave when one wants to philosophise in that methodical know-how contains also truth-claims regarding the world. That is the crux of many explorations regarding Cartesian method. It seems that in Descartes, and also in Clauberg, the position regarding the truth value of methodical proceedings is not simple but rather complex and versified. methodical regulation pertains to a level of inquiry which is prior to the work of metaphysics itself. It prepares the basis for the pursuing of a metaphysical inquiry. Hence, the regulations themselves are not representative of any realities outside the mind. Should we then summarise and determine that methodical regulations do not have any metaphysical, not to mention metaphysical, truth value? I would suggest that such a value does exist. It exists, however, not only regarding the mind or even its faculties (see Schmid 2015) but more concretely regarding its *manners of functioning*: the inner mechanics of the mind. In this sense I suggest that even if for the Cartesians the *res cogitans* is essentially simple and unified within itself, and even if its two elementary operations, willing and intuiting, are simple and undividable, still within the mind itself one can detect an external cover which can be analysed and regarded as functioning according to a mechanical logic. This mechanical-based logic is exactly what makes syllogism rudimentary. The Cartesians aspire instead to reach a mechanistic description of the functioning of the mind. For Spinoza, as he demonstrates the principles of method in his “On the improvement of the understanding” (Spinoza 1955, 13): “In order to know that I know, I must first know.” In this sense if a method is to begin at all, one should possess beforehand some certain knowledge, that is to say some true idea: “There can be no method without a pre-existent idea.” (Spinoza 1955, 144). For Spinoza there is no method without there being in the beginning some true idea directing *a priori* methodical proceedings. In this sense any method already has its truth at its beginning, at its basis. The “good method” hence is one “which teaches us to direct our mind according to the standard of the given true idea” (Spinoza 1955, 16). The good method in this sense is not occupied in discovering that true idea; rather, given the true idea, it directs our ideas accordingly. In this sense, as we shall see in the following chapters, Spinoza’s interpretation of the method is essentially synthetic: it is a sum of precepts following necessarily from a certain true idea. Returning to the question of the status of knowledge contained in methodology, in Spinoza the status of knowledge of method is inherently realistic: Any (good) method is a faithful and strictly logical representation

of a true idea. We know, by the way, that Spinoza was in possession of Clauberg's *Logica vetus et nova* and *Defensio cartesiana*.²⁷⁷

Even though Spinoza's insistence on the truth value of any good method is more radical than that of Clauberg, and certainly more explicit than the one of Descartes, it seems that in the chain of philosophers we draw on here there is one latent assertion: A good method is one which receives some true idea subsisting within the objects that it studies. This true idea somehow triggers our thought to make it proceed towards clarifying this idea. Method, in this sense, is seen as a work of reconstruction of an apprehension of a truth. The act of latent apprehension was there in advance, and the good method works to restore the process of the arrival of this intuition. In other words, method makes a mechanical reconstruction of some pre-given apprehension. The task of methodology is to make explicit this mental mechanics (either analytically or synthetically, as we shall see in the following chapters).

1.2.4. The Know-how of Method: Methodology, Style of Thought and Elimination

In order to place our discussion regarding method in relevant debates in epistemology, it is necessary to point out Jason Stanley's commentary on the notion of *know-how* as relevant to our thesis in characterising a Cartesian form of method.²⁷⁸ Stanley promotes a conception of know-how which is understood as a *know-what*. In other words knowing-how can be treated as an answer to a certain question or problem. This interpretation is an intellectualist understanding of habit. That is to say Stanley suggests that know-how is in fact wholly reducible to knowledge of facts about a certain situation. Descartes' conception of method, and the manner in which Clauberg understood it, is in fact very close to such an understanding. This means that in fact mental know-how is established exclusively on the knowledge of particular matters, certain cases, texts and propositions that the philosopher must weigh and either include or exclude from his way towards the truth, the matter in the focus of the philosopher's gaze. It is this matter which begins the philosopher's process of habituation.

277 Spinoza had a copy of Clauberg's *Logica Nova* in his private library (Catalogue 29, the Amsterdam edition of 1654.); his library included also the *Defensio cartesiana* in the edition of 1652 (catalogue 28). See in <http://www.librarything.com/catalog/BenedictusdeSpinoza&deepsearch=clauberg> , consulted on 06.12.2020.

278 See Jason Stanley, *Know How* (Oxford and London: Oxford University Press, 2011).

Another manner of approaching the definition of method as a mental style is through the concept of *Denkstil*,²⁷⁹ style of thought. In this framework a method defines the *modus operandi* of a philosopher, one particular woman or man who philosophises. The concept of *Denkstil* was developed by Ludwig Fleck (1896–1961). What characterises *Denkstil* is its unconscious selective character, which is however an acquired habit. After a process of edification that teaches the scientist to select his materials and observations according to a certain line of questioning and pre-suppositions, he gradually starts to behave scientifically in a manner which has internalised his methods of selecting data.²⁸⁰ Becoming a scientist, in this approach, means shaping and designing one’s own capacity to select data. This view is, indeed, extremely close to the position found in Clauberg’s reading of Descartes. The whole process of method is in fact directed towards forming a constant capacity to select verified data to proceed in an inquiry. As we shall see in the following chapters, for Clauberg it is through the very complex *operation of doubt* that one acquires this habit, this style of thought. In this view method is a process demanding the researcher to constantly re-examine and habilitate his own *Denkstil* as well as discern what is left outside his perspective. This understanding of method is also relevant to describe what we find in Clauberg’s Cartesian writings.

Another term we must consider in our explorations of the meaning of method is *methodology*, most importantly methodology in philosophy. Remarkably, whereas in the other humanities and the social sciences methodology plays a pivotal role, in philosophy there is little exploration of the term. In his enlightening “What is philosophical methodology?” Josh Dever accentuated the importance of the element of elimination in any philosophical methodology. This he called “eliminativism”: “Methodological talk is widespread throughout philosophy, and Eliminativism would require a rather stark error theory about our stance toward our own philosophical

279 Allan Janik, “Notes on the Origins of Fleck’s Concept of ‘Denkstil’,” in *Cambridge and Vienna. Frank P. Ramsey and the Vienna Circle*, edited by Maria C. Galavotti (New York and Berlin: Springer), 179–188.

280 As Allan Janik writes, (Ibid., 180): “Fleck defines *Denkstil* as a readiness for directed perception of form that has been instilled into the practicing scientist in the course of his/her education to the point that the selective character of scientific observation cannot ever be explicitly recognized by the practicing scientist. More than any of his predecessors, Fleck emphasizes that the very precision, which scientific perception demands, requires that scientists be rigorously trained to see only certain complex aspects of what they observe while systematically ignoring others. Fleck’s view of scientific perception as selective vision as well as his seemingly unorthodox position with regard to what we have been accustomed to regard as problems of verification (or falsification) it entails is, on his own account, determined by his perspective as an immunologist. Even more than biological science itself his relation to medical research dictates the perspective he brings to the philosophical consideration of scientific knowledge.”

practice.”²⁸¹ Indeed, for Dever it is a strong theory of elimination which allows one to view one’s philosophical methodology as meritorious. Indeed, as we shall see Clauberg is interested in showing the way towards establishing an eliminativist understanding of Cartesian method. Error is considered the greatest danger, and one’s work in the establishment of one’s method is directed towards the elimination of faulty observations.

In a reflection on philosophical methodology, Augustin Riska²⁸² remarks on the eliminative character of philosophical methodology, insightfully stating,

The investigation of methods is naturally very much concerned with philosopher’s activities, though only with those which are relevant for it. We see in this how the methodological preconceptions with their philosophical backgrounds influence the whole matter. If the methodological preconceptions did nothing else but determine the selection of features on which the methodologist’s attention is concentrated, it would be sufficient to guarantee that methodology would be philosophically loaded. Such preconceptions are spotlights which illuminate only some spots, fully ignoring others.

In addition to eliminativism, Riska remarked that methodology itself is occupied with two central problems: *the philosopher’s actions* and the philosopher’s *preconceptions* regarding those very actions. In this it becomes quite clear that questions of philosophical method belong to the domain that we must characterise as meta-philosophical. Philosophical methodology is occupied with the underlying level which puts any philosopher on her path of inquiry. In that sense as shall be elaborated in the coming chapters, any philosophical method in the framework of methodism consists of analytical and synthetical elements. Analysis points to the processes of *elimination*, synthesis to the process of *preconception*; these make up any philosopher’s ground of activities.

281 Josh Dever, “What is philosophical methodology?,” *The Oxford Handbook of Philosophical Methodology*, edited by Herman Cappelen, Tamar Szabó Gendler, and John Hawthorne (Oxford and New York: Oxford University Press, 2016), 7.

282 Augustin Riska, “Methodology and philosophy,” *Metaphilosophy* 3, no.3 (July 1972): 224.

1.2.5. Method and Logic

The discussion of the relationship between philosophy and method demands an account of a third conceptual player in the chart of mental capacities: logic. What is the relation between method and the more accepted study of logic? For the tradition we have been examining, revolving around the concept of method, method and logic are indeed discussed as two intimately interrelated arts. For example Jacopo Acontius [Aconcio] (c. 1520 – c. 1566) in his enlightening *De Methodo* (1558) writes, “*It is indubitable, that method must refer to logic, because division, and the ordering of complexities pertain to it. Hence in order to be able to define what is method, we must pass by the division of Logic into its parts.*”²⁸³ According to this important 16th-century theoretician of method, if we want to understand what method is, we must go through the divisions and elements of logic. Does logic have at all a place in a Cartesian framework?²⁸⁴ It seems that at least in the philosophy of Descartes himself there is no real place for (pure) logic as such, at least as it was practiced and taught in the Thomist colleges. Descartes aspired to make his method functional without the traditional instruments of Scholastic syllogisms. If logic is equated with Aristotle’s *Prior Analytics*, then indeed there is no place for it in Descartes’ method. However, one should not forget that the Aristotelian *Organon* also includes the *Categories*, the *Topics*, and the *Hermeneutics*, all working on other levels of discussion than the strictly syllogistic one. In the *Topics*, for example, it is not the formalised logic which one meets but rather a logic built on conversation, persuasion and dealing with domains where one cannot claim to achieve full certainty. Differently from what is sometimes claimed, it is not that Descartes claims mathematics can replace logic. Instead, arithmetic and geometry should serve as a model for the philosopher; the rationality found in them should guide one also when looking at other problems. Let us see what Descartes says in Part Two of the *Discourse on Method* regarding the nature of his own method compared to the logic available to him:

283 Jacobus Acontius, *De Methodo/Über die Method*, trans. Alois von der Stein (Düsseldorf: Stein Verlag, 1971), 11: “Dubitandum sanè mihi esse non videtur, quin Methodus ad logicam referri debeat, quando et definiendi et dividendi, et colligendi leges complectitur, quæ omnia satis constat ad Logici officium pertinere: Ut igitur intelligi commodè quid sit Methodus possit, definiri ac dividi Logicam oportet.”

284 On Descartes and logic, especially in the earlier years and in the context of Descartes’ exchange with Beekman, see Édouard Mehl, “Descartes critique de la logique pure,” *Les études philosophiques* 75, no.4 (2005): 485–500.

*When I was younger, my philosophical studies had included some logic, and my mathematical studies some geometrical analysis and algebra. These three arts or sciences, it seemed, ought to contribute something to my plan. But on further examination I observed with regard to logic that syllogisms and most of its other techniques are of less use for learning things than for explaining to others the things one already knows or even, as in the Art of Lulle, for speaking without judgement about matters of which one is ignorant. And although logic does contain many excellent and true precepts, these are mixed up with so many others which are harmful or superfluous that it is almost as difficult to distinguish them as it is to carve a Diana or a Minerva from a block of marble. As to the analysis of the ancients and the algebra of the moderns, they cover only highly abstract matters, which seem to have no use. Moreover, the former is so closely tied to the examination of figures that it cannot exercise the intellect without greatly tiring the imagination: and the latter is so confined to certain rules and symbols that the end result is a confused and obscure art which encumbers the mind, rather than a science which cultivates it. For this reason, I thought I had to seek some other method comprising the advantages of these three subjects but free from their defects. Now a multiplicity of laws often provides an excuse for vices, so that a state is much better governed when it has but few laws which are strictly observed; in the same way, I would find the following four to be sufficient...*²⁸⁵

Therefore, Descartes acknowledges the study of logic, and nevertheless he differentiates between his method and the accepted, traditional Scholastic art of logic. There is one more step we must take in order to approach a correct definition of Cartesian method. According to Johannes Clauberg, this first step includes the endorsement of the importance of doubt. In his essay *Initiatio philosophi* (“The initiation of the philosopher”), Clauberg shows that the foundation of method is found in the concept of doubt, *dubitatio*. However, what Clauberg shows is that within the framework of Cartesian method, doubt receives a special character, which is not a sceptical one (as will be shown in the following chapters).

In this sense Cartesian methodical regulations make explicit the know-how of thought: how the mind, in fact, knows its way about when being placed within a certain inquiry. In the Claubergian version the ingredient of doubting itself is also put into the repertoire of knowing-how. These formulations of methodical know-how make a

285 Descartes, *Works* I, 119; Descartes, *Œuvres* VI, 17–18.

specific difference in Cartesian philosophy, setting it apart from other forms or branches of rationalism. Moreover, as the present research tries to show in the coming chapters, Cartesian methodist know-how has *a realist* character in a double sense: specific methodist know-how consists of concrete mental realities having an *extended* aspect. This extended aspect of the method is a synthetic one: It makes the synchronic process of method, happening in time in a narrative form, into a chart, a map of the domain of questioning. This is what is designated in the below discussion following Descartes and Clauberg: the order of matters. In the second sense Clauberg's method questions specific realities given by sense perception. It is sense perception, the empirical data, that directs the entire methodical process. The empirical realities Clauberg faces are not however only things of nature but also human products. Method is focused on every matter put into inquiry. In this sense for Clauberg all subject matter is empirical, but this empirical matter is also inherently artificial in the sense that it is given as a product of human articulation. This is what is called in subsequent chapters Clauberg's "other empiricism."

1.2.6. Method: A Mental Know-how?

As stated above, we address the question of the definition of Cartesian method against the background of the recent discussion regarding the concept of know-how in contemporary epistemology. In his *Concept of Mind* (1949) Gilbert Ryle presents skill as a disposition, an acquired capacity the content of which is distinct from propositional knowledge regarding objects in the world. In his controversial book *Know How*²⁸⁶ Jason Stanley puts forth a different perspective on the definition of skill. He suggests that know-how is a form of a *knowing-what*, that it is say it is knowledge about things in the world, or a *knowledge-that*. Skill, according to Stanley, is reducible to *propositional knowledge regarding the world*. Hence, for Stanley skill is a knowledge involving the ability to answer questions regarding states of affairs and produce propositions regarding these states of affairs. This enables a direct passage between acquisition of knowledge and acquisition of the physical ability to behave correctly in the world. The know-how of riding a bike, if we follow Stanley's suggestions, is a set of verified propositions regarding the structure of bikes, the physiology of riding, and even hills, roads and transport regulations. This is an interesting suggestion in relation to the methodism that we discuss in this present research. Stanley's proposal demands holding

286 Stanley, *Know How*.

a very particular concept of knowledge, one which has “a standard more demanding than justified true belief.”²⁸⁷ This definition of knowledge, that is a set of regulations regarding applications of principles in particular cases, is not very different from the concept of knowledge found in Ramus, Descartes and Clauberg. The habitus of infallibility strongly demands the know-how of method. We see in the coming chapters what inner proceedings this establishment of infallibility demands.

In the framework of know-how, according to Stanley, one can define skill as knowledge regarding a certain performance by a certain agent under certain circumstances with a certain objective in mind, including specific and accurate knowledge not only regarding actions but also regarding the things they involve, their relations and their respective locations. This means that practical knowledge can be fully translated into propositional knowledge. The conception of method found in the authors that interest us here—the humanist thinkers of method, the Philippo-Ramists, and then Descartes and Clauberg—takes somewhat this approach. These authors translate the principally intellectual know-how into a set of propositions regarding knowledge itself: The mechanics of method constitute an artificial fabrication of the matters of thought, and the exposition of this know-how is intended to show how *the mind works* through a demonstration of the rules of the mind’s workings. Descartes’ conceptualisation of the relationship between methodical procedures and the principles delivered by them, as well as the application of these to the various domains of human activity, can be assisted by Stanley’s approach to skill. The thesis of this present project is that behind the Cartesian method stands a similar assumption to that behind Stanley’s concept of know-how: Both assume that know-how derives from, or is reducible to, *propositional* knowledge regarding things in the world. In continuation of this, Clauberg’s methodical writings contain assertions about what-is on the order of matters in the world.²⁸⁸ The perspective suggested by Stanley, allowing a reduction of know-how to knowing-what, suggests that method is a process of acquiring knowledge of principles; however, this endows the Cartesian method with its *realist* tenor in the sense that within the application of method itself, the researcher gets to know the things of the world. In other words, in the framework that we meet in Clauberg’s writings, method and empirical knowledge are united: There is no possibility of disengaging methodical proceedings from a certain inquiry regarding the world, and it is only through a certain inquiry

287 Ibid., 175.

288 On this see Vincent Carraud, “L’ontologie peut-elle être cartésienne ? L’exemple de l’Onstosophia de Clauberg, de 1647 à 1664 : De l’ens à la mens, “ in Verbeek, *Johannes Clauberg*, 13–38.

regarding the world that one is capable of being initiated into philosophy. In other words self-introspection cannot be entirely theoretical or absolutely formal; it must erupt from a certain state of affairs that the researcher meets and learns to estimate. This apparently points to a certain intentionality of methodical procedures: methodical procedure, in contrast with formal logic or syllogism, cannot be empty; it must be filled with some object, some matter, and this object will be of interest to us in following chapters.

Know-how helps to clarify the function of representation in Cartesian method, which aims to elucidate the principles of thought and their architectonics, but before that the manner by which these are applied in particular cases regarding specific problems or scientific domains must be demonstrated. The suggestion of understanding Descartes' method under the terms of realistic know-how implies that method itself should be understood as a mental mechanism and therefore that the furnishing of method and its usage should be considered a technique that produces its own objects. In that sense the principles that one learns in the methodical writings strive to be themselves as simple natures: mental entities that can be used to reconstruct a model of the world. In the present project the wider and general implications on Cartesian method are explored, bringing mechanical rationality into methodology. That is to say the methodical thinker not only describes processes of thought as they really are but wants to show how one should activate one's mind and what processes are obligatory when one wishes to initiate a process towards the truth of things.

From the historiographic perspective, our present research strives to contribute to a consideration of Cartesian method, more specifically the methodism that we find in Clauberg in line with the *artisanal and artistic theories* of his era. Many of Descartes' writing are composed as manuals of operation as if written for artisans in the domain of philosophy. To bind our terms with the domain of intellectual history, if the research field of "artisanal epistemology"²⁸⁹ examines how principles of knowledge are induced from the history of concrete production procedures, this project goes in the complementary direction and suggests how philosophy was conceived in the Cartesian 17th-century framework, at least by the group of philosophers we refer to as methodists, as an activity having an artisanal aspect, and this artisanal aspect was *energised* but also *modified* by Cartesianism.

289 Edited by Pamela H. Smith, Amy R. W. Meyers, and Harold J. Cook, eds., *Ways of Making and Knowing: The Material Culture of Empirical Knowledge* (Ann Arbor: University of Michigan Press, 2013).

One might also question in this respect the relationship between Cartesian epistemology and Cartesian methodology. Epistemology and method are interconnected concepts in the Cartesian context. Method is aimed at achieving and sustaining knowledge regarding things or objects. Hence, any Cartesian epistemology must entail a theory of method. Moreover, if the hypotheses of the present project are plausible, acquiring a method is itself a matter of acquiring knowledge about, in Descartes' terms, the reality and the order of matters, not only regarding the order of reasons itself.

Some research has already pointed to the praxiological characters of Descartes' method. Ernest Sosa²⁹⁰ suggests the term "secure aptness" to discuss Descartes' achievement of clear and distinct assertions in the *Meditations*. This aptness, Sosa claims, is self-maintaining in Descartes: The only outer help this self-maintenance requires is the guaranty of continuity of thought by God. Our present research pursues this perspective of Cartesian methodology; yet, unlike Sosa's reconstruction that focuses on the "cogito-moment" supplying full certainty to the thinker, this project examines the more basic and elementary, less intuitive and less evident movements of thought entailed in Descartes' methodology, that were also of interest for Clauberg. Moreover, if Sosa views Descartes through an *ethical* or *virtue-epistemological* perspective, this study suggests viewing Descartes through a *poietical* (from the Greek *poiein*, meaning production or making) perspective, as a skill in establishing principles.

In an enlightening attempt to typify the ethical character of Descartes' method, Noa Naaman-Zauderer coins the term "*deontological turn*" to refer to Descartes' later writings.²⁹¹ Zauderer argues that Descartes understands error as a *misuse* of method in the ethical sense. In that sense Cartesian error is first and foremost a practical fallacy, a methodical misbehaviour. Our present research shows that the deontological character of Descartes' philosophy is found already in Descartes' *earlier* writings, which Zauderer only fleetingly considers. The aim of this research is to show that Cartesian deontology does not strip Cartesian method from any metaphysical claim, but it rather holds within itself a realist claim, pointing to the principles that operate this deontology.

However, as stated above the perspective of the present research is to find in the Cartesian method a mental technique. This means that method is not a natural capacity but rather an artificial, prescriptive (rather than merely normative) procedure. Acontius,

290 Ernest Sosa, "Descartes's Pyrrhonian Virtue," in *Epistemology* (New Jersey: Princeton University Press, 2017), 1–20.

291 Noa Naaman-Zauderer, *Descartes' Deontological turn: Reason, Will, and Virtue in the Later Writings* (Cambridge: Cambridge University Press, 2010).

a 16th-century methodist we have already mentioned, writes quite beautifully about how our art of thought makes our inquiry fitting or unfitting for certain objects.

*The artistic form on the contrary, I would say, is nothing other than that, what makes an object to something useful and fitting. As the form of the statue makes the marble fitting to the presentation of an effigy. The form of the knife makes the iron fitting for cutting.*²⁹²

This statement by Acontius pinpoints exactly what our inquiry is about: the manner in which the art of thought makes mind able to cut and carve reality. In this sense if we express this in Cartesian terms, it is the *extended aspect* of spirit that must be explored. Method works against the natural tendency of our mind to pre-judgments, imaginations and errors. This agrees with the understanding of method as a faculty,²⁹³ a habitus or a stable disposition. As Schmid demonstrates,²⁹⁴ Descartes was a metaphysical realist regarding the human faculties, posing both reason and will as two primitive human powers. These powers, however, in the Cartesian framework must be tamed and organised to be capable of serving as tools for human existence. These primitive powers cannot be analysed, but they can be synthesised. The armouring of the intellect should serve as the foundation for the direction of the will; hence, know-what and know-how belong to the same science (complying with the Cartesian ideal of the unity of science). In the Cartesian framework know-what and know-how are practically indistinguishable. The present research goes beyond the praxiological reading of Cartesian method to suggest that methodical praxis itself contains a realist tenor in the sense described above.

In the initiation of a methodical process, some matter is yet unknown, but this unknown matter is capable of being known on the basis of known matters. The method says that if one goes through a process of verification of one's known matters, putting aside all the doubtful parts, one will find a way towards what one wants to know. But

292 Acontius, *De Methodo*, 16: "Artificiosam autem formam nihil aliud esse dixerim, quàm illud ipsum, per quod res ad usum aliquem apta est. Statuæ namque forma reddit marmor idoneum ad referendam alicuius effigiem: cultri verò forma cultrum ad incidendum."

293 Stefan Schmid, "Faculties in Early Modern Philosophy," in *The Faculties: A History*, edited by Dominik Perler (Oxford: Oxford University Press, 2015), 150-198.

294 Schmid, *Faculties*, 150–170.

what is this unknown matter, the one orienting the inquiry, making an intentional object of the methodical process? The unknown can be likened to *the known plus X*: We begin with an initial stage of knowledge and some *supplementary knowledge* is being aimed at. The way between the two situations of knowledge *is method*. This is not trivial for any philosopher: One must be prepared to leave something behind and to *work for a while*, that is to say *as long as it takes*, in territories of indistinct perceptions in order to land at the end of the journey somewhere else, a place that guaranties (at least partial or relative) certainty. This differentiating nuance between uncertainty and the guarantee of certainty, between the doubtful and the reliable, defines the path of method. The certainty of knowledge sought by Cartesian method is also the basis for its realist claim. In the first place Cartesian realism is essentially bounded with the achievement of *certainty*, and this certainty is achieved through the establishment of the instruments of method: Order, figuration and ratio are not only principles of operation of method; they exist as mental realities. Hence, Cartesian rationalism is concerned with regulating not only the autonomy but also the reality of mental instruments. Ursula Renz²⁹⁵ observes that in order to achieve certainty according to Descartes, one needs to control and verify the *reasons* upon which one bases one's observations. Reason should be understood as a mechanical cause internal to thought. The *reason* found at the basis of Cartesian evidence is a *principle*. Yet, in order to distinguish the correct principles, method must go through a process of correcting, amending, aligning and putting in order our architecture of reasons. The acquisition of clear and distinct ideas results in the *architecture of the ingenium*, a mental constitution designed to answer specific problems that life and science present to the thinker. As will be developed in the following chapters, the basic connector between know-how and know-what is order. Indeed, even to a larger extent than humanist forerunners, Cartesian methodical skill is based on the principle of ordering. The principle of order appears as the first requirement of method in Rule 5 of the *Regulæ ad directionem ingenii* (c. 1628). More than a decade later, in a letter to Mersenne²⁹⁶ Descartes famously distinguishes between two kinds of order that can be followed in the presentation of an inquiry: the order of reasons and the order of matters. Famously, Martial Gueroult (1953) insists on the importance of the order of reasons to Descartes' philosophy. However, the two kinds of orders construct together the full Cartesian methodology, and one should give an account of Cartesian order of *matters* as well as the intermingling between the two. The order of matters in

295 Ursula Renz, "Doxastische Selbstkontrolle und Wahrheitssensitivität: Descartes und Spinoza über die Voraussetzungen einer rationalistischen Ethik der Überzeugungen," *Archiv für Geschichte der Philosophie* 96, no.4 (2014): 463–488.

296 Letter of 24 December 1640. Descartes, *Œuvres* III, 266–267; Descartes, *Works* III, 163.

the case of Descartes includes not only the principles Descartes discovers in the world, but furthermore this order should be found *within the processes of thought itself*.

In the manner that Clauberg presents the Cartesian method, the order of reasons and the order of matters in Cartesian method together form *a cohesive, double-faced order*, which is the order of method, being *presentable* sometimes as processes of analysis, other times as synthetical construction. In the coming chapters we see what processes compose this methodical order.

Recently, a collection of essays edited by Eric Watkins²⁹⁷ approached the theme of ordering in the tension between natural order and divine order from a historical perspective, putting great focus on the Early Modern period. However, in this anthology the order referred to is mostly the one of the laws of nature: What is the order that organises the world of physical phenomena? Throughout the various chapters it is made clear that there is some synchronicity between the development of the modern concept of divine intervention and the development of the concept of encompassing rules of nature, leaning, from Descartes onwards, first and foremost on the endorsement of mechanical causation. The present research strives to approach not so much the parallelism between natural and divine order but rather the order of method itself: the order of rationality within the specific framework of Cartesian philosophy as interpreted by one of his first representatives, Clauberg. The first question we must ask is in what sense this order is descriptive and in what sense is it prescriptive or *normative*.

Daniel Garber²⁹⁸ argues that the problematics of method are mostly pertinent to Descartes' early writings, up to the *Discours de la méthode*. The position this project takes regarding the Cartesian corpus is that most of Descartes' philosophical principles, *including* the elements of hyperbolic doubt and dualist realism, can be traced back to the *Regulae*. However, the *Principles of Philosophy* are also replete with methodical suggestions, as is *Conversation with Burman* (transcribed by Clauberg), and the undated

297 Eric Watkins, ed., *The Divine Order, the Human Order, and the Order of Nature: Historical Perspectives* (Oxford and London: Oxford University Press, 2013).

298 Daniel Garber, *Descartes Embodied: Reading Cartesian Philosophy through Cartesian Science* (Cambridge: Cambridge University Press, 2000), 33–51.

*Research after the truth*²⁹⁹ is mainly oriented towards finding the right approach to the philosophical craft and towards the placing of doubt within this craft. In this sense questions of the acquisition of method are indeed pertinent to the Cartesian project. What is the case with Clauberg on this matter? Indeed, also in Clauberg, methodical questions are most central. Almost all his writings deal with questions revolving the attainment of knowledge, the attainment of certainty, the mechanics of doubt and the development of an inquiry.

We suggested above the term “methodist commitment” to refer to that engagement in methodical questioning that occurred throughout the 16th and 17th centuries. One should speak in this context of a commitment that should be understood as an epistemic virtue, to follow Ernst Sosa’s concept.³⁰⁰ It is an epistemic capacity, an epistemic merit which enables us to obtain certain validity regarding our observations and arguments. We must take notice that we are arriving at a level of meta-philosophical discussion which regards the *ethical tenor* of philosophical inquiries. Sosa makes clear the manner in which Descartes’ process of reasoning establishes an epistemic virtue which is, in Sosa’s view, too much demanding because of its demand for infallibility:³⁰¹

Recall Descartes’ reasoning when in the second paragraph of the Third Meditation he reflects on the one first certainty that he has attained (sum res cogitans) and finds that what gives it its exalted status is, so far as he can see, simply its clarity and distinctness, and immediately adds that this could hardly happen if it were possible for anything ever to be so clear and distinct without being true. Clarity and distinctness therefore in his view can clarify as such an exalted source of epistemic status (certainty) only through a similarly high degree of truth-reliability (namely, infallibility). The competences or intellectual virtues

299 Édouard Mehl suggested to think about this text as composed in two times, at the beginning and maturity of Descartes’ career. See Édouard Mehl, “La question du premier principe dans La Recherche de la Vérité,” In *Nouvelles de la République des Lettres* (Prismo, 1999): 77-97. And also René Descartes, *Etude du bon sens, La recherche de la vérité et autres écrits de jeunesse (1616-1631)*, trans. Vincent Carraud and Gilles Olivo (Paris, Presses Universitaires de France, 2013). Ernst Cassirer thought that the *Recherche* must have been written in Descartes very last years, perhaps even in Stockholm, the period where he was serving as a philosophy tutor to the queen Christina. See Ernst Cassirer, “La place de la ‘Recherche de la Vérité par la lumière naturelle’ dans l’œuvre de Descartes,” P. Schrecker trans., *Revue Philosophique de la France et de l’Étranger* 127, 5, no.6 (May-June 1939): 261–300.

300 Ernest Sosa, “Précis,” *Philosophical Studies* 131 (2006): 677–678; Ernest Sosa, *A Virtue Epistemology: Apt Belief and Reflective Knowledge*, Volume I (Oxford and New York: Oxford University Press, 2009); Ernest Sosa, “Descartes’s Pyrrhonian virtue epistemology,” *Judgment and Agency* (Oxford and New York: Oxford University Press, 2015), 233–254.

301 Ernest Sosa, “Précis,” 677.

that I invoke similarly qualify as epistemic sources only if they qualify as truth-reliable, though unlike Descartes I do not require infallibility, since I am interested in ordinary knowledge and not just in absolutely certain knowledge.

We see that the manner in which Clauberg reads the epistemic virtue suggested by Cartesian method leans heavily on the model of the acquisition of *language*. In fact, Clauberg views logic itself literally as an inner *dialogue* of the thinker with himself. In other words the task of the logician is to have a precise and penetrant conversation with her own inner voice, or what Clauberg calls the “inner word”:

For as often as logicians discuss enunciation, syllogism, conclusion and question, they understand primarily matters as they are in the mind, since the art of directing reason is situated chiefly around the internal word [of the person, ae], [and] if the external word is added, the novices in this art are well aware of that this is something secondary or accidental.³⁰²

Again we ask: Does logic, in its strict Scholastic sense, have any place at all in a Cartesian framework? It seems that at least in the philosophy of Descartes himself, there is no real place for logic as such, at least as it was practiced and taught in the Scholastic universities and the Jesuit colleges of his time. Descartes aspired to make his method functional without the need to turn to the traditional instruments of Scholastic syllogisms. If logic is equated with the *prior analytics* of Aristotle (in which one finds the rules of construction and application of the syllogism), then indeed it is difficult to find an echo of the prior analytics in Descartes’ writings. However, one should not forget that in the Aristotelian corpus, what is titled the *Organon* also includes the *Second analytics* (dealing with the definition of science), the *Categories*, the *Topics* and the *Hermeneutics*, all working on other levels of operation than the strictly syllogistic one. In the *Topics*, for example it is not the formalised logic which one meets but rather a logic which refers to situations of conversation and persuasion and domains where one cannot claim full certainty. Returning to Descartes, differently from what is sometimes claimed, it is not the case that Descartes claims that mathematics can *replace* logic. Instead, arithmetic and geometry should serve as a *model* for the philosopher; the

302 OOP II, 1141 (*Initiatio* II §5): “Nam Logici quoties de enunciatione, syllogismo, conclusione, quaestione loquuntur, inprimis intelligunt *ea quæ sunt in animo*, cum ars rationis dirigendæ præcipuè circa internum sermonem versetur, ad quem si externa verba accedant, id secundarium et accidentale quid esse, illius artis tirones nôrunt.”

rationality found in them should guide one also when looking at other problems than purely mathematical ones.

Therefore, Descartes acknowledges the study of logic; nevertheless, he differentiates between his method and the accepted art of logic. We already saw that the process of the replacement of syllogistic logic with another model of logic was taking place already during the 16th century. The logic about which we speak here is placed under a threat: Logic is threatened to be resolved and so to say consumed by the domains of theory of knowledge and metaphysics. This is why the younger Clauberg writes his earlier versions of the *Ontosophia*, in which logic and ontology are united. The historical process we are describing also includes a change in the manner in which one understands the technical status of logic as an *art of thought*. Logic was not considered as belonging to metaphysical inquiry, but rather as an art and, on some occasions, for example in Zabarella, effectively as an instrument (one of the possible translations of the *Organon*). Clauberg views logic through certain empiricist lenses: He sees logic's task in the first place as retracting and verifying what we say and what we hear or read, but this must also lead to rectified judgment and perception:

*What is the usage of Logic? Answer: Some posit that it will be used in the opportunity of disputations, others [will posit that it will be used] in the resolution and analysis of authors. And indeed, there's truth in both sayings; but neither approach touches upon the true scope of Logic; namely, logic teaches how should we use our reason [ratione nostra] in the right way [recte], as is generally acknowledged by all. But the right usage of reason [rectus rationis usus] does not consist only nor primarily in answering my opponent, nor in correcting the texts of some author; but truly in **convert** the attentive soul towards things or toward the people talking about things³⁰³ (...) in reasoning in the right way, judging in the right way, perceive [in the sense of 'comprehend,' ae] in the right way.*

Hence, after the topical responsibilities of the usages in discussions and disputations, we have a suggestion regarding a rectifying task for logic, a rectification that leads to a

303 Clauberg OOP I, 591 (*Exercitatio*, I, §5): “Quem usum habet *Logica*? Resp. Quidam omnem ejus usum in disputandi facultate ponunt, alii in authorum resolutione et analysi. Ac dicunt quidem utrique aliquid veri, sed neutri praecipuum veræ Logicæ scopum attingunt, Logica quippe docet quomodo rectè ratione nostra uti oporteat, quemadmodum in confesso est apud omnes. At rectus rationis usus non in eo solùm neque praecipuè consistit, ut cum adversario contendas, aut alicujus Authoris scripta retexas; verum ut ubique (...) sive ad res sive ad personas de rebus loquentes animum convertas, rectè ratiocineris, rectè judices, rectè percipias.”

right perception of things. Clauberg indeed repeats in this passage the term *rectè*: rectifying the soul, the matters and their perceptions. Hence, it seems that Clauberg understands logic as having an empirical tenor; for him, logic is no longer merely the formal procedure to construct and analyse propositions; it is rather *the manner of using our perceptions in a reasonable way*. This is why in further chapters of this project we discuss another empiricism found in Clauberg's writings, an "other" empiricism, different perhaps from the systematic, encompassing one that we are accustomed to meeting in John Locke's writings, but perhaps a precursor for this empiricism, to a similar extent echoing the influence of Francis Bacon's philosophy.

In concluding this section, we must provide a general answer to the question, "What is a method?", at least in the framework we are exploring in this present work. A flexible definition would see a method as an *approach* to the acquisition of knowledge, an attitude towards the pursuing of an inquiry regarding certain kinds of things. This places method close to a medium, a measure, creating a relation between a thinker and her object. This softer definition may present method as a style of thought (see Section 1.2.4.). A style of thought is a typification of a manner of thinking, placing the manner of pursuing an inquiry alongside other manners of pursuing similar targets.

The perspective of viewing method as a measure or a medium expresses the relationship between that which is known and that which is not yet known, that which is less well known, or the thing as it is *known by its nature alone*, which is demanded by Aristotle at the beginning of his *Physics*. Can indeed one aspire to perceive matters by their nature alone? Perhaps this is one of the greater questions that Clauberg leaves for his readers. This rectifying measure includes an *estimation*,³⁰⁴ an estimation of that which we do not know *in its own nature*. The estimation of the searched-for knowledge works as a hypothesis, a construction, a model through which one can advance in the resolution of a problem. This is similar to what Descartes proposes in his *Geometry*,³⁰⁵

304 Upon concluding this present research, the author was pleased to find the theme of estimation as typifying the Cartesian project, in the most recent publication of Jean-Luc Marion. See Jean-Luc Marion, "Connaître à l'estime," *Questions cartésiennes III: Descartes sous la masque du cartésianisme* (Paris: PUF, 2021), 95–130.

305 Descartes, *Œuvres* VI, 367–485; René Descartes, *Discourse on Method, Optics, Geometry and Meteorology*, Revised edition, trans. Paul J. Olskamp (Indianapolis and Cambridge: Hackett Publishing, 2001), 177–262.

where he suggests a method by which one should assume a solution and then show how one arrives in a correct manner at this solution. This constructivist account of method has an inferential aspect as well: One presupposes the framework of the game; one preposes several principles, and then one advances to fill in the blank spaces. We shall see in the last chapter of this research that this estimation puts the methodical procedure into a pre-destined structure in which the estimated determines the development of the process of reasoning. The estimation, as we shall see, is made through the work of definition and figuration (see Chapter 3.2). This constructivist account of method acts like a normative, prescriptive set of rules for a certain game of searching after the truth of things. This kind of formulation of method poses itself as a synthesis of organisation. What are the elements of this organisation? They are, in Clauberg, test cases from past inquiries. In this framework, a method is an *a posteriori* product of previous experiences in inquiries or processes of reasoning. These previous experiences can be one's own or others' (apprehended as testimonies, texts, images). This differentiation between one's own past experiences the experiences of others is taken into account quite seriously in Clauberg's *Logica vetus et nova*.³⁰⁶ As we shall see, it is only when starting to understand and judge the works of other authors that we enter the field of *analysis*. All these parameters of the methodical procedure demand a certain temporal, diachronic aspect of reasoning, leading to the possibility of constructing future proceedings through learning from past proceedings. The temporal aspect of method will be discussed at the conclusion of this project; however, one should note that it is present in almost all upcoming chapters.

Another aspect of the method is that it is clearly looked at from the perspective of art, of a technique, a *techné*. Method should be like a *techné* of thought. This returns to the idea of style of thought. As an artwork has a style, thought can also have a style which expresses the singularity of the thinking mind, its choices and its abilities. This singularity of the thinking mind is extremely important to Clauberg in his reading of Descartes. In his view what characterises the Cartesian kind of first philosophy is its individuation, and a style of thought in this framework will enable one to develop an individual style in one's own thinking.

As was already noted Descartes was rather hesitant regarding this technical aspect of method. However, in a way, that which Descartes highlighted is exactly the distinction between technique as an art and technique as the new model for a mechanical structure. We learn from the first rule of the *Regulae* to turn the *techné* into a machine,

306 OOP II, 784–816.

to automatise the technique of thought, but in what sense can one really talk about an “art” of thought? What is the meaning of this art? A provisory suggestion for a general definition of method in this orientation would be as follows: A method is a normative and regulative set of rules for the application of mental know-how.³⁰⁷

As a *techné*, in the Cartesian framework, the art of thought should serve as a substitute for logic, and this has notable effects regarding the elements of this art. In Descartes method is explicitly brought up as an alternative to logic. However, when Descartes poses method as the alternative for logic, he has in mind a very specific form of logic, the one coming from the schools of the Jesuits, based on Aristotelian and Thomistic syllogism. What disturbs Descartes in this logical system is that it is too much closed within its own mechanics, being unable to tackle real objects or produce new ideas. Hence, we conclude that the improvement that Descartes seeks by the introduction of his conception of method is to be capable of meeting reality in its particular manifestations, hence producing new knowledge. For this Descartes suggests his four rules of method, conceived as an alternative manner of formalisation and ordering of incoming data.

Finally, and as will be extensively discussed in the last two last parts of this, method is an educative set of principles. These principles must be transferable to others; they must be simple to teach and to carry out. However, before anything else, as we learn from Clauberg’s interpretations of Descartes, the art of thought is first and foremost the art of self-teaching, of self-education. This art is hence in the first place auto-didactic, and in a way this makes redundant the presence of an auxiliary teacher. As we try to demonstrate throughout the chapters of this research, it is plausible to treat the field of method as proto-philosophical, that is belonging to philosophy, enabling philosophy, initiating philosophy, but at the same time not belonging to the metaphysical terrain par excellence. In this sense methodology is proto-metaphysical. It draws the line between the philosophical and the non-philosophical.

1.2.7. Methodical Doubt: The Art of not yet Knowing-how

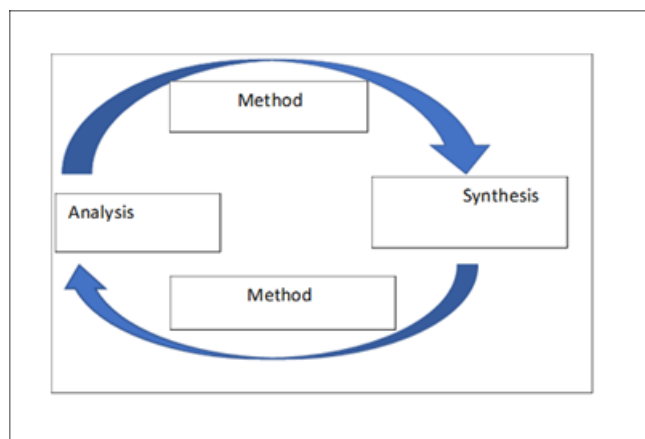
As we shall see in Chapter 3.1, in Clauberg’s presentation of Cartesian method, it is the methodical element of *doubt* that is presented as the central and most determining methodical tool. This means that for Clauberg the first rule of Cartesian method is that

307 Stanley, *Know How*.

one should in the first place take care to follow and exercise the habitus of doubt. However, Clauberg's effort is to make out of Cartesian doubt an entire pedagogic program. What this doubt makes clear is that the primary task of method is to demonstrate and distinguish what *do we want to know*. That is to say that if we go in the direction of the Aristotelian formulations, in method we are searching to define the things that we know less well and the manner in which we can know a thing by its own nature. First philosophy, in this sense, is the stage in which we arrive at a clean slate, coming to understand what is missing in the account that we are called to give regarding an object or a state of affairs. In other words method is a way of *estimating the unknown* in already existing knowledge. As we shall see in coming chapters, method moves the entire time between synthesis and analysis to the extent that it furnishes what we suggest calling "second synthesis," which corresponds to the fourth rule of the Cartesian method, clarifying the state of affairs clearly and reaching this distinct estimation of that which *is not yet known*. When this distinct estimation is indeed realised, any inquiry, either physical or metaphysical, *can begin*.

The figure below presents a circular model of understanding method. Method is the way ($\omicron\delta\omicron\varsigma$) between synthesis and analysis. In this model, as will be elaborated in coming chapters, method must be understood as synthetic in its essence because it binds analysis and synthesis together. It is the process of thought that demonstrates in what manner elimination becomes composition and in what manner composition eventually must perform a selection.

Figure IV: **Circularity of analysis and synthesis in the method**



On its way between analysis and synthesis, method constantly directs the mind from the *better known* to the *lesser known*, in other words from the already known to the not yet known. Using the Aristotelian vocabulary from the *Physics*, method's first and central task is to fittingly esteem the unknown in the existing knowledge. In this sense method models the unknown; it tells us in more detail what we still need to know. In order to perform this estimation, method must always show the shortcomings of our already achieved knowledge. In this sense method is always corrective and emendating. In order to estimate what we do not know, we do not have to know in advance the solution for a problem; instead, what is needed are *some of the coordinates of the possible solution*.

In the first place one must know how to formulate the problem that is at hand. In Aristotelian terms this necessitates knowing something about the thing in itself and acknowledging that this knowledge is indeed partial and unsatisfying. In this sense the process demanded is one of estimation of the knowledge that *we already have*. Hence, when Descartes says that "we need a method when we look after the truth of things," we can only say, following Clauberg and Aristotle, that method is an instrument allowing one to pass from the things as they are known to us *towards* the manner in which they are known for themselves. We look, through method, for the things that we cannot yet define regarding the thing in question. Based on the philosophical leaning on inference, that which is sought is already contained in the rules of method. For the realist (for example Spinoza) it is the distance between thought and things which we seek to articulate. When one is a naive radical realist, one does not need a method because the assumption is that things are conceived as they are to us. Hence, for the radical realist method is redundant. What we can hence say is that a Cartesian position is a quasi-realist position regarding things. Things are not reducible to our knowledge of them, but they are only approachable within the framework of our method. Hence, for the Cartesian realist and the Aristotelian realist *method is essential*. There is no question of doing away with method. Hence, also for Clauberg method is an essential and obligatory phase in the initiation of the philosopher, and it provides the kernel and essence of most of his writings. Clauberg himself observed that this necessity for method and its *set of rules* is one of the marks of Cartesian philosophy:

The third difference [of Cartesian philosophy], regarding the rules, that one must use in philosophizing.

The one who wants to know the truth of things that belong to philosophy, rightly and with fundamental examination, must have some elementary rules, according to which he will order the examination of things. Just as the art of writings and other arts have their rules and accomplish themselves according to them. And the

*more that these rules are fewer, the better they can be observed, and as more precise they are, the more one can heavily and strongly rely on them.*³⁰⁸

*Therefore, Cartesius has secured only four principle-rules for himself, which he has used in order to bring into the light of day the truth of the things that are not yet known to him in the first place. And hence one must put before one's eyes this [rule], and labour with the best diligence and dedication and efforts not to deviate anymore from this.*³⁰⁹

The first known principle of Cartesian method, as Clauberg presents it, must do exactly with the postponement at the beginning of the philosophical process:

*The first principal rule is that, in philosophical matters, that is to say, in things which must be known by the natural light, one must never take something as true and certain, before one rightly and fundamentally beforehand understood it, so that he can behave so [i.e. take something as true and certain]. The rule demands 1. That one will evade all precipitation of judgment, and will take enough time (...)*³¹⁰

308 Clauberg, *Unterschied*, 15: “Der III Unterschied, Was angeht die Regeln. Welcher man sich gebraucht im philosophieren. 16. Einer so die Wahrheit der Dingen welche zur Philosophie gehören, gründlich untersuchen und recht kennen will, muss etliche gewisse gewisse Regeln haben, darnach er sich in Erforschung der Dingen richte. Gleich wie die Schrieb-und andere Künsten ihre Regeln haben, und sich darnach schicken. Wie aber dieser Regeln weniger seind, je besser sie können beobachtet werden, und wie gewisser sie seind, je fäster darf man sich darauf verlassen.”

309 Clauberg, *Unterschied*, 15–16: “Hat derohalben Cartesius nur vier hauptregulen sich absonderlich vergeschrieben. Welcher er sich gebraucht und die wahrheit der ihm noch unbekanten sachen allererst [16] Ans tagelicht zu bringen. Und hat dieselbe sich so fest und stets vor augen gestellt, dass er sich mit ausersten fleisses anwendung bemueht und nimmer da von abzuweichen.”

310 *Unterschied*, 15-16 (§18): “Die erste Hauptregel ist, dass man in Philosophischen Sachen, das ist, in Dingen welche auß dem licht der natur müssen erkant werden, nimmer etwas für wahr und gewiß auf und annehme, man haben denn zuvoren recht und gründlich verstanden, daß es sich also verhalte. Diese Regel erfordert 1. Daß man alle eilfertigkeit in urtheilen meide, und zeit genug nehme um die sache nach nohkurst zu überlegen. 2. Daß man allereh vorgefasste meinungen angänglich ablege, und durch solche von reiffer erwegung der sachen davon man urteilen soll, sich nicht lasse abwenden. 3. Daß man keinen schluß mache, kein endurteil fälle, als nur von dem, welches also klar und deutlich unserer vernunft vorkommt, daß man nicht weiter daran zweifeln könne.”

The other ground rule of method is that one must divide the things that one seeks to research into as many parts as necessary and useful to conceive them in the best way.³¹¹ This demands that one will

*[...] collect and arrange all of one's thoughts that are erected for the finding of the truth, through a certain order, that is to say that: 1. He will begin from the lightest and simplest things, those that can be conceived with the least effort. 2. That one will hence slowly, step by step, and through a series know to advance to the more difficult and complicated in his research [...].*³¹²

*And will advance in the inquiry of difficult things, with which one [...] will finally come to the knowledge of these things, which are genuinely difficult and hold in themselves a lot. The force of this rule also is our endeavour to follow the cases of the things of nature one after the other, to make for ourselves an order, and to present to ourselves the cases of things in a wise manner.*³¹³

Finding the best way to represent to ourselves in an orderly manner the matters in front of us is the core challenge of the theory of method. The fourth rule that Clauberg references regarding Cartesian method is the demand for comprehensiveness. Again, Clauberg emphasises the demand for a synthetic comprehensiveness of the method:

The fourth ground rule is, that also in the examination of the means that are required in order to find the truth, also in them one would divide perceived things into pieces. The latter are then presented, as well as everything which is

311 *Unterschied*, 16 (§19): “Die andere hauptregel ist, daß man die Sachen, welche man vorgenommen hat zu erforschen, in so viel stücke abtheilte, als nötig und nützlich ist, um dieselben bester massen zu fassen und zu begreifen.”

312 *Unterschied*, 17 (§20): “Die dritte Hauptregel ist, daß man alle seine gedanken, welche zu erfundung der wahrheit gerichtet sein, durch gewisse ordnung fortsetze, nämlich also daß man 1. Anfange von den allereinfältigsten und leichtesten dingen, welche mit der geringsten mühe können begriffen werden. 2. Daß man also langsam, fuß vor fuß, und gleichsam staffel weis, zu grüßeren und schwäeren sachen im nachforschen fortschreite (...)”

313 *Unterschied*, 17: “§ 20. Und schwereren Sachen im nachforschen fortschreite, damit man 3. und endlich zu erkenntnis derer gelange, welche fast schwer seind und viel in sich fassen. Kraft dieser Regel soll auch unser gemühte, im fall die Sachen in der Natur mit eben auf einander folgen, sich selbst eine Ordnung machen und und klüglich vorstellen.”

*accounted in them in their entirety. With this, one can be sure that nothing will be left outside or will be missed.*³¹⁴

The fourth rule of method, hence, is that one must use the three former basic ground rules to ensure that nothing is left out. In this context Clauberg mentions in reference to a model regarding method Jacques Du Roure, an important Cartesian of the Parisian circles.³¹⁵

This is posed against “other philosophers,” the non-Cartesian ones, who exaggerate in the prescription of rules: “As it concerns other philosophers, these prescribe too many rules, from which their logic or much more their Dialectic is realized.”³¹⁶ Hence, for Clauberg, following Du Roure, the economy of the ground rules is extremely important for the installation of method.

However, at the centre of these ground rules, one finds in Clauberg the element of doubt, which constitutes one of the central characters of Clauberg’s Cartesianism. Indeed, not all 17th-century Cartesianisms share this emphasis. Notably, Jean-Luc Marion offers his own readings of Descartes by adding the centrality of the concept of doubt in his method:³¹⁷ For Marion (my translation) “Descartes (...) does not consider the doubt of sceptics (nor his own doubt) as a doctrine, but rather as an act of thought.” Perhaps one should differentiate on this point between Cartesian and Claubergian doubt: In Descartes doubt appears as an action of gambit, but in Clauberg we see entire treatises dedicated to a deployment of an architecture of doubt if not as a doctrine, then at least

314 *Unterschied*, 17: “§21. Die vierte Hauptregel ist, daß man sowohl in untersuchung der mittelen, welche erfordert werden zu erfindung der Wahrheit, als In denen stücken in welche man die vorgenommene sachen abgeteilt, sich so genau umbher sehe und so wollkömmlich alles erzehle, damit man versichert sei, daß nichts davon ausgelassen oder verabsäumt werde.”

315 *Unterschied*, 18: “(...) Erfahren deser hinweise, wie auch den seinen eben dahin weiter der Französische Philosophus du Roure in seiner Cartesianischen Logic am achten Artikel.” On Du Roure see Roger Ariew, “Descartes, les premiers cartésiens et la logique,” *Revue de métaphysique et de morale* 49, no.1 (2006): 58, 66–68.

316 *Unterschied*, 18: “§22. Was andere Philosophen angeht, so schreiben dieselbe gar viel Regeln vor, davon ihre Logic oder vielmehr Dialectic, also erfüllt ist, daß sie sich auch wohl gar zu weit...”

317 Jean-Luc Marion, “Le doute comme jeu suprême,” *Les Études philosophiques* 205, no.1 (2021): 8: “Descartes (...) ne considère pas le doute des sceptiques (ni le sien) comme une doctrine, mais comme un acte de pensée.”

as a method. In Clauberg doubt turns to a sort of a bureaucratic trail of verification processes. If Marion presents Descartes' doubt as a supreme play, in Clauberg the virtuous gesture of Cartesian doubt turns into a multi-layered and multi-faceted method of abeyance. Clauberg dives into the abyss of doubt to find in this labyrinth a point where philosophy can re-begin. Remaining in the state of not-yet-knowing becomes not a play but rather a prescription, even an order, in Clauberg's Cartesian methodism.

1.2.8. The Notion of *prima philosophia* According to Clauberg

The definition and establishment of first philosophy constitutes the heart of Clauberg's philosophy. In many ways Clauberg tries to establish the fundamentals of the beginning of philosophy. In the words of Clauberg, "[First philosophy] transmits the first principles (initia), fundamentals, roots, the first beginnings."³¹⁸ For Clauberg the meaning of first philosophy is in fact being able to refer to philosophy from the point of view *of a certain thinker*: the specific spirit who thinks, the spirit who initiates itself into philosophy. First philosophy, hence, is not a "catholic" philosophy; it is not philosophy from a bird's-eye view; it is not the general truth which is sought but rather the truth which is found in one, specific, individual seeker of the truth of things. In this sense first philosophy allows, before everything, to *locate an individual*, to locate this individual in relation to his intellectual childhood, the sensual judgments that one has acquired. So, we know that in the first place, first philosophy regards a certain, individual philosopher, the one who thinks. But what is the domain to which first philosophy relates? It is the domain of fundamental knowing:

Which things are treated by Metaphysics, that is to say primary philosophy, especially that which was given by René Descartes to his public? I reply. It treats the principles of human cognition (as a consequence of perception or of the exercise of our mental powers), that is to say the primary commencements and foundations of all the knowings that we are capable of by the natural light. As such, the mind of each man that goes to practice philosophy begins first by the cognition of its own existence, of which there is nothing that can be more

318 Descartes, *Œuvres* VII, 7-9; Descartes, *Works*, II, 7-8. OOP II, 1166 (*Initiatio* VIII, §4): "*De prima Philosophia*) Promittit initia Philosophiæ, fundamenta, radices, primordia. Unde in præfat. ad Lector. Iterum hîc aggredior easdem de Deo et mente humana quæstiones, simulque totius primæ philosophiæ initia tractare. Whence in the preface to the Reader: *Again I turn now to discussing the same questions about God and the human mind, and at the same time the first principles of the entire first philosophy.*"

known by him. From the cognition of oneself he is led to the cognition of God the creator and the conservator, he demonstrates that the latter necessarily exists and that he is the source of any light.³¹⁹

From the individual mind examining itself, one is led to God and from there to the light in general, that is to say to *Scientia* in general. It is only when beginning individually that one can arrive at the *catholic light*, the universal wisdom inhering in all things.

Alice Ragni recently suggested an alternative understanding for Clauberg's first philosophy.³²⁰ She underlines the ontological aspect of the "initiation of philosophy" rather than the "initiation of the philosopher," which is much closer to what Clauberg, according to this present project, tries to articulate. For Ragni, "The *initium* of first philosophy is guaranteed by the fact that the first and supreme objects of intellect correspond to that for which first philosophy searches. There is no difficulty in relation to the immediacy of intellect, which first grasps the concept of being as such, thereby promoting an autonomous access to first philosophy."³²¹ However, the view of the present research is a bit different in the sense that if indeed *in the Ontosophia* it is Being which is first defined and grasped, the methodological writings of Clauberg show that the entrance onto the stage of doing first philosophy is not so simple and guaranteed. In fact, the whole movement that Clauberg describes in his Cartesian writings takes extremely seriously the difficulties that one meets in one's entry into philosophy. According to our present research, *it is the endorsement of a habitus of hesitation concerning the entrance into the domain of metaphysics from the individual starting point which is proposed by the Cartesianism that Clauberg presents*. As early as his pre-Cartesian thesis written in Groningen, Clauberg differentiates between first philosophy and logic: He typifies first philosophy as a principal habitus whose aim is to achieve *Sapientia*:

319 OOP II, 592 (*Exercitatio*, I, §9): "Quibus de rebus tractat *Metaphysica* sive prima Philosophia, illa in primis quæ à Renato Cartesio publico data? Resp. Tractat de principiis cognitionis humanæ, sive de primis initiis et fundamentis omnis nostræ scientiæ, quam ex naturæ lumine possumus haurire. Ita mens cuiusque hominis philosophaturi primò incipit à cognitione suæ existentiae, qua nihil ei notius esse potest. E sui notitia provehitur deinde in cognitionem Dei Creatoris et Conservatoris, hunc necessario existere, omnisque datorem luminis esse demonstrat."

320 Alice Ragni, "Johannes Clauberg and the Search for the *Initium Philosophiæ*: The recovery of (Cartesian) Metaphysics," in Steven Nadler, Tad M. Schmaltz, Delphine Antoine-Mahut eds., *The Oxford Handbook of Descartes and Cartesianism* (New York and London: Oxford University Press, 2019), 465–480.

321 *Ibid.*, 469.

*The habitus of first philosophy is composed from the intellection [intelligentia] of the first principles and the knowledge [scientia] of the conclusions deduced from them. Because of this composition, first philosophy was ornated with the title of 'Sapientia' by Aristotle: Logic is not understanding, not knowledge, let alone wisdom.*³²²

Clauberg continues in fact to differentiate quite hermetically between first philosophy and logic, which is in his mind not a science and much less a wisdom. We shall see that effectively the methodological writings of Clauberg, apologetic of the Cartesian cause, serve as a stage prior to the one of first philosophy. Method is in fact *the gate into first philosophy, problematising first philosophy* and preparing the mind to face its demands.

1.2.9. Who Knows? or What is a Soul?

In the *Logica*, Clauberg expresses great difficulties regarding the definition of the soul in general and abstract terms. He believes that the soul should also be understood from a particular ground based on actual cases rather than discussing the different genres that constitute abstract definitions.³²³ He also notices the relation between soul and life in the meaning of *anima*. According to Clauberg, a great part of method must focus on self-estimation of the soul. What is this soul according to Clauberg, and what does this process of self-estimation involve? The epistemological schemes we developed above must relate to a certain concept of the soul, its capacities and its limitations. Did Clauberg hold an exclusively Cartesian conception of the soul? It seems that in his own eyes, at least, he did. We can find several references to the nature of the human soul in various writings of Clauberg, but the most notable text regarding this point is found in the *Exercitationes de cognitione Dei et nostri (Excursions on God's cognition and of ourselves)*. Here, Clauberg noted the relation between the definition of soul and the natural light:

322 Johannes Clauberg, *Thesium Philosophicarum: Logicae ab aliis Disciplinis quibuscum vulgo confundi assolet distinction, Moderatore Tobia Andreae* (Groningen: Johannis Nicolai, 1646), §XXX: "Primæ Philosophiæ habitus ex intelligentia primorum principiorum et scientia conclusionum ex illis eductarum est compositus, qua ex compositione Sapientiæ titulo ab Aristotele ornata: Logica neque intelligentia est neque scientia, multò minùs sapientia."

323 OOP II, 877-878 (*Logica* IV, VI, §46-§51).

*He who wants to demonstrate the immortality of the human soul from the natural light, must know in advance what is the soul and what to understand by the name 'immortality' that we attribute to it. This enunciation: 'the human soul is immortal' has, as any other, its subject and its predicate [...].*³²⁴

*We explain the soul in a positive manner, as an intelligent thing, which wants, affirms, negates etc. in which everything refers to cogitation, for when it conceives (si intelligit), it thinks [cogitate]; [and] if it wants [si vult], it thinks, etc. Negatively however [we explain the soul], as [something] not having depth, width or length, not being divisible into parts, not warm or cold; etc.*³²⁵

Hence, Clauberg sees, again in agreement with Descartes, the soul as a thing that one can approach positively or negatively. Positively, the soul has mental capacities. Negatively, the soul is that which is devoid of any character which belongs to extended matter. The soul is revealed as something that is not accounted for by the paradigms of matter. It is achieved negatively, as a process of approximation. In this sense there is no way of approaching the soul directly, only indirectly as a part of a process of elimination: "I consider myself as something which does not have hands, not eyes, not flesh, not blood, not anything sensual, but all these are related to me by false opinion."³²⁶ The soul, according to the Claubergian articulation, always belongs to a certain, particular mind. This is the positive manner in which to approach the investigation of the soul, one in which the soul is received only through the individuation of thought, that which Clauberg refers to as a thinking mind:

In order acquire a better understanding, we propose beforehand some things regarding 'Being' in the primary and in the second acceptance, in commencing

324 OOP I, 675 (*Exercitatio* LI §1): "Qui animæ humanæ immortalitatem è naturæ lumine vult demonstrare, eum scire prius oportet, et quid anima sit et quid nomine immortalitatis quæ ei attribuitur intelligendum. Nam haec enunciatio, *Anima humana est immortalis*, habet, ut omnis alia, suum subjectum et prædicatum, quæ utrùm cohæreant nec ne, necessario an contingente nexu, non potest judicari, nec potest è natura subjecti aut prædicati ullum argumentum duci, nec denique quid de quo dicatur ac demonstretur internosci, nisi utrumque membrum rectè percipiatur."

325 OOP I, 676 (*Exercitatio* LII, §8): "Anima igitur nostra ex his *positivè* explicatur, quòd sit res intelligens, volens, affirmans, negans etc. quæ omnia ad cogitationem referuntur, nam si intelligit, cogitat, si vult cogitat etc. *negativè*, quod non sit res longa, lata, profunda, divisibilis in partes, non calida, ne frigida etc."

326 Clauberg quotes from Descartes' meditations, the first meditation, in OOP I, 362 (*Paraphrasis in Renati Des Cartes Meditationes de Prima Philosophia*): "Considerabo me ipsum. tanquam manus non habentem, non oculos, non carnem, non fansuinem, non aliquism sensum, sed haec omnia me habere falso opinantem."

*universal philosophy by a thinkable being, as for instance, beginning with a singular [being], primary philosophy considers only the thinking mind.*³²⁷

The term that Clauberg uses most often to refer to the agency that activates processes of thought is *mens*, the mind. In the fourth part of the *Logic*, he equates the mind with perception: “The mind, that is to say perception, must rule over what you say and judge.” We have here the complete formula for the thinking agency: perception-definition-judgment.³²⁸ The methodological process, as will be demonstrated in the coming chapters, begins with perception; it continues to the emendation of perception and ends with its necessary judgment. Judgment constitutes, in this sense, the central and most decisive step in the methodological process.

Clauberg was very much aware that judgment is not only a mental but also a juridical process. Another route for thinking of the manner in which the soul realises itself is through the concept of *conscientia*. The young Clauberg participated in a *disputatio* by one of his teachers in Groningen, Matthias Pasor (1599–1658), regarding the notion of *conscientia*.³²⁹ Pasor taught theology, morals, oriental languages and philosophy, and he was related to the Hartlib Circle in England and even taught for a while at Oxford. The *disputatio* refers throughout to the moral and auto-inspective nature of this state of the mind, and it provides quotes from Hebrew, Greek and Roman philosophy. What is certain is that conscience has not only a theological but also a juridical meaning. The present project demonstrates that this juridical introspective faculty noted by consciousness is constantly treated in the methodical writings of Clauberg. The initiated philosopher is constantly made to perform a process of becoming conscious, developing a *conscientia*. In this sense the stage of initiation to first philosophy is one of furnishing the quality of *consciousness*, and only this can permit access to first philosophy. In this sense the answer to the question, Who knows? is, succinctly, the judge. The human agent is a judge presiding over the tribunal of one’s perceptions, the contents that come before him in the first place as faulty and *accused*.

327 OOP I, 283 (*Metaphysica de ente* I, 5): “Ad meliorem hujus notitiam comparandam nonnulla de Ente in prima et secunda acceptione præmittemus, inchoaturi universalem philosophiam ab *Ente cogitabili*, quæmadmodum à singulari incipiens prima philosophia nihil prius considerat *Mente cogitante*.”

328 OOP II, 890 (*Logica* IV, §94): “Mens, id est, perceptio, debet imperare quod dicas et iudices.”

329 Johannes Clauberg and Matthias Pasor, *Disputatio Theologico-practica de Conscientia*, Praesidio D. Matthiae Pasoris (Groningen: Augustini Eissens, 1646).

1.2.10. Reaching the Point of the Initiation of Thought

We have already mentioned that after Descartes, the philosopher whose thoughts regarding the initiation of philosophy Clauberg quotes most often is Francis Bacon. For example in the opening parts of the *Dubitatione cartesiana*, Clauberg brings together a pair of sceptical approaches from very different parts of civilization: on the one side, Maimonides, on the other, Francis Bacon.³³⁰ For Clauberg, both philosophers, Maimonides and Bacon, are examples for those who bravely push philosophy *backwards* to the point where the thinker begins to think. It is hence interesting that Bacon is seen by Clauberg as an example of a philosopher who shows us the way towards the foundation of philosophy. Clauberg underlines that the usage of the terms “*initiation*” and “*fundament*” also has a rhetorical, topological sense, serving as a terminological defence measure against the opponents of Cartesianism. Insisting on the foundation and on the point of initiation differentiates one from the language of the *Peripatetics*.

*The foundation of philosophy was called by the author [Descartes] here and in another place ‘first principles’ (as in the preface of the Meditations to the reader), because in the word Principium adversaries found an easier opportunity to criticize [him]. For concerning the nature and conditions of the principles so many things are rumoured everywhere by the Peripatetics, not to say made up. Accordingly, if we retain and more often use the terms ‘first principle’ and ‘foundation,’ we will offer them less occasions for reproach.*³³¹

OOP II, 1165 (*Defensio VIII*, §18): “Majemonides More Nevochim part. 3 cap 9 è sacris quoque literis probat, materialia nos impedire in rerum intellectualium contemplatione. Inscriptio capitis est: *Quòd materia sit instat parietis vel veli, apprehensionem Creatoris impediens. Initium capitis est: Materia est veluti maceriam magnam et velum impediens veram apprehensionem Intelligentiæ abstractæ, etc.* §19: “Ac denique efficiat) Tertia hæc utilitas ad duas istas quæstiones et initia philosophiæ simul se extendit, ac proinde est generalis. Notentur verba Baconis de Verulam. Lib. I de Augm. Scient. mihi pag. 21. *Alius error est impatientia dubitandi et caeca fesinatio decrevendi absque debita et adulta suspenione judicii. Nam bivium contemplationis non est dissimile bivio actionis, à veteribus sæpius memorato: cujus altera via initio plana et facilis erat, fine autem impervia ; altera ingredienti aspera erat et confragosa ubi paulo processeris, expedita et æqualibus: Haud secus in contemplationibus, si quis à certis (suo scilicet judicio per præcipitantiam facto) ordiatur, in dubia desinet ; sin à dubiis incipiat eaque aliquamdiu patienter toleret, in certis exitum reperiet.”*

331 OOP II, 1161 (*Initiatio*, V, §58) : “*Fundamentum Philosophiæ hîc videtur Author appellare et alibi initia (ut in præf. Meditationum ad Lector.) quia in voce Principii commodiorem cavillandi occasionem inveniunt adversarii, cùm de natura et conditionibus principiorum volgò tam multa à*

Taking into account the initiation of the philosopher and then proceeding to the articulation of principles, we in this way demarcate the domain of discussion of Cartesianism itself using our own terms of inquiry. In the coming part of our inquiry, we examine the manner in which Clauberg, after Descartes and within the framework of methodism, understood the meaning of the foundation of philosophical inquiries. This foundation, in general terms, leaned on the processes of *ordering*. Establishing order in thought, or ordering our individual souls, is required as a first step, as a fundament, in the initiation of the philosopher. We now turn to this foundation of order to demonstrate that within the Cartesian framework, as within methodism, this order is at heart a dual one, or one may say that this order itself is split in its core.

Peripateticis differantur, ne dicam, fingantur. Proinde si nomina initii et fundamenti retineamus et sæpius usurpemus, minorem iis dabimus nos accusandi occasionem.”

Part 2: The Two Faces of Order

2.1. The Order of Reasons or Finding the Principles of a Thought

2.1.1. Order as a methodical question; 2.1.2. The Gueroult paradigm; 2.1.3. The first step: doubt as an *immanent act*; 2.1.4. The methodical continuum; 2.1.5. The order of reasons versus the order of matters; 2.1.6. The methodical series; 2.1.7. The principle of doubt in Clauberg; 2.1.8. The craft of ordering one's own thoughts; 2.1.9. The formation of methodical norms; 2.1.10. Self-estimation as proto-philosophy

2.1.1. Order as a Methodical Question

We turn our observation now to the subject of order itself and to its equivocal character in Cartesianism: the split between the order of reasons and the order of matters. However, before turning to the two orders that stand at the heart of the Cartesian conception of method, we must dedicate some attention to the concept of order itself in Cartesianism and in Clauberg's presentation. Indeed, order is not merely another term in Descartes' philosophy. It can be noted that Descartes himself stated that "the whole method" consists in fact as a technique of ordering:

*The whole method consists entirely in the ordering and arranging of the objects on which we must concentrate our mind's eye if we are to discover some truth. We shall be following this method exactly if we first reduce complicated and obscure propositions step by step to simpler ones, and then starting with the intuition of the simplest ones of all, try to ascend through the same steps to a knowledge of all the rest.*³³²

Order has for Descartes a therapeutic nature in the sense that it can be based only on a process of simplification: making the difficult and complex clear and simple. Noa Shein interestingly brought up another differentiation that Descartes makes in the second reply in his *Meditations* between *order* and *method* of geometrical exposition.³³³ This creates a differentiation between a *synoptic* order and what one can call a *historic* (or 'methodical) manner of geometrical exposition where, indeed, in the synopsis of geometrical ordering, one must expose in a clear and definitive manner the deductive stages of an already verified mental process.³³⁴ In geometrical ordering the order refers to the dependency between former and later stages of the demonstration "by which claims or items that come first must be entirely known without the aid of those that come later in the demonstration [...]. In turn, what comes later in the demonstration must rely solely on what came before."³³⁵ What order hence guarantees is the

332 Descartes, *Œuvres* X, 379; Descartes, *Writings* I, 20.

333 Noa Shein, "Geometrical Exposition," in *The Cambridge Descartes Lexicon*, edited by L. Nolan (Cambridge: Cambridge University Press, 2015), 319–321.

334 Differently from geometrical ordering, geometrical method is more replete in the arguments it contains; it allows in also the moves or propositions that were falsified; it leads one through a trail of a more *experimental* search. Orderly exposition is, in this sense, an abstraction or a reduction of methodic exposition, retaining only the necessary building block of the entire argument.

335 *Ibid.*, 319.

independence of a former element in an inquiry with regard to that which comes afterwards and the full dependence of that which comes after on that which precedes. This order is, in this sense, wholly necessary and directional; it can lead only in one way from the simpler to the more complex. In other words when there is order, there must also be a synthetic, a compositive constitutive element in the formation of a methodical process.

Hence, a crucial question for a Cartesian to ask is What is the right order in which one must handle the problem which is posed in the inquiry? As we shall see throughout this present inquiry, the methodist tradition suggests two prominent modes of order, which Descartes certainly also uses: analysis and synthesis. The problem, indeed, is that the term “order” itself is a synthetic, not an analytic, concept. Turning to Clauberg, he claims strongly that some difference between method and order must be noted, even if it is accepted in logic to identify the two concepts:

In Logic order and method designate the same thing to some, to others however they should be distinguished in this way: ‘method’ pertains to the right conception and judgment of singular things, which is discussed in the first and second grades of logic; ‘order’ on the other hand pertains to the apt disposition of everything together, which we are presently discussing.³³⁶

Order and method are quite similar concepts, but it seems that for Clauberg if method is like the beginning of the logical act, order is already the second act in which we put into conjunctive order all the things we conceive in a methodical manner. In this perspective, if we put things in a diachronic order, first comes method, and then comes order. Method consists in conception; order consists in action. Viewed under these terms, method and order are two moments of the same process: Method is the stage of initiation, order the stage of application. This differentiation betrays in fact a Ramist trope where, as we showed in the first chapter, all inquiry must begin with the conception of the principles and then proceed to their application. However, what comes out of this differentiation of Clauberg between method and order is that order is the final task of method. Does Clauberg express here a genuinely Cartesian position, or rather merely a character of the mentality of 17th century intellectual tendencies?

336 OOP II, 933 (*Logica contracta*, §251): “Ordo et methodus aliis quidem in Logica idem designant, aliis verò ita distinguuntur, quòd *methodus* pertineat ad singula seorsum recte intelligenda et judicanda, de quo in primo et secundo Logices gradu actum ; *ordo* autem ad omnia conjunctim apte disponenda, de quo agemus in præsentiä.”

Indeed, both Michel Foucault in *Les mots et les choses*³³⁷ and Jean-Luc Marion in *L'ontologie grise de Descartes*³³⁸ insist on the determining place of order and ordering in the Cartesian project. In the following we take a deeper look at the idea of order within the methodical context, both pre-Cartesian and Cartesian. Within the debates around the concept of method, its definition, scope and application, one finds the concept of order as a recurring theme. Order is recommended to serve in the framework of method as that which makes the researcher's inquiry a bit easier. Already Zabarella acknowledged that the end of order is facilitated knowledge: "The end of every order is our better and easier knowledge."³³⁹ In the framework of methodical know-how that we suggested in Chapter 1.2, the establishing on the facility and fluency of the usage of our findings is of utmost importance.

In the Cartesian framework it seems that method becomes a problem of ordering one's thoughts: Putting one's thoughts in order, both a priori, a posteriori and at the very time of the thinking process is the very essence of methodical proceedings. For this putting-into-order we have in fact two approaches: analytical and compositive.³⁴⁰ In the humanist discourse that we explore in Chapter 1.1, method is considered *an ordering of thought*. In the Ramist sense this order is considered as a disposition of well-established principles. However, if method is always an ongoing process, enabling a passage from that which is *known to us* to the *knowledge of matters* themselves, then the question is how this orderly movement between the two stages should be performed. Here, Ramus and Zabarella supply the determining articulations. The question of order is in the first place attributed to the *application* of method. As Ramus writes,³⁴¹

Let us learn from Aristotle that the order and arrangement of an art - what I call method - is structured in an inverse manner. While the method is enunciated with

337 Michel Foucault, *Les mots et les choses* (Paris : Gallimard, 1966), 64–72.

338 Jean-Luc Marion, "La constitution de l'ordre comme destitution des catégories de l'être," *Sur l'ontologie grise de Descartes [1975]* (Paris : Vrin, 2000), 71–98.

339 Jacopo Zabarella, *On Methods*, Volume 1, Books I-II, edited and translated by John P. McCaskey (Harvard University Press, 2014), 150 (Book 2, VI, §2): "[F]inem omnis ordinis esse nostram meliorem, ac faciliorem cognitionem."

340 The term "analytic" is practically synonymous to the term "resolutive" (for example in Zabarella); divisive order, or the order of *invention*.

341 Ramus, "One method," 119; Ramus *Methodus*, 4.

no great difficulty, it is applied only with the greatest difficulty (...). Of all the parts of the arts of logic, there is none which has fewer precepts. With regards to practice, actual use, and application, however, there is none which is more important or more difficult.

In the first place and at the philological level, Ramus traces the whole question of the arrangement of method to Aristotle. He then states that the whole question lies not within the definition of the various rules of method that, according to Ramus, are few and relatively simple; rather, it is that we must apply these rules that creates the biggest problem for the Ramist methodist thinker. It is the question of usage and application that leads to the great challenge of ordering. In other words in Ramist methodism the biggest difficulty lies in the orderly application of the ground principles of method.

The Cartesian methodist, however, is not only interested in application; for him already the stage of the elucidation of the ground principles poses a philosophical, methodical challenge. Still, where does one begin, and where should one end? What is the first step in method, and what is the following one? These are questions that stand at the basis of the problem of order in method. Before taking a deeper look at the concept of order and the two principle orders of method one finds in Descartes, let us recall that for Clauberg the first step of method is found in the practice of doubt:

Questions and doubts are connected and coherent things, regarding which we conclude: that the method is orderly tried by doubts in the same way that the method is orderly tried by questions, for as questions precede the conclusion, doubt [precedes] determination.³⁴²

The move that Clauberg suggests constitutes a preliminary precaution, beginning with the questioning of the method itself, before passing on to the things with which we conclude our inquiry and then continue to the determination of the element of doubt. We see in the coming chapters how important doubt is to the Claubergian institution of method. It is in any case notable to see that the place of doubt is related to the subject of the order of method. Because methodical processes must be *ordered*, one should always use the principle of doubt. In other words to keep our inquiry ordered, we must

342 OOP II, 1140-1141 (*Initiatio*, II, §4): “[...] [Q]uæstionem ac dubitationem *res esse coniunctas* et cohærentes, inde enim concludimus: qua ratione probatur methodus à quaestionibus ordiendi, eâdem probari methodum ordiendi à dubitationibus ; nam ut quaestio præcedit conclusionem, sic dubitatio determinationem.”

use our habitus of doubt to prevent us from continuing onwards in an unorderedly manner. The central question here is how the traditional humanist articulations of the ordering of method are synthesised with the Cartesian conception of the order of reasons, only to form in Clauberg's thought the priority of doubt. Like Descartes, the Humanist and Calvinist Ramus was especially concerned with distinguishing his method from that of the Scholastics. Both Ramus and Descartes emphasised the serial character of methodical thinking in which one verified step should follow another formerly verified one. In both thinkers, this order, this seriality is not arranged according to the art of syllogism but rather according to what we suggest calling in the present research the *principle of simplicity*. In fact, in a Cartesian framework, and in any case in the Claubergian understanding of it, the ongoing principle determining the sequence of ordering is the one of maintaining maximal simplicity in all propositions. Simplicity is the value which one aspires to attain, and it is also the principle enabling the establishment of knowledge. Simplicity's two criteria are clarity and distinctness. This elementary unit consisting of clearness and distinction should remain simple and elementary so that thought is like "child's play" (in the words of Descartes). We see here also a difference between Clauberg and Descartes in as much as for Descartes there is an aspiration to return to a stage of infancy of thought, but for Clauberg the aim is to leave infancy and move towards becoming an adult. We shall see in the last chapters of this work that what is attained as the product of the preliminary, methodological stage of the inquiry is the synthesis of the mind as a habitus of infallibility. Moreover, in the Cartesian framework, we have effectively two orders working together in synchrony: the order of reasons and the order of matters.

In the *Research after the truth* that Eudoxus proposes, we learn that all truths are related amongst themselves. Hence, if we begin to think in a correct order, chances are that we will connect all truths together, also rightfully:

For all truths follow logically from one another and are mutually interconnected. The whole secret is to begin with the first and simplest truths, and then to proceed gradually and as it were step by step to the most remote and most complex truths. Now can anyone doubt that what I have laid down as the first principle is the first of all the facts we can get to know if we proceed more methodically? It is certain that we cannot doubt this, even if we doubt the truth of everything in the universe. Since, then, we are sure that we have made the right beginning, we must see to it that we do not go wrong from now on. We must take great care to admit as true nothing which is open to even the slightest doubt. With this in view, I say we should let Polyander speak on his own. The only master he follows is common sense, and his reason has not been marred by

*any false preconceptions. So it is hardly likely that he will be deceived; if he were, he would soon realize it, and would have no trouble getting back onto the road.*³⁴³

2.1.2. The Gueroult Paradigm

The most notable scholar to underline the centrality of order in Descartes was Martial Gueroult, already mentioned above, in his two-volume *Descartes selon l'ordre des raisons* from 1953.³⁴⁴ Gueroult approaches the issue of the order of reasons as part of his quarrel with Ferdinand Alquié. Alquié suggested an existentialist, ethical-humanist reading of Descartes, one arguing against systematicity and accentuating Descartes' spiritual and moral endeavours.³⁴⁵

Conversely, Gueroult opts for a systematic, programmatic understanding of Descartes's philosophy, seeing in Descartes the seeds of the systems of Spinoza, Leibniz and Fichte.³⁴⁶ Gueroult points out the *category of order* as crucial for a proper

343 Descartes, *Writings* II, 419–420; Descartes, *Œuvres* X, 527: “Les vérités se suivent l'une l'autre et sont unies entre elles par un même lien. Tout le secret consiste à commencer par les premières et les plus simples, et à s'élever ensuite peu à peu jusqu'aux vérités les plus éloignées et les plus composées ... A cette fin, il faut laisser parler Poliandre seul. Comme il ne suit aucun autre maître que le sens commun, et comme sa raison n'est altérée par aucun préjugé, il est presque impossible qu'il se trompe, ou du moins il s'en apercevra facilement, et il reviendra sans peine dans le droit chemin.”

344 Martial Gueroult, *Descartes selon l'ordre des raisons*, 2 vols (Paris: Aubier, 1953).

345 Pierre Macherey, *Querelles cartésiennes* (Villeneuve d'Ascq : Presses universitaires du Septentrion, 2014).

346 Martial Gueroult, *Études sur Fichte* (Paris: Aubier-Montaigne, 1974); A. D. Smith, “Spinoza, Gueroult, and Substance,” *Philosophy and Phenomenological Research*, 88, no.3 (2014): 655–688; Michel Fichant, “Leibniz, dynamics, and metaphysics according to Martial Gueroult,” *Revue internationale de philosophie* 291, no.1 (2020): 13–29; Tad M. Schmaltz, “Gueroult on Spinoza and the Ethics,” *Revue internationale de philosophie* 291, no.1 (2020): 51–62.

understanding of Descartes' method. Yet even if Gueroult is correct in underlining the question of order in Cartesianism, one should ask to what extent Gueroult's understanding of Cartesian order is proper to the nature of order actually found in Descartes' writings. Indeed, Gueroult dedicates merely the introduction of his two volumes to a clarification of how he conceives the technique of ordering in Descartes, and then he proceeds to the presentation of the metaphysical arguments of the *Meditations*. In the first place we should dwell on the issue of the definition of *Cartesian order* and try to draw the general lines of its character. In addition to being a process of self-examination, Cartesian order is also self-engineering. Cartesian orders are constructions of the methodical engine. In that sense, at least in the first level of observation, the order that Cartesian method supplies is self-imposed.

Gueroult emphasises an analytical reading of the Cartesian project. He identifies analysis with the order of reasons and insists on the importance of analysis to this project.³⁴⁷ From an interpretative perspective, Gueroult suggests treating Cartesian method as a self-sufficient system whose understanding must follow the order of reasoning itself and leave all extra-textual contextualisation aside. This is according to Gueroult also the manner through which Descartes conceives of his own philosophy.

The first thing to question regarding Gueroult's reading is his concentration, out of all Descartes' writings, on the *Meditations*, which according to Gueroult is the central text that expresses clearly what Descartes means by the order of reasons (*Ordre des raisons*). Of course, Gueroult was not the first to question that term. Already in the *Regulæ* of about 1628, a decade before the *Meditations*, one finds an elaborated concept of order which is only scarcely addressed by Gueroult, and it is to this concept of order that this chapter now turns. Trying to pin down the precise nature of Cartesian order may help establish a better view of the relation of Cartesian rationalism with the rationalism of the later part of the 17th century, the one of Clauberg. The experiment with ordering begins for Descartes always anew³⁴⁸ as is demonstrated by the fact that each of his works is arranged and composed through a slightly different procedure of analysis, disposition and professing. For Clauberg, similarly, we have also at our hands

347 Tad M. Schmalz, "PanzerCartesianer: The Descartes of Martial Gueroult's Descartes selon l'ordre des raisons," *Journal of the History of Philosophy* 52, no.1 (January 2014): 2. See also Pierre Macherey, *Querelles cartésiennes* (Villeneuve d'Asq: Presses de Septentrion, 2016); And also Édouard Mehl, "Une polémographie de la modernité": Sur les *Querelles Cartésiennes* de Pierre Macherey," *Methodos : savoirs et textes, Savoirs textes langage* 16 (2016), <https://journals.openedition.org/methodos/4653>, consulted on 23.12.2020.

348 Édouard Mehl, "Descartes ou la philosophie des (re)commencements," *Archives de Philosophie* 2018/1 (81): 49-67.

many series of ordering. However, the preliminary order is the one that should take place between the proto-primary and the primary stages of the inquiry, which is first philosophy. As we shall see, it is this order passing from the proto-primary and first philosophy *tout court* that also makes for Clauberg the heart of the methodical procedure. This is the passage from doubt to first principles, and we refer to it as a stage of ‘limination’, in the sense putting oneself on the borderline of philosophy.

2.1.3. The First Step: Doubt as an *Immanent Act*

Clauberg defines the action of doubting as an *immanent act*:

*Doubting/ To doubt is an immanent, not a transitive act. Hence that which acts in doubting, receives in oneself the act of doubt. Because this is the nature of the immanent act, as in its potentiality, in which one produces, and at the same time receives, in the sense that it is the potential of the same act, divers reasons which are at the same time active and passive.*³⁴⁹

Doubt has this specific and most important character that it is both a potential and an act: it is an act becoming a potential and a potential becoming an act. This full energetic circle which is closed within the activity of doubt makes of it also an important ontological element of philosophical activity. Instead of placing intuition at the centre of philosophical activity, with Clauberg we make doubt a central operator of method. In fact, it seems that doubt is mounted almost against intuition. The method, as expressed in Clauberg’s writings differently from Descartes, is not based on the natural light of intuition but rather on the virtue of the immanent act of doubting. By doubting one prepares a place for intuition to take place so that one can view the phenomenon in natural light. In order to reach intuition, we must go through a laborious process of ordering.

In this sense the first step in a Cartesian method, according to Clauberg, is doubt; doubt takes place in what Clauberg calls the genetic part of logic, the part where one produces one’s own principles or reasons; in this stage one examines and discerns one’s

349 OOP II, 1207 (*Defensio*, XI, §17); “[D]ubitare est *actus immanens* non transiens. Igitur id quod dubitat agendo, recipit eundem in se dubitationis actum patiando. Hæc enim est natura actionis immanentis, ut ab ea potentia, à qua producitur, simul recipiatur, ita quidem ut eadem potentia ejusdem actus respectu diversa ratione simul activa sit et passiva.”

own reservoir of concepts and ideas and comes up with a set of principles to which one can refer as the first principles of one's method. This first, genetic moment is a moment of halting in the inquiry. Here is how Clauberg understood this halting as expressed in the introduction to his *Initiation of the philosopher*:

*Among the principal rules of Cartesian philosophy is, when and as long as we do not comprehend some thing in a sufficient manner and cannot recall if we have once before rightly understood it, that we must suspend our judgment of it or DOUBT it/ have DOUBTS about it, until we have thoroughly investigated and examined it.*³⁵⁰

There is therefore a relation between order and doubt in Cartesian method as Clauberg presents it: Doubt is the first step in any process of active ordering. In other words without the element of doubt there can be no order. However, is he following Descartes to the letter on this?

Indeed, order is not merely another theme in Descartes' philosophy. Rather, order is one of the first principles of Descartes' methodical technique. Descartes' major philosophical writings—the *Rules*, the *Discourse*, the *Meditations*, the *Principles* and the *Passions*—are all in fact different experiments in ordering, in *putting into order* ideas, concepts and the objects related to them. The first necessary condition for order is *analysis*, or in the language of the humanists, invention, the process of discriminating the basic elements of an inquiry. Without prior procedure of analysis and of making an inventory of established assumptions, there can be no synthetic ordering. True order leans on elementary parts, either intuited or deduced, being achieved and established, allowing a construction, a synthesis of the various parts into an organised series. Yet, in Descartes the analysis of the basic parts of method *must itself* embody an order; this is what Descartes calls “the order of reasons.” The order of reasons means showing how, in what way and in what sequence the building blocks of his method were achieved and sorted out one after the other in the first place. The order of reasons is a thread of reasoning which Descartes calls the “Theseus string”:³⁵¹

350 OOP II, 1131 (*Initiatio*, I, §1): “Inter praecipuas Philosophiæ Cartesianæ regulas est, ut quando et quàm diu rem aliquam non satis percipimus, neque recordamur, nos eam antea rectè percepisse, iudicium de ea nostrum suspendamus sive D U B I T E M U S [so in the original, a.e.], tantisper dum cognita nobis fuerit et explorata.”

351 Descartes, *Writings* I, 20 (Rule V); Descartes, *Œuvres* X, 379.

*The whole method consists entirely in the ordering and arranging of the objects on which we must concentrate our mind's eye if we are to discover some truth. (...) Anyone who sets out in quest of knowledge of things must follow this rule as closely as he would the thread of Theseus if he were to enter the Labyrinth. (...) they [i.e. the erroneous] frequently examine difficult problems in a very disorderly manner, behaving in my view as if they were trying to get from the bottom to the top of a building at one bound, springing or failing to notice the stairs designed for that purpose.*³⁵²

The central difficulty found in the above quotation is that if the order of reasons was constantly associated with an analytic character of Cartesianism, in fact what Descartes describes here is a synthetic task paralleling an order of matters as opposed to an order of reasons. The order of reasons deploys the ingredient of a certain question so that intuition can work its way through the elements in a continuous manner. Hence, for Descartes ordering has not only a linear but also an architectonic character, and it begins with the problem of determining the fundament: The first important thing to determine in a Cartesian kind of philosophy is a stable point of departure. Already in the *Regulae* Descartes places order as a central, constitutive tool of his method, yet order is not only a tool but also *an aim* in Descartes. When one establishes for oneself an account of one's order of reasons, one in fact has already achieved the greatest part of one's methodical goal. In this sense Descartes' philosophy is a philosophical *techné* in the rigorous sense of the word: His philosophy is about furnishing philosophical instruments, and these are these instruments that constitute the very goal of his philosophical work.

352 Descartes, *Œuvres* X, 379, Regula V: "*Tota methodus consistit in ordine & dispositione eorum ad quæ mentis ancies est convertenda, ut aliquam veritatem inveniamus. Atque hanc exactè servabimus, si propositiones involutas & obscuras ad simpliciores gradatim reducamus, & deinde ex omnium simplicissimarum intuitu ad aliarum omnium cognitionem per eosdem gradus ascendere tentemus.*"

2.1.4. The Methodical Continuum

Any methodical order leans on elementary units, either intuited or deduced, being achieved and established, allowing a construction, a synthesis of the various parts into an organised series. However, the analysis of the basic parts of method must itself embody an order, and this is what Descartes calls “the order of reasons.” The order of reasons shows how the building blocks of the method *are* achieved and sorted out one after the other in the first place. The order of reasons is a thread of reasoning which Descartes calls the Theseus string. In the *La recherche de la vérité*, Eudox representing Descartes’ position, expresses again a similar reference to the order of reasons, in which each man with his common sense can properly proceed:

*Eudox: Truths follow one another and are united between themselves by the same relation. All the secret consists in commencing by the first and the most simple, and to elevate oneself afterwards step by step until the farthest and the most complex truth (....) To this aim, one must let Poliander speak first alone. Because he follows no other master than the common sense, and as his reason is not altered by no prejudgment, it is almost impossible that he will err, or at least he will perceives this [the error] easily, and he will return without effort to the straight way.*³⁵³

Already in the *Regulæ*, Rule 5 defines the order of method. Denis Sepper³⁵⁴ emphasises that one must take Rules 5, 6 and 7 of the *Regulæ* as belonging together and inseparable from each other, working to build the foundation of the methodical gesture. Rule 5 deals with order. Rule 6 deals with the notion of the series, and Rule 7 deals with the uninterrupted movement of thought.³⁵⁵ These three rules should be taken as one unit, and even “it is not that important which of them will be taught first.”³⁵⁶ Through the

353 Descartes, *Œuvres* X, 526–527: “Eudoxe : Les vérités se suivent l'une l'autre et sont unies entre elles par un même lien. Tout le secret consiste à commencer par les premières et les plus simples, et à s'élever ensuite peu à peu jusqu'aux vérités les plus éloignées et les plus composées (...) A cette fin, il faut laisser parler Poliandre seul. Comme il ne suit aucun autre maître que le sens commun, et comme sa raison n'est altérée par aucun préjugé, il est presque impossible qu'il se trompe, ou du moins il s'en apercevra facilement, et il reviendra sans peine dans le droit chemin.”

354 Denis L. Sepper, *Descartes' s Imagination: Proportion, images, and the activity of thinking* (Berkeley-Los Angeles-London: University of California Press, 1996), 162.

355 Jean-Paul Weber, *La constitution du texte des Regulæ* (Paris : Société d'édition d'enseignement supérieur, 1964), 58–80.

356 Descartes, *Writings* I, 27 (my translation is different from the one given by Cottingham); Descartes *Œuvres* X, 392: “neque multùm intereratn ultra prior docetur.”

establishment of series, order enables the uninterrupted movement of thought. One can begin from any one of these three kinds of instruments of synthesis (order, series, uninterrupted movement): When practiced correctly, the result will be the same. Putting into order, in this sense, means establishing series in which thought can move uninterrupted. This trio of rules should *artificially produce* an intuition, or what we refer to as the natural light. In other words Cartesian method *imitates, emulates* or even *simulates* intuition with the artificial tools of ordering. Already in the *Regulæ*, Descartes distinguishes between the order in which men conceive of things and the order in which they exist in reality:³⁵⁷ “When we consider things in the order that corresponds to our knowledge of them, our view of them must be different from what it would be if we were speaking of them in accordance with how they exist in reality.” He repeats the statement in a similar manner more than 10 years later:³⁵⁸

The order I follow is not the order of the subject-matters [l’ordre des matières], but the order of reasons [mais seulement celui de raisons]. This means that I do not attempt to say in a single place everything relevant to a given subject, because it would be impossible for me to provide proper proofs, since my supporting reasons would have to be drawn in some cases from considerably more distant sources than in others. Instead, I reason in an orderly way from what is easier to what is harder [facilioribus ad difficiliora], making what deductions I can, now on one subject, now on another. This is the right way, in my opinion to find and explain the truth. The order of the subject matter [l’ordre des matières] is good only for those whose reasoning is disjointed, and who can say as much about one difficulty as about another.

This famous passage presents the relation between the order of reasons and the order of matters. One way of understanding the above is that the order of reasons *is the order of ordering*. More than a meta-order (which pertains more to the order of matters), the order of reasons is an infra-order, or infra-structure; it is the hidden structure in the passage of our thoughts showing the reason behind a certain chain of reasoning. It is like a hidden pattern, a hidden character found in the movements of our thoughts.

357 Descartes, *Writings* I, 44; Descartes, *Œuvres* X, 418: “Dicimus igitur primò, aliter spectandas esse res singulas in ordine ad cognitionem nostram, quàm si de ijsdem loquamur prout revera existunt.”

358 Letter to Mersenne, 24 December 1640. Descartes, *Œuvres* III, 266-267; Descartes, *Writings* III, 163. Slight changes to the translation are mine.

The order of reasons has a *diachronic* character, that is to say it follows some sequence of thoughts, judging between movements that are valid and those that are not. Clauberg is well aware of the temporal parameters of methodical processes and even emphasises them. For example, he remarks,

*The duration of attention, which is dignified by the act in which the intellect postulates the theme, is simple or complex. Since attention has a duration, understanding [intellectus] demands the theme to be worthy of attention, whether it is simple or complex.*³⁵⁹

He therefore sees that attention takes time, that it endures, even if it can be either facile or complicated. Clauberg thinks that it is because Descartes was not especially interested in pedagogy that he put aside the logic that Clauberg calls analytic, which is the one applying the rules of reasons regarding objects that are different from one's mind and thoughts. For Clauberg we must recall that in a very Ramist manner, an analytic procedure is one that relates to the works of others outside one's mind. He thinks, hence, that Descartes is less interested, at least as expressed in the *Meditations*, in understanding the works of others. In other words, in the eyes of Clauberg Descartes is more interested in the genetic than in the analytic part of logic. The introspective nature of Descartes' order of reasons is understood and interpreted by Clauberg in the following manner:

But, as Descartes, in searching for method, did not have the intention of teaching others, for this reason he left for everyone else all the logic that I have called the "analytic" [analytic in the ramist sense, i.e. the Logic that is occupied with the arguments and the works of others, ae]. Because in the same manner, in this epoch, he did not establish the teaching to others, but he wanted only to form his own mind consciously and to apply himself to apprehension, it is manifest that in leaving to the side the precepts of the last part of genetical logic, he had to choose only those that pertained to the first [...] one needs however to remark that in the explication of those precepts, in order to demonstrate their richest

359 OOP I, 787 (*Logica*, I, IV): "Durabilis ut sit attentio, intellectus postulat Thema attentione dignum, quod simplex aut complexum."

*employment, I took in consideration in some places the remaining parts of logic.*³⁶⁰

Clauberg thinks that Descartes puts aside what he himself calls the analytic part of logic, that which he considers extremely important. For Clauberg all of Descartes' philosophy is in fact *genetic*. In Clauberg's terms Descartes' method is inherently genetic, not analytic.

2.1.5. The Order of Reasons Versus the Order of Matters

The two central orders in the work of Descartes are the order of reasons and the order of things. The order of reasons is widely understood to be the analytical order, the order going from easily perceived data to the elements constructing this data, a knowledge which is achieved from *within* the methodical process, not from a zenith viewpoint from which all elements can be seen simultaneously.

The order of matters, widely acknowledged as synonymous with *synthesis*, is the order of the world, the way things *are*, and it is an order viewed from outside the limits of an inquiry, from a perspective beholding things from an all-encompassing perspective. Conversely, the order of reasons is shaped like a trail within a wood: It is a continuous act of a specific movement of thought, working against and with a certain examined matter. The order of reasons can further be compared to a reason of *reading*, passing diachronically from segment to segment of a text, needing to synthesise

360 OOP II, 998 (*Defensio XVII*, §11–12): “Cùm verò Cartesio Methodum investiganti non esset propositum ab aliis discere, ideo totam Logicam, quam vocavi Analyticam, tanquam à suo instituto alienam aliis reliquit. Cùm etiam docere alios eo tempore non institueret, sed tantùm mentem propriam vellet cognitione informare, et studio discendi ex semetipso incumbere, manifestum est quod omissis posterioris Geneticæ Logicæ præceptis sola debuerit eligere, quæ ad priorem pertinent. [...] Observandum tamen est, me in explanatione istorum præceptorum [...] ut usum eorum uberiorem patefacere, etiam ad reliquas Logicæ partes multis in locis respexisse.” In several parts the Latin here is equivocal. The beginning of this paragraph can be also translated as: “For this reason he left a logic, which I have called “analytic”, that was alien from all others (alienam aliis) as if it was strange to his purpose.” However that last translation is less plausible, as Clauberg does not call Cartesian logic “analytic” but rather “genetic.”

continuously all the parts together in a dynamic manner. Here is Descartes: “*For example, say we want to read something written in an unfamiliar cypher which lacks any apparent order: what we shall do is to invent an order, so as to test every conjecture we can make about individual letters, words, or sentences ...*”³⁶¹ This last quote from the *Regulae* suggests that the order of reasons can be understood not only as a reading report, attesting in retrospect for a process of reading; it is also an artificial order, an instrument helping one to understand, to decipher that which is in need of clarification. This, in fact, comes very close to the manner in which Clauberg presents the subject of order in his Cartesian writings. The orders he enumerates are indeed like an invention of order, an order which is crystallised as a process of estimations of the cyphers that we want to decipher. This order works as a deciphering code, enabling us to come to terms with the objects we meet on the way of our inquiry.

2.1.6. The Methodical Series: Order and Understanding

What is the actual meaning of the establishment of an order of reasons regarding a certain case or state of affairs? Finding the order of reasons answers the question, How did I come to know what I think I know? After some conclusion has been reached, the order of reasons tells me how I came to perceive such and such.³⁶² Hence, the order of reasons is retroactive: It restores a posteriori a process of thought. This is how Dennis Sepper understood the difference between the two orders: In as much as the order of reasons is the disposal of things into series according to cognitive order, the order of matters is the proper ordering of certain kinds of things.⁹ In any case it is clear that the

361 Descartes, *Œuvres X*, 404: “*Monuimusque idcirco, quærenda esse illa cum methodo, quæ in istis levioribus non alia esse solet, quam ordinis, vel in ipsa re existentis, vel subtiliter excogitati, conastans observatio: ut si velimus legere scripturam ignotis characteribus velatam, nullus quidem ordo hîc apparet, sed tamen aliquem singimus, tum ad examinanda omnia præjudicia, quæ circa singulas notas, aut verba, aut sententias haberi possunt (...)*”

362 Dennis L. Sepper, *Descartes's Imagination: Proportion, images, and the activity of thinking* (Berkeley-Los Angeles-London: University of California Press, 1996), 163.

art of ordering is central to the Cartesian endeavour. It is, according to Descartes, useful to explore the order of reasoning in ancient texts:³⁶³

We should exercise our intelligence by investigating what others have already discovered, and methodically survey even the most insignificant product of human skill, especially those which display or presuppose order. For [...] they present us in the most distinct way with innumerable instances of order, each one different from the other, yet all regular. Human discernment consists almost entirely in the proper observance of such order.³⁶⁴ [...] the method usually consists simply in constantly following an order, whether it is actually present in the matter in question or is ingeniously read into it.

Again, we see hiding at the end of this quote the metaphor of reading and see again that the order detected by method for Descartes can be either “present in” the matter in question or “ingeniously read into” it. Hence, a process of reading is again brought up by Descartes as a model for the detection of order in reality.

This modelling of reason on the prototype of the practice of reading is very prominent in Clauberg. Moreover, in Clauberg this practice of reading receives a genuine hermeneutic character (see Chapter 4.1). Both empirical and metaphysical experiences are described by Clauberg as hermeneutic processes of *understanding*, of defining the sense of matters-at-hand and putting the understanding of these matters to the scrutiny, estimation and judgment of reason. As he writes in the opening passages of his *Logica vetus et nova*, “To perceive or to comprehend a thing clearly and distinctly, to understand well (*wohl verstehen*).”³⁶⁵ In this sentence we clearly see the name that Clauberg gives to Descartes’ principle of clear and distinct apprehension: understanding, which he gives also in his native German: *verstehen*. The following chapters are dedicated to suggesting what this *understanding* might be. The habitus of

363 Descartes, *Works* I, 34-35 (Rule 10); Descartes, *Œuvres* X 403 (Regula X): “*Ut ingenium fiat sagax, exerceri debet in iisdem quærendis, quæ jam ab alijs inventa sunt, et cum method etiam levissima quæque hominum artificiose percurre, sed illa maxime quæ ordinem explicant vel supponunt.*”

364 Descartes, *Works* I, 35; “It was for this reason that we insisted that our inquiries must proceed methodically.”; AT X, 404: “*Cum enim nihil in illis maneat occultum, & tota cognitionis humanæ capacitati aptentur, nocis distinctissimè exhibent innumeros ordines, omnes inter se diversos, & nihilominus regulares, in quibus ritè observandis fere tota consistit humana sagacitas.*”

365 OOP II, 913: “[...] clarè & distinctè rem percipiat seu *intelligat*, wol [sic, ae] *verstehen*.”

method, as will be discussed below, is a habitus of understanding. For Clauberg, to know, to make something intelligible, means literally to read it correctly.

2.1.7. The Principle of Doubt in Clauberg

For Clauberg we must engage with the process of doubt as a prophylactic procedure, trying to hinder in advance the danger of falling into error:

*To charge future philosophers with a very careful precise suspension of judgement was inevitable, therefore, so that they, proceeding slowly and gradually, would sooner labour with the utmost diligence to perceive things, than to presume to affirm or negate something about them. This passage is quite similar to the jurists' saying: To restrict something lawful, so that the unlawful may be avoided.*³⁶⁶

If we take the principle of the order of reasons as the one that asks “How did I get to know what I know,” then this order is bound up with Cartesian methodical doubt as the preliminary demand to doubt our preconceived judgments is intended to determine which principles have been produced through a proper process of reasoning and which of them are like rotten apples that one should throw out from the basket. In this sense the first condition to realising methodically the order of reasons is to begin at the stage of doubt. The order of reasons asks, When I assume to know something, what in fact do I know, and how did I come to know it? Descartes did not have a sceptic motivation, but he was nevertheless continuously suspicious of received opinions and observations. Cartesian suspicion regards customs and habits in all their forms, against improper conjectures, analogies and pre-conceived ideas, causing improper ordering of reason. The order of reasons can be understood as another name for Cartesian doubt, at least as it was presented by Clauberg:³⁶⁷

366 OOP II, 1128 (*Initiatio*, Prolegomena, §27): “Necessum itaque fuit iudicii suspensionem accuratissimam philosophaturis injungi, ut gradatim et lente procedentes rem percipere **prius** omni adhibitâ diligentia laborarent, quàm aliquid de ea affirmare aut negare præsumerent. Nec videtur illud Jurisprudentium effatum, Licitum coarctari, ut illicitum vitetur, valdè huic loco alienum esse.”

367 OOP II, 1131 (*Initiatio*, I, §1): “Inter præcipuas Philosophiæ Cartesianæ regulas est, ut quando et quàm diu rem aliquam non satis percipimus, neque recordamur, nos eam antea rectè percepisse, iudicium de ea nostrum suspendamus sive D U B I T E M U S [so in the original, a.e.], tantisper dum cognita nobis fuerit et explorata.”

Among the principal rules of Cartesian philosophy is, when and as long as we do not comprehend/ understand some thing in a sufficient manner and cannot recall if we have once before rightly/ accurately understood it, that we must suspend our judgment of it or DOUBT it/ have DOUBTS about it, until we have thoroughly investigated and examined it.

Hence, a lack of clarity in the sensual data necessitates the activation of doubt. This is naturally a Cartesian principle. For Clauberg the first argument in favour of being suspicious of pre-judgments comes from the Bible, Luke 6:37: “Judge not, and you will not be judged; condemn not, and you will not be condemned.”³⁶⁸ It is in fact an interesting argument; it is as if Clauberg says, If you do not want to be negatively judged (as a philosopher in this case), you must abstain from judging. In other words if you suspend doubt, you yourself cannot be doubted. The question, indeed, involves the one regarding the essence of judgment, how a judgment is to be made. The process of doubt, although it makes us halt before proceeding with our thought, is actually intended to save time in the gathering of knowledge. In this, doubt works synergistically with the purpose of “shortening the way,” the methodist motivation that we discuss in the first chapters of this project.

1.2.8. The Craft of Ordering One’s Own Thoughts

In most classical interpretations of Descartes, his preference for the order of reasons over the order of matters is highlighted. Not only Gueroult but also Ferdinand Alquié was amongst those. Alquié understood the order of reasons as being based only on knowing (“*sur la seule connaissance*”), and from this order gets its truth value, even though this order is not natural; it is artificial.³⁶⁹ In the order of reasons there is already

368 Clauberg, OOP II, 1131 (*Initiatio*, I, §3): “Ne judicate, et non judicabimini: ne condemnate et non condemnabimini, Luc. VI 37.”

369 Ferdinand Alquié, *Leçons sur Descartes : Science et métaphysique chez Descartes* (Paris : La table ronde, 2006), 61–62: “En effet, l’ordre est souvent un ordre artificiel (...) si l’ordre n’est pas naturel, si, d’autre part, comme l’affirme Descartes, la vérité ne fait qu’un avec l’être, comment pourrions-nous dire que l’ordre est vrai ? l’ordre dont parle Descartes, c’est l’ordre de la

a method, and in retracing the path of the ordering of reasons, a guide is available for other thinkers, documenting the moves which were achieved and transmitting these onwards.³⁷⁰ This is what Descartes is looking for, and this is also how he wants to be read. Cartesian order in this sense, differently from later, systematic orders but also differently from Ramist ordering, is not given a priori; rather, similarly to humanist *invention*, it must be reconstructed according to the problems the thinker meets on his path of research. We see in Cartesianism the drive to establish an order in a rather uncertain, unexpected and unorganised reality, a drive that one can sense in Clauberg.

In other words, methodical order is for Descartes a matter of learning how to place oneself so that an inquiry *can, in principle*, begin. That is also why for Descartes the determination of *principles is so* important, as he states later in the preface to the French translation of the *Principia philosophiæ*.³⁷¹ Reaching the beginning, not as a search for some substantial origin but as a search for the first step (the first act of ordering), is a gesture characteristic of Cartesian method, and this is exactly how Clauberg also conceives of the ordering of method. Let us remember that in the philosophy of method in the 16th century, the word “invention” was used to designate the furnishing of the basic elements with which a procedure of reasoning can proceed. In the earlier Descartes, these elements are designated as *simple natures*. What Descartes adds to the humanist, and Ramist, conception of invention is that invention should also contain a retroactive rendering of how those simple natures were distinguished. In this sense what Descartes adds to the humanist formulation is a narrative, confessional approach to presenting the path of invention. It is a manner of reading oneself. We noted above Descartes’ paralleling the work of establishing an order

seule connaissance. Au reste, dans la définition qu’il donne de l’ordre, Descartes nous dit que « l’ordre consiste en cela seulement que les choses qui sont proposées les premières doivent être connues sans l’aide des suivantes, et que les suivantes doivent après être disposée de telle façon qu’elles soient démontrées par les seules choses qui les précèdent. » Donc, l’ordre est ici relatif à la seule connaissance. Et, dans une lettre au Père Mersenne, Descartes sépare l’ordre des matières et l’ordre des raisons : il dit qu’il ne suit pas l’ordre des matières, qu’il n’entreprenne pas « de dire en un même lieu tout ce qui appartient à un matière ». Une fois encore, l’ordre qu’il suit, c’est l’ordre de la connaissance, propre à l’esprit de l’homme. De même Descartes, dans un autre texte, également fort connu, distingue l’ordre de l’analyse et l’ordre de la synthèse : l’ordre analytique est relatif à notre connaissance ; l’ordre synthétique est celui des choses considérées quant à leur existence réelle. (...) Le règle 12 déclare : « chaque chose doit être considérée différemment selon qu’on se réfère à l’ordre de notre connaissance ou que l’on parle d’elle selon l’existence réelle.»

370 For Alquié on order in Descartes see also Ferdinand Alquié, “Notes sur l’interprétation de Descartes par l’ordre des raisons,” *Revue de Métaphysique et de Morale* 61 (3/4, 1956):403 – 418. See also Knox Peden, “Descartes, spinoza, and the impasse of french philosophy: Ferdinand Alquié versus Martial Gueroult,” *Modern Intellectual History* 8, no.2 (2011): 361–390.

371 Descartes, *Œuvres* IX, 5; Descartes, *Writings* I, 181.

with the process of reading. Hence, the order of reasons is a manner of presenting the reading of one's own processes of ordering. Methodical procedure exposes the thread of its own ordering or invention, and first philosophy includes the presentation of its own achievement. The first item in the change of positive ordering that Descartes produces, is the cogito moment: The identity between thinking and existence which is revealed at the end of the inventory process of doubt. After invention is complete, philosophy can begin. When we put Descartes and Ramus together on the subject of order, we get the *Claubergian* version of methodical order.³⁷²

Order necessarily creates a sequence, a series, and this series can then be compared with another one. When one methodically engages with the action of ordering, one already engages with *mathesis universalis*, that is to say with that general wisdom (*sapientia, sagesse*) sought by Descartes.³⁷³

2.1.9. The Formation of Methodical Norms

When presented by the methodist researcher, the order of reasons can turn into a normative order, an order in the sense *of a rule*: “Do *y* and not *z* when you come across *x*”; “Do *w* and *x* in order that *y*.” Hence, the Philippo-Ramist principle of the method being a set of rules which is easy to transfer onwards is retained in the Cartesian and the Claubergian versions. An idea is not necessarily ordered, but when it is clear and distinct, it is ordered, that is to say it is ordained (or rectified); it is placed in its right place in the process of thought. What happens with this ordaining of ideas in the

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373 Dennis L. Sepper, *Descartes' s Imagination: Proportion, images, and the activity of thinking* (Berkeley-Los Angeles-London: Univ. of California Press, 1996), 162: “Every examination of order and method properly refers to universal mathesis : Rule 5 announces that the whole method consists in proper ordering and that the two rules that follow will clarify how this order is to be discovered and how it is possible to avoid error. The emphasis on order is not at all surprising, since it is an elaboration of what is implicit in the doctrines of *intuitus* and *deductio*. If we are to use these properly (that is to say, if we are to proceed methodically) we must know when they are in order. (...) This orderly procedure is what Rules 6 and 7 teach.”

Claubergian transformation of Cartesianism? What happens is that the only normative order that remains is the one between the proto-primary and the primary stages of the initiation of philosophy, the one making the passage between doubt and judgment. The labour and the industry of method, according to Descartes and Clauberg, indeed constitute the effort in establishing an order: “*We must know (...) that to work out an order is no mean industry, as our method makes clear throughout, that being virtually its entire message.*”³⁷⁴ Hence, the entire aim of method is in fact, the establishment of orders. This work of division of the problems is adequate for the mind’s limited capacity to observe a certain amount of data at a certain moment. Therefore, the ordaining of method, the establishing of the prescriptive principles of method, has also to do with the acknowledgement of one’s own limitations, an estimation of the not yet known.

2.1.10. Self-Estimation as Proto-Philosophy

If we follow Clauberg’s Cartesianism, we receive the maxim that any research of whatever object or problem that one approaches philosophically must begin with an examination of the self. For Clauberg,

*He who goes to philosophize seriously must begin by it, that is say, by the cognition of one’s own mind, of God, etc. This primary philosophy is contained in the six meditations of Descartes. And the first part of the Principles also shows the the summary of it.*³⁷⁵

The primary stage of serious philosophy is the *cognitione suæ mentis*. This is, in fact, a cognition with which we must begin and which is *the preparation for primary philosophy*. Metaphysics in this sense is the beginning (rather than the accomplishment)

374 Descartes, *Œuvres* X, 451: “Sciendum præterea, in ordine quidem excogitando non parùm esse industriæ, ut passim videre est in hac methodo, quæ nihil aliud docet.” Descartes, *Writings I*, 64.

375 OOP I, 283 (*Metaphysica de ente* I, note e): “Sic dicta non propter universalitatem objecti, de quo agit; sed quod seriò philosophaturus ab ea debeat incipere. Nempe à cognitione suæ mentis et Dei etc. Haec prima philosophia sex Meditationibus Cartesi continetur. Summam ejus etiam prima pars Principiorum exhibet.”

of philosophy, and it is bound up with doubt, a doubt which is conceived as self-estimation and a self-limitation:

[...] because metaphysics is the first of the sciences, it is the beginning of philosophy. Before the first beginning of philosophy, however, nothing can be determined, philosophically, in the human mind, hence the general suspension of judgment, we have published elsewhere regarding the restrictions of its generality [...]. Here I will add a new limitation: that the Cartesian doubt, which we discuss here, is not applicable to all the branches of knowledge, transmitted by him, not the *Physica* or the *Geometrica* that he wrote, not even the *Metaphysica* as a whole, but rather only to the very beginning of it.³⁷⁶

Hence, before turning to all domains of specialised knowledge, we must begin with the activation of doubt, limitation and self-restriction. This is the condition, according to Clauberg, of all special sciences and for metaphysics itself. In conclusion, we see that primary philosophy in the Cartesian-Claubergian sense means the estimation of the self as a preparation for metaphysical judgement. However, this self-estimation also has an affinity with Descartes' ethical principle from the *Passions de l'âme*:³⁷⁷ the virtue of generosity. Generosity is exactly this correct estimation of the self, of its capacities and shortcomings. Hence, for Clauberg, before we begin with metaphysics, we must be, in the sense of Descartes, generous; that is to say we must attain a correct estimation of our knowledge as well as of that which we do not yet know. We return to this observation in the last part of this researchessay. However, in the coming chapter we seek to understand how exactly this self-estimation works.

376 OOP II, 1208–1209 (*Initiatio* XI, §28): “Responsio ex toto hoc libro clara est, nempe quia *Metaphysica* est scientiarum *prima*, est philosophiæ initium. Sed ante primum Philosophiæ initium nihil esse potest in mente humana Philosophicè determinatum, hinc generalis iudicii suspensio, cuius tamen generalitatis restrictiones alibi attulimus [...]. Hic ex occasione novam limitationem adjicimus, quòd dubitatio Cartesianæ, de qua agimus, non pertineat ad omnes disciplinas ab ipso traditas non ad *Physica*, non ad *Geometrica* ejus scripta, imò neque ad *Metaphysicam* totam, sed ad initium ejus duntaxat.”

377 René Descartes, *Les Passions de l'âme* III, Art. CCIII, *Œuvres* XI, 481; Descartes, *Writings* I, 400–401. On Generosity see also Geneviève Rodis-Lewis, “Le dernier fruit de la métaphysique cartésienne: La générosité,” *Les Études philosophiques* 1 (Janvier-Mars 1987): 43–54.

2.2.

The Order of Matters or the Disposition of Principles

2.2.1. From the order of reasons to the order of matters; 2.2.2. The order of matters versus synthesis; 2.2.3. The Ramist ambivalence regarding synthesis; 2.2.4. The Zabarellist conception of synthesis; 2.2.5. Order, universal mathesis and the order of matters; 2.2.6. The system of loci as the basis of Ramist synthesis and the *topica universalis*;

2.2.7. The organisation of the order of matters in the Claubergian text; 2.2.8. Descartes' "Order of the world" and Claubergian universal order; 2.2.9. Order as a regulator; 2.2.10. Imposed intuition

2.2.1. From the Order of Reasons to the Order of Matters

In this chapter we take a deeper look at the concept of the order of matters in the context of the Claubergian reading of Descartes' philosophy. It is stressed that more attention must be given to the significance of the *order of things* in the overall Cartesian project, more precisely in the framework of Cartesian method. We explore the relationship between the order of matters and the notion of synthesis. We present in more detail what was meant by the concept of synthesis in the 16th and 17th centuries. As we shall see, Ramus and Zabarella pose two diametrically opposed interpretations of the place of synthesis in methodical proceedings, two options that play an intricate game within Clauberg's understanding of the Cartesian method. We also consider the place of synthesis in the Cartesian project. Finally, we show in what sense Clauberg's philosophy interprets Descartes' method in an inherently synthetic manner, that is to say Clauberg presents the essential Cartesian move, finally, as a synthetic one.

The present chapter maintains that the methodist framework necessitates a stable and rigorous component of synthesis. This was also how Zabarella understood Aristotelian method; for Zabarella scientific method is an inquiry which necessarily leads towards providing a synthesis of the given objects and their causes. We argue that in the view of most of Descartes' commentaries,³⁷⁸ Descartes was not in principle objecting to synthesis, only to *a certain kind* of synthesis, one based on prejudice and the imagination. In fact, it is synthesis rather than analysis that poses the real challenge for the advancement of learning in the methodist framework. How does one correctly compose the elements of an inquiry? How does one synthesise the ensemble of data without leaning on the corrupted prejudices of infancy? That is, in fact, the great question of method that we find in Clauberg's various writings. Clauberg's lifelong project is a work towards forming synthesis, but it is a synthesis that must be

378 As in Oliver Dubouclez, *Descartes et la voie de l'analyse* (Paris: Presses Universitaires de France, 2013). But also already in Martial Gueroult, *Descartes selon l'ordre des raisons*. 2 vols (Paris: Aubier, 1953).

distinguished from the encyclopedism of earlier and later generations.³⁷⁹ In the conclusion of this thesis (Part 5), we try to show that there is a relation between the Claubergian synthesis and a moderate conception of predestination; synthesis has also theological overtones that are certainly not irrelevant to the Calvinist Clauberg. The synthesis we speak of here stands for the order of matters and leans on the logic of *loci*, the return of certain themes or problems in the history of cultures, signs and languages. In Clauberg, the methodological procedure tries to make a synthesis between the given perception and an emended *topos*.

In Part 1 of the present research, we regard the various parameters of the order of reasons as they can be found in Descartes as well as in Clauberg's articulations. Clauberg himself declares in his *Ontosophia* that a preliminary stage of knowledge of particular things must be established before arriving at the possibility of learning about being itself:

Because among the laws of method, there is this one, that each doctrine is agreeable with a human of a certain age, [and that] the first age, however, is recognized as more capable to get to know particular things, [because of that] I prefer, like the ancients, that those who study philosophy will reach Ontosophia only when they have in some manner instructed their soul with the science of particular things.³⁸⁰

It is notable that here Clauberg does not refer to an order of reasons that must precede the order of matters; rather he poses a distinction between two levels of the order of matters: the order of particulars and the order of universals. In the order of matters itself, as in Ramism, one finds a distinction between the order of particular matters and the order of universal matters.

Regarding the issue of synthesis, there are indeed telling discrepancies between Descartes and Clauberg. In Descartes, we find two understandings of synthesis, one of

379 See in Wilhelm Schmidt-Biggemann, *Topica Universalis: Eine Modellgeschichte humanistischer und barocker Wissenschaft* (Hamburg: Felix Meiner, 1983); Howard Hotson, *Commonplace Learning: Ramism and its German Ramifications 1543-1630* (Oxford: Oxford University Press, 2007).

380 OOP I, 281 (*Metaphysica de ente*, Prolegomena, §6): "Quoniam verò inter methodi leges hæc est, ut omnis doctrina sit attemperata hominis ætati, prima autem ætas rebus particularibus cognoscendis magis idonea deprehenditur, malim Philosophiæ studiosos, ad instar Veterum, tum demum ad Ontosophiam accedere, cùm rerum particularium scientia quodammodo animum instruxerint."

which can be found in Descartes' scientific writings, for example the *Geometry*. This first kind of synthesis works as procedure modelling: One poses a solution to a problem and then tries to reconstruct the stages from the problem to the solution. The second kind of synthesis is a *synoptic* one, referred to by Descartes as the "geometric" reconstruction of his trail of thoughts (found in his reply to the second objection of Mersenne ³⁸¹), but actually this kind of geometrical presentation also exists earlier in the *Regulae* and to some extent later in the *Principia*. Here, one puts in order the already written and elaborated arguments. Furnishing synoptic figures (syn-optic: seeing-together) facilitates the entrance into one's thoughts.

One can view the relation between the two orders as the Cartesian coordinate scheme, with the two axes allowing thought to take place somewhere between them. The method itself, if one follows the *Meditations*, is as follows:

- 1 The first step is doubt or suspicion regarding analogies: analysis.
- 2 The second step is *cogito*, an equation, a tautology, where nothing is superficial or that which cannot be doubted: tautology.
- 3 The third step is *habitudo*, understood as *proportion*, that is to say the relation between two ascertained propositions maintained in synthesis.
- 4 The fourth step is figuration, that is to say the formation of a group, an order of things, a rectified perception of matters.

For Clauberg the order is a bit different:

- 1 Doubt is the initiation of philosophy, creating genetic logic.
- 2 Halt: One is demanded by doubt to halt one's advancement of knowledge in order to perform the self-estimation demanded by the initiation to philosophy.
- 3 Order: After the stage of negative judgment, we are ready to furnish an ordered figure of the matter at hand. This order results from the division (analysis) of the matter-at-hand into its basic principles. When an order is achieved, we can view the matter in an orderly way, as a figure of itself.
- 4 Judgment: Judgment is the *understanding* of the meaning of the matter at hand. After one understands what is being said in a certain text, one determines whether that which is contained in the text is plausible or implausible, valid or invalid.

381 Descartes, *Œuvres* IX, 124-132.

It is hence plausible to understand Clauberg's method as viewing Cartesian through the lens of the hermeneutician. If this is the case, then we have here a genuine version of the Cartesian project, a variation which elaborates on the original avowals of Descartes but which suggests, in the view of the present inquiry, a viable understanding of Cartesianism, different from the other Cartesianisms that included more scientific interpretations of the doctrine.

2.2.2. The Order of Matters, the Order of Things, and Synthesis

The differentiation between synthesis and analysis has its roots in ancient philosophy. Plato already distinguished between two methods of dialectics: division (διαίρεσις) and composition (συναγωγή). Aristotle talked about composition (σύνθεσις) as well as a compound, or combination, in several places in his writings.³⁸² Galen included both analysis and synthesis among the methods of medicine. After the translation of the *Analytics* and the *Topics* in the 12th century, the terms *resolutio* and *compositio* took their places beside *inventio* and *judicium*.

We saw that Descartes himself was more at ease with representing his project as analytic rather than synthetic in nature. However, in certain places, as for example in the *Principia*, Descartes himself moves towards a synthetic mode of demonstration which he however abandons essentially unaccomplished.³⁸³ According to Garber and Cohen (1982), one should take the analytic trait as more than a declarative character of Descartes' discourse; rather it should be regarded as an essential tendency of his philosophy. Even the *Principia*, to which one refers often as constructed in a synthetic manner, is in its essence based on analytic ordering.³⁸⁴ Synthesis hence remains as a virtual point of the method, continually energising the ongoing methodical process. Arriving at the grammar of the language of the world stands as an ideal aim, a virtual object of the Cartesian project as a whole.³⁸⁵ And this virtual telos is a synthesis. As

382 "On the soul," *Works*, trans. J. A. Smith, 684 [430a 26-b4]; "De Interpretatione," *Works*, trans. Ackrill, 25 [16a 9–18]: "For falsity and truth have to do with combination and separation."

383 On this see the enlightening Jean-Marie Beyssade, "Scientia perfectissima: Analyse et synthèse dans les Principia," *Etudes sur Descartes*, 181-216.

384 Daniel Garber and Lesley Cohen, "A Point of Order: Analysis, Synthesis, and Descartes's Principles," *Archiv für Geschichte der Philosophie* 64, no.2 (1982): 136–147.

385 In this sense, Noam Chomsky was indeed much less misleading us than one tends to think, when he spoke of universal grammar as standing at the very core of what he defined as "Cartesian

Clauberg says about the order of synthesis in one of his minor but decisive writings, the *Logica Contracta*:³⁸⁶

*A synthetic order is spoken of, when we proceed (or: a synthetic order proceeds) from the simple and the partial, that is to say from things that are easy to comprehend, towards the composite and whole; as in Grammar from the letters to the syllables, from the syllables to the words; from the words to the sentences.*³⁸⁷

In his description of the synthetic order, Clauberg makes recourse to a linguistic model, proceeding from the letters into the word and to the sentence, gradually passing from the atoms of language to more complex composites. Hence, Clauberg synthesises a double meaning of the synthetic order: It is both *holistic and applicable*. It is, indeed, a configuration of a *metatechné*.³⁸⁸ It is interesting to observe that for Clauberg it is the written letter rather than speech which constitutes the beginning of language. Speech and the sentences it contains are understood as a final, accomplished construction which begins with the sorting out of the first elements of language. One should also note the Aristotelian subtext here: Synthesis has to do with bringing into realisation, bringing into reality, bringing into work; synthesis is a paradigm of an *energeia of thought*.

We need to aspire to at least be as precise as possible with the terms we use in the present project. In the first place, it must be to specified why, in the present project, it is better to use the term “order of matters” than “order of things” in our reference to the *orders des matières* in Descartes. As we shall see in Chapter 3.2, things in the Cartesian framework exist only as figurations of the *res extensa*. Figures hence are the absolute condition for the existence of things. Moreover, matters arrive to us always as problems that we encounter on our way. They are in this sense matters or issues to deal with, to solve, or to use. Method in this sense is indeed primarily

linguistics” in his *Cartesian linguistics: A Chapter in the History of Rationalist Thought* (3rd ed.) (Cambridge University Press: 2009), especially pages 78–92. We can say that Cartesian method looks for *the clear and distinct conception of the joints of the world*.

386 The first edition of the *Logica Contracta* was probably published at 1659. However the third edition, most likely based on Clauberg’s teachings in Duisburg, was issued in 1670, after Clauberg’s death.

387 OOP II, 934 (*Logica contracta*, §256): “Ordo *syntheticus* dicitur, cum progredimur à simplicibus et partibus, ceu cognitu facilioribus ad composita et tota, ut in Grammatica à literis ad syllabas, à syllabis ad voces ; à vocibus ad sententias.”

388 I take this term from the helpful Robert Williams, *Art, Theory, and Culture in Sixteenth-Century Italy: From Techne to Metatechne* (Cambridge: Cambridge University Press, 1997).

occupied with matters, the various problems that one encounters in one's advancement through the storm. In Clauberg this tendency is even more accentuated as the lingual model is so dominant: Things are as they appear to us *in language*. Moreover, it is only rarely that these matters of the world arrive to us clearly and distinctly. We must begin our philosophical initiation with the clearance of the status of the matters we know. Before achieving the stage of metaphysics we have first to amend our layers of preconceived ideas and false judgments, our bad habits, and this can be done only through the analytical process.

Further, we must summarise what we mean by synthesis in our present context. We learned that synthesis is meant for the more advanced students who have already achieved the realignment and emendation of their intellect through the process of analysis. Synthesis presupposes that one already knows to read the signs and figures of the already achieved elements of knowledge. Synthesis is the establishment of order of matters for its own sake. In order to understand what synthesis is, we need to understand the Cartesian meaning of the order of matters. The order of matters is one of exposition. In the conversation with Burman, Descartes says: "In the *Principles*, however, he reverses the order; for the method and order of discovery is one thing, and that of exposition another. In the *Principles* his purpose is exposition, and his procedure is synthetic."³⁸⁹

Within the framework of the seminal four rules of method, the first two rules tend to appear as analytic; at the same time, the third and the fourth rules are strictly and evidently synthetic. In the *Discourse on method*, Descartes recapitulates the rules:

*The first was never to accept anything as true if I did not have evident knowledge of its truth. The second to divide each of the difficulties I examined into as many parts as possible and as may be required to resolve them better. The third, to direct my thoughts in an orderly manner, by beginning with the simplest and most easily known objects in order to ascend little by little, step by step, to knowledge of the most complex, and by supposing some order even among objects that have no natural order of precedence. And the last, throughout to make enumerations so complete, and reviews so comprehensive, that I could be sure of leaving nothing out.*³⁹⁰

389 Descartes, *Conversation with Burman*, trans. J. Cottingham (Oxford: Clarendon Press, 1976), 12 [17].

390 Descartes, *Writings* 1, 120; Descartes, *Œuvres* VI, 18–19.

If the order of reasons is affiliated with analysis, the order of matters proceeds by deduction from proposition to proposition, which, through the logical consistency between various propositions, makes a coherent, composed and realised whole. The order of synthesis also portrays a *view of the world* (again, this syn-optic character) as things *must be*. According to Descartes, in as much as the order of thought is challenging and difficult, the order of matters is established with facility as it is a matter of observance. As we suggest, this facility of observation, the facility of syn-optic thought, is an imposed intuition. At the beginning of method, there must exist a moment of passage allowing the switch between analysis and synthesis to take place, and this is the moment of the stopping of doubt. In the various usages of methodical discourse, synthesis is shown as the way from principles to that which is derived from the principles, and analysis is the return from the ends to the principles. Synthesis, hence, assumes that some work of analysis has already taken place.

In the following we take a closer look at the term and try to supply a coherent reading of “the order of matters” (*l'ordre des matières*) in its Claubergian-Cartesian context. Our intention is to show that differently from the widespread assumption, the order of matters is extremely important in the understanding of Cartesian method, as Clauberg was perhaps one of the first to understand. If methodical procedure is divided into the order of reasons and the order of matters, then it is the order of reasons which is more difficult to follow in as much as the order of things must be already facile and spontaneous. However, even if it is more spontaneous than the resolute procedure, still the order of matters is not less artificial than the order of reasoning. It is a construction exactly like the order of reasons, a construction which enables us to see a problem in composite, figural terms. As we saw in former chapters, facility is an important element of the discourse on method. In a way it is only when some facility is enabled as the basis and the background of the inquiry, that methodical procedure can begin. Method is conceived in advance as helping to facilitate the route towards the truth of things that we have still to elucidate in later chapters. Unlike the *Meditations*, which are mainly built according to the order of reasons, the *Regulæ* is almost in its entirety ordered according to an order of things, and so is the *Principles*. Indeed, Descartes' later writings, the *Principles* and the *Passions*, are blunt examples of experiments in the order of matters, not in the order of reasons. Descartes' later writings try to make an approachable listing of things and processes that enable a facile approach to a certain domain of knowledge. Returning to the earlier writings, in the fifth rule of the *Regulæ*,

Descartes insists that “*toute la méthode [...] consiste dans l’ordre et la disposition.*”³⁹¹ So, if the order of reasons is the order par excellence, it is disposition that constitutes the second, constructive part in the institution of a method. The insistence on the element of disposition in the construction of the method is a Ramist determination. Ramus wrote also that method is a disposition of various things; the first to be noticed is disposed of in the first place, the second in the second, the third the third, and so on. However, this disposition is not only formal but also substantial: The order of matters contains not only the form of the series but also the sort of objects that are placed in this order:³⁹²

Rule 5 announces that the whole method consists in proper ordering [...] The emphasis on order is not at all surprising, since it is an elaboration of what is implicit in the doctrines of intuitus and deduction. If we are to use these properly (that is to say, if we are to proceed methodically) we must know when they are in order. [...] The orderly procedure is what rules 6 and 7 teach. But [...] this orderly procedure should involve learning both to put the mind into a pure and attentive state and what the mind is recognizing when it is in that state: that is, there are two subjects under consideration, the activities and powers of mind and the proper objects of those activities.

The order of matters can be defined as the *order of orderings*: It is a second-degree order, a meta-order; it is the order *qua* infrastructure of processes of reasoning; it is found latent within the order of reasons; in other words it is deducible from the order of reasons. As an infra-order, the order of matters shows us what to do in the maze of research. In this it is also an order in the transitive, active sense of ordering someone to do something. The order of matters operates within the process of thought. It is the production of a meta-order from various particular orders. It is not the sum of all precedent orders; it is rather the order that is *deduced* from the various particular orders achieved. It is a unifying code that is found in various previous experimentations. The order of reasons as we have seen is the order that shows how one reaches the basic parts and elements with which one should work, but the ordering of those elements of ordering is already a constructive task. Can we say that it is the establishment of a kind of *genos*? Indeed, it is as if the methodist, after already performing certain movements

391 André Robinet, *Aux sources de l’esprit cartésien, l’axe La Ramée-Descartes: De la Dialectique de 1555 aux Regulæ* (Paris: Vrin, 1996), 254.

392 Dennis L. Sepper, *Descartes’ s Imagination: Proportion, images, and the activity of thinking* (Berkeley-Los Angeles-London: University of California Press, 1996), 162.

of thought producing elementary verified mental components, now observes certain infrastructures that underlie the sampled material. These are then taken as a posterior achieved *genres* that can be now applied for the treatment of new cases.

Even though the order of reasons is necessary, it is not sufficient to make a complete methodical move. After the inventory work of sorting out simple natures and after an account is given regarding the sequence of this process, one must proceed to viewing the ordering that was achieved and draw from all this a certain formula. In the *Rules* we see the process of progressive ordering when Descartes says, “With the aid of the unit we have adopted, it is sometimes possible completely to reduce continuous magnitudes to a set (...) The set of units can then be arranged in such an order that the difficulty involved in discerning a measure becomes simply one of scrutinising the order. The greatest advantage of our method lies in this progressive ordering.”³⁹³ Descartes employs ordering so that he artificially brings his mind to the point when all that it should do is *view the truth*. Order brings the possibility of recognising in a facile way the truth of things as it institutes a relation between one thing which is better known and another which is dependent on this knowledge. It enables a viewing of reality in a way which simply and clearly leads to the apprehension of truth. Furthermore, in the *Regulæ* Descartes advises that “when we have more than two different things to compare, our method demands that we survey them one by one and concentrate on no more than two of them at once.” Hence, the first conjunction recommended in Cartesian method is one of equation, one which results from putting two things one by the other and conceiving of them together, making a comparison, an analogy between the two. Indeed, when one establishes such a basic *habitus*³⁹⁴ one can continue to form a series from which one actually builds a comprehensive model of one’s reality. In later writings, the terminology of order, sequences and habitudo turns to one of *deduction*. Hence, the most central logical operation is one of deduction: determining the methodist concept of synthesis.³⁹⁵

393 Descartes, *Writings*, 1 ; Descartes, *Œuvres*, X, 451-452: “Sciendum etiam, magnitudines continuas beneficio unitatis assumptitiæ posse totas interdum ad multitudinem reduci, et semper saltem ex parte; atque multitudinem unitatum posse postea tali ordine disponi, ut difficultas. Quæ ad mensuræ cognitionem pertinebat, tandem à solius ordinis inspectione dependeat, maximumque in hoc progressu esse artis adjumentum.”

394 Descartes, *Œuvres* X, 462, line 11: “Relatio sive habitudo.”

395 Doren A. Recker, “Mathematical demonstration and deduction in Descartes's early methodical and scientific writings,” *Journal of the History of Philosophy* 31, no.2 (April 1993): 223–244.

In this story of dichotomies between division and composition, however, we have one exception: the Ramist approach. Ramus, in his usual provocative manner, is very much opposed to using the term “synthesis” in methodical matters, and he prefers the analytic manner which he understands under the terms of application and specification, the division of the genre into its particular cases. Hence, for Ramus, it is analysis alone which operates in method.

2.2.3. The Ramist Ambivalence Regarding Synthesis

The previously mentioned points lead to a larger question regarding the place of synthesis in the humanist interpretation of the construction of method. As we saw, there are two diametrically contrasting ways to view synthesis: One is that of Ramus, who argues that all method is essentially analytical and that synthesis includes the formation of principles, not their application. The other approach, the more Aristotelian one energised by Zabarella, sees synthesis as providing a satisfying account of a given phenomenon. One could say, however, that Johannes Clauberg is more dominantly influenced by the Ramist version. The whole method goes in the direction of the application of principles in the work of analysis.

We should not forget that for Ramus *synthesis is not considered a method*. The only method is analysis. Synthesis is exterior to method; it stands as the horizon of method, as the outcome of a fruitful method, and it is the usage of method which makes method in Ramus also synthetic. Otherwise stated, it is the artistic context of method which gives it a synthetic nature:

*That which distinguishes Ramism is exactly that it forms, in countering and in the overarching the unilateral extreme position of other schools, forming of method something that functions as an all-comprehensive instrument, that is to say, to do from it at the same time the general criterion of the functioning of different disciplines that constitute the domain of knowledge, and the instrument of measure and verification of their respective scientific solidity.*³⁹⁶

396 Guido Oldrini, “En quête d’une méthodologie: la position du Ramisme,” *Argumentation* 5 (Novembre 1991): 387–401.

For Ramus, effectively *there is no synthetic method* because all method is inherently and essentially analytic. It is analytic for Ramus in the sense that all method must be applicable to particular cases, to particular usages. For Ramus this is the true meaning of analysis because, for Ramus, “[t]here is no art which proceeds from what is by nature subsequent and less well known; for it would lack a starting-point and would produce a shapeless monster, all deformed, with its head down and its feet in the air.” For Ramus it is certain that method does not begin with sense data but rather with principles. The whole method must address the application of well verified principles in specific terms: “On the contrary, every discipline proceeds from the general to the specific, because the general is more causal and better known, as Aristotle correctly teaches, therefore there is no synthetic method.”³⁹⁷ Note that for Ramus the method refers to a discipline and not to scientific research. Within the framework of any discipline, we begin, according to Ramus, with the principles and proceed in the application of the rules to specific cases. For him this process of application is called analysis, and hence method is inherently analytic.

2.2.4. The Zabarellist Conception of Synthesis (the Compositive Method)

However, the Ramist approach to synthesis was not the only one available for the methodists of the 17th century. In Chapter 1.1 we extensively refer to the Zabarellist conception of method, drawing its sources essentially from re-engagements with the Cartesian sources. Zabarella thinks that synthesis stands at the heart of method. All method must be synthetic, and analysis is merely the most useful instrument to arrive at such a synthetic stage of explanation.

In technical terms, analysis exhibits the thinking machine in as much as synthesis exhibits its products. Differently from analysis, which exposes the process of production of an idea, synthesis exhibits the produced idea at work: It shows the mechanics of what the idea can do; in other words, it demonstrates the relations between the idea and other ideas in its vicinity. Turning to a doctrine of our own time, it is interesting to see that both analysis and synthesis can also be described in *inferential terms*. Synthesis demonstrates the principles of operation of a system, or in

397 Ramus, “One method,” 145; Ramus, *Methodus*, 18recto: “Nulla ars à posterioribus naturam et ignotioribus procedit ((peteret enim τὰ ἐξ ἀρχῆς) et prodigiosum chaos efficeret sublimibus pedibus abjecto deorsum capite deformatum), sed contrà, disciplina omnis à generalibus ad specialia procedit, quia illa sunt (...) ut Aristoteles verè docet. Quare συνθετικῆ methodus nulla est.”

inferential terms how a game functions and what are its rules.³⁹⁸ Synthesis embodies the inner mechanics of a system, what leads to what, while analysis shows another playground which is perpendicular to the one of the order of things; it shows the manner in which a player is trained and the process by which his disposition is installed. For Zabarella this means that method is in fact synthetic because it leads from the gathering of experience to the formation of an art. Indeed, in order to put an art into action, one must possess know-how, meaning that one must know the relations leading from a certain cause to a certain effect. In this sense if in the arts we are always interested in causing some effect to occur, we must know to put in place the right causes that will in the most cases result in a certain effect. In other words a painter must know what canvas, what kind of paint and what kind of brush to use in order to effectuate a certain kind of painting. In this sense any art (including, in this sense, medicine, logic, painting and rhetoric) *must* be compositive. In other words art is essentially synthetic (this time in the Zabarellist sense). In the *De Methodis* (Book II, Chapter XVI)³⁹⁹ Zabarella defines the compositive order as one which proceeds from the first and most general principles to the more particular effects, and he thinks that not only the arts but also the sciences can be learned through this compositive order. The compositive order is accomplished after the resolutive (or analytic) process. The resolutive method, or the one “going backwards,” looks at a product or an effect and from this infers the general principles, rules of action or instruments with which the product is realised. The full methodical process, based on composition and resolution, is named by Zabarella the “regressive” method, which happens “between a cause and an effect, when these two are put in a relation of exchange, and the effect is more known to us than the cause.”⁴⁰⁰

2.2.5. Order, Universal *mathesis* and the Order of Things

Having concentrated on the meaning of the term synthesis in the humanist context, let us proceed to the concept of order itself. One can indeed say that order is a central concept in Descartes’ philosophy. One is reminded of Descartes’ words in his letter to

398 On inferentialism and the rules of the game, see: Jaroslav Peregrin, *Inferentialism; Why Rules Matter* (London: Palgrave Macmillan, 2014).

399 Jacopo Zabarella, “De Methodis,” *Opera Logica* (Venice: Apud Meietum. 1578), 214–215.

400 My translation from Jacopo Zabarella, *Über die Methoden-Über den Rückgang*, trans. Schicker (Munich: Fink, 1994), 319.

Mersenne in 1629: “Order is what is needed.”⁴⁰¹ Indeed, it seems that the overall Cartesian project is internally tied up with the incessant search for a proper manner of ordering one’s thoughts on one’s own way towards the truth of things. However, in Descartes’ *Regulæ*, the concept of order arrives coupled with *measure*: “We should know that all the relations which one may possibly obtain between entities of the same kind should be placed under one or other of two categories: viz. order or measure.”⁴⁰² What is the difference between measure and order? Descartes gives the answer in the 14th rule. Measure, based on degrees, necessarily creates a series in as much as order can be also made between things arriving from different series. That is to say while a measure is always made *from within a genre*, order can be also made *between genres*. Differently from Aristotelian logic, measure is found within a certain genre (*genus*), a certain category of discussion in as much as order can be constructed between two things alone without needing a third genre to contain them. Using Scholastic terms Descartes states that order can be *found between different genres*. In that sense a true order is one bringing together different matters belonging to *different kinds* of matters, and order is more complex than measure; in as much as measure leans strictly on quantitative measures of counting, order can also use other instruments, for example modelling, figuration, deduction or intuition. However, Descartes’ aspiration is to bring together as many problems as possible to be represented through measure and not through order so that mathematics (above all, algebra) can provide a quantitative account of the state of the matter. So, the Cartesian methodist strives to bring his data into a state of measure so that the *order* is easily viewable. In that manner, for example, vegetables and fruits should be transformed into higher kinds of edible products so that we can really see the difference between the various particulars. This is what happens when everything becomes measure and why it is so helpful, according to the young Descartes:

*All things can be disposed according to certain series, not indeed insofar as they are referred to a certain genus of entity, as philosophers divide these things into their categories, but insofar as some can be known from others, such that as often as some difficulty occurs, we can immediately notice whether certain ones are prior to others, and which ones, and in what order to survey.*⁴⁰³

401 Letter to Mersenne 20 November 1629. Descartes, *Œuvres* I, 80; Descartes, *Writings* III, 12.

402 Descartes, *Writings* I, 64; Descartes, *Œuvres* X, 451: “Jam vero ut exponamus, quibusnam ex illis omnibus hîc simus usuri, sciendum est, omnes habitudines, quæ inter entia ejusdem generis esse possunt, ad duo capita esse referendas: nempe ordinem, vel ad mensuram.”

403 Descartes, *Œuvres* X, 381.

David Rabouin unfolds not only the structure but also a comprehensive history of universal mathesis.⁴⁰⁴ He notes⁴⁰⁵ that in Descartes we find two kinds of *mathesis*: One kind of mathesis happens as a spontaneous intuition or direct measure of things by the mind, and the other is established by the pre-preparation of method. The *mathesis universalis* is the science of proportions as is the *Treatise on music*.⁴⁰⁶ The order of matters in this sense can be understood as parallel to that which is meant when we speak of the *mathesis universalis*; it is that infra-order expressing the abstract, quantifiable structure existing within all things and processes together. The *mathesis universalis* has a utopic character: We can only aspire to bring to a full expression the entirety of matters and their inner relations. It is clear that this order of things is for Descartes quantifiable, but for Clauberg the infrastructure is not that of proportions but rather one of *meanings*. The universal order that Clauberg references is not a one of quantifiable, mathematised relations; it is rather one of ordered meaning of things in their proper place in the order of the world.

In general, regarding the subject of *mathesis universalis*, one must mark a substantial difference between Descartes and Clauberg. If for Descartes the aim of method is to arrive at a mathematisation of reality, for Clauberg it does not seem that mathematics for itself is an important thing to achieve. What he is looking for most of all is precision and order in our usage of philosophical language. In fact, mathematics plays almost no role in the Claubergian corpus. Again, we see a process of de-mathematisation of the Cartesian *mathesis*. It seems that for Clauberg, in fact, what works at the level of quantities for Descartes, the infrastructure, is replaced by Ramist rationality with one of *loci*, tropes and definitions of segments of reality.

404 David Rabouin, *Mathesis Universalis: L'Idée de mathématique vniuerselle d'Aristote à Descartes* (Paris : Presses Universitaires de France, 2009).

405 Ibid, 431–440, “Mathésis et méthode.”

406 Descartes, *Œuvres X*, 89–141; René Descartes, *Compendium of Music*, trans. Walter Robert, Musicological studies and documents 8 (Michigan: American Institute of Musicology, 1961).

2.2.6. The System of *loci* as the Basis of Ramist Synthesis and the *topica universalis*

In Clauberg's immediate predecessors, that is to say that group which we call the Philippo-Ramists, we find the most influential synthetic method of the *system of loci*, known also as the school of the *topica universalis*, sometimes also referred to as Encyclopaedism.⁴⁰⁷ The tradition of the *topica universalis* stems directly from both Ramus and Melanchton,⁴⁰⁸ and hence one can say that the method of universal typifying expresses the very core of that strange mixture of different methods of the Protestant Melanchton and the Calvinist Ramus. The system of *loci* was created during the 16th century as a result of the reorganisation of knowledge by the Humanists. It condenses the work of Humanism. If in the Humanist method we view the rather liberating movement of collecting and comparing data from different sources, the later humanism of the *topica universalis* is much more disciplined: It not only aspires but also realises a discipline of order of different themes, occupations and faculties of the human being. We can see here again the striving for order which became more and more prominent towards the 17th century. Michel Foucault in *Les mots et les choses* sheds light on the passage from the Renaissance *epistemè* of similarity to the one reigning in the 17th century in the works of authors such as Descartes and the Port Royalists, the one of overarching organisation and the charting of reality.⁴⁰⁹ Indeed, what Foucault emphasises is that if in Renaissance Humanism order resulted from the affinities found between the things of the world, in the 17th and 18th centuries we find a relation which is established with order itself; that is to say order, in its own right, becomes a subject of desire, creation and realisation. At a deeper level order becomes in the 17th century an autonomous mode of rationality; it no longer draws its reference point from the things of the world but is nourished and directed by its own rules of organisation. Hence, something indeed happens during the 17th century regarding the place of order not only

407 The leading member of this group, Johan Heinrich Alsted, published in 1620 his *Encyclopaedia Cursus Philosophici*. Johann Heinrich Alsted published the Encyclopaedia in seven volumes in 1620, which is known to establish the paradigm for German encyclopaedism for centuries to come. See also Massimiliano Savini, "La Panacea Philosophica de Johann Heinrich Alsted: un projet architectonique d'accès au savoir," in *Branching Off: The Early Moderns in Quest for the Unity*, edited by Vlad Alexandrescu (Bucharest: Zeta Books, 2009), 211-225.

408 Wilhelm Schmidt-Biggemann, *Topica universalis. Eine Modellgeschichte humanistischer und barocker Wissenschaft* (Hamburg: Meiner, 1983), 6.

409 Foucault, *Les mots et les choses*, 67-69; On Descartes' theorems see Philippe Sabot, *Le Même et l'Ordre. Michel Foucault et le savoir à l'âge classique* (Lyon: ENS Éditions, 2015).

in civil, social, and political spheres but in theological and intellectual ones as well; it is order itself which becomes a self-standing value.

Returning to the system of *loci* of the *topica universalis*, of course one should not forget the Aristotelian source of this rationality. Many of the theoreticians of this system acknowledged explicitly their debt to the Aristotelian *Topics* which gradually became a viable alternative to the rationality based on Aristotelian analytics. Hence, universal topics were not only directed to establish a functional operativity of the systems of education but also aimed to establish a culture of civil reason in which all of man's dealings are taken into account and find their proper place. In this framework the art of reasoning becomes the art of conversing, or dialectics (the name of Ramus' most influential treatise). Civil and juristic commerce becomes the central focal point of the organisation and ordering of knowledge.

The inherent problem in this regime of ordering, according to Schmidt-Biggemann, is that it is structurally ambivalent: On the one hand the system of *loci* is a structure of relations; on the other hand the system of *loci* aspires to achieve precise definitions of all things. Hence, we have here a paradoxical rationality in trying to hold the rope on both ends, but it is both ultra-relational and able to account for specific cases. Jan Amos Comenius, the great Ramist reformer of education, was a rigorous thinker in the tradition of the *loci*. He developed his system of education as a great topical system.

What exactly are the *topoi/loci*? If in Aristotle, and after him in the rhetorical tradition, the *topoi* were developed as measures or instruments, units of meaning to be used in the construction of discourse, in the 16th and 17th centuries they are explicitly *places within* the universal system of order. Philipp Melanchton poses his *loci* in a theological framework in his *Loci communes* of 1521.⁴¹⁰ Here Melanchton spreads his theology through a list of general, easily approachable topics (sin, law, gospel, grace, signs and love). According to Schmidt-Biggemann, it is already in Melanchton that the *topoi* abandon their rhetorical formality, and they become instead epistemological, content-oriented guiding concepts that constitute the domains of the various sciences.⁴¹¹ Hence, the *topoi* are, in the first place, the coordinates of the overall system of knowledge.

410 Philipp Melanchton, *Commonplaces*, trans. Christian Preus (Saint Louis: Concordia publishing house, 2014).

411 Schmidt-Biggemann, *Topica Universalis*, 20: "Mit Melanchthon verloren die Loci communes zwar die formalen Spuren ihrer Herkunft aus der Topik. Sie wurden im rhetorischen

The final question in this primary presentation of the Early Modern mode of rationality of the *topica universalis* is, What is the place of philosophy in this great endeavour? This question occupied most of the theoreticians of the *topica* (such as Freigius,⁴¹² Alsted, Comenius and Goclenius). However, in each of these authors one finds different characterisation of the locus of philosophy and its sub-domains. Moreover, philosophy is spread through the extended schemas of knowledge between several domains of application such as logic, ethics, technology, physics, mathematics and medicine. In this sense one can indeed say that one of the great changes that the rationality of the *topica universalis* brought is a clear *de-stabilisation* of the place of philosophy. Philosophy found itself being blended with domains of general theory or sciences of principles, irredeemably harming its secure metaphysical place which had been maintained both in the Aristotelian and the Platonic traditions. The question of the placement of philosophy was also the central one that Clauberg himself picked up from this tradition, posing the place of philosophy in the practice of ordering he inherited from his predecessors. In fact, it seems that the only one of Clauberg's writings which stands in close contact with the rationality and style of writing of the Philippo-Ramist and their topics is the *Ontosophia* with its three versions. It is here that we find the deconstruction of the metaphysical terrain into several conceptual-linguistic, elementary building blocks, easily usable in all theoretical domains.

In general, what happens in Clauberg's localisation of philosophy is that he places philosophy, in the first place, far away from discussions of theology. Philosophy in this sense belongs to the domain of secular knowledge. Indeed, Clauberg thinks that this is also Descartes' attitude towards philosophy and that by doing so, he aligns his philosophy with Cartesianism. In the second place philosophy is described as participating in the pedagogical programme of the education of young people who are not merely interested in practical knowledge. In this sense Clauberg indeed dedicates a special place to what one calls in Germany still today (at least in the German-speaking world) "theoretical philosophy," which is a domain differentiated both from practical philosophy and theology. It is interesting to observe that Clauberg did not write any texts explicitly interested in ethical questions. One wonders whether this is a result of his rather short lifetime or if the disappearance of ethics from Clauberg's Cartesianism tells us something more meaningful.

Umfeld aber als epistemologische, inhaltsbezogene Leitbegriffe behandelt, die Einzelwissenschaften konstituierten."

412 Johann Thomas Freigius or Frigius (1543–1583).

Finally, what we defined as *first philosophy* in Clauberg, including his logic and methodology, make way for a certain transcendental examination, the preparatory learning and self-estimation that are necessary conditions for any philosopher to begin his way towards the truth of things. Regarding this one should also note that Clauberg works in fact as a critic of Philippo-Ramism. Instead of jumping headway into the pool of the *loci* of knowledge, it is as if Clauberg, aided by the Cartesian method of hesitation, is saying, Do not trust the established, received system of classification before you examine this system, and yourself, that is to say your own mind, in its relation to this accepted system of locations. This critical stance towards accepted systems of classifications and the proposal of dynamical forms of methodism were possible reasons for Clauberg's expulsion from teaching at the academy of Herborn, which was, indeed, a haven of Ramist encyclopaedism.

2.2.7. The Organisation of the Order of Matters in the Claubergian Text

In as much as *analysis* develops in a sequence of reasoning, synthesis has a figural, synoptic nature: The place of figural synthesis in Clauberg's thought is addressed in Chapter 3.2. For the time being it is important to note that synthesis is graphic, diagrammatic, schematic depiction of the structure of reasoning rather than its narrative sequence. Spinoza also saw synthesis as coupled with what was understood as a geometrical style. He constructed his *Ethics* following the geometric manner of presenting the order of things. Hence, synthesis comes as a composition of simple, verified units. This composition, as the end of philosophical inquiry, supplies an order which parallels the order of things *as they are*. "The order of the things as they are" is not a negligible element in Cartesian philosophy. Things as they are represent a world as it is guaranteed by divine intervention. The craft of synthesis within the philosophical project is that aspiration to create a body of thought which will make a unity, a simple, well-disposed unity.

What kind of orders do we find in the Claubergian corpus? In most cases his writings are divided into limited sections that are in most cases numerically ordered. However, the rationality that we find in Clauberg in the organisation of his writing is not always logical; that is to say it is not always the case that the sections relate to each other as a continuous chain in an order of reasoning, nor are they necessarily related by inference or deduction with one another. Instead, the inner reason of the division into sections is more sporadic and hermeneutical; it refers to different places in the writing of Descartes, to certain words and terms, demanding clarification. In the *Defensio*

Cartesiana Clauberg follows the order of accusations made by Descartes' critics in order to face them one by one. As a *hermeneutician*, Clauberg works continuously *in front of a text*; he is always thinking while flipping forwards and backwards through some text on which he is commenting. Indeed, his writing method is one of commentaries: The numeration/alphabetisation of the different sections helps the reader follow the order of matters rather than the order of reasons.

As such, one must note the strict stylistic difference between Descartes' writings and those of Clauberg. If Clauberg assumed a great deal of the Cartesian manner of thinking, he still practiced a manner of writing which was quite other than the one we find in Descartes. Clauberg's writings themselves cannot be said to be written in what Descartes would call the "analytical order," the one that we find in the *Meditations*, that is to say a diachronic style of demonstration following the thinker's trail of thought, as we discussed above. However, neither can Clauberg's writings be considered as written in a strictly geometrical order in which the different sections are organised according to the matters themselves and the logical relations between them. Moreover, one could say that Clauberg's way of writing is not very similar to what we find in his predecessors, the Philippo-Ramists, in whose texts we find a way of ordering and deployment of the discussion which is rather table-like, putting into order in a classificatory manner all the items discussed. Clauberg's style of demonstration is indeed different: It is, like the order of reading, the order of passing through the discussed text. The writings are divided into sections in numerical and alphabetical order; however, the relation between the different divisions is not necessarily continuous. The divisions are rather like notes of local questions, themes, problems, or even text places from Descartes or others. The divisions themselves stand rather as independent from one another, and they are only rarely divided into sub-sections, more like a chain of commentaries. The only exception to this rule is the earlier *Ontosophia*, which is written similarly to the ordered lists of terms of the Philippo-Ramists. Moreover, one should note that in as much as his philosophical mentor Descartes only rarely references other philosophers or sources, Clauberg is very much aware of the force of citation. He cites amply in his writings from sources of a wide spectrum, from the Bible to theological authorities, ancient philosophers, Renaissance philosophers and philosophers of his own century. Often, he presents quotations in their original languages, always noting the precise place from which the citation was taken. The impression the reader gets from strolling through his *Opera omnia* is one of a great humanist, sitting in the midst of a library, taking from the shelves each time a new source with which he can work. This order of reading that we find in most of Clauberg's writings reveals more than just an aesthetic, stylistic aspect regarding his thought. Clauberg's order of reading attests to the fact that he only rarely

works without a textual reference; he is inherently a listening philosopher, being attentive to the various possibilities offered to him by the history of philosophy. In this sense he is not a free-standing philosopher as Descartes indeed was (or at least wished to be). He constantly leans on other sources to proceed with his thoughts. This also leads us to what we would like to call in subsequent chapters Clauberg's "other empiricism." Clauberg's thought is not introspective; it is always motivated by matters coming from the *outside*, demanding interpretation and understanding. He is, in this sense, inherently a *scholar* of philosophy, a learner, a student, one who remains constantly in an ongoing process of initiation, occupied with the task of teaching and professing.

2.2.8. The Order of the World in Descartes and Claubergian Universal Order

As we are explaining the plethora of orders found in the Cartesian corpus, we have an order which is not intended as internal to method but as belonging to the exterior world. What kind of order do we find in Descartes' world, and what is the relation of the thinking man to this world? In the *Discourse on method*, Descartes argues that it is better to "change my desire rather than the order of the world."⁴¹³ Here, the order of the world is synonymous with things as they are, things that are unchangeable. The *topos* of order returns here as a cosmological term, relevant to the moral-ethical register of reasoning; it is the order of the world as it is, that order which demands from me a certain kind of moral resignation (stoic in character). The order of the world is that which one cannot aspire to change; it is that to which we must adapt; it is that reality to which we must habituate ourselves. In a letter from 1629, we see a similar usage of the term the *order of things* in a discussion of the notion of universal language, which is utopic and unattainable:

*But I do not hope ever to see such a language in use. For that, the order of things would have to change [cela presuppose de grans changemens en l'ordre des choses] so that the world turned into a terrestrial paradise; and that is too much to suggest outside of fairyland [pays des romans].*⁴¹⁴

There is then an aspect to the order of things which is related to things as they are, the things we cannot change even with the help of philosophy. This is referred to by

413 Descartes, *Œuvres* VI, 25; Descartes, *Writings* I 124–125.

414 Descartes, *Œuvres* I, 81.

Descartes as the order of the world, the order of things as they are given. For Clauberg this order of the world is even more enhanced in its authority than in Descartes. The order of matters is revealed to us gradually as *that which philosophy cannot change*. This is a threshold which is clearly apparent in Clauberg's corpus. The moment of synthesis is a moment of acceptance. There is a conceptual moment of passage, allowing the switching between analysis and synthesis to take place, and this is the moment of the stopping of doubt. This is the moment when one arrives at the possibility of forming an equation, a moment of an "ergo," a moment creating a tautology when one gets to a place where the same result is achieved no matter whether subjunction and division take place. Then one can begin a deduction, an extension of the invented unit. This is the moment of artificial, *imposed* intuition. The ergo-moment is the summit of what a human mind can artificially achieve. It is a base, a starting point from which one can begin to construct. What is especially interesting is that for the Claubergian philosopher, the unbridgeable halt is found between philosophy and the order of things, not between philosophy and metaphysics.

In the *Logica contracta*, Clauberg defines the terms that are relevant here, universal order and natural order:

*The universal order is that by which all the parts of some discipline together are mutually set in order; the particular [order is that], by which singular [parts] are ordered in ever smaller particles. So the universal order of Logic is, as I have said before, analytical. The particular order, however, is synthetical, since it progresses from genre [a genere], species and other simple notions towards definitions etc., from a simple axiom towards a composite [axiom].*⁴¹⁵

In another passage, Clauberg states that natural order is that towards which certain disciplines are disposed, by which some singular quantity is divided into minor particulars.⁴¹⁶

415 OOP II, 934 (*Logica contracta*, §257): "Ordo *universalis* est, per quem disciplinae alicujus partes universae inter se disponuntur ; *particularis*, per quem singulae quantum ad minores particulas digeruntur. Sic Logicæ universalis ordo, ut modo dictum, est analyticus : at cum à genere, differentia aliisque notionibus simplicibus ad definitiones etc. ab axiome simplice ad compositum progreditur, particularis ille ordo est et syntheticus."

416 OOP II, 934 (*Logica contracta*, §258): "Ordo *naturalis* dicitur, cum res ipsae ex natura sua ita sunt connexae, uti à nobis cognoscuntur vel traduntur, cujus insigne specimen in quatuor Logicæ gradibus [...]." "Natural order is meant when the things themselves (res ipsae) are connected by their own nature in such a way, that we can [get to] know and taught [...]."

Natural order according to Clauberg is first and foremost hierarchical; a field of knowledge is ordered according to its internal and particular divisions. One should not fail to acknowledge here, again, the influence of the *topica universalis* that we discussed above; in fact, the order that we are discussing here is the order of the disciplines, not the order of things in the world as they are. Clauberg is always interested in the organisation of the world of knowledge and the principles of rationality used by the philosopher. Nature *is* its own organisation. Nature is its own ordering.

2.2.9. Order as a Regulator

What exactly is order for Clauberg? He gives us an explicit hint in the *Ontosophia*. Here, Clauberg recognises that order is in fact a kind, a form, of diversity: “For order, just as we see in it the prior and the posterior, is a species of diversity.”⁴¹⁷ Hence, we only need an order when we are faced with a situation in which there is some variety of data:

*The order of disposition [ordo dispositionis] either regards [respicit vel] at the place, as the teacher's chair is determined to be the first place in an auditorium; or [it regards] the method and the way to acquiring knowledge [cognoscendi viam], as the introduction [of a speech] precedes the presentation of proof. The natural and true order of acquiring knowledge [Ordo cognoscendi naturalis et verus] is derived either from the nature of things, and in this way the causes are better known than the effects and the simple things [better] than composites; or [it is derived] from the knowledge about ourselves, which is distinct and easily obtained, and in this way the mind is better known than the body. This natural order is set against (1) the arbitrary one that is reliant on our desires [à voluntate nostra] and (2) the superficial and imaginary one [that is reliant on] deformed vulgar notions.*⁴¹⁸

417 OOP I, 329 (*Ontosophia* §277): “Ordo enim, prout in eo prius et posterius spectantur, species quaedam diversitatis est.”

418 Ibid., §278: “Ordo *dispositionis* respicit vel locum, ita primus locus in auditorio statuitur cathedra; vel methodum et cognoscendi viam, ita exordium orationis praecedit confirmationem. *Ordo cognoscendi* naturalis et verus petitur vel à natura rerum, atque ita causæ effectis, simplicia compositis notiora sunt; vel à cognitione nostra distincta et facili, atque ita mens sibi notior quàm corpus. Huic ordini naturali opponitur 1. arbitrarius qui à voluntate nostra pendet, 2. apparens et imaginarius, qui à vulgaris notitiæ perversitate.”

Order works as a regulator of imagination and vulgar opinions. In conformity both with Descartes and Ramus, Clauberg uses methodical order as a regulator of the restless tendency of man to imagine and presuppose unverified judgments. However, if we proceed step by step, that is to say in the first place using the method of doubt (as we see in Part 3 of the present research), we have the advantage of being able to regulate and block these tendencies that pull us away from the truth of things. Cartesian order begins with the order of verification, being placed before advancement into the determination of the order of matters. The order of matters for Clauberg is not the same as what we find in Descartes: For Clauberg the order of matters is not necessarily inferential; it follows the order of the text. It is *an order which is inherently hermeneutic*. It is the order of reading, the order of understanding. In a way one can say that for Clauberg a certain unification is achieved between the order of reasons and the order of matters *in the framework of the order of reading*. Genetic order, representing the way to achieve one's principles, and the analytic order, furnishing valid judgments on the discussed object, are presented as one and the same order, the order of the rather arbitrary division of the text. This achieves a circularity of the argumentation in Clauberg, where the end point returns to the starting point, and this point from which we part and to which we arrive is self-estimation. This reversibility of method is treated in the conclusion of the present project as the *pre-destination of (Claubergian) method*. In the era just before Clauberg, this reversibility was apparent in the Zabarellist method, working between sense data and the principles that help us explain them. This movement back and forth between the matter that we perceive and our disposition of principles recalls the Zabarellist theory of *regressus* (see Section 1.1.6). This reversibility is not the character of Descartes' project itself, which has an open-ended mathematised construction at its far end. In the case of Clauberg, if this reversibility is allowed, then perhaps one can read, with Clauberg, Descartes' *corpus of works* from the end to the beginning, from the *Passions* to the *Regulae*, from his physical morals to the principal rationality established in the *Regulae*, from morals, habitude and the production of generosity backwards to the 'methodical moment when the truth of things is sought. This is indeed what Clauberg suggests: establishing an organic hermeneutical reading of the Cartesian corpus in which we can move between the several parts of the philosophical oeuvre. Again, we should not forget that there is no positive sign that Clauberg knew the text of the *Regulae*. However, it seems that in many ways he is discovering ideas and principles that one can find in the very early writings of Descartes. The *Regulae* and the *Olympica* constitute the beginning of Descartes' thought, and it is there that one should look for the operative principle of his thought. However, it is in

the moral writings of his later period that we must recognise the horizon of the Cartesian message, and this is exactly what Clauberg clearly understands. He tries to present the Cartesian corpus always as a cohesive whole; he tries ceaselessly to deconstruct the fundamental Cartesian intuition which he doubtlessly endorsed.

2.2.10. Imposed Intuition

The reconstructive moment of method arrives when analysis is stopped by a moment of intuition which is imposed by the putting into order of the matters of the inquiry. What is then the relation of the order of reasons with the *lumière naturelle*? The binding between the order of reasons and intuition comes at the deductive level of the *order of matters*, where one can view the order which was established between the data. We must bring our deductive process to a place of certainty so that we can allow intuition to take place.⁴¹⁹

Ferdinand Alquié emphasises the relationship between order and intuition as central to the Cartesian inquiry:⁴²⁰

The [central] problem of Descartes is that of the relations between those modes of knowing: intuition and deduction. (...) Deduction presupposes order. As such the problem is that of the relation of intuition and order. And it is absolutely clear that these two notions are inseparable: without intuition, order will amount to nothing, it will not be capable of ordering nothing, there will be no matter; and, without order, intuitions will present themselves without a relation between them, hazardously; they will not constitute a veritable knowing, but they will largely

419 See Frederick Van de Pitte, "Intuition and Judgment in Descartes' Theory of Truth," *Journal of the History of Philosophy* 26, no.3 (July 1988), 468: "What Descartes is insisting upon is that we never permit natural (automatic) assent to occur until we have so thoroughly examined the issue that we have reduced it not merely to a high degree of probability, but indeed to necessity. For only when natural assent is complemented by necessity can we be certain that we are not in error."

420 Ferdinand Alquié, *Leçons sur Descartes: Science et métaphysique chez Descartes, Les Cours de Sorbonne 1955* (Paris: La table ronde, 2005), 42: "Le problème qui se pose à Descartes, c'est celui des rapports entre ces modes de connaissance : l'intuition et la déduction [...]. La déduction suppose l'ordre. Ainsi le problème est celui du rapport de l'intuition et de l'ordre. Et il est absolument clair que ces deux notions sont inséparables l'une de l'autre : sans l'intuition, l'ordre ne serait rien, il ne pourrait rien ordonner, il n'aurait pas de matière ; et, sans l'ordre, les intuitions se présenteraient sans lien entre elles, au hasard ; elle ne constitueraient pas une véritable connaissance, elle se présenteraient tout au plus comme des sortes d'expériences fragmentaires, elles ne formeraient pas, à proprement parler, une science."

present themselves as sorts of fragmentary experience, they will not form a science, in the proper sense of the term.

As a mixture of the two orders (the order of reasons and the order of matters), methodical order demands a *durational discipline* of thought. This means first and foremost not putting the wagon before the horse, not doing sooner what should come later, thus giving reality time to sort itself out before the inspective mind arrives. This is a *postponement* technique, taming the will, demanding the latter not throw its rod too far too quickly. We will see that for Clauberg this postponement is extremely central for the understanding of method.

In as much as the order of analysis is challenging and difficult, Descartes says that the order of synthesis should be easier to establish. Viewing the order from the perspective of a bird is relatively easy: “There is no difficulty whatsoever in recognising an order once we have come upon one.”⁴²¹ When a moment of ergo is achieved, one is already in the deductive domain, the domain of facility. Descartes wants to bring his method to a state in which working with it will be like, in the Cottingham translation of Descartes, *a child’s play*. He brings in the object of the anagram, the cipher. “(T)he [...] method of invention consists entirely in arranging things in (an) orderly way. If this is done, the task will seldom be tedious; It will be

421 Descartes, *Philosophical writings* I, 64–65: “By following Rule Seven we can easily survey in our mind the individual parts which we have ordered, because in relations of this kind the parts are related to one another with respect to themselves alone and by way of an intermediary third term, as is the case with measures, which is our sole concern to explicate here. I can recognize what the order between A and B is without considering anything over and above these two terms. But I cannot get to know what the proportion of magnitude between 2 and 3 is without considering some third term, viz., the unit which is the common measure of both.”

Descartes, *Œuvres* X, 451: “Sciendum prætera, un ordine quidem excogitando non parum esse industriæ, ut passim videre est in hac methodo, quæ ferè nihil aliud docet; in ordine autem cognoscendo, postquam inventum est, nullam prorsus difficultatem contineri, sed facilè nos posse juxta regulam septimam singulas partes orginatas mente percurrere, quia scilicet in hoc habitudinum genere unæ ad alias referuntur ex se solis, non autem mediante tertio, ut sit in mensuris, de quibus idcirco evolvendis tantùm hîc tractamus. Agnosco enim, quid sit ordo inter A & B, nullo alio considerato præter utrumque extremum; non autem agnosco, quæ sit proportio magnitudinis inter duo & tria, nisi considerato quodam tertio, nempe unitate quæ utriusque est communis mensura.”

mere child's play":⁴²² *sed tantùm puerilis labor*⁴²³ (AT X 391, 28). Descartes explains beforehand the way to reach that order.

Thus if you want to construct a perfect anagram by transposing the letters of a name, there is no need to pass from the very easy to the more difficult, nor to distinguish what is absolute from what is relative, for these operations have no place here. All you need to do is to decide on an order for examining permutations of letters so that you never go over the same permutations twice. The number of these permutations should, for example, be arranged into definite classes, so that it becomes immediately obvious which ones present the greater prospect of finding what you are looking for.

There is no difficulty whatsoever in recognizing an order once we have come upon one. By following rule seven we can easily survey in our mind the individual parts which we have ordered, because in relations of this kind the parts are related to one another with respect to themselves alone and not by way of an intermediary third term, as is the case of measures, which it is our sole concern to explicate here. I can recognize what the order between A and B is without considering anything over and above these two terms. But I cannot get to know what the proportion of magnitude between 2 and 3 is without considering some third term, viz., the unit which is the common measure of both.

422 Descartes, *Philosophical writings*, I, 26–27; Descartes, *Œuvres* X, 390–391: “Addidi etiam, enumerationem debere esse ordinatam: tum quia ad jam enumeratos defectus nullum præsentius remedium est, quàm si ordine omnia perscrutemur; tum etiam, quia sæpe contingit ut, si singula, quæ ad rem propositam spectant, essent separatim perlustranda, nullius hominis vita sufficeret, sive quia nimis multa sunt, sive quia sæpiùs eadem occuperent repetenda. Sed si omnia illa optimo ordine disponamus, ut plurimùm, ad certas classes reducentur, ex quibus vel unicam exactè videre sufficet, vel ex singulis aliquid, vel quasdam potiùs quàm cæteras, vel saltem nihil unquam bis frustra percurremus; quod adeò juvat, ut sæpe multa propter ordinem benè institutum brevi tempore & facili negotio peragantur, quæ primâ fronte videbantur immensa.

Hic autem ordo rerum enumerandarum plerumque varius esse potest, atque ex uniuscujusque arbitrio dependet; (...) Per multa quoque sunt ex levioribus hominum artificijs, ad quæ invenienda tota methodus in hoc ordine disponendo consistit: sic si optimum anagramma conficere velis ex litterarum alicujus nominis transpositione, non opus est à facilioribus ad difficiliora transire, nec absoluta à respectivis distinguere, neque enim ista hîc habent locum; sed sufficet, talem tibi proponere ordinem ad transpositiones litterarum examinandas, ut nunquam bis eadem percurrantur & sit illarum numerus, ex. gr., in certas classes ita distributus, ut statim appareat, in quibusnam major sit spes inveniendi quod quæritur; ita enim sæpe non longus erit, sed tantùm puerili labor.”

423 One can better say “a making of a child.”

After an order is established, it enables perceiving the truth with ease; this is what we call in the present research the synoptic moment of method.⁴²⁴ The difficulty in measurement can be reduced through recourse to ordering. The set of units can be arranged in such an order that the difficulty involved in discerning a measure becomes simply one of scrutinising the order. According to Descartes the greatest advantage of our method lies in this progressive ordering.⁴²⁵ We should realise that with the aid of the unit we have adopted, it is sometimes possible to reduce continuous magnitudes to a set, and this can always be done partially at least.⁴²⁶ An order is easily seen; it is easily scrutinised, and as such, it is essential for the proceedings of method.

I said also that the enumeration must be well ordered, partly because there is no more effective remedy for the defects I have just listed than a well-ordered scrutiny of all the relevant items, and partly because, if every single thing relevant to the question in hand were to be separately scrutinized, one lifetime would generally be insufficient for the task, for either there would be too many such things or the same things would keep cropping up. If we arrange all of the relevant items in the best order, so that for the most part they fall under definite classes, it will be sufficient if we look closely at one class, or at a member of each particular class, of at some classes rather than others. If we do that, we shall at any rate never pointlessly go over the same ground twice, and thanks to our well-devised order, we shall often manage to review quickly and effortlessly a large number of items which at first sight seemed formidably large. In such cases the order in which things are enumerated can usually be varied; it is a matter of individual choice.

424 Descartes, *Philosophical writings*, I, ; Descartes *Œuvres*, X, 451: “Jam vero ut exponamus, quibusnam ex illis omnibus hîc simus usuri, sciendum est, omnes habitudines, quæ inter entia ejusdem generis esse possunt, ad duo capita esse referendas: nempe ad ordinem, vel ad mensuram. Sciendum præterea, in ordine quidem excogitando non parùm esse industriæ, ut passim videre est in hac methodo, quæ ferè nihil aliud docet; in ordine autem cognoscendo, postquam inventum est, nullam prorsus difficultatem contineri, sed facilè nos posse juxta regulam septimam singulas partes ordinatas mente percurrere, quia scilicet in hoc habitudinum genere unæ ad alias referuntur ex se solis, non autem mediante tertio, ut sit in mensuris, de quibus idcirco evolvendis tantùm hic tractamus. Agnosco enim, quis sit ordo inter A et B, nullo alio considerato præter utrumque extremum; non autem agnosco, quæ sit proportio magnitudinis inter duo et tria, nisi considerato quodam tertio, nempe unitate quæ utriusque est communis mensura.”

425 Descartes, *Œuvres* X, 451–452: “Sciendum etiam, magnitudines continuas beneficio unitatis assumptitiæ posse totas interdum ad multitudinem reduci, & semper saltem ex parte; atque multitudinem unitatum posse postea tali ordine disponi, ut difficultas, quæ ad mensuræ cognitionem pertinebat, tandem à solius ordinis inspectione dependeat, maximumque in hoc progressu esse artis adjumentum.”

426 Descartes, *Philosophical writings* I, 27; Descartes, *Œuvres* X, 390-391.

Imposed intuition arrives after things are arranged into orderly series. The disposition of things, the putting of things into an order, *licences* intuition. According to the Humanist Ramus, after an order is established in the confused groups of perceptions, there is no more need for further invention (in the sense of analysis); everything will only need to be acknowledged, by synopsis.⁴²⁷

For Descartes all possible knowledge, except for that attained through intuition of isolated cases, issues from acts of comparison. Cartesian method aims at properly carrying out operations of comparison. Only intuition is attained without the need to use the art of comparison. Here, in the case of intuition, we need only the light of nature.⁴²⁸ The order that Descartes seeks refers first and foremost to the derivability of certain propositions from other ones. Cartesian methodical order determines how a thing is placed in a certain genre [*genus*]. The basic order that Clauberg seeks is the one of genres of knowledge. One should begin with the most facile and easy parts, and only after ordering them properly, to return to the question of the meaning of sense data and particular phenomena:

*Since one cannot examine the difficulties all at the same time, it is necessary to divide them into parts, on account of the second prescription of the method, and the third prescription of the method dictates that in getting to know these parts one should commence with the most simple and easy [parts]. As long as he commences his primary philosophy on the basis of such things (that it to say the most simple and facile things and also according to his judgment according to the truth of things), he decided to put to the side in the meantime the things that concern the senses, geometrical demonstration, sleep and waking, and to examine them only in the appropriate time and place.*⁴²⁹

427 La Ramée, *Dialectique*, 122: “Ici je demande quelle partie de Dialectique me pourroit enseigner de disposer ces preceptes ainsi confus et les réduire en ordre: premièrement ne sera besoing des lieux d'invention, car tout est la trouvé.”

428 Stephen H. Daniel, “Descartes' Treatment of ‘lumen naturale,’” *Studia Leibnitiana* 10, no.1 (1978): 92–100.

429 OOP II, 1161 (Initiatio V, §53): “Cùm enim non possit difficultates omnes simul examinare, necessum est, ut eas in partes dividat, ex praecepto Methodi secundo, atque in his partibus cognoscendis incipiendum esse à simplicissimis et facillimis praeceptum Methodi tertium sancit. Dum igitur à talibus (id est, simplicissimis ac facillimis, et suo iudicio et in rei veritate) primam Philosophiam inchoat, ad sensum, ad demonstrationes Geometricas, ad somnum et vigiliam spectantia tantisper seponere et suo demum loco ac tempore examinare decrevit.”

We find in the conversation with Burman a discussion of the very same point regarding the number of parts that the mind can carry simultaneously:

Burman: But our mind can think of only one thing at a time whereas the proof in question is a fairly long one involving several axioms. Then again, every thought occurs instantaneously, and there are many thoughts which come to mind in the proof. So one will not be able to keep the attention on all the axioms, since any one thought will get in the way of another.

Descartes: Firstly, it is just not true that the mind can think of only one thing at a time. It is true that it cannot think of a large number of things at the same time, but it can still think of more than one thing. For example, I am now aware and have the thought that I am talking and that I am eating; and both these thoughts occur at the same time. Then, secondly, it is false that thought occurs instantaneously; for all my acts take up time, and I can be said to be continuing and carrying on with the same thought during a period of time.⁴³⁰

From the Cartesian point of view, the mind is indeed capable of carrying several activities simultaneously, but its capacity is not limitless. Hence, the profit of method is to reduce the complexity which is carried by the mind to the point where our mind can deal with all the necessary operations at the same time. The aspiration is not one of unification but rather one of creating a compact complexity capable of being handled efficiently and distinctively. Again, we see here a double movement of reduction and configuration which is equivalent, in our terms, to analysis and synthesis. Indeed, also at the metaphysical level, we can see Descartes leading this compacting project, reducing reality into the two matters [*res*], the thinking matter and the extended matter, while still leaving some elementary, synthetic complexity to work with in creating and retaining the real distinction between these two. It is true that if we want to see in the Cartesian project a dualist one, then we must put synthesis at its centre: What if synthesis is not needed to think about what Descartes calls the “real distinction” between mind and body? However, this is not synthesis in the regular sense but rather a synthesis between two actually distinguished substances from two different genres, in the Cartesian terms of the *Regulæ*, a proposition regarding order

430 Descartes, *Conversation with Burman*, 6 [6].

(established between matters arriving from different genres) and not measure (determined within the *same genre*).

To conclude, it seems that one should rephrase the accepted meaning of the expression “the order of matters” in the Cartesian framework. The order of matters includes two meanings: One is the realist interpretation of things as they are, the order of the world that we noted above. These are things that one meets along one’s way, the problems that one should solve, the conditions to which one must learn to habituate. The other meaning of the order of matters relates to the reconstruction of a problem in a manner that will accommodate the acknowledgement of the truth of things.

In the coming chapters, we elaborate on the relation between order, reason and rationalism. We try to discover how, in Descartes’ and Clauberg’s methods, it is a dynamic of ordering that makes the technique of the creation of method. This will perhaps lead us to give an account of the term ‘Rationalism’ in the history of philosophy. We know now that this rationalism, at least as it was formulated by Descartes and Clauberg, must include an account of this *Theseus string* that we try here to discern, but it must also include its synthetic part. Turning a Theseus string (searching for a minotaur) into an Ariandna’s string (postponing the arrival of answers) and perhaps back again might be a clue to defining what is a rationalist intuition.

2.3.

The Equivocation of Analysis in Descartes and Clauberg

2.3.1. Presentation of the equivocality thesis; 2.3.2. The ancient sources of analysis;
2.3.3. Clauberg's *logica vetus et nova*; 2.3.4. Descartes' view of analysis; 2.3.5.
Returning to synthesis; 2.3.6. Analysis and metaphysics in the Cartesian context;
2.3.7. Ramus, Ramism and applied analysis; 2.3.8. Synthetic analysis: The suggested
model; 2.3.9. Genetic vs. analytic logic in Clauberg; 2.3.10. Conclusion: Synthetic
analysis and the formation of judgment

2.3.1. Presentation of the Equivocality Thesis

The present section aims to demonstrate the intricate dynamics of analysis and synthesis in the Cartesian framework and more specifically in Clauberg's philosophy. We argue that the full structure of methodical process includes not a single but rather a double process of analysis and synthesis, containing two levels of analysis and two levels of synthesis. We attempt to show that though analysis and synthesis are heuristically capable of being isolated as different moments of the methodical process, the methodical movement from that which is better known to that which is less known or from that which is known to us to that which is known in its nature is a heterogenic movement of division and composition.

Why is this important at the global level of discussion? In *analytic* philosophy, as the very term denotes, there is a clear preference for the concept of analysis over the concept of synthesis: One commonly thinks of philosophy as related to analytic know-how, leaving the synthetic level to artists and rhetoricians. Analysis in this view promises the prizes of rationality and realism, of providing the truth of things. On the other side of the discussion, what is usually called Continental philosophy has been from its very beginning interested in the systematic, synthetic model that German idealism,

for example, offers. The challenge is to offer a way to think of both terms not only as synthetically bound to each other but more acutely as belonging to the same methodical order.

According to Lex Newman, “There is no scholarly consensus on how to understand Descartes’ account of the distinction of analysis and synthesis. (...) Appeals to the history of the analysis/synthesis distinction have not been fruitful.”⁴³¹ Basing those observations on Descartes’ second reply to his *Meditations*, Newman concludes that “the *Regulæ* and the *Meditations* are, notwithstanding their difference, both works of analysis, and [...] the *Discourse* and the *Principles* do, in varying degrees, incorporate elements of analysis.”⁴³² In general, Newman sees the question of analysis as related to the question of first principles of knowledge. This relatively recent contribution testifies to the confusion that the term analysis has spread over Descartes studies. The fact that analysis, as *dihairesis*, is related to the process of finding first principles is relatively straightforward. However, I do not think that this is all there is to say about the role analysis plays in Descartes and in Cartesian philosophy. In the first place the differentiation between analysis and synthesis amounts not only to “literary style,”⁴³³ as Newman says. Instead, the rationality of the differentiation between analysis and synthesis stands at the very heart of Cartesian methodology. Also, a rigorous consideration of the historical aspect of the usage of the term analysis is crucial for understanding the Cartesian position.

Vincent Carraud supplies a key for the description of the meaning of this state of affairs:⁴³⁴ It must do with the place of the object in Clauberg’s philosophy. As Carraud shows, Clauberg forms an ontology which is object based; it is an ontology whose element of ‘Being’ lies in an objective reality, understood also as a *res*. For Carraud this places Clauberg’s ontology apart from Descartes’ first philosophy.

What our present section emphasises is that in the general philosophical framework, the term “analysis” has an equivocal meaning (that is to say a double

431 Lex Newman, “Descartes on the method of analysis,” *The Oxford Handbook of Descartes and Cartesianism*, edited by Delphine Antoine-Mahut, Steven Nadler and Tad Schmaltz (Oxford and New York: Oxford University Press, 2019), 65.

432 Ibid., 87-88.

433 Ibid., 65.

434 Vincent Carraud, “L’ontologie peut-elle être cartésienne ? L’exemple de l’Onstosophia de Clauberg, de 1647 à 1664 : De l’ens à la mens,” in Theo Verbeed (ed), *Johannes Clauberg (1622-1665) and Cartesian Philosophy in the Seventeenth Century* (Dordrecht, Boston and London: Kluwer Publishing, 1999), 13–38.

meaning).⁴³⁵ Many scholarly attempts have been made to demonstrate the analytical character of Cartesianism: It was Gueroult who determined that “*La constitution du nexus cartésien s’opère uniquement par l’analyse*” (“The constitution of the Cartesian nexus operates exclusively by analysis.”)⁴³⁶ Such sweeping determinations, however, prevent one from acknowledging how much synthesis exists, not only generally in Cartesian philosophy but also in its very nexus. In this sense Cartesian analysis, as it is found in Clauberg, operates as a synthetic procedure.

What is the problem of dualism, of the real distinction argument, if not the core problem of synthesis, the putting together of the different? As asked in the last section, What if not synthesis is needed to think about what Descartes calls the “real distinction” between mind and body?⁴³⁷ The scholarly identification between Cartesianism and analysis contributed to the tendency of some Continental philosophers from Heidegger onwards to condemn the reputed Cartesian *cogito*,⁴³⁸ understood as a tautology of the self-returning to itself, conceiving and reflecting on oneself, dividing and analysing oneself; it is conceived as an analytical structure of inquiry, especially according to the Kantian model of synthesis⁴³⁹ which understands synthesis as a judgment that *a* is *b*

435 That equivocation of analysis stands as one of the great ambiguities of the philosophy of Immanuel Kant: In Kant, analysis and synthesis receive unredeemable blur which participated in the formation of the devastating division between analytic and continental philosophy. (See for example R. Lanier Anderson, *The Poverty of Conceptual Truth: Kant's Analytic/Synthetic Distinction and the Limits of Metaphysics* (Oxford and New York: Oxford University Press, 2015); Peter Pagin, “Indeterminacy and the analytic/synthetic distinctions: a survey,” *Synthese* 164, no. 1 (September 2008): 1–18.) It is philosophically essential to shape an understanding of philosophical analysis, as well as to ask, what is the exact nature of the relationship between philosophy and analysis. But before being equipped to handle the later stage of the equivocation of analysis which belongs to our own times; it is essential that we see what happens with this term in the 17th century, notably in Cartesian philosophy.

436 Martial Gueroult, *Descartes selon l’ordre des raisons II- l’âme et le corps* (Paris, Aubier, 1968), especially pages 123–218.

437 On synthesis and the “unity” of the person, see Marleen Rozemond, *Descartes’ Dualism* (Cambridge: Harvard University Press, 1998); Paul Hoffman, “The Unity of Descartes’ Man,” *The Philosophical Review* 95 (1986): 339–369.

438 On Heidegger’s reading of Descartes see Jean-Luc Marion, “L’ego Et Le Dasein Heidegger Et La ‘Destruction’ De Descartes Dans ‘Sein Und Zeit.’” *Revue De Métaphysique Et De Morale* 92, no.1 (1987): 25–53; Jean-François Courtine, “Les méditations cartésiennes de Martin Heidegger,” *Les Études philosophiques* 88, no.1 (2009): 103–115; Matthew Shockey, “Heidegger’s Descartes and Heidegger’s Cartesianism,” *European Journal of Philosophy* 20 (2012): 285–311; Édouard Mehl, “Ego sum qui sentio: Phenomenology and the Reembodied Ego,” *Methodos savoirs et textes* 18 (2018), <https://doi.org/10.4000/methodos.5066>, consulted 14.4.2021.

439 Joseph Vidal-Rosset, “La distinction kantienne entre jugement analytique et jugement synthétique a-t-elle un sens?,” *Actes du Colloque Kant et la France - Kant und Frankreich* (Olms: Hildesheim -

when *b* is contained in *a*, and hence the *cogito* is a tautological judgment that does not add any new knowledge to what we knew before.

I hope the opening chapters of our thesis have demonstrated that in the methodist framework, analysis and synthesis are intimately bound together. Among the questions posed are What is the nature of their relation in the Cartesian context? How exactly do they work together, and what is the hierarchy between the two? Is analysis immanent to synthesis, or is synthesis immanent to analysis? My general thesis is that in all the authors we discuss—the Philippo-Ramists, Descartes and Clauberg—it is *analysis which makes part of synthesis*. In this sense it is synthesis and not analysis that forms the basis, the starting point of the inquiry but also its end. The question is, What is the nature of this synthesis? This question is answered in later chapters.

As we have seen, it is indeed possible to find some coherence regarding the behaviour of the concept of analysis in the period from 1550 to 1650. It seems that analysis always retained its Greek origin as *diairesis* (διάρεσις), and it has definitely always been related to the question of method, and it has always been considered in relation to synthesis (σύνθεσις). However, this is not exactly the case with the term “synthesis.” Here, we find a larger field of receptions and concepts related to the term (composition, application, causal explanation), and hence it seems that it is actually the term “synthesis” that must be further clarified, historically and philosophically. In Clauberg we find a peculiar usage of the two terms. In the *Logica*, his elementary pair of concepts is not analysis and synthesis but rather *analysis* and *genesis*. This present chapter gives an account of Clauberg's seemingly unusual usage of the term “analysis” and claims that his Hermeneutical logic remains within the framework of the Cartesian understanding of analysis, though it also demonstrates Clauberg's deep engagement with Ramism and the controversies around the place of analysis in methodical procedures, which was a central theme of philosophical discussions in the 16th and 17th centuries.

Zürich - New-York, 2005), 133–145; Carsten Olk, *Kants Theorie der Synthesis: Zu einem grundlegenden Gedanken der kritischen Philosophie*, *Kantstudien Ergänzungshefte* 192 (Berlin and New York: De Gruyter, 2016).

2.3.2. The Mathematical Sources of the Terms Analysis and Synthesis

If in the former parts of this thesis we concentrated on the differentiation between the order of matters and the order of reasons, it is now time to turn our attention to the more accepted terminological division, that between analysis and synthesis. Indeed, we already noted that the order of reasons is not necessarily synonymous with analysis, nor is the order of matters synonymous with synthesis. The Greek philosophical term analysis appears already in Plato⁴⁴⁰ and is rather consistently equivalent to the term *dihairesis*.⁴⁴¹ Analysis has, in Plato, a seminal role to play in the acquisition of knowledge of ideas. However, it is from the Aristotelian corpus that most of the formulations were taken in later eras. For Aristotle analysis is used in the meaning of “resolution,” that is to say not only reaching knowledge of principle and prototypes but also dealing with concrete problems and proceeding towards their resolutions. In the *Posterior Analytics*, analysis is meant as the resolution of demonstrative syllogisms from true premises.⁴⁴² Both in Plato and Aristotle analysis has a logical as well as a mathematical and geometrical character. In fact, it is in geometry that one can apply analysis in the best possible manner. In the latter sense, a quantitative inquiry with a practical deliberation *is an analysis*: What is sought is the quantitative determination of the assumed x . What arrives last in the order of analysis is first in the order of genesis (also *Eth. Nic.* 1112b 11–24). Here, we determine in advance the quantitative value of the result and seek to clarify the means of arriving at this result. The humanists and Ramists of the 16th and 17th centuries were very much aware of these ancient mathematical origins of the terms. Descartes himself was also aware of the terms and meanings of these ancient geometrical and mathematical origins of analysis. This is also the case with Clauberg. We see him throughout his

440 Stephen Menn, “Plato and the Method of Analysis,” *Phronesis* 47, no.3 (2002): 193–223.

See especially page 221: “Geometrical analysis can thus provide Plato with a model for philosophical discovery, in one sense of ‘discovery’: it does nothing to explain a transition from not having habitual knowledge to having habitual knowledge, but it helps to explain the transition from having merely habitual knowledge to having actual knowledge, that is, the process of removing an obstruction from our habitual knowledge. But, after all, this is all we can expect from Plato, since he renounces the possibility of explaining the first kind of transition. The point of the account of learning as recollection is just to give up on this, and to say that we have always had habitual knowledge, but that it has been somehow obstructed, and that we “learn” by removing obstructions and reawakening the habitual knowledge that is under the surface of our minds.”

441 Jaakko Hintikka and Unto Remes, *The Method of Analysis. Its Geometrical. Origin and Its General Significance* (Dordrecht: Springer, 1974), 1.

442 Aristotle, “Posterior Analytics,” trans J. Barnes, in *Works* 1, 127 (78a 6–8).

corpus returning, in his discussion of method, analysis and genesis, to Aristotelian sources: the *Organon*, the *Ethics* and the *Metaphysics*.⁴⁴³

2.3.3. Clauberg's Idiosyncratic Presentation of Analysis in the *Logica vetus et nova*

In the *Logica vetus et nova* (1654), Clauberg constructs an encompassing model for the study and practice of logic. This model is influenced by Cartesianism, Aristotelianism and Ramism. Logic is for Clauberg the art of determining the meaning of texts. However, the text here is taken in the very widest sense of the word, be it an essay, an author, a poem, or a work of architecture. It is in this sense, as we elaborate in later chapters, inherently and deeply *hermeneutic* in character. While acknowledging traditional syllogistic logic, Clauberg already is energised by his encounter with Descartes' philosophy. If the *Defensio Cartesiana* and the *Initiatio philosophi* are explicitly Cartesian, the *Logica* is still very much a work expressing the Aristotelian and Ramist themes that we describe in former chapters. In this framework Clauberg gave to the term "analysis" an unconventional meaning, one which binds this term, of all things, with Hermeneutics. This usage seems unusual, and we must give an account of how it came about.

In the *Logica* Clauberg refers to analysis in two different usages: The first arrives at the second part of logic, where the subject of discussion is the explication of oneself to others in words (often referred to as external discourse). Here, Clauberg differentiates between two styles of discourse: *dialectica* and *analytica*. In as much as the dialectician works on the stylising and ornamentation of words, the analytician seeks to arrive at a style which is unornamented, precise and clear.⁴⁴⁴ Analytics in this sense equals

443 Notwithstanding the clear Aristotelian context, one should not neglect to mention the heavy presence of Plato in the Claubergian corpus: Throughout the *Opera Omnia*, I could find references to the following dialogues: Alcibiades, Republic, Parmenides, Protagoras, Sophist, Laws, Hippias major and minor, Timaeus, Thaeetus, Meno, Philebus, Phaedrus, Phaedon, Cratylus, Apologia Socratis, and Hipparchus. Hence, it is clear that Clauberg knew the Platonic dialogues very well.

444 OOP II, 823-824 (*Logica* II, §35): "Analyticus autem simplicitatem sermonis amat et brevitatem, potiusque rerum et sententiarum ponderi, quàm verborum numero navat operam, quippe qui omnia refert ad docendam veritatem, cujus oratio, veteri proverbio, simplex est. [...] ornari res ipsa negat, contenta doceri." "An analytician loves simple and brief language, he cares more about the weight/ importance of his subject matter and thoughts than the number of words, because for him everything is about teaching the truth, whose language is simple, as the saying goes. [...] things themselves [res ipsa] do not want an ornamental style/ to be ornated, they are satisfied with being taught."

minimalism. Moreover, whereas the dialectician constructs discourse from different divisions of meanings,⁴⁴⁵

[...] the analytician teaches excellently if he habituates the minds of his students to be attentive by the linkage of several arguments as in a chain, in order to make clear that not only each argument conveys something, but that all [the arguments] together prove a thing, strengthen each other, [that] from one truth continuously follows another [truth] which is attached to the first; as in an extended chain, one ring holds to another ring. As the real usage of reason, in which all human wisdom is contained, consists only in the thoughtful and exact chaining of all that is required for the cognition of the researched truths.

Hence, the analytical generator of discourse needs not only to keep the thread of the truth that he is after; he also needs to express himself in this orderly chain of reasons that we discuss in a former chapter. However, that which Clauberg calls genuinely analytic in logic arrives at the third and fourth parts of, where it is a question of finding the truth in obscure phrases (third part) and judging the meaning of these phrases (fourth part). In this, analytical logic is differentiated from genetic logic. In as much as genetic logic *composes* a discourse, analytical logic is the art of the correct *reception* of the phrases of others. In this context, at the opening of the third part, Clauberg clarifies: “Who do we call here analytic? In the first place, one must find in this analyse the search for the true sense: logic must find the precepts enabling to find them and say succinctly what they are.”⁴⁴⁶ However, it is only at the last, fourth part of the *Logica* that Clauberg elaborates on what is analytical logic *tout court*:⁴⁴⁷

445 OOP II, 837 (*Logica* II, §103): “*Analyticus* verò optimè docet si multarum rationum catenatione, animos discentium attentioni studeat assuefacere, ut liqueat, non tantùm quodque argumentum aliquid conferre, sed omnia junctim rem conficere, mutius viribus stare, ab una veritate continuò trahi aliam priori alligatam; ut in catena distenta annulus annulum solet. Etenim *verus rationis usus*, in quo omnis humana sapientia continetur, solummodo consistit in circumspecta et accurata complexione eorum omnium, quae ad quaesitarum veritatum cognitionem requiruntur.”

446 OOP II, 843 (*Logica* III, title-sentence): “*Logicæ* Genetica, duabus partibus hactenus expositæ, necessariò addendam esse *Analyticam*. Quis hoc loco dicatur *Analyticus*. Quod primum in hac *Analysi* esse debeat veri sensûs investigatio, quòd hujus inveniendi causam praecepta tradenda in *Logica*, et quæ summam ea sint.”

447 OOP II, 866 (*Logica* IV, §1): “*Sensu* orationis percepto alia superest *Analysis*, ad quam instituendam praecepta *Logicæ* Geneticae non omnino sufficiunt, tanta ejus est in cogitatis alienis et propriis, humanis ac divinis dictis resolvendis necessitas. Quo animo ad hanc *Analysin* accedendum, cur speciatim *Analysis Logica* dicatur, et quis ordo in praeceptis aut exemplis ejus tradendis servandus.”

After having perceived the sense of the phrase, another analysis still remains [to be done]: in order to institute it, the precepts of genetic logic will not suffice [...] how should one approach that analyse, and why we call it specifically a logical analysis and what order one should observe when one treats its precepts and examples.

In the continuation of this fourth part of the *Logic*, Clauberg repeats the argument that the utility and force of the analytics is to find the truth (or falsity) within a certain discourse. For example: “In the analysis of a wise author, one must research that which rests hidden in his words or that which must be understood by other means.”⁴⁴⁸ But analysis has an even more complicated task.⁴⁴⁹

It pertains to the duties of analytics, to see in the thoughts of man which are expressed by external discourse, that which relates to words and which to things [ad res], to separate the notion of a word from that of the thing truth, and to show how so many errors are born from their mixture and confusion.

Hence, Clauberg tells us that in analysing the discourse of other thinkers, we must distinguish between words and things and determine what is the chance that the diffusion of those two genres will place us on our route towards the truth of things.

2.3.4. Descartes’ View of Analysis

As noted earlier, analysis itself is far from being a univocal concept, and the equivocality of analysis is found in Descartes.⁴⁵⁰ However peculiar, the emphasis that Clauberg puts on the latent meaning found in the discourse is already hinted at by Descartes himself. Descartes restates the *occultist* nature of analysis, drawing on a

448 OOP II, 903 (*Logica* IV, §157): “[I]n analysi sapientis authoris etiam eas esse indagandas, quæ vel in ejus verbis latent absconditæ, vel aliunde sunt intelligendæ.”

449 OOP II, 870 (*Logica* IV, §23): “*Analytica officia*, in cogitationibus hominum externo sermone expressis videre, quid ad verba, quid ad res pertineat, separare notionem vocabuli et notionem rei, et quomodo ex illa mixtura et confusione errores quàm plurimi oriuntur ostendere.”

450 See Lex Newman, “Descartes on the method of analysis,” *The Oxford Handbook of Descartes and Cartesianism*, edited by Delphine Antoine-Mahut, Steven Nadler and Tad Schmaltz (Oxford and New York: Oxford University Press, 2019), 65–88.

private sphere of discussion in as much as synthesis was of more common usage. It is synthesis which is related to usage and analysis which is related to inspection and theory. For the young Descartes, as he states in the *Rules for the direction of the mind*, analytical method in the first place belongs to mathematical vocabulary:

*It is well known that the geometers of antiquity used a sort of analysis which they extended to resolution of every problem, though they avoided revealing it to posterity. And now a genre of arithmetic called 'algebra' is flourishing, and this is achieving for numbers what the ancients did for figures.*⁴⁵¹

Here, Descartes lets us in on the secret of analysis: Analysis is a meta-instrument able to resolve any problem. This key to the ciphers of reality is not possessed by everyone. What algebra does, according to Descartes, is carry out the task of the ancients: from problems to figures, from figures to numbers, from numbers to the language of algebra. For Descartes it is algebra that carries the task of modern analysis, which forms a continuous link with the ancient resolution of problems. It is the knowledge of the usage of algebra that gives us the craft of analysis. See how Descartes passes from the discussion of analysis to the discussion of synthesis:

Now it is analysis which is the optimal and truest method of instruction, and it was this method alone which I employed in my Meditations. As for synthesis, which is undoubtedly what you are asking me to use here, it is a method which may be very suitable to deploy in geometry as a follow-up to analysis, but it cannot so conveniently be applied to these metaphysical subjects.

Synthesis is not suitable for metaphysics, but it is suitable to geometry. How should we understand this? Perhaps we should understand it a little differently from the previously established interpretations of the matter. We suggest that it is only synthesis that is appropriate to the task of *understanding* because only synthesis is occupied essentially with the art of judgment. If we follow Clauberg's understanding, we would designate as *proto-philosophical* the stage of the initiation of the philosopher, a necessary stage of self-estimation, leading to the stage of properly first philosophy, when both the order of reasons and the order of matters can be determined and put to

451 Descartes, *Œuvres* X: 373: “[S]atis enim advertimus veteres Geometras analysi quamdam usos fuisse, quam ad omnium problematum resolutionem extendebant, licet eandem posteris inviderint.”: Descartes, *Writings* I, 16-17; Descartes, *Œuvres* X: 373.

work in a synthetic manner. Though being in its very nature analytical, the proto-philosophical stage contain already also a synthetic element of the estimation of the self.

In the rule dealing with the definition of method, the young Descartes notes that although analysis was originally a geometrical procedure, it was developed as a tool to solve problems in other domains as well. Hence, it is analysis which is valued in Descartes' eyes as the major instrument of method. He also notes that geometrical analysis is an occult practice and that the algebra of his own time makes the same with numbers as ancient geometry made with figures: Both are analytic procedures, and they are examples from which one should proceed in the development of method. The geometrical understanding of analysis has its origins in the writings of Pappus of Alexandria (died 350). Pappus' "Geometry" was translated into Latin in 1589 and was a fashionable item in Europe at the beginning of the 17th century. Before then, Pappus' "Geometry" was only available in its Greek original and was rarely read or commented upon. One can therefore suppose that it is this translation that led to the underlining of the concept of analysis in many discussions regarding method.⁴⁵² Pappus's geometry became a central concern for Descartes, and the latter's "Geometry," one of the three essays composing the body of the *Discourse on Method*, is dedicated to an elaboration on what was known as "the Pappus problem." Through his own observations regarding Pappus' geometry, Descartes arrives at elaborating his own version of algebra or analytic geometry. It goes without saying that Clauberg was well acquainted with the *Discourse on method*, which had been published long before Clauberg made his acquaintance with Cartesian philosophy in general, probably around 1647. At the beginning of his "Geometry,"⁴⁵³ Descartes suggests a manner of solving problems that is more concise and economical than the one used by ancient geometers, one that goes beyond figurative geometry and allows the development of a language which is more economical and efficient.⁴⁵⁴ Cartesian aspiration is therefore to go beyond the figure. Naturally, figural intuition is still required, according to Descartes, to attain the truths of geometry. However, Descartes proposes to his readers another way which he

452 See Jaako Hintikka and Unto Remes, *The Method of Analysis, Its Geometrical Origin and Its General Significance* (London: Springer, 1974).

453 Descartes, *Œuvres* VI, 369-370; Descartes, *Writings* I, 177-178.

454 Stephen Gaukroger, *Cartesian Logic: An Essay on Descartes' Conception of Inference* (Oxford: Oxford University Press, 1989), 88-98; David R. Lachterman, *The Ethics of Geometry: A genealogy of modernity* (New York and London: Routledge, 1989), 141-186. Lachterman emphasizes the relationship between Cartesian and Proclidian, neoplatonic notions of mathesis.

develops as algebraic, or analytic, geometry. Indeed, algebra works as a cipher, hiding within itself a formula of computation.

One should also note that in the “Geometry,” Descartes aspiration is a bit different from merely using algebra to solve geometrical problems. It is much more to simplify algebra into quantitative relations which function on the principle of straight lines. Hence, he does not give away synthesis altogether. Descartes still wants to arrive at figuration of geometrical problems, but this figuration should be based on quantities expressed as straight lines rather than on the classical set of geometrical figures.⁴⁵⁵ So, one can indeed say that it is the challenge of improving our instruments of analysis that pushes Descartes into his various explorations. Descartes hence still draws on the tradition of geometrical analysis in the *Discourse on method* of 1637. A few years later, in the *Meditations*, Descartes reflects on the meaning of analysis while responding to the objections of his friend Marin Mersenne. He talks about a method of demonstration, not of method of inquiry but of the manner by which he presents his findings:

As for the method of demonstration, this divides into two varieties: the first proceeds by analysis and the second by synthesis. Analysis shows the true way by means of which the thing in question was discovered methodically [...] so that if the reader is willing to follow it and give sufficient attention to all points, he will make the thing his own and understand it just as perfectly as if he had discovered it for himself. But this method contains nothing to compel belief in an argumentative or inattentive reader; for if he fails to attend even to the smallest point, he will not see the necessity of the conclusion.”⁴⁵⁶

Descartes argues that as a persuasive strategy, analysis is not so compelling as it demands time, patience and the participation of the interlocutor; it presupposes that the philosopher accompanies the student in a process of initiation.⁴⁵⁷ Synthesis, by

[...] a directly opposite method [...] demonstrates the conclusion clearly and employs a long series of definitions, postulates, axioms, theorems and problems so that if anyone denies one of the conclusions, it can be shown at once that it is

455 Descartes, *Œuvres* VI: 372.

456 Descartes, *Writings* II, 110; Descartes, *Œuvres* VII, 156–157.

457 Ibid.: “Moreover there are many truths which - although it is vital to be aware of them - this method often scarcely mentions, since they are transparently clear to anyone who gives them his attention.”

*contained in what has gone before, and hence the reader, however argumentative or stubborn he may be, is compelled to give his assent. However, this method is not as satisfying as the method of analysis, nor does it engage the minds of those eager to learn since it does not show how the thing in question was discovered.*⁴⁵⁸

So, for Descartes synthetic demonstration is the more compelling demonstrative method of the two, but it is less pedagogical. Synthesis begins by posing a thesis which is well formulised and then forces the interlocutor to consent to the argument. In that sense this method is also more economical, and it works according to its own laws and conventions. Descartes continues, “It was synthesis alone that the ancient geometers usually employed in their writings. But in my view this was not because they were utterly ignorant of analysis, but because they had such a high regard for it that they kept it to themselves like a sacred mystery.”

Similarly to Clauberg, Descartes, as pointed out above, restates the occultist nature of analysis, drawing on the private milieu of the geometers, in as much as synthesis in Descartes’ understanding is of more common usage. According to my reading, it is exactly this publicity of synthesis and privacy of analysis that stands at the heart of the manner in which Clauberg developed the Cartesian kind of synthesis. Indeed, one of the traits of Clauberg’s Cartesianism is its accessibility, in the positive sense of this word. One should ask whether it is this very accessibility that Descartes himself places at the far end of his philosophical endeavour. What the making-accessible of method allows is the common usage, ready for any mind, of the principles of method when they are applied with simplicity, sincerity, and above all, order. This is the very content of the uncompleted and posthumously published *La recherche de la vérité par la lumière naturelle qui toute pure, et sans emprunter le secours de la Religion ni de la Philosophie, détermine les opinions que doit avoir un honeste homme touchant toutes les choses qui peuvent occuper sa pensée, et pénètre jusque dans les secrets des plus curieuses sciences*,⁴⁵⁹ more commonly known as the *Research after the truth*. but whose full title is “La recherche de la vérité par la lumière naturelle qui toute pure, et sans emprunter le secours de la Religion ni de la Philosophie, détermine les opinions que doit avoir un honeste homme touchant toutes les choses qui peuvent occuper sa pensée, et pénètre jusque dans les secrets des plus curieuses sciences.” In this play of three figures, a young, uneducated man receives advice from two wise men

458 Ibid.

459 Descartes, *Œuvres* X, 495.

as to how to be initiated into the search for truth. The figure that represents Descartes' position, Eudoxe, suggests the accessibility of the natural light instead of the knowledge from the past suggested by Epistemon. The question is whether this "penetration through the secrets of all the curious sciences," appearing as the end task of the search for truth, is more analytical and synthetical, or perhaps it is necessarily a mixture of both.

2.3.5. Returning to Synthesis

We must remind ourselves that both for Ramus and Zabarella, synthesis must do with the establishment of method, with the theoretical, contemplative aspect of knowledge. For both it is through synthesis that one arrives at the principles and causes of things. For Ramus synthesis means the disposition of good and verified ideas, forming the principle of an art. For Zabarella synthesis is the very wished-for process of method, a demonstration of how and in what manner a certain phenomenon being shown to the senses leads to the necessary outcome of a certain cause. Hence, in as much as Ramus' version of synthesis is more artistic and more technical, Zabarella's concept of synthesis is clearly more scientific in nature.

As we saw with Descartes, synthesis is preferably "suitable to deploy in geometry,"⁴⁶⁰ and it characteristically involves the presentation of a series of definitions, postulates, theorems and axioms, that together form a deductive chain of reasoning that forces even the most stubborn of minds to affirm its conclusion.⁴⁶¹ There are many synthetic elements necessary to the Cartesian project which cannot be left aside even within the methodical process itself. The synthetic aspect of method has many faces, and the model that we give of its overall structure must be itself complex. In the heart of the synthetic challenge, we have the inner splitting within the synthetic order between the order of matters and the order of nature, that is to say how we can (and should) guarantee that the deductive system we forge corresponds to the order of matters in nature. As we shall see, the guarantee we can forge of reality must do with the model of judgment. Having gone through an analytic process of introducing into doubt and estimating our received and habituated preconception, we must pass to a positive stage of judgment in which we forge for ourselves figures of matters by operating with the

460 Descartes, *Writings* II, 111; *Œuvres* VII, 156.

461 Descartes, *Writings* II 110-111; *Œuvres* VII 156.

capacity of *indication*, that is the capacity of signs to indicate certain matters and their order. This is achieved through the process of figuration (see Chapter 3.2 below); however, after the stage of indication, one must also pass to a certain procedure of application in which one places what the principles that have been verified into the matters themselves. In this sense philosophy, in the methodist version we learn from Clauberg's reading of Descartes, is inherently a work in progress; it is a moving project whose open-ended target is the things of the world, the truth of which is being sought. In a way, as we shall see in the last two chapters (4.2 and 5) of this present research, the crux of the methodist construction of the order of matters makes also the positioning of our provisional ends towards which we work in the labour of method. Indeed, this is a *deontological* principle of which we can state in the Cartesian, methodist project:⁴⁶² There is always a certain teleological target placed at the far end of the inquiry (in the terms of Descartes, to reign over nature), and it energises one's own epistemological correction. In this sense what stand at the far end of method is not only things of nature but what one can do with them, *how one can operate with them*. It is this technical telos which stands at the vanishing point of method. The action which is placed as the predestined at the far end of the methodical procedure also reigns over our epistemological re-habitation to the things of nature. However, as we learn from the Cartesian ethics and the virtue of generosity, we must esteem correctly what we cannot do but also what we can do. It is hence the synthesis of the relation between our programmed operations and the epistemological procedures that we need to develop in order to reach those object-operations. We, however, must take into account that there is a constantly moving order of matters and that we must continually readjust our operations according to this change.

In summary, let us state that although since Kant we have been accustomed to looking at synthesis and analysis as a pre-established conceptual pair, in fact the two members of this pair are not perfectly symmetrical or even complimentary in as much as analysis is a relatively well-established term, and synthesis is an unstable conceptual token. Hence, it is the very understanding of synthesis which stands at the heart of the methodist project: Are we talking about supplying a definitive description of the relation between a cause and an effective result (as in Zabarella), or are we talking rather about the forging of a set of first principles (as in Ramus)? Are we talking about the modelling of a problem in order to solve it more correctly? Does synthesis regard the bringing together of inner reflection and outer physical objects, or (as this present project

462 Noa Naaman-Zauderer, *Descartes' Deontological turn, Reason, Will, and Virtue in the Later Writings* (Cambridge: Cambridge University Press, 2010).

suggests) does it furnish a manner *to operate within nature*? Effectively, synthesis means all these together.

In Clauberg's generation, the question of synthesis was also discussed regarding the philosophy which was newly conceived by Benedictus Spinoza. Christopher Wittich (Clauberg's closest colleague, who taught with Clauberg in Herborn, was dispelled with Clauberg out of Herborn due to their Cartesian convictions and worked with Clauberg in the erection of the Duisburg university) wrote, after the death of Clauberg (1680), an extremely interesting treatise called *anti-Spinoza*. The introduction to this treatise focuses on the definition of synthesis.⁴⁶³ For Wittich, the synthetic method of demonstration can never account for the procedures that one should follow at the beginning of any true analysis. As opposed to analysis, which shows the true and direct ways to conceived of the truth of things, Wittich writes of synthesis,

*Synthesis instructs by the totally opposite way, which entirely hides from the reader the manner of resolution [modum inveniendi]; this other way exhibits artificially the facts, which if the reader follows, no objection or reservation will be allowed to be demonstrated: because it is exhibited, that that which is negated, is [in fact] contained in the antecedents and was admitted in them. It will not however satisfy the mind and not fill the soul of the students as otherwise, because the medium by which the thing [res] is resolved is hidden.*⁴⁶⁴

It is notable to observe here the fierce accusation that Wittich makes against Spinoza and his usage of the synthetic method. The central accusation of Wittich is that the method of education offered by the synthetic method does not expose to the reader, or to the student, the manner by which things were discovered, but it rather imposes, artificially, a set of inferential tokens to which one must concede in order to "get into the play." Hence, in this understanding, it is synthesis which *occults* the method (Wittich uses the term *occultat*). There is something hidden, and that which is hidden is reason itself, the only content capable of filling and satisfying the soul. Perhaps we have here a clue regarding the understanding of the essential difference between the

463 Christoph Wittich, *Anti-Spinoza; sive examen Ethices B. de Spinoza, et Commentarius de Deo et ejus attributis* (Amsterdam: Apud Johannem Wolters, 1690).

464 Ibid., 1–2: "At Synthesis instituit viam plane oppositam, modum inveniendi Lectori plane occultat, aliam viam arte factam ostendit, quam si Lector sequutus, quantumvis re pugnans & renitens assentiri debet demonstratis: eò quòd ostendatur, hæc quæ negantur, jam in antecedentibus contineri & in illis fuisse admissa: Non tamen sic satisfacit menti nec implet ita animos discentium ut altera, quoniam medium, quo res fuit inventa, occultat."

order of reasons and the order of matters: In as much as the order of reasons makes explicit, demonstrates and *acknowledges the method* (the way through which a truth is attained) as part of the philosophical process, synthesis occults the method and tries to place things as finalised philosophical artefacts.

All these observations are indeed already contained in Descartes' references to the issue of the difference between analysis and synthesis. Descartes observes that analysis is a version of a method that was highly regarded in ancient geometry, that it helps us gain clear and distinct perceptions of the primary notions of metaphysics, and that it is a method of discovery.⁴⁶⁵ He says that synthesis and analysis are complementary methods, but one difference is that a *successful analytic demonstration* does not compel our assent. In as much as analysis invites the student to follow but does not force her to do so, in synthesis one should beforehand accept the principles in order to follow the demonstration. The two forms of method are still forms of demonstration, but it is exactly this that stands at the heart of the power of Cartesian method, which is not only directed at convincing the self but also the convincing of the other; it is in this sense interested in demonstration in the strongest sense. It seems that in Clauberg the compelling nature of synthetic method is that which makes the basis for elaboration regarding the establishment of method. For Clauberg it is clear that the process of placing into doubt is always performed based on previous falsely synthesised opinions and prejudices.⁴⁶⁶

2.3.6. Analysis and Metaphysics in the Cartesian Context

We suggest, hence, that the question of synthesis in the methodological Cartesian context, as we meet it also in Clauberg, relates to the question of the interiority and the exteriority of the methodological process. Are we performing our methodical reflections in regard to our own mind, or are we trying to make it applicable to the outer world? In other words, we must give a precise localisation of methodical procedures: Do they take place only as a reflexive art, or are they also capable of serving transitive purposes? Descartes is known to have emphasised analysis as the best method of *instruction*. Let us look at the relevant passage and see that Descartes does not positively prescribe

465 Descartes, *Writings* II, 110-112; *Œuvres* VII, 155-57.

466 OOP II, 1002 (*Defensio*, 13 §15): “Nunquam abjecit ideas seu simplices earum rerum notions, sed opiniones et praejudicia.” “He never does away with ideas or simple conceptions of these things, only with opinions and prejudices.”

analysis for metaphysics, but rather he only says that synthesis is not suited to metaphysical subjects and that analysis is the best way to *teach* in general:

*It is analysis which is the optimal and truest method of instruction [ad docentum], and it was this method alone which I employed in my Meditations. As for synthesis, which is undoubtedly what you are asking me to use here, it is a method which it may be very suitable to deploy in geometry as a follow-up to analysis, but it cannot so conveniently be applied to these metaphysical subjects.*⁴⁶⁷

What we learn from this passage is that analysis is a good manner of instruction and that synthesis does not really accommodate (*commode*) metaphysical matters. From the point of view of our present project, this also must do with the Ramist framework: Metaphysics must be related to real and actual practice of mind and its application to specific matters, and hence it cannot be only synthetic but must be in the first stage, in the stage of initiation, analytic. There is a demand for specific actualisation, a demand for real application, without which philosophy cannot proceed, and the truth of method cannot be practiced.

The connection between analysis and metaphysics is related to the relationship that Descartes promotes between metaphysics and *teaching*. The pedagogic vocation (as we see also in Chapter 4.2) was also very well taken on by Clauberg. Moreover, he prefers (analytic) pedagogy to (synthetic) instruction, which does not accompany the student through the order of reasons. This again points in a direction showing that the method is transferrable only through a long procedure of habituation and gradual naturalisation. Descartes continues to tell us what characterises the geometrical investigation to which synthesis is adequate:

The primary notions presupposed for the demonstration of geometrical truths are readily accepted by everyone since they accord with the use of our senses.

Hence there is no difficulty there, except in the proper deduction of the consequences, which can be done even by the less attentive, provided they remember what has gone before. Moreover, the breaking down of propositions to their smallest elements is specifically designed to enable them to be recited with ease so that the student recalls them whether he wants to or not. In

467 Descartes, *Writings* II, 110-111; Descartes, *Œuvres* VII, 156: “Ego verò solam Analysim, quæ vera et optima via est ad docendum, in Meditationibus meis sum sequutus; sed quantum ad Synthesim, quæ procul dubio ea est quam hic a me requiritis, etsi in rebus Geometricis aptissime post Analysim ponatur, non tamen ad has Metaphysicas tam commode potest applicari.”

metaphysics by contrast there is nothing which causes so much effort as making our perception of the primary notions clear and distinct.

Admittedly, they are by their nature as evident as, or even more evident than, the primary notions which the geometers study; but they conflict with many preconceived opinions derived from the senses which we have got into the habit of holding from our earliest years, and so only those who really concentrate and meditate and withdraw their minds from corporeal things, so far as is possible, will achieve perfect knowledge of them.⁴⁶⁸

Descartes thinks that even though the “simple natures” of metaphysics are as clear as the geometrical ones, there remains the fact that whereas in geometry we have evidence of sensory figuration which is validated by everyone, in metaphysics we have first to amend our layers of preconceived ideas and false judgments, our bad habits, and this can be done only through the analytical process. We learn also that synthesis is meant for the more advanced students who have already achieved the realignment and emendation of their intellect through the process of analysis. Finally, synthesis presupposes that one knows already to read the signs and figures of the already achieved elements of knowledge.

So, if analysis is appropriate for the juvenile, uneducated mind, synthesis presupposes already the establishment of necessary capacities and habitus. In other words synthesis presupposes methodical (analytic) habituation. As we saw above, for Descartes method and logic are not synonymous; his method reaches beyond logic. Descartes seeks to formalise his thought, to demonstrate his thought procedures without logic, nevertheless leaving the tools of analysis and synthesis intact in their Aristotelian character. He replaces the labyrinth of Scholastic logic with a few principles, those that should be the minimum of regulation of rationality. When we look at the tradition from which Descartes draws his sources, we find that the art of logic is always connected to analysis. Indeed, this began already with the titles of Aristotle’s two major books on logic, the *Prior* and the *Posterior analytics*. It is nevertheless astonishing that when one tries to locate the appearance of the word “analysis” in these writings of Aristotle, one finds only a few references; that is to say that nowhere in his analytics does Aristotle actually develop an explanation, not to mention a theory, of analysis. Nevertheless, we

468 Descartes, *Writings* II, 110–111; Descartes, *Œuvres* VII, 157.

tend to identify analysis with formalisation, with abstraction, with the finding of the elementary units from which an argument is composed or is to be composed.

Descartes' target throughout the development of his thought is to achieve an alignment of the two orders: the synthetic and the analytic. This must, however, in any case be initiated by a complex given which the analytic procedure addresses. Hence, analysis presupposes a given which has already been apprehended and estimated. So, analysis and synthesis, at least in Cartesianism, are immanently bound. This binding of the two procedures and placing them on the same side with rationality is a formulation found in a thinker who was, if not directly read by Descartes, definitely read by at least two of his closest interlocutors: Mersenne and Beekman. That thinker is Petrus Ramus.

2.3.7. Ramus and Ramist Views of Analysis

Why should we now return to Ramus? Because, with regard to the Clauberg's case, the usage of the term "analysis" draws its principles from Ramist terminology. As we noted in Chapter 1.1, for Ramus method is inherently analytic: It consists of beginning with the simple and most abstract principles and moving forward to the particular application of these principles. One should note that this Ramist reading of the Aristotelian definition of method was not the conventional, accepted one at the time Ramus wrote. As we saw with Zabarella, analysis means precisely the opposite: beginning with the observed case and the moving backwards towards its causes. It seems that these two views of analysis are incompatible. However, as we shall see, Clauberg's view of method in a way takes some elements from the more traditional, empiric interpretation of Zabarella *and* from the Ramist plan of the metaphysics of application. For Ramus synthesis only serves the general propose of analysis, but analysis and the process of application moves towards the act and not backwards towards causal explanation, as is the case in Zabarella. In this Ramus works within a no less Aristotelian framework than Zabarella as he takes the literal meaning of rationality, *energeia*, "putting to work," as the centre of his metaphysics. For Ramus analysis is the only path of method, but synthesis makes a necessary part of analysis: Both invention and disposition are, for him, the necessary parts of analysis. This disposition results in the objective of the Ramist dialectics: not analysis for itself. Creating the inventory of elements of some situation demands in the disposition of the parts one to the side of another creating series and organising it into a synthesised chart. Ramus defines analysis in a manner that was followed by many Calvinist and Reformed philosophers, notably also Clauberg. For Ramus as for Clauberg analysis

takes place when one examines a certain argument and tries to reconstruct its inner order. This seems different from Descartes' *typos* of analysis as demonstrating a certain process of thought, but the versions are closer than it seems.

If for Ramus analysis is the passage from known general principles to a specific known in the process of application, for Zabarella analysis means the passage from the particular to its causes. We find a similar trajectory in Descartes; he is also interested, as he says in the *Regulæ* Rule 5, to learn from ancient works the different orders found in them. I think this is important and is pertinent also to the manner in which Descartes approaches physical phenomena. This is what Descartes calls the order of things that we find in nature as well as in works of others and in our own works when we put them under examination as if they were written by others (see Clauberg, *Logica* IV, §4). For Descartes analysis is the observation of the mind retroactively from the confines of its own private domain, demonstrating how some conclusion has been arrived at step by step. However, one should note that analysis is also a way of exposing and demonstrating one's thought. In as much as analysis has the character of a drama, following the acts of thought and presenting them, synthesis is simply like a table of contents (the synthesis of the meditations): It is orderly, hierarchic and, in that sense, architectonic.

Both analysis and synthesis serve as tools of demonstration, retroactive formalisations of one's reasoning and the subsequent transmission of this reasoning, that is to say the teaching of one's past reasonings. Otherwise put, both analysis and synthesis are thoroughly *pedagogical* concepts. All this, not surprisingly, has a clear origin in Aristotelian methodology. Aristotle defines the order of method as the process of passing from that which is better known to that which is more knowable by its nature. However, being a bit counterintuitive, those things better known to us are, according to Aristotle, generalities (or the genres) in as much as that which is more knowable by its nature is the specific particular, that is to say the essence or the *ousia* of the thing

The natural way (...) is to start from the things which are more knowable and clear to us and proceed towards those which are clearer and more knowable by nature: (...) so we must follow this method and advance from what is more obscure by nature, but clearer to us, towards what is more clear and more knowable by nature.

This Aristotelian maxim of the order of method is deeply enigmatic, and it was hotly debated throughout the 16th century. What is the meaning of the term "things that are better known by nature"? Aristotle gives us a hint in the following section:

*We must proceed from universals to particulars; for it is a whole that is more knowable to sense-perception, and a universal is a kind of a whole, comprehending many things within it, like parts.” And then Aristotle determines clearly: What is for us plain and clear at first are rather confused masses, the elements and principles which become known to us later by analysis [...].*⁴⁶⁹

Hence, in Aristotelian science analysis is the process leading one from the general complex, the pre-synthesised genre, to the particular elements of this generality.

*Analysis, which thus moves in a downward direction, from an end which is most general and first, through subalterns, to what is most specific, will be division, as Galen previously termed it. Synthesis, on the other hand, moving in an upward direction, from what is most specific, through subalterns, to an end which is first and most general, will be the same synthesis which was spoken of and defined earlier. The third method has been explained with sufficient clarity; it consists in definition and the explication of definition.*⁴⁷⁰

Clauberg explicitly uses the term “genetic logic,” and it seems that he took this term from Ramus. Ramus talks about the question of genesis regarding method as follows:

The third error concerns genesis. While they discovered things according to the true order, proper to the method of Aristotle, they prescribed that they be arranged and taught in a contrary order. In this rule they make a horrible blunder, equal to that which they made in the previously mentioned instance. For if the teaching of Aristotle is true- and these commentators on Aristotle think that it is true- and if every science is to begin with general notions, previously known, with what is of its nature priori or better known, and if the superior method of analysis (or theory) proceeds from what is prior by nature and better known, how

469 Aristotle, “Physics,” trans. R. P. Hardie and R. K. Gaye, *Works I*, 315 (184a10–184b14).

470 Ramus, “One method,” 142; Ramus, *Methodus*, 16verso: “Analysq [sic., ae], sic à sine generlissimo primóq; deorsum per subalterna ad specialissima descendes, διαίρεσις erit, quam Galenus appellauit antea: synthesis contra à specialissimis per subalterna sursum ascendens ad finem primum et generalissimum, synthesis erit eadem, quæ dicta et definita priùs est. Tertia methodus satis apertè explicata est, quæ nempe ex definitione, et definitionis explicatione constat.”

*will the oppositive method of genesis (or practice) proceed from what is prior by nature and better known?*⁴⁷¹

Hence, it seems quite clear that the division between genetic and analytic logic in Clauberg has Ramist origins. As in Ramus, also in Clauberg it is analysis which stands as the concluding task of method. It is not only that Ramus thinks that a unified, basically analytic method is needed in the practice of the various arts; it is also his view that this was *the original opinion of Aristotle himself*. Ramus thinks, however, that this unified method is thoroughly *analytical*, that is to say it is not inductive and not synthetic. Analytic method meant for Ramus a reasoning process which moved from general and clear principles to particular cases of application, never from the particular to the general. This means that for Ramus a method always begins with the assumption of known, general principles and then proceeds to the application of the general principles to specific, particular cases with specific tools. Ramus thinks, moreover, that this is also the correct way to practice and to teach arts of all sorts, including logic: First one learns and interiorises the principles (or the genres, in Aristotelian terms) and then one proceeds to the particular case, to establish the specific difference and to reach the essence of the thing at hand. In this sense Ramus' approach is quite different from Francis Bacon's inductive method, preferring to trust only the level of knowledge dedicated to particular objects and particular tasks.⁴⁷² Bacon is, like Ramus and Zabarella, a thinker occupied with questions of method: He thoroughly criticises the given technics and objectives of philosophising. The symmetrically opposite tendencies of Bacon and Ramus highlight the common intellectual genre to which they both belong. However, both Ramus and Bacon believe that what is needed in philosophy is nothing less than a radical reform of its procedures, but differently for Bacon compared to Ramus and Zabarella. The conclusion regarding method is that no fixed method is necessary to approach the true science of things. Bacon suggests a method (*Novum organum* [1620], Chapter 1, Fragment 95) that finds a middle place between the empiricists and the rationalists. The empiricists are like ants, collecting small fragments

471 Ramus, "One method," 127; Ramus, *Methodus*, 9recto: "Tertius error est in genesis: nam cum illo ordine vero, et Aristotelicæ methodi proprio res sumpserint, ordine contrario docendas et collocandas esse præcipiunt. In qua regula tam vehementer errant, quàm erraverant in exemplo proximo. Etenim si vera est Aristotelis doctrina (ut Aristotelis interpretes hi veram esse putant) omnîsq; doctrina à generalibus prænotionibus, à naturâq; prioribus et notionibus sit instituenda: cum superior ἀναλύσεως καὶ θεωρίας via à priorib[is] nature et notionibus procedat, quomodo contraria γενέσεως καὶ πράξεως via à priorib[is] nature, et notioribus incedet?"

472 Guido Giglioni, "From the woods of experience to the metaphysics: Bacon's notion of silva," *Renaissance Studies* 28, no.2 (April 2014): 242–261.

of reality and carrying them one by one in a chain back to their lodgings; the rationalists are like spiders, weaving in advance their nets of ideas to catch everything that come their way. Instead, the model of method that Bacon prefers is one analogical to the bees collecting the honeydew of flowers to turn it immediately into a useful instrument, like the hive:

Not unlike this is the true business of philosophy; for it neither relies solely or chiefly on the powers of the mind, nor does it take the matter which it gathers from natural history and mechanical experiments and lay it up in the memory whole, as it finds it, but lays it up in the understanding altered and digested.

The direction of the methodical procedure, according to Ramus, must be from the general to the particular, not from the particular to the universal. This is how we need to proceed in matters of knowledge and the arts. Every principle must have its specific placement within particular cases.

Aristotle therefore refutes the method of proceeding from the specific to the general, and indeed proposes the opposite method, proceeding from the general to the specific. He not only argues for this method but carries it out in fact, and exemplifies it, pointing out the common and the universal, then the particular and singular.⁴⁷³

In the terms of the *Categories* this means (in Ramus' interpretation), that we must begin with a *genos* and proceed towards the definition of an *eidōs*. We proceed towards the determination of the reality or essence of a thing through the determination of the specific difference within the *genos* itself.

473 Ramus, "One method," 123; Ramus, *Methodus*, 7bis.

2.3.8. Synthetic Analysis: The Suggested Model

In order to suggest a way out of the maze of idiosyncratic definitions of synthesis and analysis, we schematise what we have learned thus far regarding the Claubergian concept of method as leaning on analysis and synthesis as follows:

1. In any exposition of a methodical order, one should begin by stating some complex given; this I call PS for prior synthesis.⁴⁷⁴
2. PS must be analysed into its simple elements, and this is done by an initial process of analysis, FA, which for Clauberg consists in the process of doubt.
3. When the analysis is demonstrated, what is furnished is a second synthesis, SS. This means that the demonstration of the process of doubt makes a certain synthesis. This is a produced and not a pre-given synthesis. This is what Descartes defines as *the order of reasons*.
4. After the SS is determined, one can observe it as a document and make a judgment of it as if it were a product made of an author other than oneself. This is what Clauberg calls hermeneutic analysis and Descartes will call the order of matters, and it is suggested here to call it SA for synthetic (or second) analysis. SA as the order of matters is the order found through the *analysis of produced synthesis*. SA is synoptic.

What characterises the FA is the fact that here the object is psychologically approachable. The SA, analysis in its synthetic aspect, regards that which is not evident, in other words that which is not intuitive to the natural light; in Aristotelian terms it is that which is not better known to us but is better known by its nature; it is a synthesised intuition. Indeed, one should also differentiate between the first Descartes of the *Regulae* and the later, sometimes known as the ‘second’ Descartes of the *Meditations* and onwards, as his method changes through the development of his philosophy. Perhaps the following table (see next page) makes the model a bit clearer; in it we try

474 We can also call this prior synthesis, in a rather hyperbolic manner, “primary matter,” in the sense that this is the first matter which is encountered by the philosopher, not in the Aristotelian sense of the Hyle [ὕλη].

to integrate Aristotle, Zabarella, Ramus, early Descartes, mature Descartes and Clauberg (see next page).

Figure V: **The double process of synthesis and analysis in method in the various authors**

	Aristotle	Zabarella	Ramus	Descartes 1 (<i>Regulæ</i>)	Descartes 2 (<i>Meditations</i>)	Clauberg
PS	That which is better known to us	Sense data	Given product	Analogies of the imagination	Senses and transmitted knowledge	Errors: Habits and customs, generalisations
FA	Analysis (<i>dihairesis</i>)	Demonstration of causes out of the effects	Finding the constituent principles and elements	Translation into quantities and geometrical figures	Doubt: The order of reasons	Genetic analysis: auto-estimation of the mind
SS	That which is known by its nature (<i>eidōs</i>)	Demonstration of effects out of causes	Synthesis within analysis: placing the product within its genre	Putting into order and measuring	The halting of doubt, 'ergo' moment	Understanding the phrases of others
SA	Establishment of the Categories, Hermeneutics and Topics	<i>Regressus</i> : Full explanation of the phenomenon; compositive order	Application of the art in particular cases: analysis in the Ramist sense	Synoptic reason: using well one's judgment. Imposed intuition.	The establishment of principles: order of matters	Judging the phrases of others (analytic Hermeneutics)

Claubergian Cartesian methodism, indeed dualist in nature, takes on the challenge of making this crossing noted by Aristotle: the passage from the *genetic to the analytic*. The whole point of the movement of method is to bridge the abyss between the two different orders: the order of reasons and the order of things, from things as they are known to us to things as they are known for themselves, in their own nature. In this framework one must proceed from the things that are simple to know because they are found within the domain of the *cogito* to the less well known, the complex and demanding "outer things": These outer things need to be known in their nature, as independently as possible from the pre-given bundled synthesis (FA) which is made of

presuppositions, received habits, and so on. Savini confirms that⁴⁷⁵ the division of logic into genetics and analytics is a Ramist division that goes back to the *Aristotelicae animadversiones* of Ramus and is ordained for rhetorical aims in which reason should serve the interpretation of the propositions of others. Indeed, in this differentiation Clauberg betrays his Ramist background. In that sense for Ramus as for Clauberg, analysis is primarily a process of judging a document; it is an inquiry regarding a certain case within a genus; one must distinguish the place of a work within a certain genre of art, in other words within a certain and particular kind of know-how. This localisation of a place within a genre is equivalent to what we call second analysis, and it provides a methodical definition of the matter at hand; it is the end product of a methodical procedure. In the Ramist framework analysis means judgment of a product in relation to the art that produced it. This judgmental analysis is evidently also synthetic because it must make a comparison between the product and the art that produces it.

FA is that which begins an inquiry, the preliminary preparation to begin a methodical process. The primary situation which invites methodical procedure is always some kind of ignorance, not unknowing but rather disposing of a non-intuitive or non-evident truth. This corresponds with the Aristotelian methodical demand that one should pass from the things which are better known to us to things that are better known in themselves. Transferred to the domain of Cartesian philosophy, any method should begin by self-inspection, for example the examination of the self and its powers, and then pass to knowing that which is more difficult to know, which is the truth of things external to the self. This is what Clauberg calls *analytical* logic. Analysis as the order of reasons, or genetic logic, is the more intimate one, trying to point out the reasons for the arrival of some conclusion. Conversely, synthetic analysis is exposed and external, but in this sense it is also public and useful; this is one of the aspects of Cartesian thought that Clauberg knows to identify but was for Descartes still somehow irrelevant. In the Claubergian moment we are dealing with a model of logical analysis which consciously puts synthesis, in its public nature, already as the conscious objective of method and takes for granted the binding between analysis and synthesis. Method itself finally is understood as a synthetic-analytic.

In the Ramist sense the analytical moment performs a quality check on a certain product within a certain genre or series of products: Does the product conform to the rules and regulations of the discipline within which it belongs? Following Ramus, synthesis is the judgment of analytic act; it is the completion of analysis. Second

475 Massimiliano Savini, "L'insertion du cartésianisme en logique : la Logica vetus & nova de Johannes Clauberg." *Revue de métaphysique et de morale* 49, no.1 (2006): 75.

synthesis should place the analysed segment within a chain of reasoning. Ramus writes that “analysis is the examination of the argument, enunciation, syllogism, method, in short of the whole art of logic, as is prescribed in the First Book of the Analytics” (quoted by Ong 1958, 263). The fourth and concluding chapter of Claubertg’s *Logica* is dedicated to the completion of logical analysis. Clauberg notes that analysis can also be activated as a process of retrospection, of the mind looking at its own products as it would look on the products of others. He remarks that one should detect, first of all, what is being said. However, one should also get to know the errors of others. In order to reach the truth of things, Descartes recommends, one should not only acknowledge and avow the turns and oblique ways others have taken but also one’s own mistakes to avoid similar cases in the future. Clauberg says we should learn from the veterans, not only the right orders, and acknowledge which orders were false. If we take Wittich’s understanding as quoted above regarding the violence of the forcing of synthesis, we learn in fact the first know-how of criticism: scrutinising the forced syntheses of the veterans, adopting those that are rightly placed and constructed and rejecting the falsified ones so that, as Clauberg puts it, the *pathemata*, the accidents of others will be made our own *mathemata*, a teaching.⁴⁷⁶ Moreover, one must first learn about one’s own faults before correcting the faults of others.⁴⁷⁷ Further on Clauberg says that one can activate this analytical logic also in one’s own thought, that is on one’s own earlier thoughts and writings. In that sense, analytical logic has in fact a special interest in things from the past. Reading oneself, correcting oneself, demands exactly this kind of logic.

In other words one should get to know *one’s mental habits* and see what is found in them to proceed in a methodical order towards the knowledge of things. In this kind of logic, one acts as a censor; one needs to serve as a cold and *indifferent judge*.⁴⁷⁸ Clauberg thinks this kind of analytical logic can also be used to clarify the sayings of God himself as these are not pronounced by man, and they therefore demand clarification. In general, as we shall see, in second analytics we learn to read, read reality, read all things that we meet on our way.

476 OOP II, 866 (*Logica* IV, I, §3).

477 OOP II, 867 (*Logica* IV, I, §4)

478 I am hinting here to Kant’s reference to reason (in the introduction to the second edition) as an “appointed judge” (“sondern eines bestellten Richters”). Immanuel Kant, *Kritik der reinen Vernunft*, (Hamburg: Felix Meiner Verlag, 1998), 19 (B, xiii).

On the connection between Kant’s transcendental inquiries and the methodic questioning of Philippo-Ramism, see Marco Sgarbi, *Kant and Aristotle: Epistemology, Logic, and Method* (New York: Suny, 2016).

First analysis works with examples, with given data. However, the given as Clauberg presents it is not just a scientifically given case or a certain problem that we must deal with; it is all our own already sedimented beliefs, our habits. As Descartes writes in the *Discourse*, one should use this bit of tradition and effort to carve out of it distinct ideas, like the sculptor sculpts a Diana or a Minerva out of a lump of stone. However, this figure is not always found within the lump: Sometimes the process of analysis leaves one only with dust; in that case Descartes tells us that we must stop the methodical process and proceed no further because we have not yet established a knowledge which is stable enough to enable building the rest of our inquiry. However, when one does find some distinct figure there, one can begin to work and elaborate one's method, not only looking at the sculpted Minerva and examining it but also allowing Minerva itself to look back at us. This is exactly what Clauberg understands in genetic logic, the logic that analyses the inner process of the mind. Any methodical process should begin with the encounter of some problem standing in one's way, demanding a re-questioning of habits. First analysis should be understood as a de-habitation (regarding opinions and pre-conceived notions), and the methodical procedure in its entirety should be understood as re-habitation, as a re-working of a habitus, and this should be addressed as a central deontological aspect of Cartesian method.⁴⁷⁹

Synthesis, in this sense, accomplishes the equivocation of analysis within the framework of analysis. In order to divide, one must also put together; in order to make distinct, one must dispose matters in a right order. Synthesis is a manner by which method can distinguish itself from theory; it is the manner by which the truth of the matter can be grasped by the mind in terms of quantities alone and their inter-relations. Here is what Descartes says in the second part of the *Discourse on method*:

Nor did I have any intention of trying to learn all the special sciences commonly called 'mathematics.' For I saw that, despite the diversity of their objects, they agree in considering nothing but the various relations or proportions that hold between these objects. And so I thought it best to examine only such proportions in general, supposing them to hold only between such items as would help me to know them more easily. At the same time I would not restrict them to these items, so that I could apply them the better afterwards to whatever others they might fit. Next I observed that in order to know these proportions I would need sometimes to consider them separately, and sometimes merely to keep them in mind or understand many together. And I thought that in order the better to consider them

479 See in Naaman Zauderer, *Descartes' Deontological Turn*.

*separately I should suppose them to hold between lines, because I did not find anything simpler, nor anything that I could represent more distinctly to my imagination and senses. But in order to keep them in mind or understand several together, I thought it necessary to designate them by the briefest possible symbols.*⁴⁸⁰

We see from Descartes' own testimony that the target of method is in fact simplification. One does not need to be an expert in all the mathematical procedures. Instead, we try to make all problems reducible, in the first place, to the form of a line (which Descartes conceives as the simplest possible sign), and then in order to express the relations between the lines, we make recourse to the "briefest possible symbols." These symbols, indeed, bring Descartes into the generation of modern algebra. Hence, we see that algebraic symbolisation is used by Descartes as a double-level synthetic measure: At the first level, algebra expresses specific relations between lines; at the second level, algebra replaces the linear method to form a concise and brief manner of symbolisation. This algebraic move, however, is not found in Clauberg's writings.

2.3.9. Genetic vs. Analytic Logic in Clauberg

In as much as genetic logic, according to Clauberg, is occupied with the description of the mind's own relation to itself, analytic logic is occupied with the understanding of external things by the mind. These external things can be objects in the outer world but also the discourses of other people or even texts demanding interpretation or elucidation; in this sense, all external objects demand acts of interpretation. All these kinds of understanding are seen by Clauberg as belonging to analytical logic. Analytic logic, hence, is first and foremost an art of judgment. In the next chapter of this research, we delve into the meaning of judgment for Clauberg and the sources for its definitions.

In Section 6 of the *Prolegomena* to his *Logic* (§ 107), Clauberg maintains that "Analysis presupposes that the thoughts of others are capable of being communicated to us, that which genetic does not require necessarily." That is to say analytic logic must lean on communication, on things being transferred to us. Conversely, we can call genetic logic non-transitive: In genetic logic we are dealing with the mind examining

480 Descartes, Works I, 120–121; Descartes, *Œuvres* VI, 19.

and estimating its own knowledge and reasoning. In Paragraph 120, he continues to clarify:

*Analytiks directs the mind in the resolution [in resolutione] that which is complex, in the first place for us to comprehend what they are, that is to say, for us to [get to] know the true sense of external discourse.*⁴⁸¹

Therefore, analytics resolves a given thing until it reveals its true sense (*verum sensum*). At first glance, these formulations seem wholly non-Cartesian, coming from another, hermeneutic tradition. However, Clauberg's understanding of the task of logic is at the very least *compatible* with a Cartesian creed.

Clauberg's above mentioned usage of the term "analysis" seems bewildering as it is different from our usual understanding of the term "analysis," the one we present in previous chapters. In fact, it seems that analysis as presented in Claubergian logic is almost identical to what in post-Kantian philosophy one understands by the term "synthesis *a posteriori*": Posterior to some act of sense apprehension of complex data, one judges the composition of the givens. However, this is for Clauberg analysis and not synthesis. Clauberg says that quite clearly analysis presupposes communication of the thoughts of others.

In this line of questioning of method between Ramus, Descartes, Clauberg and Aristotle, analysis and synthesis are the two aspects of the same *reason*. This means that the distinction between analysis and synthesis is only modal, not real nor even rational, because the two cannot be thought of except as relating to each other. Moreover, only in retrospect, when one *presents one's method*, can one differentiate between the analytic and the synthetic parts of the inquiry. For Clauberg genetic logic, the first stage of method, carves the figure of Minerva out of lumps of thought. Spinoza makes this clearer in the *Emendation*, where he argues that method is only enabled and initiated by the fact that one *has already a true idea*. No method according to Spinoza can be initiated when one does not possess beforehand some truth, the acquaintance with which is the task of the method.⁴⁸²

481 OOP I, 781 (*Logica*, Prolegomena, §120): "Analytica dirigit mentem in resolutione eorum, quæ composita sunt, primò, ut intelligamus, quænam illa sint, sive, ut verum sensum cognoscamus, externi sermonis."

482 Spinoza, *Complete Works*, trans. S. Shirley (Indianapolis: Hackett Publishing, 2002), 11 (§38).

From this we may conclude that method is nothing but reflexive knowledge or the idea of an idea; and because there is no idea of an idea unless there is first an idea, there will be no method unless there is first an idea. So a good method will be one which shows how the mind is to be directed according to the standard of a given true idea.

Many Descartes scholars think that he understood analysis exclusively in geometrical terms, that is to say as the reduction of a complex situation into elemental quantifiable units. Is this comprehension right, and if the answer is yes, then how does it stand in relation to the Claubergian version of analysis? I would suggest my understanding of the matter in the following manner: Clauberg makes a mixture (a synthesis) between the Ramist and the Cartesian understandings of analysis. In this sense he remains entirely Ramist and entirely Cartesian at the same time. In Clauberg analysis is a process of the demonstration of verification, of checking the fundamentals of the mental instruments that one possesses. This procedure, as Ramus observes, not only includes synthesis but necessitates it. In SA, the final stage of the four steps of method, an already *carved Minerva puts in order* the items that it itself observes. It is analytics which relates to the matters of the world.

A full methodical gesture includes, according to our understanding, both FA and SA, sometimes both in parallel or simultaneously. To illustrate this we use an example which might seem trivial, but it demonstrates the point rather clearly: Let us look at the famous *Cogito ergo sum*. This elementary item of Cartesian method holds within itself all levels of method as well as the two meaning of analysis. I think that this first item of method makes the distinction between analytic and synthetic not a real one but rather a modal one: Both synthesis and analysis are included in the same conceptual genre. Hence, it is a rather plausible application of Cartesianism by Clauberg when he insists on transposing the crucial distinction within method not to the border between analysis and synthesis but rather to the border between analysis and genetics, that is to say between FA and SA. If genetic logic should lead one to the inspection of one's own ego, making explicit the order of the acts of cognition, allowing one to say "ego cogito," then it is an analytic-synthetic logic that allows one to return to the cogito as the first product of the method and observe what this cogito can do with its body in a world.

This is how Claubergian analytical Hermeneutics is produced from the two mentalities of Ramism and Cartesianism. Analytical Hermeneutics places us indeed *within* the Cartesian distinction itself, which is to say between the *res cogitans* and the *res extensa*. Analysis is the way; synthesis is the presupposed condition, but they are

both on the same side of the river going in the same direction. Analysis presupposes that there is some gap between the understanding and the understood. This means that the understood *does not belong to the understanding*. Analytical hermeneutics places us indeed on the Cartesian line of distinction between the *res cogitans* and the *res extensa*. In second analysis an already carved Minerva puts into order the items that it itself observes. It is analytics which judges the order of matters. We are not doing the methodical work regarding all simple notions stored somewhere in the background of our mind but only regarding that which is already complex and synthesised:

*[...] Descartes does not talk about the elimination from the mind of simple notions, through oblivion or in some other way, but [rather] about opinions [de sentiis] that contain a complex notion [containing more than one simple notion, ae], and which is held together by opinion and not by demonstration and science.*⁴⁸³

In general, and before moving forward to elaborate on the dynamics of synthesis, we should conclude and say that it is indeed possible to find coherence regarding the behaviour of the concept of analysis between Clauberg and Descartes. It seems that analysis always retains its Aristotelian origin and always relates to the question of method.

2.3.10. Synthetic Analysis and the Formation of Judgment

In this chapter we have tried to deploy the complex and equivocal nature of analysis in the history of philosophy up to Early Modern times, keeping in mind the special problems and characters of 17th-century philosophy. We have tried to show that, at least in Descartes and Clauberg, analysis, however prominent in methodical proceeding, carries evident and permanent synthetic characters and cannot be separated from a synthetic procedure. In as much as in Descartes the synthetic element is observable, in Clauberg the synthetic aspect of method becomes explicit and essential to the activation of method. This project suggests that one must pay more attention to the synthetic content of the Cartesian concept of method. It is clear that the discussion around

483 OOP II, 1178 (*Initiatio IX, M.*): “Rursus liquet, Cartesium non loqui de simplicibus notionibus oblivione aliove modo ex mente eliminandis, sed de sentiis in quibus est notionum complexio, nec de iis quæ per demonstrationem et scientiam, sed quæ per opinionem tenentur.”

methodical technique always questions the validity of synthesis: The definition and formation of the righteous and correct technique of synthesis stand at the very core of methodist thought rather than analysis, which has already a relatively stable meaning and content as a methodical tool. Synthesis makes such a challenge to the methodist discourse exactly because analysis is the clearer term of the two; it leans on a more evident tradition than the one we find regarding synthesis. Also, if methodism in the Cartesian version contains a fundamental realism regarding matters of nature (that is to say method assumes the presence of a thing, or at least a real problem, to be studied and transmitted through the senses), then analysis is in this sense destined always to achieve its task as long as it remains loyal to the reality of the matter. In that sense, analysis receives a guaranty from the reality of matters. Conversely, synthesis is more open ended as there is no model at the far end of the process; rather, there is an end product, an architecture of thought which is produced by the philosopher and must respond to the criteria of validity. The coming chapters of this research are wholly dedicated to a deployment of the various forms, parameters and limits of synthesis in the Claubergian reading of Cartesian method.

Part 3: Reframing Judgment and the Figuration of Thought

3.1.

The Negative Usage of Judgment, Doubt and the Technique of Limination

3.1.1 The reconstruction of doubt; 3.1.2 Doubt as the condition of judgment; 3.1.3. The habit of infallibility and the challenge of false ideas; 3.1.4. Limination, stoic doubt, hypothetical doubt; 3.1.5. The accusations of Descartes by Lentulus and Revius; 3.1.6. The *postponement of intuition* and the definition of doubt as a genetic process; 3.1.7. The theological aspects of doubt in Clauberg; 3.1.8. The pedagogy of the judgmental level 0; 3.1.9. The therapeutic synthesis of doubt; 3.1.10. The synthesis of doubt: another empiricism

“He who doubts, does not affirm, does not negate, but is indifferent to either of these.”⁴⁸⁴

“[T]he method of progressing through doubt in the direction of certitude.”⁴⁸⁵

3.1.1. Restructuring Doubt

Almost all Clauberg's Cartesian writings concentrate on an apology on behalf of the concept of doubt. One should mention especially the *Defensio cartesiana* (1652) and the *Initiatio philosophi* (1555). In this sense Clauberg's defence of the Cartesian creed is bound up with his understanding and endorsement of the concept of doubt. Indeed, it

484 OOP 1142 (*Initiatio* II, §9): “Qui enim dubitat, neque affirmat, neque negat, sed ad utrumque indifferens est.”

485 OOP II, 1141 (*Initiatio* II, §8) : “Atqui methodum per dubitationem progrediendi ad certitudinem & Platonis &c.”

is obvious that for Clauberg any philosophising should begin with a process of putting-into-doubt, and hence what we try to define here as the “initiation of the philosopher” must pass through a stage of doubting. However, Clauberg tries to show that this strategy of doubting must not be confused with expressing a sceptic philosophical position. In fact, as we shall show, Clauberg’s epistemological position is best described as a *stoic* one. In Clauberg’s writings, putting into doubt is a process of halting, or suspension, before beginning of to build an inquiry. The place of doubt in Cartesian method had been amply commented upon and criticised in Clauberg’s time, and in this sense it is evident that Clauberg viewed the promotion of doubt as a methodical tool as central to his Cartesianism. The quarrel of Utrecht (1642), the central and most dramatic debate regarding the reception of Descartes in his lifetime, placed the concept of doubt at the centre of the discussion.⁴⁸⁶ Clauberg’s defence of Cartesian doubt stands as an aftermath of the Utrecht quarrel, and he addresses the same themes that had been brought up in the earlier controversy. The apocryphal text *Research after the truth*, supposedly written by Descartes, was circulating in Holland at the time. One could suppose that the *Research* was written generally for laymen and was not intended for the doctors at the Sorbonne.⁴⁸⁷ This text, construed as a philosophical drama, has a philosophical-pedagogical theme, and doubt remains at its centre. This unfinished text is a dialogue between three figures: Poliander, Epistemon and Eudox. Poliander is a young man looking for his way forward in knowledge and science. Epistemon leans on past knowledge, and Eudox thinks with the help of natural light and by placing all accepted knowledge into doubt. Eudox, in the view of Cartesian research, represents the position of Descartes himself. Hence, Descartes speaks through the words of the philosopher who prefers, at the very least, not to depend too much on (previous) knowledge: Philosophy begins with finding true thinking or the *bon sens*. In the centre of the conversation regarding the *search* stands the status of doubt:⁴⁸⁸ In as much as Epistemon represents the position of the learned, Eudoxus, close to Descartes’ positions, suggests a certain basic suspicion that the researcher after the truth must adopt.

486 See Theo Verbeek and Jean-Luc Marion, *René Descartes et Martin Schoock, La Querelle d'Utrecht* (Paris: Concours Philosophie Impressions Nouvelles, 1988).

487 On this see A.-F. Baillet, “Descartes à la recherche de la vérité,” *Bulletin de l'Association Guillaume Budé* 2 (June 1963): 209–215. See also Ernst Cassirer, “La place de la « Recherche de la Vérité par la lumière naturelle » dans l'oeuvre de Descartes,” P. Schrecker trans., *Revue Philosophique de la France et de l'Étranger* 127, no.5/6 (May June 1939): 261–300.

488 Recently Ernest Sosa suggested a pyrrhonist reading of Cartesian doubt. See Ernest Sosa, “Descartes’ Pyrrhonian Virtue,” *Epistemology* (New Jersey : Princeton University Press, 2017), 1–20.

In the *Logica vetus et nova* Cartesian doubt is bound up with what Clauberg defines as genetic logic, the logic that places into doubt received opinions in one's mind and forges anew the building blocks of philosophical architecture. Genetic logic is, in our framework, in parallel with first analysis. Analysis, according to this line of reasoning, is that which dissects a given content, trying to make clear, in other words *to distinguish*, the essential content of the given, assuming it is there to be found. In a paragraph that was cited at the conclusion of the last chapter, Clauberg states that according to Clauberg, Cartesian doubt is directed only against complex sentences of opinions, not against simple notions or scientifically proved propositions:

*[...] Descartes does not talk about the elimination from the mind of simple notions, through oblivion or in some other way, but [rather] about opinions that contain a complex notion, and which is held together by opinion and not by demonstration and science.*⁴⁸⁹

Hence, all that we can place into doubt *must be a complex, composed whole*; it must be a synthetised given; it must be primary synthesis. What the initiated philosopher tries to discover through the methodical process is the validity of the given complex, that is to say in what manner this complex furnishes a proper composition of simple truths (or in Descartes' terms, "simple natures"). If this is not the case, then it must be corrected and emended. This inspection regards, in the first place, the opinions that we learned as *children*, weighing which of these can be withheld and which must be overthrown:

*Inspection of things about which we have formed an opinion when we were children and in the years of youth, with the aim that, in remarking the things that we have judged well and the things that we have misjudged, we will accept, in philosophizing, some things, and we will reject others.*⁴⁹⁰

As we shall see, Clauberg works between two opposing demands: On the one hand, he opts for arriving at particular understanding of things, not leaning on too wide or too rigid abstractions; on the other hand, Clauberg aspires to re-construct the given and

489 OOP II, 1178 (*Initiatio*, IX, 6. M): "Rursus liquet, Cartesium non loqui de simplicibus notionibus oblivione aliove modo ex mente eliminandis, sed de sententiis in quibus est notionum complexio, nec de iis quæ per demonstrationem et scientiam, sed quæ per opinionem tenentur."

490 OOP II, 1139 (*Initiatio*, I, §32): "[R]ecognitio eorum quæ ineunte ætate et juveniliū annorum tempore judicavimus, ut animadvertentes quæ rectè judicata, quæ secus, alia quidem assumamus in philosophando, alia rejiciamus."

accepted systems of classifications, as is very clear, for example, in his *Ontosophia*. This method is generally based on the capacity to place into doubt. However, as we shall see, Clauberg's position is not a sceptical one but rather, we would like to suggest, a *Stoic* one: It does not put reality into doubt, only our view of it. In this sense Early Modern Cartesianism can be understood as adding a character to the long Stoic tradition of the *Medicina mentis*:⁴⁹¹ It is a process of self-examination which seeks to accept in a valid way that which is given.

Within the framework of FA, Clauberg highlights what he calls the immanent character of the act of doubting. In this act there is an element of auto-didactics in which one receives in oneself the act of doubting. In this sense Clauberg insists that the process of doubting, before being a process of putting things into doubt, is in fact a process of self-emendation between man and himself. This kind of act Clauberg calls immanent, and what is contained in this definition is the action made from both sides of the act, both from its potentiality and its actuality:

*Doubting is an immanent act, not a transient act. Hence, when there is an act of doubting, the one who doubts receives in oneself in a passive manner the act of doubting. Hence such is the nature of an immanent act, working both from its potentiality, the producer, and the receptor, whose potentiality is respective to one's passive and active rationality.*⁴⁹²

This definition of doubt as an immanent act makes out of doubt itself a kind of an ontological experiment in which the searcher, the one who doubts, acts both as potential and actuality. In fact, what happens is the assertion of the "I," self-assertion of the individual, in which one experiences oneself for the first time both as the cause and the effect of one's actions.

Clauberg often places Cartesian doubt in relation and in comparison with Baconian doubt; he says, "Cartesian doubt is metaphysical, that of Francis Bacon

491 On the tradition of the *medicina mentis* and its Stoic origins, see Guido Giglioni, "Medicine of the mind in early modern philosophy," in *The Routledge Handbook of the Stoic Tradition*, edited by John Sellars (New York and London: Routledge, 2016), 189–203.

492 OOP II, 1207 (*Initiatio* XI, §17): "Deinde, dubitare est *actus immanens*, non transiens. Igitur id quod dubitat agendo, recipit eundem in se dubitationis actum patiando. Hæc enim est natura actionis immanens, ut ab ea potentia, à qua producitur, simul recipiatur, ita quidem ut eadem potentia ejusdem actus respectu diversa ratione simul activa sit et passiva."

physical.”⁴⁹³ What does this distinction mean? Does it simply mean that Bacon doubted physical matters and Descartes metaphysical? I think there is more to this distinction, and it is a distinction of method. In as much as Baconian doubt was intentionally directed to form a method regarding science and knowledge, according to Clauberg the doubt that was operated by Descartes has more to do with metaphysical questions. This means that for Clauberg doubt should serve us before we arrive at the later stages of the inquiry by sorting out in advance our preparedness to any further inquiry. In that sense doubt should come before the stage of application of method:

*Next he confounded a positive action, such as the hanging of a thief, with the suspension of judgment, which is a negative act, consisting in non-judging. 3. The hanging of the thief happens after the judgment has first been peracted and after the sentence has been passed; our doubting or suspension of judgment happens before the decisive sentence, before the determination of judgment [...].*⁴⁹⁴

In this chapter we concentrate on the negative operation of judgment, which is doubting. We try to show that already at this stage, Clauberg’s conception of method is inherently *compositive*. Doubt comes from the position of the impossibility of choosing between two options:

To fall [apart] into two, not holding together as one, from zwei and fallen [Clauberg’s intention here is to explain the German word for doubt, Zweifel, ae]. This affiliates with the Greek. ἀμφίβολον, which can be thrown as it were from both sides [hitting at both ends, double-pointed (Liddell & Scott, Greek-English Lexicon)], from ἀμφίβαλλω. The French “estre entre deux”, as if said to be between the two, means to doubt. If all of these things are considered together with the previous part, one can clearly conceive that doubting is nothing else but

493 OOP II, 1214 (*Initiatio* XII, §25): “Porrò Cartesiana dubitatio Metaphysica est, Verulamiana Physica.”

494 OOP II, 1146 (*Initiatio*, III, §32): “Deinde actionem *positivam*, qualis est furis suspensio, confundit cum suspensione iudicii, qui actus est *negativus*, consistit enim in non-judicando. 3. Suspensio furis fit, peracto priùs iudicio et *post* latam sententiam; dubitatio nostra seu suspensio iudicii contingit *ante* sententiæ decisionem, ante iudicii determinationem : ille actus sequitur, hic noster accedit iudicium.”

*the suspension of judgment; and to be indifferent regarding the two possibilities, neither to affirm nor to negate.*⁴⁹⁵

Cartesian doubt is hence not an action of negation but rather an action of halting. Standing before the stage of judgment, placing ourselves before judgment begins, is indeed the function of Cartesian doubt according to Clauberg.

3.1.2. Doubt as the Condition of Judgment

In *Conversation with Burman*⁴⁹⁶ Descartes says, “Every imperfection under which the judgement labours comes from intellectual ignorance. If this were removed, the fluctuation would disappear too, and our judgement would be stable and perfect.” But what is this *intellectual ignorance*? It comes from an excess of non-valid knowledge. On the contrary, the state of intellectual non-ignorance is established from the self-inspection learned by method. However, doubt is in its heart the abstinence from expressing judgment on things that are not obviously true:

*Even if I have no power to avoid error by having an evident perception of everything I have to think about, I can avoid it simply by remembering to withhold judgment on anything whose truth isn't obvious.*⁴⁹⁷

The most evident principle that comes out of these two passages in *Conversation with Burman* is that in the Cartesian-Claubergian framework, *doubt is inherently connected to judgment*, and because doubting is first and foremost an immanent act, what it produces is the possibility of *judging oneself truly*. In this way forming a judgment of oneself is the first step in the initiation of the philosopher. Élodie Cassan emphasises the

495 OOP II, 1132 (*Initiatio*, §5): “Ad duo cadere, non adhærere uni, ex zwei et fallen. Cum quo consentit Graec. ἀμφιβολον, quod utrinque quasi jaci potest, ab ἀμφιδάλλω. Et Gallis *estre entre deux* q.d. esse inter duo, significat dubitare. Quæ omnia si conferantur cum art. præcedente, clarè intelligitur, dubitare nihil aliud esse quàm judicium suspendere ; *et indifferentem esse ad duo*, nempe ad affirmandum vel negandum.”

496 Descartes, *Conversation with Burman*, 32 [31].

497 Descartes, *Writings* II, 32; Descartes, *Œuvres* VII, 61.

centrality of the question of judgment to the Cartesian project.⁴⁹⁸ However, she thinks there is no univocity in the meaning of the term in Descartes; rather one should follow the various places in which judgment appears in Descartes' corpus and see the various applications of this term. In any case it is clear that for Descartes the efficient method brings about a better ability to judge. Conversely, most times when Descartes speaks of judgment, he refers to it in a suspicious tone, emphasising its fallibility and fluctuation which are due to its relation to the will. We know that in Descartes judgment has a relation not only to ideas but also to the will.⁴⁹⁹ In *Conversation with Burman* Descartes is challenged by his interlocutor: "But judgment itself is an operation of the will." Descartes answers, "It is indeed an operation of the will, and as such it is perfect. Every imperfection under which the judgement labours comes from intellectual ignorance. If this were removed, the fluctuation would disappear too, and our judgement would be stable and perfect."⁵⁰⁰ If one wants to suspend judgment and hence avoid making errors based on intellectual ignorance, one must use the will. This is called in research "direct negative voluntarism," maintaining that the suspension of doubt can be accomplished by a simple act of will.⁵⁰¹ Hence, we are talking here of a direct human capacity according to the Cartesian creed: to *withhold judgment*, to stop the movement of judgment in order to avoid judging falsely. Another epistemological consequence is that the betterment and habilitation of our judgment is related with the emendation of our usage of will. In this sense being occupied with our judgment is an inquiry that has ethical as well as epistemological consequences.

As intimately connected with the will, judgment is also strongly related to affectivity: Some judgments, that is to say those not verified, are affective movements.⁵⁰² The development of the discussion around the question of judgment was a seminal theme in 17th and 18th-century philosophy. The emphasis given to the concept of judgment in Descartes' writings was indeed already widely explored in Descartes

498 Élodie Cassan, "La théorie cartésienne du jugement," *Labyrinthe* 19, no.3 (2004), <http://journals.openedition.org/labyrinthe/251>.

499 Lex Newman, "Attention, voluntarism, and liberty in Descartes' account of judgment," *Res Philosophica* 92, no.1 (January 2015): 61–91.

500 *Conversation with Burman* [§31], English Cottingham translation, 32.

501 Rico Vitz, "Descartes and the Question of Direct Doxastic Voluntarism," *Journal of philosophical research* 35 (January 2010): 107–121.

502 Jan Forsman, "Descartes on Will and Suspension of Judgment: Affectivity of the Reasons for Doubt," in *The Concept of Affectivity in Early Modern Philosophy*, edited by G. Boros, J. Szalai and O. Tóth (Budapest: Eötvös University Press, 2017), 38–58.

scholarship.⁵⁰³ Shortly after Clauberg, we see philosophers in the second half of the 17th century placing judgment at the far end of the aim of methodical proceedings. In the *Grande Logique* of Antoine Arnauld and Pierre Nicole, just a few years after Clauberg's death, we find the following definition: "Judging is the action in which the mind, bringing together different ideas, affirms of one that it is the other or denies of one that it is the other. This occurs when, for example, having the idea of the earth and the idea of round, I affirm or deny of the earth that it is round."⁵⁰⁴ Judgment, hence, is the *choosing* of a way, a determination. Judgment happens when we decide, regarding a certain path of questioning, whether to take a certain way of interpretation affirming or denying a certain state of affairs. We put together several elements and then affirm or deny their synthesis. Judgment, in this sense, is inherently synthetic. The underlying question is how to reach a judgment with a sound basis. Also in the *Grande Logique* one finds an assertion regarding the relation between judgment, reason and synthesis: "The action of the mind in which it forms a judgment from several other is called reasoning."⁵⁰⁵ Hence, we learn that reasoning itself is a judgment of the second order, where several judgments are unified into one. We thus have a question before us: What is the relation between first order judgment and second order judgment? In continuation of this question, How do we differentiate a valid second-order judgment from a non-valid one? It seems that at least according to the Claubergian approach, a sound judgment is one which went through the verification process of method, that is to say, it is a judgment put into doubt. In method, all judgments must be placed into doubt. A judgment that we cannot doubt is no longer a judgment but rather an intuition. Second order judgment, or reason, is valid when a deductive validity is demonstrable between the several elements of the judgment.

For the thinkers of Port Royal, reason begins *after* judgment, after the work of positioning by judgment; when one assembles several judgments, one receives the beginning of reason. This comes from a Ramist tradition: For Ramus, judgment makes the second part of dialectics; it is a collocation: "The doctrine or collocating (or assembling) what invention has found, and of judging by this collocation concerning

503 On judgment in Descartes see Élodie Cassan, "La théorie cartésienne du jugement," *Labyrinthe* 19 (2004 (3)), <http://journals.openedition.org/labyrinthe/251>, consulted 22 August 2018.

504 Antoine Arnauld and Pierre Nicole, *Logic or the Art of Thinking*, trans. J. V. Buroker (Cambridge: Cambridge University Press, 1996).

505 Arnauld and Nicole, *Logic or the Art of Thinking*, 23.

the matter under consideration.”⁵⁰⁶ Ong adds that this assembly or collocation must do with diagrams and dispositions of given data. For Ramus the entire dialectics rests on the duality between invention and judgment. As we saw, invention goes hand in hand with the concept of analysis, and it is the concept of judgment which roughly coincides with the more synthetic understanding of disposition.⁵⁰⁷ The notion of judgment in Ramus implicates a process of reasoning, a movement of thought. So, in the Ramist framework judgment and disposition show themselves as exchangeable concepts. We are talking, regarding Ramus, on two levels of judgment: proto-methodical judgment and strictly methodical judgment. First judgment is simply based on the craft of syllogism, and it only shows the appropriation of a rule to a certain case in question. However, the second kind of judgment is already the beginning of method, proposing collocation and arrangement of numerous verified propositions.⁵⁰⁸ Second judgment is in fact synthetic analysis, the SA suggested in the last chapter (Section 2.3.8).⁵⁰⁹

The present chapter expresses the process of doubting in terms of analysis and synthesis. From the point of view of the present inquiry, doubt is first analysis. In the first place, the chapter places the Claubergian presentation of doubt in the context of the methodical references to analysis. In the second place, I show that analytical doubt has a methodical function of halting; it is a position from which an inquiry can begin. This position is neutral; that is to say, it does not carry either verification or falsification. This is why it is suggested to refer to this stage as a *negative aspect of judgment; it is the judgment of the ground zero, where no positive content is yet being presented.*

At the beginning of the *Initiation*, Clauberg declares that “Cartesian doubt is like a stone that offends many.”⁵¹⁰ Clauberg knows that it is in the re-definition of doubt that the novelty and offensive force of the Cartesian message is found. Ernest Sosa suggests a Pyrrhonist interpretation of Cartesian doubt⁵¹¹ which I would like to examine in relation to the Claubergian version of Cartesian doubt. Sosa suggests that Cartesian

506 Ong, *Ramus*, 184.

507 See Robinet, *Esprit cartésien*, 107–109.

508 See Ong, *Ramus*, 183, 184, 187, 189.

509 Ramus in fact talks on a third level of judgment, which is already an ascent to God. See Ong, *Ramus*, 189–190. See also Craig Walton, “Ramus and the Art of Judgment,” *Philosophy & Rhetoric* 3, no.3 (Summer 1970) (Summer, 1970): 152–164.

510 OOP II, 1124 (*Initiatio*, Praefatio): “Quia Dubitatio Cartesiana primus et praecipuus quasi lapis est, ad quem offendunt plerique.”

511 Ernest Sosa, *Judgment and Agency* (Oxford and New York: Oxford University Press, 2015), 233–254.

doubt is essentially directed to the accommodation of *infallible judgment*. In this, his interpretation is identical to that of Clauberg. He concentrates on a differentiation between that which cannot be doubted and a second level of examination of scrutiny in which doubt occurs. That which cannot be doubted is of common meaning and usage. It is the foundational level instead which is placed in doubt. In other words doubt does not operate on the superficial level of everyday consciousness. Instead, Cartesian method leaves the higher surface as it is and works on the inside, at a second level of questioning. This also must do with the stoic character of Clauberg's interpretation of Descartes that we noted above. What a successful methodical process brings is the capacity to make judgments when the occasion (a problem, a question, sense data) arises:

*There is much in the preceding passage that needs emendation, and the first is that he claims the antecedent doubting of Aristotle and his followers as his own (proprium), deprives us of it, since the first dissertation has clearly shown, that we do not mean another doubting, than the suspension of judgment, which is the preparatory act that is instituted as the primary approach to the study of philosophy.*⁵¹²

Indeed, it seems that the view we get from the Claubergian interpretation of Cartesian doubt is the necessity of suspension. Suspension is that halting position, pose of spirit, or *mental posture* which is initiated by the methodical process of doubting. The relation between doubt and judgment in Clauberg's Cartesianism is a two-ways street: On the one hand doubt is discussed through judgment, and on the other hand the theory of judgment, for Clauberg, passes through the discussion of doubt. In fact, it seems that for Clauberg the basic intention of any doubt is the suspension of judgment. In that sense, doubt is a mode of judgment; it is a judgment in a negative mode, pending between avowal and negation. "By doubting we neither affirm false things, nor negate true things; we do not affirm or negate anything outright, but rather, suspending our judgement of unknown things we avoid error."⁵¹³ Evidently, when we speak of judgment

512 OOP II, 1142 (*Initiatio* III, §2): "Multa in his castiganda veniunt, e quibus primum est, quod illam dubitationem *antecedentem* Aristoteli et ejus sectatoribus propriam vindicat, nobis abrogat, cum clarissime prima Dissertatione demonstratum fuerit, nos non aliam intelligere dubitationem, quam illam, quae est suspensio iudicii, quae est actus praeparatorius, quae instituitur in primo ad philosophandum accessu etc."

513 Clauberg, OPP II, 1132 (*Initiatio* I §8): "[D]ubitando *neque affirmemus falsa, neque negemus vera*, neque omnino quicquam affirmemus, aut negemus, sed iudicium de rebus incognitis suspendendo errorem vitemus."

in the Cartesian framework, we are actually talking about the beginning of the direction of the will itself. Clauberg says, “A simple soul-perception differs absolutely from judgment, that is affirmation or negation, it differs from the will which pursues what is good.”⁵¹⁴ Hence, experimentation with doubt is in fact experimentation with the will. Descartes classifies the performance of judgment under the category of the actions of the will:

*All the modes of thinking that we experience within ourselves can be brought under two general headings: perception [perceptio], or the operation of the intellect [operatio intellectus], and volition [volitio], or the operation of the will [operatio voluntatis]. Sensory perception, imagination and pure understanding are simply various modes of perception; desire, aversion, assertion, denial and doubt are various modes of willing.*⁵¹⁵

In this it is clear that the suspension of judgment is, essentially, a suspension of the will. In the Claubergian, Calvinist perspective it is will that is placed within parentheses. The will must obey the primacy of the rationality of the mind. It is the will that must follow the right order. Descartes himself pointed to the possibility of the neutralisation of the will through the neutralisation of judgment:

*For I saw that over and above perception, which is a prerequisite of judgment, we need affirmation and negation to determine the form of the judgment, and also that we are often free to withhold our assent, even if we perceive the matter in question. Hence I assigned the act of judging itself, which consists simply in assenting (i.e. in affirmation or denial) to the determination of the will rather than to the perception of the intellect.*⁵¹⁶

According to Descartes, “will” always refers to the ability to do or not do something; it refers to action and its possibility to be or not to be performed:

514 OOP I, 219 (*Corpris et animae in homine conjunctio*, chap. 14, § 3) “Differt utique simplex animi perceptio à judicio seu affirmatione et negatione, differt à voluntate bonum prosequente .”

515 Descartes, *Principia* I, XXXII. *Writings* I, 204; *Œuvres* VIII A, 17.

516 Descartes, *Writings* I, 307; Descartes, *Œuvres* VIII-b, 363: “Ego enim, cùm viderem, præter perceptionem, quæ prærequitur ut judicemus, opus esse affirmationem vel negationem ad formam judicii consistendam, nobisque sæpe esse liberum ut cohibeamus assensionem, etiamsi rem percipiamus: ipsum actum judicandi, qui non nisi in assensu, hoc est, in affirmatione vel negatione consistit, non retuli ad perceptionem intellectûs, sed ad determinationem voluntatis.”

*The will simply consists in our ability to do [facere] or not to do [non facere] something (that is, to affirm or deny, to pursue or avoid); or rather, it consists simply of the fact that when the intellect puts something forward for affirmation or denial or for pursuit or avoidance, our inclinations are such that we do not feel we are determined by an external force.”*⁵¹⁷

When one arrives at the thematical questioning of judgment, one finds several difficulties that Cartesian method poses. In the framework of the Cartesian understanding of judgment, one is forced to deal with the definition of the will; so, we are not talking about judgement in its natural state but judgment as an *artefact*. This artificial judgment is directed by the will. As Descartes says in the *Principles I*, “Making a judgement requires not only the intellect but also the will.”⁵¹⁸

[Con.] *In order to make a judgment, the intellect is of course required since, in the case of something which we do not in any way perceive, there is no judgement we can make. But the will is also required so that, once something is perceived in some manner, our assent may then be given. Now a judgement – some kind of judgement at least – can be made without the need for a complete and exhaustive perception of the thing in question; for we can assent to many things which we know only in a very obscure and confused manner.*⁵¹⁹

In a more coherent and less conflicting reading of the general suspension of judgment through the method of doubt in the first *Meditation*, Descartes writes:

*The will simply consists in our ability to do [facere] or not to do [non facere] something (that is, to affirm or deny, to pursue or avoid); or rather, it consists simply of the fact that when the intellect puts something forward for affirmation or denial or for pursuit or avoidance, our inclinations are such that we do not feel we are determined by an external force.*⁵²⁰

517 Med. IV, 8; Descartes, *Œuvres* VII, 57; Descartes, *Writings* II, 40.

518 Descartes, *Œuvres* VIII-a, 18; Descartes, *Writings* I, 204 (Principles I §34).

519 Ibid.

520 Descartes, *Writings* II, 40; *Œuvres* VII, 57.

The will incorporates what is conceived as the freedom within us. Liberty is not only a positive but also a negative force. It is the choice of reaction which is given to us in all of life's situations, to act or not to act:

[W]e [...] experience within us the kind of liberty [libertatem esse expirimur] which enables us always to refrain [abstinere] from believing things which are not completely certain and thoroughly examined. Hence we are able to take precautions against going wrong on any occasion.⁵²¹

In matters of the mind, wisdom and science, what is to be most avoided? It seems that the answer is relatively unanimous: error. Hence, it is in the power of the will to act or not to act in a manner that will lead us to error. In other words, the major 'problem' that is posed in front of any method of the Cartesian kind, is error. But what exactly is error in Cartesian terms?

3.1.3. The Habit of Infallibility and the Challenge of False Ideas

It is clear that we are located in the domain of the discussion of habitus, in the ethical domain of the tempering of our mind and the formation of a mental habit, and this habit has one central goal: to proceed in the processes of inquiry without falling into error:

Even if I have no power to avoid error in the first way [...], which requires a clear perception of everything I have to deliberate on, I can avoid error in the second way, which depends merely on my remembering [recorder] to withhold judgment on any occasion when the truth of the matter is not clear. Admittedly, I am aware of a certain weakness in me, in that I am unable to keep my attention fixed on one and the same item of knowledge at all times; but by attentive and repeated meditation I am nevertheless able to make myself remember it as often as the need arises, and thus get into the habit of avoiding error.⁵²²

In this last quote from the *Meditations*, note that Descartes uses the term *recordare*, which takes us straight to the theme of memory. Methodical operations must in some

521 Descartes, *Œuvres* VIII, 6 (*Principia* I, §VI); *Writings* I, 194.

522 Desartes, *Writings* II, 43; Descartes, *Œuvres* VII, 61–62.

manner reshape and educate *our memory*.⁵²³ How in more detail should we relate to this? The answer that the present project suggests is that the education of our memory regards essentially and necessarily habituating to performing *analysis and synthesis*. It is like an instant operation with which we must train ourselves to perform it at all needed times. This may sound like a trivial assertion, but we hope we have led our readers to the point where the dynamics of the operations involved in this methodist *habitus* are far from being simple or self-evident. In fact, by acquiring and applying this methodist *habitus*, one must be practiced in the rules of method. All this is done to avoid one thing: error. Thus, a question we must ask is, Why did error become such a dreaded thing at this stage in the development of the history of philosophy?

Methodical error is not a sin; it is neither considered an ethical nor a theological fallacy. It is merely a fallacy in the operation of the art. As Clauberg says, “*perperam artificii peccatii attribui*” (“Wrongfully, sin is attributed to artists.”)⁵²⁴ This is also an Aristotelian and Scholastic stance. Sin is only related to ethics, not to poietics.⁵²⁵ The error that we are discussing here is what can be called poietical error: an error in the application of the rules of true inquiry. Error is something poietical, belonging to the operation of the methodical art. In this sense doubting is an internal and necessary part of any art. The one who doubts in any case *evades error*.⁵²⁶ Hence, the poietic art of method assists in the establishment of the habitus of infallacy. What we aspire to do is a priori to evade, to push away, error. Hence, if we acquire the habit of hypothetical doubt, we can always avoid error. The habit is a hygienic habit, a habit of avoidance, of elimination of the ailment of error. It is hence a prophylactic model. However, we must look a bit deeper into what kind of error we are talking about here.

The idea of material falsity of ideas appears in the third meditation of Descartes. A materially false idea is a one which represent a non-thing as a thing.⁵²⁷ The most evident case of materially false ideas is, of course, the imagination. For Descartes, there is a difference between material falsity and formal falsity. The latter, formal kind of

523 See also Jean A. Wahl, *Du rôle de l'idée d'instant dans la philosophie de René Descartes* (1920), re-edited by Frédéric Worms (Paris: Descartes & Cie, 1994).

524 OOP II, 876 (*Logica* IV, §42).

525 As Plato observes in *Nullus artifex peccet* Plato, *Republic*, Dialog. 1, 1335c.: “No artist sins.”

526 OOP II, 1132 (*Initiatio* I, §8): “Qui dubitat, non errat; adhuc in utrumque paratus ; Error opinando, non dubitando venit.” Clauberg cites here John Owen (c.1564–c.1622/8) a celebrated british epigrammist.

527 See Cecilia Wee, *Material Falsity and Error in Descartes' Meditations* (London and New York: Routledge, 2005).

falsity can “occur only in judgments.”⁵²⁸ In as much as materially false ideas result from false *representation*, formal falsity occurs as a result of false *judgment*, and hence formal falsity originates in a false usage of the will. If we take this a step further, we can say that materially true ideas are those arriving from sense data, and formally true ideas arrive not from sense data but from judgment. This is exactly the manner in which Clauberg explains materially false ideas:

Just as, in fact, a thing is sometimes related to an idea that is not properly its own by the error of men, in which case it is called false: in the same manner an obscure and confused idea can sometimes be related to something the idea does not belong to. Ideas of this kind, because they do not represent a thing as a thing, and not of such a nature as it is, and they offer us matter for error, we will call this "materially false ideas."⁵²⁹

Hence, Clauberg adopts quite clearly the Cartesian doctrine of materially false ideas. These are the ideas that we need to examine regarding the stage of initiation. We must take care at the beginning of the process of initiation to clear the mind of these materially false ideas and in this sense dissect all the chimeras that exist there. When one arrives at the initiation to philosophising, one’s mind necessarily already contains some *materially false ideas*. Hence, the habit of infallibility that we describe above is in the first place related to these materially false ideas in which non-things are presented as things. In other words, our habit of infallibility assures, for Clauberg, one thing before everything else: that we meet only real things on our way and not judge chimeras to be real things. However, to understand that an idea is false, we must examine whether it is *materially* or *formally* false, in other words whether this mistake is found in representation or in the will.

Many mixed, synthesised data that allegedly represent things, like chimeras, are already installed in us. What the process of first analysis must do is differentiate between materially true ideas and materially false ideas, that is to say to separate those ideas that are pure chimeras from those which represent things in reality. It is only then that one

528 Descartes, *Œuvres* VII, 43; Descartes, *Writings* II, 30.

529 OOP I, 309 (*Metaphysica de ente* IX, § 162): “Quæmadmodum verò res aliquando errore hominum refertur ad ideam non suam, quo respectu falsa nominatur : ita vicissim contingit, ut idea quædam obscura et confusa interdum referatur ad id, cujus idea non est. Hujusmodi autem *ideas*, siquidem non rem tanquam rem, non talem ut talem repræsentant, adeoque materiam nobis erroris præbent, *materialiter falsas* dicimus.”

can continue to the second stage which regards *judgments*, hence formal falsity or formal validity. Richard Field observed,

*Falsity in the strict, or formal, sense occurs only when the representational content of our ideas is referred to something other than themselves and is thus thought to conform to the formal being of, or to represent formally, something actual. This reference of objective being requires judgment.*⁵³⁰

In other words formal falsity, or formal error, occurs only in judgments. It refers to the determination that our will makes of the particular object standing before us. Hence, we can conclude that the falsity Clauberg wants to hinder is the formal, objective one, not the material one. The errors that occupy Clauberg's mind are those referring to false judgments of things, not of false ideas of things. We are hence addressing the formal validity or falsity of the account we give of matters.

Both kinds of falsity, material and formal, bring to our mind what is referred to by Clauberg often as darkness. In this sense when we see fictive entities and believe them to be true, we actually do not see anything at all. The rational light, as Clauberg sees it, arrives almost at all times from darkness and hence it must establish a process of change and transformation in the mind of the researcher: "By reason (Ratione) the light of our philosophy emerges from the darkness, for from doubt we turn to certitude. From seeing our errors and ignorance [we turn] to finding cognition and science."⁵³¹ We must, within the framework of method, make a passage between two stages of judgment: the negative stage, where judgment is simply postponed and the second stage, the positive stage of judgment, or "good judgment":

The method of good judgment prescribes the best of all the rules, which is detailed by the author into three parts (so that it will not be less distinctively understood because of its generality). The first is that one must abstain from any precipitation in judgment; the second is that one must abstain from any prejudice in judgment; the third is that one must not judge or conclude anything

530 Richard W. Field, "Descartes on the Material Falsity of Ideas," *The Philosophical Review* 102, no.3 (July 1993), 314.

531 OOP II, 1133 (*Initiatio*, X, §10): "[R]atione lux Philosophiæ nostræ à tenebris emergit ; nam à dubitatione tendimus ad certitudinem, ab animadversione errorum atque ignorantiae ad inventionem cognitionis et scientiæ."

other than what is evident to reason, that is to say that which is present and open to an attentive mind.⁵³²

The initiating philosopher must work as hard as it takes in order to bring the matter-at-hand- to so that the matter-at-hand will appear clearly before his reason; otherwise, he must not proceed with his inquiries.

3.1.4. Limination and Hypothetical Doubt

Clauberg presents the process of doubting in Descartes clearly as an *anti-sceptical* project, as a defensive instrument against the blunt negation or rejection of perceptions. In this he adopts a position that we suggest is rather close to a *Stoic position*. Differently from Ernest Sosa,⁵³³ the present project, following Clauberg's interpretation of Descartes, does not see in Cartesian doubt a Pyrrhonist procedure but rather a more stoic one. *stoic doubt* views all opinions as to a certain extent artificial; it is an epistemological position that we propose to call, after Franz Rosenzweig, hypothetical doubt,⁵³⁴ which is a doubt being constantly placed on the foundation of any given. In many ways, Sosa's description of Cartesian doubt is helpful and valid. However, to address the needs and interests of the present project holding Clauberg in mind, I suggest some fine tuning to Sosa's description. Instead of seeing doubt as working at the level of accepted opinions and habits, the present project sees Cartesian questioning as working the other way around: The sources of our *habits must be searched; habits that have true idea at their basis must be preserved in as much as habits that lean on*

532 OOP II, 977 (*Defensio cartesiana*, XI, § 2): "Methodum recte judicandi regula præscribit optimam, quæ ne propter generalitatem suam minus distincte intelligeretur, ab Authore in tria membra particulatim diducitur, quorum primum est, *omnem in judicando præcipitantiam esse vitandam* ; secundum, *omnem in judicando anticipationem vitandam* ; tertium, *Nihil amplius esse judicandum aut concludendum quàm quod rationi pateat, sive quod menti attendenti præsens sit & apertum.*"

533 Ernest Sosa, "Descartes's Pyrrhonian Virtue Epistemology," *Judgment and Agency* (Oxford and New York: Oxford University Press, 2015), 233–254.

534 Franz Rosenzweig, *Stern der Erlösung [1921]*, ed. Raffelt (Freiburg am Beigsau: Universitätsbibliothek, 2002), 2. Buch, "Zur Methode,": "Des Descartes „de omnibus dubitandum“ galt unter der Voraussetzung des einen und allgemeinen All. Diesem All stand das eine und allgemeine Denken gegenüber, und als Werkzeug dieses Denkens der ebenso eine und allgemeine Zweifel „de omnibus“. Fällt jene Voraussetzung – und sie als hinfällig, ja als für den bewußten Geist schon gefallen zu erweisen, war unser erstes Bestreben – fällt also jene Voraussetzung, so tritt an die Stelle des einen und allgemeinen, also absoluten Zweifels der hypothetische Zweifel, der, eben weil nicht mehr „de omnibus“, sich auch nicht mehr als Zweck, sondern nur noch als Mittel des Denkens fühlen darf. So versinken wir denn abermals in die Tiefe des Positiven."

materially false ideas must be eliminated. This means that next time around there will be a chance of responding better to life circumstances. In other words the methodist must *invest*, or even sometimes gamble, in given opinions to proceed gradually towards the true ones, as is the case with such thinkers as Michel de Montaigne (1533–1592), Pierre Charron (1541–1603) and Blaise Pascal (1623–1662). For Clauberg given opinions and beliefs must be weighed against the estimation of reason. In this sense the position of Clauberg is not Pyrrhonian. Not all opinion is ignorant; instead, one should experiment with accepted conceptual habits (traditional logic, beliefs, sense perceptions), placing them under examination and judgment. This is also the first principle of defence of Cartesian philosophy against its adversaries: the principle of the suspension of any philosophical judgment. This is what Clauberg calls “liminal,” sometimes referred to as the “borderline of philosophy.”⁵³⁵ Remaining on the borderline before the inquiry begins involves necessarily the examination of memory: We must view our stored concepts and, more importantly, our stored judgments from the past. The effort here is again twofold: On the one hand, we must learn to locate our stored knowledge, and on the other hand we must determine whether we need to put it aside or keep using it as a principle in our future inquiries. Surely, this enables a certain usage of the *ars memoriae* and the Aristotelian formulations:

*Let every philosopher examen his soul, whether, when and where he notices something similar; immediately at the beginning of Philosophy he institutes the analysis of his own precedent cogitations, until he reaches the oldest memory of his childhood.*⁵³⁶

Here, Clauberg refers to the Aristotelian theory of *anamnesis*, in which Aristotle discusses the difference between *mneme* and *anamnesis*, that is to say when we want to

535 For example: OOP II, 1012: “[...] Non tollitur demonstratio Dei à posteriori, licet ille ut corporearum rerum principium in Naturalis Philosophiæ limine ab omnibus consideretur.” “*The preceding chapter (a posteriori) does not exclude God from [...] the demonstration, even though he is considered to be the first beginning of all corporeal things by all who are just beginning with Natural Philosophy.*”

1142: “[V]el à limine salutârit ; namque in solo hujus Philosophiæ limine dubitatio illa, propter quam pluribus invisâ et suspecta est, instituitur”; 1171: “in limine Philosophiæ”. “[...] *that welcomed him from the threshold, for only at the very entrance of this Philosophy is this doubting, that is hated and suspected by so many people, is being instituted. 1171: “At the very limit (doorstep) of Philosophy.*”

536 OOP II, 1171 (Note I): “Examinet animum suum philosophaturus unusquisque, an, quando et ubi simile animadverterit, et statim in limine Philosophiæ cogitationum suarum praecedentium analysin instituat, quoad potest pueritiae memoriam recordari ultimam.”

remember, recapture and relocate a movement of *thought*, not merely a specific *content* in thought.⁵³⁷ *Anamnesis*, in the Aristotelian sense, is not a search for lost content but rather for a lost movement of one's own thought. Hence, the Cartesian philosopher must interrogate her own memory in the sense of some "oldest memory":⁵³⁸

*Some would say, that the sceptical argumentations in the first Meditation are pressed harder (vehementius urgeri), and then they are let loose afterwards. Response: 1. Only one Meditation is dedicated to doubt, [the other] five are assigned to certainty, and furthermore the entire Philosophia. 2. Truth is fully valid in itself, but the sceptical argumentation does not have value except when pressed hard. Hence almost the same applies here, as he mentions in his reasoning, about which the philosopher in the dissertation on Metaphysics, at the end of first part: that, the more remote from truth and common sense one is, the more one should devote his spirit [ingenii] and industry to make [his arguments] probable. In fact I did not learn by chance that this has precedence in the Elenctical tradition, that we do **not only** ~~through the mode of error~~ refute the erroneous opinions, **but also** weigh the reasonings (rationes) of the adversaries, and press their strength hard, [...] as I said in Logicæ part. 2. Quæst. 96.*⁵³⁹

Our Descartes performed his office [in the sense of duty or task] rightly, when he pressed the rationality/ reasonings of the Sceptics hard, as he could in a merciless manner, but not completely to dissimulate: rather one abandons an argument after pondering, and these words are balanced efficaciously, if in the remnants of

537 See Aristotle, "On memory," trans. J. I. Beare, *The complete Works*, edited by J. Barnes (New Jersey: Princeton University Press, 1985), 714–720.

538 OOP II, 1210 (*Initiatio* XI, §39): "Dicunt aliqui, vehementius urgeri Scepticorum argumenta Meditatione prima, quàm solvantur postea. Resp. I. Dubiis una tantum Meditatio assignata, certitudini asserendæ quinque, et tota deinceps Philosophia. 2. Veritas per se satis valida, at Scepticorum argumenta non habent valorem nisi valdè urgeas. Ac proinde simile propemodum hîc obtinet, quale contingit in iis ratiocinationibus, de quibus Philosophus Dissert. De Meth. prope finem sectionis primæ ; quòd, *quò à veritate ac sensu communi sunt remotiores, eò plus ingenii atque industriæ ad eas verisimiles reddendas quis debeat impendere*. Esse autem hoc præcipuè in Elenctica traditione observandum, ut non modò erroneas sententias refutemus [...] **verùm etiam**, *adversariorum rationes expendamus, earumque robur, quantum fieri ulla veri specie potest, urgeamus*, *Logicæ part. 2. Quæst. 96. non temere existimo me docuisse.*"

539 OOP II, 1210 (*Initiatio* XI, §39): "[Refutemus,] **verùm etiam**, *adversariorum rationes expendamus, earumq robur, quantum fieri ulla veri specie potest, urgeamus*, *Logicæ part. 2. Quæst. 96. non temere existimo me docuisse.*"

*the Meditations he uses softer words, it is notable, that a long and grave reasoning opposes and expurgates the Sceptics.*⁵⁴⁰

The doubt that Clauberg, following Descartes, demands of the initiated philosopher regards not the probably true but the necessarily true; that is to say, it regards “intellectual matters.”

*The reasons for doubting: In the synopsis of the first meditation I recalled the proper causes that allows us to doubt. In the initiation of the response to the third objection Descartes says to its propositions, it is not true, as if probable [verisimiles], which is related to what can be of usage, not as in movement, in “selling,” but partially as the soul of the reader is prepared to the consideration of intellectual matters, which are distinguished from corporeal things, whose necessity we have already seen.*⁵⁴¹

For Descartes there is a difference between judgment and the passions, but sometimes judgment is similar to a passion. As he writes to Princess Elizabeth on 6 October 1645, “When it is announced in a town that enemies are coming to besiege it, the inhabitants at once make a judgment about the evil which may result to them: this judgement is an action of their soul and not a passion. And though this judgement is found in many alike, they are not all equally affected by it.”⁵⁴² The help of doubt is needed by the student who has not learned logic; in a way, the usage of hypothetical doubt can make the formal learning of logic *redundant*, preparing the mind of the initiated for the preoccupation with truth:

For all this, the disciple of our Philosophy is gradually (sensim) fashioned and prepared, since no other logical rule is implanted in him while philosophizing so

540 OOP II, 1210 (*Initiatio* XI, §39): “Fungitur itaque rectissimè officio suo Cartesius noster, urgendo Scepticorum rationes, quantum fieri potest, nil prorsus dissimulando ; imò quod ponderi argumentorum deest, hoc verbis efficacioribus compensat, ac si in reliquis Meditationibus lenioribus verbis utitur, notandum quoque est, quòd longè gravioribus rationibus pugnet et Scepticos expugnet.”

541 OOP II, 1180 (*Initiatio*, IX, §K) “*Rationem Dubitandi* I. In synopsi 1. Med. vocat *causas* propter quas possumus dubitare. Has initio Resp. ad tert. Obj. dicit à se propositas , non ut veras, sed ut *verisimiles*, addit, se iis usum esse, *non ut pro novis venditaret, sed partim ut Lectorum animos praepraret ad res intellectuales considerandas, illásque à corporeis destinguendas, ad quod omnino necessariae videantur.*”

542 Descartes, *Writings* III, 271; Descartes, *Œuvres* IV, 312–313.

*many times, so that he will not make any random and premature judgment, but will rather control the impedance of the soul, until he has pondered the given matters (rem) with due attention towards the balance of rectified reason. And because of this I have written in my Logic with the utmost diligence, against the usual practice of the Logical rules, an entire chapter about Attention and another [chapter] about the important rule of Judgement.*⁵⁴³

Spinoza's understanding of judgment is quite different from that of Clauberg. For Spinoza judgment *is the effect an idea has on us*. From a Cartesian methodist perspective, ideas cannot influence us; most of the time they are the result of judgment.⁵⁴⁴ Cartesian certainty, for Clauberg at least is defined in the first place negatively, as the halting of doubt. It is attained by the impossibility of refutation. Clauberg defines certainty as the point in the inquiry where one can no longer doubt, that is to say when doubt disappears. As long as the mechanics of doubt are still operative, we cannot talk about a situation of certainty. What is this operation of doubt? It has several possible referents, including (1) some prior deduction where we find something false and (2) the data of the senses. Doubt is also tenable only at the level of the investigation of the truth, not at the level of day-to-day action:

*I. Certain is that about which one cannot doubt. II. We can doubt regarding [dubitare nos posse de] a consequence deducted from a precedent, that we can recall into doubt, or as a result of detecting something false in some deduction from it. III. I deny the faith in the senses, which have deceived me not once, but often; to deny it, I mean, not in the active (practical) things to be done, that would be silly, but in speculations or in the investigation of the truth.*⁵⁴⁵

543 OOP II, 1136 (*Initiatio* I, §20): “Ad hæc autem omnia sensim disponitur ac paratur Philosophiæ nostræ discipulus, cùm nulla Logiciæ regula toties ei in philosophando inculcetur, quàm ne temerè et præproperè *judicium* ferat, sed cohibeat animi impetum, donec rem debita cum *attentione* ad rectæ rationis trutinam ponderaverit. Et hac de causa contra receptum Logicorum morem caput integrum de *Attentione*, item aliud de præcipua *Judicandi regula* in Logica mea quàm potui diligentissimè conscripsi.”

544 Diane Steinberg, “Spinoza, Method, and Doubt,” *History of Philosophy Quarterly* 10, no.3 (July 1993): 211–224.

545 OOP II, 1161 (*Initiatio*, VI, §3): “I. Certum esse id de quo dubitari non potest. II. dubitare nos posse de consequentia ex eo antecedente deducta, quod in dubium revocare possumus, vel ex quo videmus falsum aliquod deduci. III. Negare me fidem sensibus, qui me non semel, at saepius deceperunt; negare, inquam, non in rebus agendis, quod stultum esset, sed in speculandis ac veritate investiganda.”

In the *Exercitatio*, Clauberg refers explicitly to his own *initiation* as supplying the right method of preparation to the philosophical process:

*As, in the beginning of primary philosophy, human mind should want to suspend its judgment regarding all things and not evaluate nothing if not according to the proportion and the augmentation of its perception (as it was demonstrated in the book *The initiation of the philosopher*), one cannot however judge that he exists and that he thinks, for the very fact that he thinks of not willing to judge other things before having perceived them beforehand.*⁵⁴⁶

*When, at the beginning of primary philosophy, the human mind thinks, that it wants to suspend its judgment regarding all things and not to evaluate anything if not according to the proportion and the augmentation of its perception (as it was demonstrated in the book *The initiation of the philosopher*), it will perceive that it cannot, however, not judge, that it exists and that it thinks, for the very fact that he thinks of not willing to judge other things without having perceived them beforehand.*

In the *Initiation* Clauberg acknowledges that even if the initiation stage is difficult, in as much as we describe it with wisdom it is the only manner to begin the way towards philosophy:

*Even if this manner for an initiate is difficult, even if the author of our philosophy has never doubted so much as he clearly seems to do in the primary meditation, even if again the disciples do not have the power to imitate and follow entirely such doubting [...] I still support ~~however~~ [the view that] that this initiation through general doubting was prescribed by Descartes with a big to our great benefit and conforming to the laws of true wisdom.*⁵⁴⁷

546 OOP II, 597 (*Exercitatio* II, § 11): “Quando primæ Philosophiæ initio mens humana cogitat, se velle iudicium de cunctis rebus suspendere, neque exserere nisi pro modo et incremento perceptionis suæ (quemadmodum in libro de Initiatione Philosophi etc. ostensum fuit) non potest tamen non iudicare, semet ipsam existere et cogitare, eo ipso quo cogitat se nolle iudicare de reliquis antequam perceperit.”

547 OOP II, 1127–1128 (*Initatio philosophi*, prolegomena, §26: “[Q]uamvis arduus iste sit initiandi modus, quantumvis Philosophiæ nostræ Author nunquam ita dubitaverit, uti Prima Meditatione præ se ferre videtur, quantumvis etiam discipuli non valeant talem omnino dubitationem imitari et assequi, [...] nihilominus pertendo, quòd ejusmodi per generalem dubitationem initiatio magna cum utilitate ac veræ sapientiæ legibus congruenter à Cartesio fuerit præscripta.”

Doubting is not an easy but rather a difficult stage of method according to Clauberg. Even if only a few of us can really follow the radical method of doubt to its very end, Clauberg thinks that this doubting conforms to the laws of reason.

3.1.5. The Accusations of Descartes by Lentulus and Revius and the Place of Doubt in the Quarrel of Utrecht

In a seminal introduction to academic scepticism in Early Modern philosophy, José Neto remarkably skips over the figure and times of Clauberg. The stops on his road include Montaigne, Descartes and philosophers of the late 17th century such as Simon Foucher (1644–1696).⁵⁴⁸ The 1650s are hardly mentioned. In any case 17th-century scepticism comes from a post-Cartesian point of view in which Cartesian method is taken into account and either defended or criticised; in most cases it is a defence of Descartes' method in which a favourable consideration of scepticism is made. Indeed, one can say that Clauberg is no less than one of the chief defenders of Cartesianism across the Netherlands-German axis. Andrea Strazzoni recently wrote, “The Cartesian reaction was co-ordinated across the Netherlands and Germany. As far as the development of a full-blown logical and metaphysical defence is concerned, this was deployed by Clauberg.”⁵⁴⁹ Clauberg was not the only German Reformed philosopher of his times who advocated and defended the Cartesian cause: Tobias Andreae (1604–1676) and Christoph Wittich (or Wittichius, 1625–1687) were also engaged in the same Cartesian project.⁵⁵⁰ We are therefore talking about a separate league within Reformed philosophy which was dedicated to the Cartesian way of thought. Whether this constitutes a direct link to the league of Protestant, post-Cartesian philosophers which was forming a tight relation between Germany and Holland, culminating in the work of Leibniz and epitomised by the *Medicina mentis* of Ehrenfried Walter von Tschirnhaus, is a question that we address in Chapter 4.2. It seems that a differentiation between the two leagues

548 José R. Maia Neto, “Academic Skepticism in Early Modern Philosophy,” *Journal of the History of Ideas* 58, no.2 (April 1997): 199–220.

549 Andrea Strazzoni, *Dutch Cartesianism and the Birth of Philosophy of Science: From Regius to Gravesande* (Berlin and Boston: De Gruyter, 2019), 45.

550 Wittich defended also Descartes' method against the newly founded Spinozism: On Wittich See for Alexander Douglas, “Christoph Wittich's Anti-Spinoza,” *Intellectual History Review* 24/2 (2014): 153–166.

is due. What, in fact, would have provided the motivation for persons such as Wittich, Andreæ and Clauberg to defend aloud the Cartesian cause? It seems that we can understand this by taking a look at the two central figures against which Clauberg addressed his *Defensio Cartesiana*: Lentulus and Revius. Both were orthodox Calvinists and anti-Cartesians. Let us see against whom Clauberg works in his Cartesian crusade.

Cyriacus Lentulus (1620–1678) was a professor of politics, Latin and Greek philosophy at Herborn (1650–1656)⁵⁵¹ and then taught practical philosophy at Marburg (1656–1678). Jacobus Revius (1586–1658) was a Dutch poet, Calvinist theologian and church historian. We are placed in the midst of a seminal debate internal to Dutch-German Calvinism in the 17th century. Both critics of Descartes were ferociously anti-Arminian (i.e. anti-remonstrant), that is to say, they were fierce defenders of the classicist Calvinist doctrine of predestination, and hence their objectives in attacking Descartes were first and foremost *theological*. Arminianism was notable for its position regarding the strictness of the doctrine of predestination, which was highly debated within Calvinist circles. What was the place of Cartesianism in this debate? First to take note of is the concept of the will, which is very predominate in Descartes (and in Clauberg). However, one should see the balanced, moderate position of Descartes on this point: On the one hand, ethically, Descartes is a defender of the importance of the *libre arbitre*. On the other hand we should not forget that in the overall Cartesian framework, the place of the preserving God is indispensable. Hence, the position of Descartes regarding freedom is a moderate one: On the one hand free will is indispensable for the initiation of any true method. On the other hand without godly maintenance and intervention, no action of the mind can be accomplished. As we saw, the question of doubt in Descartes is strongly related to the question of the will. In fact, the operation of doubt is basically, an operation of the will because the negative aspect of judgment is the suspension of the will to action. Still, we must see how this moderate position regarding the will relates to the question of doubt itself. Notably, both Revius and Lentulus attack Descartes' position mainly on the basis of the latter's alleged scepticism. This criticism of Descartes is a follow-up from the quarrel of Utrecht, which was itself very much a quarrel about the

551 Not to forget: until 1650 Clauberg himself was a professor of theology in Herborn. Hence, we can say that fights of academic politics are very much involved in this debate that we are portraying here.

limits natural theology.⁵⁵² Aza Goudriaan shows in his introduction to Revius' disputations with Descartes in what manner the question of doubt takes for the former theological overtones in the sense that Descartes' universal doubt implies, in the last step, atheism.⁵⁵³

*We have there a very impudent attack against the art of logic, that he does not shame to call childlike and harmful, drawing this away from those who have a bit of judgment and good sense (...) but who does not search to know the name, the genre, the species, the antecedents, the consequences, the causes, or the effects of the thing?*⁵⁵⁴

So, we see that for Revius Descartes was explicitly viewed as an *anti-logical* thinker, as someone who disabled the valid and verified operations of reason.

3.1.6. The postponement of Intuition and the Reconstruction of Doubt as Genetic Process

It is certain that for Clauberg doubt was not viewed as a destructive but rather as a constructive and even genetic, that is to say a productive, process. In order to make judgment productive, one must initiate not only a halting of the will but also a *suspension of intuition*, that is to say a halt in one's habituated rush to accept as certain the data we apprehend. In this sense the process of methodical doubt is understood as a taming of the intuitive urge which is directed at releasing the intuitive impulse at the right time under the proper conditions, that is to say when the right occasion arrives. In any case we are talking about a complex, ambivalent attitude towards the process of

552 On the Quarrel of Utrecht, see Theo Verbeek and Jean-Luc Marion, *René Descartes et Martin Schoock, La Querelle d'Utrecht* (Paris: Concours Philosophie, 1988); Wiep van Bunge, "The Early Dutch Reception of Cartesianism," in *The Oxford Handbook of Descartes and Cartesianism*, edited by Delphine Antoine-Mahut, Steven Nadler and Tad M. Schmaltz (Oxford and New York: Oxford University Press, 2019), 417–433.

553 Aza Goudriaan and Jacobus Revius, *Jacobus Revius, a Theological Examination of Cartesian Philosophy: Early Criticisms (1647)* (Leiden: Brill, 2018), 17–19.

554 Jacobus Revius, *Methodi cartesianae consideratio theologica* (Lugd. Batavorum: Hieronimum de Vogel, 1648), 27: "Habemus petulantissimam invectivam in artem Logicam, quam et *puerilem et damnosam*, imo *damnosissimam*, appellare non erubescit, eamque removet ab omnibus qui aliquid habent *judicii sive bonae mentis* [...]. Quid enim ille novit qui nec *nomen*, nec *genus*, nec *species*, nec *antecedentia*, nec *consequentia*, nec *causas*, nec *effecta* etc. rei scire curat?"

doubt in which several modes of doubt are proposed, not only one. F.A Siegler suggests a similar approach to Descartes' doubt itself, viewing Cartesian doubt in the plural and not in the singular.⁵⁵⁵ What happens in Clauberg's methodology is that the process of doubting itself takes precedence over all other methodical processes; it is as if he microscopes into this stage of doubting that Descartes demanded for the beginning of any philosophical process. Clauberg proposes taking a deep plunge into the tactics of doubting. This, of course, amounts to an *interpretation* of Descartes which does not express quite precisely the Cartesian usage of doubt in which doubting is clearly limited to a brief stage at the beginning of method. In Clauberg this moment becomes longer and postponed (but not eternalised). For Clauberg it is precisely that extension of the stage of doubt which one should understand as first philosophy:

*One must remark that, by the name of primary philosophy, Descartes indicates something else than that which is commonly indicated. One calls commonly primary philosophy that one which treats abstract and most universal truths, regarding Being qua Being, or indeed regarding God and created Minds, of angelic and human [minds] in common.*⁵⁵⁶

Instead, as Clauberg explains first philosophy in the Cartesian sense serves as the initiation of a mind into the field of philosophising. In other words there is a great question regarding the passage from first to second philosophy. Second philosophy is performed already *within* the *branches* of the tree of knowledge going out from its trunk, the physics: medicine, mechanics and morals.⁵⁵⁷ Second philosophy is hence constructive philosophy, and it demands a passage into the positive usages of judgment.

This positive usage of judgment, as we shall see in the next chapters, adds levels of compositive propositions on top of the minimal level of judgement arrived at by doubt (the negative usage of judgment). As we shall see, the positive operation of judgment is that which constitutes a language of the mind or *configures the mind*. The negative

555 F. A. Siegler, "Descartes' Doubts," *Mind* New Series, 72, no.286 (April 1963): 245–253

556 OOP II, 1166 (*Initiatio* VIII,5): "Notandum verò, aliud vulgo nomine primæ Philosophiæ, aliud Cartesio designari. Vulgo *Prima philosophia* appellatur quæ agit de veritatibus abstractis et universalissimis, de Ente quatenus ens est, vel etiam de Deo et Mentibus creatis, angelica et humana in communi."

557 Descartes, *Œuvres* IX(b), 14: "The whole of philosophy is like a tree whose roots are metaphysics, whose trunk is physics, and whose branches, emerging from the trunk, are all the other sciences, which may be reduced to the three principal ones, namely, medicine, mechanics, and moral." Translation found in Roger Ariew, "Descartes and the Tree of Knowledge," *Synthese* 92, no.1 (July 1992): 101–116.

operation of judgement is a reversal of processes of habituation, initialising a process of de-naturalisation that brings the mind again to the moment at which a disposition is formed against a materially true or a false idea. The next level of judgement, the one occupied with meaning and understanding, is a process of re-habituation to that same imposed intuition produced through the process of analysis.

What is sought is not the moral level of action and knowledge but rather *sed in speulandis metaphysicam*: the level of metaphysical speculation: “What is enough, is that he who does not query the moral certitude in active things, but [does so] in metaphysical speculation, which no reason can undermine, refrains from assent (ab assensu se contineat).”⁵⁵⁸ The level of action hence cannot demand certainty; certainty is saved for the level of metaphysics. This certainty is sound and strong. In short, the extension of doubt occurs on a stage which is pre-practical. After this stage, according to Clauberg, one can begin in the real direction of the mind, which is a process taking place after the stage of doubt: “Thereafter, the new act, supported by [the] strong foundations, directing the mind using the right method.”⁵⁵⁹ So in fact what doubt serves is a *halting of the intuitive natural light*. Through doubt, through the process of selection performed in the methodological preparation, we prepare the way for intuition, for the natural light to shine on the materially true idea. The following quote shows us that even if we cannot prove that Clauberg held an unpublished manuscript of the *Regulæ*, he still uses the expression “direction of the mind” as in “the right method in directing the mind [*rectiore methodo mentem dirigentes*].”⁵⁶⁰

He says because he does not just deal with those two questions, but with the first principles of philosophy, as we have previously shown. He mentions, however, these questions particularly (1) on account of the theologians he dedicated the treatise to, to whom these [questions] are especially addressed (2) on account of those who desire those questions to be handled using the Cartesian method. About them he says in the Dedicatory letter to the Sorbonne: And finally because so many etc. (ac denique quoniam nonnulli, etc.) (3) Because these two factors, among others, also pertain to the beginnings [initia, initiations, ae] of

558 OOP II, 1162 (*Initiatio*, VI, §10): “Quod satis est, ut, qui non moralem in rebus agendis certitudinem quærit, sed in speculandis Metaphysicam, quæ nulla ratione labefactari possit, ab assensu se contineat.”

559 OOP II, 1165 (*Initiatio*, VIII, §21) “*Postea*] Actu scilicet novo, solidioribus innixi fundamentis, rectiore methodo mentem dirigentes.”

560 Ibid.

*Philosophy, the two however are not sufficient in order to constitute those first initiations.*⁵⁶¹

In this passage Clauberg traces the domains within the initiation of philosophy: the domain of reason “every-man,” the domain of the learned, university philosophy, and those that take the further step towards the beginning of philosophy. We must create a new platform from which to initiate philosophical thinking. This new platform must be achieved through what is commonly understood as doubt. Richard Popkin highlights the thematic and methodical continuity between Descartes and Montaigne’s disciple, Pierre Charron, on the question of doubt. Both in Descartes and Charron we see this thesis in the *systematising* of doubt in the process of method.⁵⁶² This is an important point which is also pertinent to the case of Clauberg: In as much as in Montaigne, for example, we see doubt behaving as a nomadic principle, operating without any explicit regulations, in Descartes and Clauberg we see the ‘taming’ of doubt into a certain, fixed set of regulations.

3.1.7. The Theological Aspects of Doubt

After the quarrel of Utrecht regarding the status of Cartesian philosophy in the Reformed countries and in the aftermath of the war of religions, the question of doubt carried strong theological overtones and undertones. The quarrel itself had theological motivations in the northern Reformed political chart, and the system of higher education was divided in the aftermath into Cartesians and anti-Cartesians. As we saw, the accusations of Revius and Lentulus are in the first place directed against the theological implications of Descartes’ usage of doubt. For both Descartes’ methodical usage of doubt is taken to be a threat to the authority and validity of created nature. Against this

561 OOP II, 1166 (*Initiatio IX*, §6): “[Q]uia non sunt illæ duæ quaestiones tantùm, de quibus hîc agit ; sed initia Philosophiæ, ut antea ostensum. Mentionem autem facit harum præcipuè quaestionum (1) propter eos quibus dedicavit Theologos, ad quos hæ inprimis pertinebant (2) Propter eos qui illas quaestiones methodo Cartesiana tractari desideraverunt, de quibus in Dedicat. Ad Sorbon. Verbis : *ac denique quoniam nonnulli*, etc. (3) Quia hæ duæ res inter alias etiam pertinent ad initia Philosophiæ, quamvis non solæ constituent illa initia.”

562 Richard H. Popkin, “Charron and Descartes: The Fruits of Systematic Doubt,” *The Journal of Philosophy* 51, no.25 (December 1954): 831–837.

approach Clauberg understands doubt almost as an act of Baptism, as a kind of a ritual of passage (or even conversion). It is the passage of hygiene and cleansing that our mind must go through to proceed into the terrain of contemplative matters. Indeed, doubt is not only compared in the title of the *Initiation* but actually paralleled to a ritual of initiation.

*Perkins in the Images of the Human, page 776: You should know that these two cogitations; There is God and there is no God, can be found in one and the same spirit. The same man who knows in the light of nature that God exists, can [also] think that God does not exist in the corruption and darkness that comes from the fall of Adam. (...) From which it is understood, how for a different reason the same [thing] can be affirmed and negated, [the same] can be doubtful and certain.*⁵⁶³

Another reader of Descartes very much against emphasising the place of doubt in his method was of course Benedictus Spinoza. For Spinoza, before a method begins, one must have a true idea. This true idea is like the first, primitive mental instrument that enables one to begin forging one's tool.⁵⁶⁴ The Spinozist conception of method is more in tune with the positions of the anti-Cartesians in the aftermath of the quarrel of Utrecht. For him, the process of method is predetermined by the a priori existence of a good idea producing and generating the whole methodical process. However, both Spinoza and Clauberg agree that if philosophy exists, then method necessarily exists, and if method exists, then some good idea necessarily exists; in this sense the process of method works as a restoration of the good idea. Hence, for both Clauberg and Spinoza in their explicit readings of Descartes' method, the first assumption is that there is a method, that is to

563 OOP II, 1140 (*Initiatio* I, §37): “Perkinsius de Imaginationibus Cordis humani pag. 776. *Sciendum est, hasce duas cogitationes : Est Deus et non est Deus, in uno eodemque corde esse posse. Idem homo qui lumine naturae novit esse Deum, corruptione tenebrisque istis ex Adami lapsu fluentibus, Deum non esse potest cogitare. [...] Unde intelligitur, quomodo idem diversa ratione affirmari et negari, dubium et certum esse possit. §38. Idem Dialogo inter Ministrum et Christian., Tom. I.P. 1039.*” Clauberg refers here to Perkinsius, *De Imaginationibus Cordis humani A treatise of man's imaginations : Shewing his naturall euill thoughts: His want of good thoughts: The way to reforme them* (1607). And also to his *De praedestinationis modo et ordine : et de amplitudine gratiae diuinae Christiana & perspicua disceptatio* (1598).

See also on restrained predestination: James Arminius, “An examination of Predestination and Grace in Perkin's Pamphlet [1602],” in *Arminius Speaks: Essential Writings on Predestination, Free Will, and the Nature of God*, edited by John D. D. Wagner (Eugene: Wipf and Stock, 2011), 88–195.

564 See the recent Valtteri Viljanen, “The Young Spinoza on Scepticism, Truth, and Method,” *Canadian Journal of Philosophy* 50, no.1 (January 2020): 130–142.

say that there is something valid already given at the beginning of the inquiry, some materially true idea.⁵⁶⁵

The easier way: these two are utile and influence the questions of existence of God and the distinction between the soul and the body. Here we note, that all idolatry originates in that, that man's mind is reduced to something sensual. The same as shaping God as a body, as it goes in Romans I.23: "and exchanged the glory of the incorruptible God for images made to look like a mortal human being." And 25: "They exchanged the truth about God for a lie, and worshiped and served the maintained things rather than the maintaining." Certainly. I maintain, much attention is needed here. On the contrary we, [working with] Cartesian method, need to begin with the maintainer and then continue to the maintained, then properly to contemplate this in a mental and notion, after the revocation through doubt of the coming sense [data]. The truth of the origin of idolatry is very much discussed in the third dissertation of the De Praejudiciis.⁵⁶⁶

We suggested above that Clauberg's readiness to give doubt a programmatic, determining and positive place in the initiation of the philosopher has also to do with his confessional background and with the debates within Calvinist philosophy of the time. For Descartes the Catholic, the decisionist nature of judgment as an expression of the will was very central, a character of Cartesian judgment that points to the responsibility the philosopher carries in his various endeavours.⁵⁶⁷ Clauberg the Calvinist carries a determining yet moderate sense of predestination: A judgment is not so much an act of the will but rather a *re-ordering*. Like many of his fellow Calvinist

565 OOP II 1164-1165 (*Initiatio* VII, §16): "Viamq facillimam) Secunda haec utilitas respicit inprimis duas illas de Dei existentia et Animæ à Corpore distinctione quæstiones. Ubi nota, quòd omnis idolatria inde duxerit originem, quòd mentem à sensibus nunquam abduxerunt homines. Indè namque Deum corporeum finxère, ut ipsi erant, Rom. I.23. *mutârunt gloriam incorruptibilis Dei in efformatam imaginem corruptibilis hominis etc.* et v. 25 *coluerunt res conditas præterito conditore.* Certè, quod colo, hoc magis attendo. Nos contrà ex Cartesiana methodo aliquantisper præterimus res conditas et attendimus conditorem, ad quem ducimur propriæ mentis et notionum ei insitarum contemplatione, postquam à sensibus venientia in dubium revocavimus. Verùm de idolatriæ origine Diss. tertia de Præjudiciis abundè disserui."

566 It may be that Clauberg refers to this book: Jacob Raevardi, *de Praejudiciis libri duo* (Bruges: Hubertus Goltzius, 1565).

567 Marie Jayasekera, "Responsibility in Descartes's Theory of Judgment," *Ergo: An Open Access Journal of Philosophy* 3, no.12 (2016), <http://dx.doi.org/10.3998/ergo.12405314.0003.012> , consulted 16.12.2020.

philosophers, Clauberg's view of the philosopher is more one of a corrector of tradition, a re-arranger of past-judgments.

And hence it is impious to judge that God acts according to his power and his liberty in such a manner that some action is opposed to his goodness. But what is more opposed to his goodness in fact but that he made me as such that I am always mistaken and deceived (as I am since I am always...)?⁵⁶⁸

Our fallen nature, hence our proneness to fallacy, creates a theological problem. However, as we saw, when we make a mistake within the framework of the method, our mistake is not problematic from a theological or ethical but rather from a poetical point of view.

3.1.8. The Pedagogic Aspect of the Judgmental Level '0'

The zero level of judgment is the one in which *no* positive determination has been made yet. It is a preparatory, initiatory, propaedeutic measure that all method must include. All in all, Clauberg presents the processes of doubting as relating to a pedagogic project of initiation not only into the philosophical domain but also the civil domain in general. The stage of doubt must take place between childhood and adulthood; it is a phase between two certainties because nobody comes as a *tabula rasa* into philosophising:

If the understanding of man that accedes towards philosophy for the first time would have been like a tabula rasa, or, one says today, a white paper, one would not have need to begin philosophy as we do now, and, therefore, it is by accident/ an unfortunate circumstance that we have to access [accedamus] philosophy by doubting in this manner, because before obtaining the full usage of reason we have judged things that only a fully developed reason is capable of judging.⁵⁶⁹

568 OOP I, p. 358 (*Paraphrasis in Renati Descartes Meditationes de Prima Philosophia*, lectio sexta, § 85): “Itaque nefas sit existimare, Deum sic agere secundum potentiam et libertatem, uti vel aliqua actio suæ *repugnet bonitati*. Quid autem magis bonitati repugnaret, quam ut talem me creaverit, qui semper fallar ac decipiar ?”

569 OOP II, 1209 (*Initiatio XI*, 32): “Si intellectus hominis primùm ad philosophandum accedentis se haberet instar tabulæ rasæ, sive, uti nunc loquimur, chartæ puræ, non opus esset Philosophiam tali omnino modo ordiri, quo nunc facimus, ac proinde quòd sic dubitantes ad philosophandum accedamus, ex accidenti est, quia ante maturum rationis usum judicavimus de iis rebus, de quibus matura demum ratio judicare apta est.”

Hence, it is because we are already replete with epistemological aberrations that we must begin the philosophical process with doubt. If the supposition of the mind as the *tabula rasa* were viable, then perhaps we would not necessarily need the element of doubt in philosophy. The beginning of philosophy is found exactly when we are ready to place into doubt the marks already etched into the block of our mind. One enters philosophy as one enters a house:

*In the name of Initiatio I understand the first undertaking of things or the first ingression, that is to say, the act with which someone [quis] commences and ordinates [orditur] some thing [...]. In German The first entry/ Eintritt.*⁵⁷⁰

In the *Initiation of the philosopher* one finds Clauberg's reflections made in a clear manner from a pedagogical perspective. The figure of the child is repeatedly presented as an example of the state from which the initiated philosopher must begin. The figure of the child, hence, is extremely important and repeats again and again in Clauberg's texts. For example:

*We can regard a philosopher as an infant, when and as long as he observes and admires everything, as yet without any determined judgment; as adolescent, when he has made some moderate progress in the contemplation of himself, of God and of general material; a young man and mature, in so far as he occupies himself in material and other things (in rerum materialium aliarumque) with special consideration.*⁵⁷¹

So, Clauberg thinks that philosophical maturity comes with a certain know-how, a certain specialisation in a certain domain. What Clauberg wishes to achieve with the help of philosophical maturation is the capability of meeting specific cases, specific matters, and placing them within their proper coordinates. This aspiration is an

570 OOP II, 1125 (*Initiatio*, prolegomena, §I). Translate "Eintritt": 1.

"*Initiationis* nomine intelligo rei inceptionem sive primam ingressionem, hoc est, actum quo quis inchoat et orditur rem quampiam [...] German. Der erste Eingang/ eintritt."

571 OOP II, 1125 (*Initiatio*, prolegomena, §4): "Nam Philosophus *infans* dici potest, quando et quamdiu omnia circumspicit et admiratur, nihil adhuc determinatè judicando; *adolescens*, cùm jam in sui, Dei et materiæ generali contemplatione mediocriter profecit; *juvenis* et ætate maturus, quatenus in rerum materialium aliarumque speciali consideratione occupatur etc."

Aristotelian character as well as a Cartesian one. Moreover, one sees here remnants of both the Baconian and the Zabarellist conceptions of the place of empirical data as condition of any process of inquiry. However, behind all these we see a Ramist vocation: It is exactly the aspiration of Ramus to use methodical proceedings to construct in the learner the ability to identify specific cases and place them within their proper genre.

In this Clauberg points to the need to rearrange and reconfigure our minds in creating a second childhood of the mind, passing from philosophical infancy to philosophical maturity. Philosophical infancy is the stage where one takes everything that comes as naïve perception:

*Infant, unmuendig: derives its name from not speaking: so the philosopher who begins his studies does not say anything, does not discern anything, but first he is forced to perceive [percipere] the things about which philosophical propositions must be made firm, so that when he speaks out about them philosophically he does so in a steadfast way.*⁵⁷²

In the state of philosophical childhood, according to Clauberg, there are blurred, uncertain perceptions which dominate the soul, and things do not yet have definitions. What should be brought into this blurring of thought is a language naming the things of the world which will allow better and more stable discernments within the blurred sense data:

*So the mind of the philosophizing [sic] man philosopher must be diverted immediately at the beginning away from the vague and uncertain judgment and discourses he is used to since childhood learning to make judgements about grave matters with a slowly and calmer soul.*⁵⁷³

The first step, Clauberg says, is to find oneself in that neutral state in which these vague perceptions are examined but not judged. This suspension is also what counts as the first defence of Cartesianism against its critics:

572 OOP II, 1125 (*Initiatio*, Prolegomena, §8: “Infans, unmündig/ à non fando nomen habet: ita philosophaturus initio sui studii nihil fatur, nihil decernit, sed priùs percipere conatur res illas, de quibus effata Philosophica stabilienda.”

573 OOP II, 1126 (*Initiatio*, prolegomena, §10): “[I]ta mens hominis philosophaturi statim in principio à vago et incerto judicandi ac discurrendi, cui à teneris assueta est, modo avocanda est, ut lentiùs ac sedato magis animo de rebus gravissimis judicare discat.”

*In such a general suspension of philosophical judgments that Cartesian philosophers pose; The philosophers of the natural philosophy of judgment, the suspension of the initiation of the Cartesians, which is placed, in this general affirmation, this man explained, and understood as an adversary against the slanders of vehement vindications.*⁵⁷⁴

Because the human mind is accustomed to the mode of vague discourse and hasty judgments, the very initiation to philosophical inquiries is hindered.

*It is therefore necessary for young philosophers to effectuate most precisely the suspension of judgment, so that they, proceeding slowly and gradually, would sooner labour with the utmost diligence to perceive things, than to presume to affirm or negate something about the. This passage seems to be quite similar to the jurists' saying: To restrict something lawful, so that the unlawful may be avoided.*⁵⁷⁵

Certainty, the incapacity to doubt can work in the higher levels of the soul and in moral and physical levels of everyday action:

Impermissible to doubt. To permit is not used in the moral or ethical sense, but in the physical sense (for example someone would say, that I am not allowed (mihi ... non licet) to frequent the temple because I cannot walk), for it says in the synopsis of the Meditations: we can be in doubt, and in the inscription [of a title]: they can call into doubt. And all the preceding [discussions] show that here doubt is discussed in order [in ordine] to [achieve] scientia [ad scientias]; and the reasonings for doubt do not lead elsewhere, whence he even posits in the

574 OOP II 1126 (*Initiatio*, prolegomena, §13): “In hac generali iudicii Philosophici suspensione initiationem Philosophi Cartesiani positam esse asserimus, hujus explanandæ atque ab adversarium calumniis vindicandæ[...].”

575 OOP II, 1128 (*Initiatio*, prolegomena, §27): “Necessum itaque fuit iudicii suspensionem accuratissimam philosophaturis injungi, ut gradatim et lentè procedentes rem percipere priùs omni adhibitâ diligentîâ laborarent, quàm aliquid de ea affirmare aut negare præsumerent. (...) Nec videtur illud Jurisprudentium effatum, *Licetum coarctari, ut illicitum vitetur*, valdè huic loco alienum esse.”

*following [sentence] so clear, that he is not now devoting his attention to active things, but only to cognitive [things].*⁵⁷⁶

Hence, doubt is not only an immediate act. One should be able to doubt and place one's doubt as an order of reasoning. In this sense one must be well prepared and exercised to properly activate the act, not only as a physical but as a genuinely cognitive act. Clauberg supports the presentation of doubt as an art, an art of weighing accepted models of thought. This again reflects Clauberg's relation with the philosophy of Francis Bacon.⁵⁷⁷ Also in the Baconian orientation, as we shall see, what Clauberg tries to enable is an emendated empirical capacity, and what he tries to enable is an emendation of the sense data. It is like a reptile's eyes that are gradually adjusted to the light of day: "Just as/ As the eyes of bats function [miserably] in the light of day, so the intellect of our soul [intellectus animæ nostræ] is [blind] to those things that are the most obvious of all."⁵⁷⁸ Indeed, Clauberg describes explicitly a process of habituation: habituation to the truth of things. One could say that Clauberg describes the methodical process as one of *habituation to the natural light*. Though truth can arrive to us as intuition, for most of us there is a necessity in an artificial process of habituation for that light. Hence, even if the light itself is natural, the manner of habituating ourselves to its apprehension is rigorously artificial, and it is achieved through the process of doubt and the attainment of the ability to judge well.

*Inspection of things about which we have formed an opinion when we were children and in the years of youth, with the aim that, in remarking the things that we have judged well and the things that we have misjudged, we will accept, in philosophizing, some things, and we will reject others.*⁵⁷⁹

576 OOP II, 1196 (*Initiatio*, IX, 39F): "*Non liceat dubitare. F. Licere hîc non sumitur moraliter seu Ethicè, sed Physicè, pro posse (uti si quis dicat, ob podagram mihi templum frequentare non licet) nam ita in Synopsi hujus Med. possumus dubitare, atque in inscriptione, in dubium revocari possunt. Et præcedentia omnia ostendunt agi hîc de dubitatione in ordine ad scientias ; neque dubitandi rationes aliò tendunt, unde etiam in sequentibus tanquam manifestum ponit, se nunc non rebus agendis, sed cognoscendis tantùm incumbere.*"

577 On Bacon's scepticism see Eva Luiz, "*Bacon's Doctrine of the Idols and Skepticism,*" in *Pyrrhonism in Ancient, Modern, and Contemporary Philosophy*, edited by Diego E. Machuca (New York and Berlin: Springer, 2012), 99–129.

578 OOP II, 1133 (*Initiatio* I, §10): "[Q]uemadmodum vesperilionum oculi ad lumen diei se habent, ita et intellectus animæ nostræ ad ea quæ manifestissima omnium sunt."

579 OOP II, 1139 (*Initiatio* I, §32): "[U]niversalis quædam recognitio eorum quæ ineunte ætate et juveniliū annorum tempore judicavimus, ut animadvertentes quæ rectè judicata, quæ secus, alia quidem assumamus in philosophando alia rejiciamus."

Again, Clauberg's pedagogy remains related to the concept of judgment.

3.1.9. The Therapeutic Function of Limation

It is only after the achievement of the stage of doubt, or the stage of the negative operation of judgment, that we can begin with primary philosophy. As Clauberg says, "Hence, primary philosophy begins by such [things] (that is to say the simple and the facile, and according to one's judgment and in the truth of things)."⁵⁸⁰ In the liminal stage of doubt, we are not yet making first philosophy; it is rather a proto-philosophy, a stage in which philosophy has not yet effectively begun. In other words it is the stage at which a methodical habitus has only just begun. This is a stage of passage, a borderline between the non-philosophical and the philosophical at the *entry into philosophy*.

At the end of this chapter dealing with doubt, we would like to make sense of the function of doubting as related to a medical, therapeutic model that we develop in more detail in Chapters 4.1 and 4.2. Doubt, for Clauberg, is not only a pedagogic instrument but also a therapeutic one. It makes up a central part in the *medicina mentis* of Claubergian Cartesianism. Doubt serves as a process of hygiene, a process of cleansing. It serves to make the basket of our mind clean:

*The good medics, not only in the transmission of the precepts of their art, but also in their practice, in shying away from the temerity of the empiricists, have the custom to examine carefully the nature of the maladies to heal, its origin and their causes. They have the habit of purging the malignant humours before administrating the healing medicaments.*⁵⁸¹

580 Already quoted above. OOP II, 1161 (*Initiatio* V, § 53): "Dum igitur à talibus (id est, simplicissimis ac facillimis, & suo iudicio & in rei veritate) primam Philosophiam inchoat [...]" "As long as he commences his primary philosophy on the basis of such things (that it to say the most simple and facile things and also according to his judgment according to the truth of thing (...))."

581 OOP II, 770 (*Logica*, Prolegomena §10): "Et boni Medici non modò in artis suæ præceptis tradendis, verùm etiam in praxi, fugientes empiricorum temeritatem, moborum sanandorum naturam, originem causas antè solent accurate explorare. Expurgare iidem consueverunt humores noxios, priusquam salutaria medicamenta propinent."

Doubting generates the possibility of a passage into the stage of mental maturity, but what is that maturity? Maturity is, simply put, the ability to make judgments. As we saw, issuing a judgment in the framework presented here effectively constitutes being able to perceive *a thing*. Because things do not exist as such in the Cartesian conception of matter but are rather an integral part of the *res extensa*, the real challenge of rational perception in the Cartesian framework is to conceive particular, individual things correctly. We concentrate on this aspect of the isolation of particular things in the coming chapter which deals with figuration. The Cartesian therapy that Clauberg suggests is one of adopting the habitus of impartiality:

*We want to make our cognition facile; that will be the force of rationality; this will be a cognition which is placed impartially and everything will be equal within itself to affirmation or to negation, so that the beginner philosopher can erect himself to measure and rules, so that it become accessible that the soul can compose true and certain philosophical judgment.*⁵⁸²

[A]lthough such a mind of a philosopher can be easier thought than [actually] given; [such a mind] that is obviously impartial and assumes an altogether equal attitude towards affirmation or negation, judgement or non-judgement; However the initiation of this kind of philosopher is rightly situated for the sake of rule and measure, so that the soul, that will approach for the first time making a true and certain judgement about philosophical things, adjusts itself to accord with them.

Clauberg is conscious of the origins of sceptical hygiene in the writings of Aristotle, and he also emphasises its ethical character:

Ethical philosophers teach from Aristotle, that we have to move away as far as possible from the error to which we are most inclined and which seem more enjoyable to us, so that we arrive in this manner easier to that which is in the

582 OOP II, 1128 (*Initiatio*, Prolegomena, §32): “Pari ratione dicere liceat, quamvis fortè faciliùs cogitari quàm **dari** possit mens hominis philosophaturi talis, quæ planè sit indifferens et omnino æqualiter se habeat ad affirmandum et negandum, ad judicandum et non judicandum, tamen ejusmodi philosophantis initiatio rectè ponitur pro regula et mensura, ad quam sese componat animus ad verum ac certum de rebus Philosophicis judicium faciendum primò accessurus.”

*middle, in the same way that distorted wooden planks are made straight by bending.*⁵⁸³

The process includes ethical emendation, where the tendencies to go astray are restrained and pushed back, emended, into the correct place. We are here confronted with the theory of *regressus* that goes from a distorted line to a straight line. For example, one begins with the image of a broken spoon in water, and through the process of method, one arrives at the understanding of the straight line. The task of judgment is to correct the tendency to error. Negative doubt is a technique of de-habituating. It works to restrict pre-existing habits. In other words it constitutes a critique of history. Doubting, in the manner that Clauberg describes it in his writings, is a technique *for generating time*; it relates to the aging of the human being and to the passage from childhood to being a man. Doubting generates the possibility of a surge into the age of maturity, the possibility of making judgments. As we saw, making a judgment in the framework that we underline here constitutes the ability of an individual mind to perceive *a thing* within a certain order of matters.

3.1.10. The Synthesis of Doubt: Another Empiricism

Clauberg points out a difference between doubt and simple “overthrowing” [*evertenda*]. He distinguishes between two kinds of doubt which is careful and not instinctive: the one latent or implicit as some content becomes redundant after progress has been made in the methodical process, and one explicitly regarding the past, that which is shown as already falsified content in the knowledge of past ages. Is this a destruction of the old? Clauberg explains that doubt cancels false opinion in two ways:

What kind of destroying must be understood and can only be understood, is clear from what has been remarked about the word what must be destroyed. The title of this Meditatio speaks of those matters that can be called into doubt, and the

583 OOP II, 1128 (*Initiatio, Prolegomena*, §28): “Ethici docent ex Aristotele, longissime recedendum esse ab eo vitio ad quod sumus procliviores, et ex quo plus voluptatis percipimus, ut ista ratione facilius ad id quod medium est perveniamus, eo modo quo ligna distorta flexione recta fiunt.”

synopsis [my emphasis a.e.] of the same [*Meditatio*] of those matters, about which we can have doubts.

And in Descartes' words, in those Meditations that follow the laws of assent, we will use restraint and collect the reasons for doubting, that he should not be understood simply to destroy [literally to "overthrow"] these matters, but rather to doubt them. The denial of the alleged here regards only the false and dubitable opinions, whose philosophical negation in the Meditations arrives in two forms: one, only implicitly, in so far after we see clearly and distinctly a matter, after it has been perceived; and the other, regarding the past: This other negation regards an explicitly discussed matter, when it has been already admitted as refutable from the truths of the past, by the discovery of falseness.⁵⁸⁴

It is clear that for Clauberg as for Descartes, the aim of method is not doubt itself but rather certainty: "The method of progressing through doubt in the direction of certitude."⁵⁸⁵ However, it is as if Clauberg brings doubt *ad absurdum*; for him, doubt is *really hyperbolic*; he extends the limits of doubt to show that doubt turns and goes in the opposite direction of scepticism. This is how we enter philosophical initiation or Cartesian doubt: (1) Judgment is in the first place activated through its postponement. (2) Judgment is always a kind of a synthesis. In the opening lines of the first chapter of the third part of the *Logic*, Clauberg argues that in analysis one looks for real sense. He says, "The logician must occupy himself with the knowledge and the ordering of the words (*dicta*) and the writings of others and for this reason he is also an analytic [logician]."⁵⁸⁶ It must do with the interpretation of nature and the interpretation of others (III, I, §2) because it is forbidden to judge what one does not see (III, I, §3). Everything begins with sense perception, with the occupation with that which exists

584 OOP II, 1178 (*Initiatio* IX, §5, N.): "Eversio qualis intelligatur & possit solùm intelligi, liquet ex iis quæ notata ad vocem *evertenda*. Titulus hujus Meditationis loquitur de iis quæ *in dubium revocari* possunt, & Synopsis ejusdem de iis, de quibus possumus *dubitare*. Et in verbis mox in hac Med. sequentibus leges *assensionem* cohibendam, *rationem dubitandi*, ut non alia intelligatur eversio, quàm dubitatio. Nullius opinionis hîc est *negatio*, sed in sequentibus Meditationibus totaque Philosophia duplex est falsarum dubiarumque opinionum negatio: una *implicita* tantùm, quatenus post hanc generalem dubitationem dum clarè distinteque percepta assumuntur, alia prætereuntur; altera *expressa*, quando ex veritatibus jam inventis falsa olim admissa refelluntur."

585 OOP II, 1141 (*Initiatio* II, §8): "Atqui methodum per dubitationem progrediendi ad certitudinem & Platonis &c."

586 OOP II, 843 (*Logica* III, I, §1): "[D]e alienis dictis ac scriptis cognoscendis ac resolvendis sollicitus quoque esse debet Logicus, et hac de causa idem *Analyticus* cognominatur."

outside the mind. This meeting with the outside necessitates a halt: The doubt-synthesis produces a moment of suspension. It is like a pause before the beginning of the inquiry.

Because effectively one cannot examine all the difficulties at the same time, it is necessary to divide these into parts, according to the second percept of method, and the third percept prescribes that in the knowledges of those parts one must begin by the most simple and the most facile. As he commences his primary philosophy on the basis of such things (that is to say the most simple and facile things and also according to his judgment according to the truth of thing), he decided to postpone for the time being the things that concern the sense, geometrical demonstration, sleep and waking, and to examine them only in the appropriate time and place.⁵⁸⁷

Clauberg works to initiate a mental state of erudite doubt, not a doubt of everyone towards everything but rather a doubt produced from knowledge: “Our doubt is not the crass and rude one, but the one which is erudite and which includes a conscious ignorance, which is the first grade towards science [ad scientiam].”⁵⁸⁸ Aristotle places the first grade in the habitus of science already as a stage of knowledge. The first stage of knowledge, however, works negatively as a correction of the already crusted shell of accepted opinions. Hence, method in its entirety in Clauberg is directed towards the acquisition of knowledge, and the first grade of knowledge is a suspension of judgment which is demanded until we gather enough verified data regarding the matter in question:

Among the principle rules of Cartesian philosophy is, when and as long as we do not perceive some thing in a sufficient manner, and cannot recall if we have

587 OOP II, 1161 (*Initiatio*, VI, §53): “Cum enim non possit difficultates omnes simul examinare, necessum est, ut eas in partes dividat, ex praecepto methodi secundo, atque in his partis cognoscendis incipiendum esse à simplicissimis et facillimis praeceptum Methodi tertium sancit. Dum igitur à talibus (id est, simplicissimis ac facillimis, et suo iudicio et in rei veritate) primam Philosophiam inchoat, ad sensum, ad demonstrationes Geometricas, ad somnum et vigiliam spectantia tantisper sponere et suo demum loco ac tempore examinare decrevit.”

Compare with the *Conversation with Burman*, [6] (Cottingham translation, 6): “It is just not true that the mind can think of only one thing at a time. It is true that it cannot think of large number of things at the same time, but it can still think of more than one thing.”

588 OOP II, 1132 (*Initiatio*, I, §9): “[D]ubitatio nostra non rudem et crassam, sed quodammodo eruditam et sui consciam ignorantiam includat, quæ primus ad scientiam gradus est.”

*once before rightfully perceived it, we must suspend our judgment of it or put it into doubt, until we make it our own and explore it.*⁵⁸⁹

Among the principal rules of Cartesian philosophy is, when and as long as we do not comprehend/ understand some thing in a sufficient manner and cannot recall if we have once before rightly/ accurately understood it, that we must suspend our judgment of it or DOUBT it, until we have thoroughly investigated and examined it.

The doubt that Clauberg wants to establish is one of literacy, a learned doubt. It is doubt taken consciously as establishing the first grade of science. Doubt should be used in the construction of the syllogism, hence it also takes part in the construction of logic: “Thereafter one investigates the middle term, or the third argument; judgement will stay suspended until the resolution of the question.”⁵⁹⁰

At this stage one must ask in what sense the conceptual genre of methodism, which is inherently bound up with techniques of doubting, is also bound up with the element of *experiment*. It seems that when we reach Clauberg, the question of experiment is not so central. The experiment is almost absent from his writings, which tend to remain speculative, making experiments within thought itself and through the hermeneutical process. Indeed, both sources of methodism that we are following in this thesis, Zabarella and Ramus, were definitely aware of the material, physical field of development of method. For Ramus this was in the area of application to practical questions in civil life. For Zabarella it had to do directly with empiricism, with the experimentation that natural science demands.⁵⁹¹ The Zabarellist tradition suggests that judgement is not *added on* to perception; rather judgment is already found in any sense perception. In other words sense perception is immanently judgmental.⁵⁹² Sensation itself is intentional according to Zabarella. The act of sensation carries within itself the

589 OOP II, 1131 (*Initiatio*, I, § 1): “Inter præcipuas Philosophiæ Cartesianæ regulas est, ut quando et quàm diu rem aliquam non satis percipimus, neque recordamur, nos eam antea rectè percepisse, iudicium de ea nostrum suspendamus sive D U B I T E M U S [so in the original, a.e.], tantisper dum cognita nobis fuerit et explorata.”

590 OOP II, 1133 (*Initiatio* I, §11): “Tum investigatur medius terminus seu argumentum tertium; adhuc iudicium suspenditur, donec illo invento quæstioni fides fiat.”

591 See Chalres B. Schmitt, “Experience and Experiment: A comparison of Zabarella's view with Galileo's in *De Motu*,” *Studies in the Renaissance* 16 (1969): 80–138.

592 Michael Edwards, “Time and Perception in Late Renaissance Aristotelianism,” in *Theories of Perception in Medieval and Early Modern Philosophy*, edited by Pekka Kärkkäinen and Simo Knuuttila (New York and Berlin: Springer, 2008), 235–36.

knowledge of its cause, and the full deployment of the relation between a cause and a certain sensation is the task of the Zabarellist method.⁵⁹³

The geometer is better than the philosopher in one thing, that he demonstrates everything with certainty; the most outstanding method, by which he achieves this, is the one of physics, where proving with rationality (probandi rationibus) is of importance, because it does not admit the probable, and it holds as false everything that one can revoke into doubt: Yes indeed matters that are certain, and demonstrated, on which their cognition hangs, stabilizes them with certain and necessary reasonings.⁵⁹⁴

The stage of doubt, as the first degree of the habitus of science, is hence intended to achieve a clear perception of the matter at hand. Only a clear perception or cleared-out empirical data can serve to proceed and pursue our question further:

What I said is proven by the subject of predication, for in Principles I.2 it is said that one must take doubtful things (dubia) as false, that is to say, things that are not yet clearly understood (ea quæ nondum clarè percepta sunt), and as a consequence that we cannot yet make an affirming or negative judgment about.⁵⁹⁵

Though Clauberg's methodism includes a certain nominalism referring to the singular figures of things achieved through the positive activation of judgment (see the next Section 3.2). However, this is not a position that one can characterise as sceptical. One must remember that in Cartesian metaphysics there are actually no substantial individual things: There are only provisional situations creating the objects of the *res extensa*.

If you are allowed to reason and deliberate regarding things, you are also allowed to doubt them. 2. Just as reasoning and deliberation are the roads

593 James B. South, "Zabarella and the intentionality of sensation," *Rivista di Storia della Filosofia* 57, no.1 (2002): 5–25

594 OOP II, 1161 (*Initiatio*, VI, §I): "Hoc unum Geometra Philosopho præstat, quòd certò demonstrat omnia; præstantissima, qua id consecutus est, methodus Physicorum probandi rationibus hoc interest, quòd probabilia non admittat, habeatque pro falsis omnia, quæ in dubium revocari possunt: imò et quæ certissima sunt, donec demonstrationes, à quibus eorum cognitio pendet, certis ac necessariis rationibus stabiliantur."

595 OOP II, 1144 (*Initiatio* III, §19): "Probatur id quod dixi (1) a *subjecto prædicationis*, nam dicitur Princip. I.2. *dubia* esse habenda pro falsis, hoc est, ea quæ nondum clarè percepta sunt, ac proinde de quibus certum iudicium affirmativum aut negativum facere nondum valemus."

towards perfect cognition: so is doubt, as will be fully evident from the following.⁵⁹⁶

Clauberg proposes here a quasi-active account of perception: He aspires to turn perception from passivity to activity.⁵⁹⁷ So, from the point of view of the Zabarellist tradition that we know Clauberg was familiar with, the negative usage of judgement has also consequences regarding perception itself. It strives to make a measure to form a clearer perception of things it amended. The aspiration to achieve clarity is a part of the methodist conceptual genre. As can be seen in the passage from Acontius presented below, he says that clarity is about achieving precision, where nothing is superfluous, without too much effort. Moreover, he states bluntly that clear definition can be made only on things that are not totally singular but also not absolutely universal:

*Finally it is necessary to express all this in clear and distinct concepts, as if no conceptual effort is demanded, as long as, without leaving something to the side, it goes with the minimal [effort]. It is possible however to define only that which is not singular- about which, we say, there is no science - and also [it is not possible to define] what is so general that nothing more general exists, under which it can be conceived. From this sort are the so called "Transcendentals" (as nothing exists that one can by definition make them better known). Only that which stays between the two [the singulars and the transcendentals], can be defined.*⁵⁹⁸

We aspire to supply definitions to all that is not unique and all that is not absolute. Method looks for particular things that require definition to be intelligible. We also see in the next chapter what kind of definition between the singular and the general can be

596 OOP II, 1133 (*Initiatio*, I, §11): "De quibus rebus licet ratiocinari et consultare, de iisdem licet quoque dubitare. 2. Quemadmodum ratiocinatio et consultatio sunt viæ ad perfectam cognitionem: ita dubitatio, ut plenius constabit è sequentibus."

597 See Cecilia Wee, "Descartes and Active Perception," in *Active Perception in the History of Philosophy: From Plato to Modern Philosophy*, edited by José Filipe Silva and Mikko Yrjönsuuri (New York and London: Springer), 207–221.

598 Jacobus Acontius, *De Methodo* (Basel: Per Petrum Pernam, 1558), 58: "Postremò necesse est, ut hæc omnia exprimentur verbis claris ac perspicuis, et quoad eius fieri poterit paucissimis, ita ut nihil desit, nihil redundet. Definiri autem possunt, quæ neque singularia sunt, quorum diximus scientiam non esse, neque ita universa, ut nihil extet, sub quo ipsa contineantur communius, qualia sunt, quæ vocant transcendentia (sic enim nihil extaret, quod posset in definitione tanquqm notius adhiveri) sed inter utraque collocantur."

associated with the framework of the Claubergian method: Definitions can be made either with the help of language or the help of geometrical figures.

3.2.

Objective Configuration:

From Definition to Figural Synthesis

3.2.1. Limination and matter; 3.2.2. The methodical object and the formation of the ontosphic object; 3.2.3. From language to geometry: The challenge of definitions; 3.2.4 The role of the figure: Physical things as instruments in Cartesianism; 3.2.5. The geometrical modelling of the thing; 3.2.6. The place of the image in the *Exercitatio*; 3.2.7. The figure of things in the context of Clauberg's *Physics*; 3.2.8. Figures, signs and the semantics of indication; 3.2.9. The importance of nuances; 3.2.10. Figures, synthesis and the formation of the methodical habitus

“The mind of man relates to its perception as the wax relates to the different figures that it assumes.”⁵⁹⁹

3.2.1. Limination and Matter

In the reading suggested by the present project of Clauberg's methodism, it is only now, after the movement of doubt has been halted (the proto-philosophical stage), that one

599 OOP I, 190 (*Theoria corporum viventium* XXVII, §655): “Ad perceptiones autem suas ita habere mentem humanam, uti cera se habet ad varias, quas recipit, figuras.”

enters the stage of first philosophy. The question is, What does one meet there in the terrain where philosophy actually begins? In the previous chapters we tried to elucidate the fundamental operations of Cartesian method as they are presented and interpreted by Clauberg in the *Initiation of the philosopher* and his other writings. We saw that though Clauberg dedicates much attention to analytical processes of invention, in the overall perspective it is synthesis and not analysis, that takes the upper hand in the Claubergian interpretation of Cartesian method. Clauberg's interpretation of Descartes is not implausible, though it is not the only correct or possible one. The present chapter approaches a presentation of *the encountered matter*, what is referred to as *the object* of the methodical examination. The configuration that one makes of a thing after the process of doubt is accomplished makes the transit from the preparatory stage of limination, the stage of not judging which we typify as the stage of negative operation of judgment, to the hermeneutic stage of interpretation which is already a stage of *positive operation of judgment*. In this process of passage between the first and second moments of method, between proto-philosophy and first philosophy, *figures play a mediating role*. First, one must make for oneself a figure of the matter under examination, and only then can that figure be integrated into an articulation of a positive judgment. This presentation of the matter-at-hand, preparing it to be understood and placed under the positive operation of judgment, is the process of modelling which is required in a Cartesian kind of method. The construction of a model of the researched matter is, in this sense, necessary for any pursuit of knowledge, and this will also tell us something about the nature of the pursuit of knowledge in a Cartesian framework which we discuss at the conclusion of this chapter.

3.2.2 The Methodical Object and the Formation of the Ontosphic Object

In the *Ontosophy* Clauberg gives a well-known definition of a being as examined by method: “ Being is all that is in any way, [all that] can be thought or said.”⁶⁰⁰ Hence, a being is something that must be known *or* discussed; its existence is not assumed as a preliminary reality but rather as a reality which is, in that sense, already linguistic. Logically, in order to be discussed, something must be at least partially known, but the question is whether a thing can be known without being said. We see in the present

600 OOP I, 283 (*Metaphysica de ente* II, § 6: “Ens est quicquid quovis modo est, cogitari ac dici potest.” The last part of the phrase seems to be a translation of the German sentence that follows it: “Alles was nur gedacht und gesagt werden kan.”)

chapter that one of the sole ways of getting to know a matter without stating it explicitly is through its figure.

Returning to Clauberg's definition of a being, we should ask whether it is in line with Descartes' definition of being (if he has one). In general, Clauberg's methodical recommendations correspond, as always without any avowed reference, with the second rule of the *Regulæ*, defining an object fit to be investigated by method: "We should attend only to those objects of which our minds seem capable of having certain and indubitable cognition."⁶⁰¹ Not all objects are worthy of being the object of method, only those that we know *in advance* our reason can handle, that is to say things that can be put to reason. However, for Descartes these are essentially the things we can articulate in mathematical terms, in as much as for Clauberg they are primarily the things *that can be said*. Apart from this substantial difference, Clauberg is close to Descartes in this approach to the object. Again, what we see is a de-mathematisation of Descartes' method, where the role of mathematics is taken by a lingual deployment and at some points, as we shall see, by the discussion around the *figures of things*. However, for both Descartes and Clauberg it is not nature itself but rather a *model*, a *transposition* of nature that is examined by the methodical procedure. Vincent Carraud poignantly remarks that Clauberg's method is always directed towards some object and that this object is a *mental object*.⁶⁰² It is exactly this "objectal" manner of developing a method that interests us in the present chapter. Whether we are witnessing here a case of intentionalism in the Late Modern sense, that is to say a thought being conceived as consisting of mental acts always already having some content, will be the question to determine for further research.⁶⁰³ What is certain is that for Clauberg, as he reads Descartes, it is always the examination of matters that makes the centre of our inquiry. Even the process of the known cogito is modelled according to an objectal relation, when the mind looks at itself as its own object, drawing from there the strength of its

601 Descartes, *Writings X*, 362: "Circa illa tantium objecta oportet versari, ad quorum certam et indubitam cognitionem nostra ingenia videntur sufficere."

602 See Vincent Carraud, "L'ontologie peut-elle être cartésienne ? L'exemple de l'Onstosophia de Clauberg, de 1647 à 1664: De l'ens à la mens," in *Johannes Clauberg (1622-1665) and Cartesian Philosophy in the Seventeenth Century*, edited by Theo Verbeek (Kluwer, Dordrecht, Boston and London, 1999), 13–38; and Alice Ragni, "L'oggetto in generale. L'orgoglio dell'ontologia da Clauberg a Leibniz," (PhD diss., Université de Paris Sorbonne 4, 2016).

603 For Intentionalism see for example Dale Jacquette, "Brentano's concept of intentionality," *The Cambridge Companion to Brentano*, edited by Dale Jacquette (Cambridge: Cambridge University Press, 2004), 98-130; Kim Sang Ong-Van-Cung, *L'objet de nos pensées. Descartes et l'intentionnalité* (Paris: Vrin, 2012).

certainty. In that sense the mind in Clauberg is indeed never empty, but rather it is always already filled with matters to investigate.

Differently than Descartes, for Clauberg the preparation of the object as a preliminary condition for the beginning of the inquiry is not directly done in a geometrical manner but rather logically and *philologically* as a revision of pre-conceived opinions and judgments:

*In order to prepare consciousness to these (to the ens qua res), we suggest in advance some things regarding being in the first (the ens qua cogitable) and in the second acceptation (the ens qua aliquid), in beginning universal philosophy by the thinkable being, the same that, in beginning by the singular being, primary philosophy does not consider anything but the thinking mind.*⁶⁰⁴

In Claubergian Cartesianism the initiation of the philosopher begins with the consideration of the thinking mind, not for itself but rather *as if it is configured by its objects*, that is to say by the examination of the *definitions* one has of matters. The place of the process of *definition* is in this sense cardinal in its importance. How do we obtain a clear and distinct idea of the thing? One of the main ways to achieve this is through figuration, as we see in the following sections of this chapter. In this sense everything begins with things perceived by the senses: “Let us look at the things, which everybody commonly and generally thinks he most distinctly comprehends, that is to say the bodies, that we see, that we touch and that we obtain knowledge of by other senses.”⁶⁰⁵ It is as if Clauberg begins as Zabarellist and Aristotelian, beginning from the sense perception of things themselves and trying to view them from a scientific, verified point of view. Only then does Clauberg pass to the realisation of the Ramist vocation and perceive philosophy as an art, trying to interpret and apply the found principles. In the middle one finds the Cartesian verification process where the estimation of the mind of the researcher makes the transfer from the Zabarellist to the Ramist phase.

In the Cartesianism that Clauberg furnishes, which is influenced by some threads of Zabarellism and Baconism, all inquiry begins with perceived things. Hence, no *tabula*

604 OOP I, 283 (*Metaphysica de ente* I, §5): “[A]d meliorem hujus notitiam comparandam nonnulla de Ente in prima et secunda acceptione præmitteremus, inchoaturi universalem philosophiam ab *Ente cogitabili*, quemadmodum à singulari incipiens prima philosophia nihil prius considerat *Mente cogitante*.”

605 OOP I, 376 (*Synopsis meditationis secundæ*, §128): “Spectemus res eas, quas vulgo omnes opinantur distinctissimè comprehendi, corpora scilicet, quæ videmus, quæ tangimus aliisque sensibus usurpamus.”

rasa of the mind is assumed in Claubergian methodism. All matters are always encountered as *problems*, as a theme, as subject matter, something that calls into action the thinker, demanding to be known, defined and implemented within the continuing reconstruction of a world. For Clauberg it is important to pay attention to the specific thing that stands before us:

*Not, indeed, to consider in general all that which is a body; as a common fact the bodies are habitually conceived rather in confusion; But [rather, in method, they should be conceived] one by one, when the perception is distinct. In particular, for the sake of an example, I perceive this piece of wax, in general, the wax, the wax is moreover something more distinct than the thing with which it generally used to be seen.*⁶⁰⁶

We saw at the end of the last section (3.1.10) in the quote from Acontius that only those things that are not totally singular but are also not transcendental (or wholly, absolutely abstract) can be defined by method. Method works within the space opened up between singularity and universality. Method works consistently between the encountered of the distinct matter and our necessity to work with preconceived schemata. In this we see the prominent Ramist influence in Claubergian Cartesianism; it is a mixture of nominalism and constructivism. On the one hand there is a demand to make the effort and advance towards the distinguished, singular thing (this or that piece of wax), and on the other hand there is a demand for definition throughout the categories that one must use in the examination of the thing to be able to give a scientific account of it. However, in this process of the correlation between matters and their ideas, figuration has a seminal role to play.

3.2.3. From Language to Geometry: The Challenge of Definitions

As noted above, the process of figuration of things is modelled, for Clauberg, in the first place on the working of *language*; even the manner in which he establishes a geometrical configuration of matters is presented by Clauberg as a kind of language

606 OOP I, 376 (*Synopsis meditationis secundæ*, §129): “Non quidem corpus *universe* consideratum, communes enim isti conceptus paulò confusiores esse solent ; sed unum *sigillatim*, cujus perceptio distinctior. Distinctiùs enim, exempli causa, percipio hanc ceram, quàm ceram in genere, adhæc distinctiùs ceram, quàm rem corpoream generaliter spectatam.”

which one must learn to use. Let us go a little deeper into the definition of the *Ontosophia nova*: “Alles was nur gedacht und gesagt werden kann.”⁶⁰⁷

Every “ens”, being, (omne ens) can be said, can be named (nominari), can be expressed (enunciari) in a living voice or in script. Hence “Sache”, thing (res), from “sagen”, to say (dicere). And the Hebrew [word] “Dabar” means ‘thing’ and ‘word’ simultaneously (simul rem et verbum).

In this sense Claubergian figuration erupts in the first place from the art of speech. Clauberg indeed published a work in Dutch dedicated to the art of speech.⁶⁰⁸ Rhetoric took special importance in the Ramist conception of method. The model of language (its analysis and construction) sustains the Claubergian effort to arrive at the encounter with things and matters. However, geometry is also presented by Clauberg as extremely important to that configuration of the encounter with matters. In this sense we again see a process of *de-mathematisation*: Geometry is understood in the Claubergian context as a *language*.

Clauberg follows Galen’s critique of definitions (discussed in Section 1.1), understood as a mental procedure that is too wide to capture the specificity of a medical situation. As Aconcio also noted (Section 3.1.10), we look for a definition which is not too singular and not too abstract. If method looks for medicine as its model, then the definition of the thing must be such that the thing *may be treatable*. This means that the definition must include also a *diagnosis* of the matter: What is the lack to be treated or the merit to be used in the future? Again, we see that the therapeutic art is brought in as the paradigm for the workings of philosophy. As in Descartes, the aspiration is to attain a simple articulation of the thing. As Clauberg says in the *Physica*,

607 OOP I, 283 (*Ontosophia*, II, §7): “Aio omne ens posse dici, hoc est, nominari, voce viva vel scripta enunciari. Hinc Sache res à sagen dicere, et Hebr. *Dabar* simul rem et verbum significat.”

608 Johannes Clauberg, *Redenkonst, Het menschelyk verstandt in de dingen te beghripen, oordelen, en onthouden, stierende* (Amsterdam: Jan Rieuwertsz, 1657). In the title page of this work, it is noted that the text is translated from the Latin, however I could not find a trace of this essay in its Latin original.

[...]a polished ~~minee~~ and round man (*vir*), *schlecht und recht*. This creates that axiom: 'The more something is simple, the more it is perfect.'⁶⁰⁹ To better understand simplicity of the round form [...] ⁶¹⁰

When a definition is round and simple, it is also perfect. The round and simple is the matter, the more it is perfect. However, not all matters are round, *schlecht und recht* as Clauberg puts it, and all deviations from this simplicity indeed require therapy. However, even before having a simple and perfect figure, one should think about figure itself. Having a *certain figure* necessitates having a figure, that is to say *being figured*.

*And of figures we reason as follows in Geometry: if something is round, then clearly it is [also] figured; if something is quadrate, then it is clear that it is figured, etc.; but it is not the same as to say that when it is figured, then it is necessarily quadrate, or when it is figured, then it is necessarily round, etc.*⁶¹¹

We must first be situated in the field of figuration to have a certain figure in our mind, but it is not that because we have some figure in the mind we must have this or that specific square or triangle. Hence, in this sense we begin always with the concrete example so we are sure we are dealing with the genre of the figure, within which we can compose our models and configurations:

*Although however, thought does not relate to affirmation, negation and the other ways of thinking in the same way as a unity relates itself to number, as character is to a part and a whole, and neither [in the same way] as figure [relates] to roundness, as they are genre and species having a relation between them.*⁶¹²

609 OOP I, 119 (*Physica* XXIX, §14): "Sic Gallici, *il est tout rond*, Latini *vir teres atque rotundus*, *schlecht und recht*. Facit huc illud axioma: Quò quid simplicius, eò perfectius."

610 OOP I, 119 (*Physica*, XXIV, §15): "Istam rotundæ figuræ simplicitatem."

611 OOP I, 375 (*Synopsis meditationis secundae*, §111) : "Et de *figura* sic ratiocinamur in Geometria : rotundum est, ergo figuratum est ; quadratum est, ergo figuratum etc. non autem sic : figuratum est, ergo quadratum ; figuratum est, ergo etiam rotundum etc."

612 OOP I, 375 (*Synopsis meditationis secundae*, §112): "Quamvis autem cogitatio ad affirmationem, negationem et reliquos cogitandi modos non ita se habeat, ut unitas ad numerum, in eo quod partis ac totius rationem habent, neque ut figura ad rotunditatem, in eo quod genus et species sunt."

When we cannot configure a matter, it means necessarily that this matter cannot be “perfect and simple” in the sense described above. For example, my memories cannot be perfectly configured: “All the above-reminded modes of thought cannot be separated from my mind or exist without it more, than roundness can be removed from a figure or or survive without it, or a binary [i.e. binary relation] from a unity.”⁶¹³ The inner visioning of the mind is not easily placed into a distinct figure. Hence, the challenge is to bring the matters of our mind into a more distinct form that we can observe and study. Only after that can we arrive at the complete application of the methodical model. We shall see that for Clauberg this configuration of the matter is done essentially as a linguistic process of finding the right definition of the matter.

Based on the previous discussions, it is apparent that the understanding of the methodical object we learn from Clauberg’s writing produces some kind of *definition*. *The object is that which is known and spoken*. It is an entity placed under the construction and modelling of reason. There is, hence, no discussion of things in themselves. These are not things as they are experienced by our consciousness as phenomena; they are rather things a priori construed according to the demands of method. This is almost trivial, testifying to the constructivism that one finds in Clauberg’s methodism. However the question is, What exactly is this object which is the product of the methodical process? The suggestion that comes from Clauberg’s writings is that the object is not first and foremost, as some Clauberg scholars claim, an object as experienced by consciousness, nor is it a mental object; rather, as shall be demonstrated, it is *the object qua its inscription*. Claubergian modelling is inherently *linguistic*. We must know how to “speak” the matter at stake. This has, indeed, a strong Aristotelian character. It is the matter’s inscription (saying, writing, configuration) that makes of it a proper object of our science. In this sense, indeed, Claubergian science rises and falls on the element of the object; but this object is already constructed as a linguistic object to be *read and written*. This approach is, again, inherently humanist in its orientation. Things are proposed to reason as its *topoi*, the subject which one can discuss. Let us remember Ramus’ suspicion regarding definitions:

Definition, indeed, is an argument; it is subject matter which is set forth to be arranged and ordered. But it is not a formula for arrangement, order, or method, saying which member of part of an art should be first, second, third etc. It is the subject matter, I say, which is arranged in those places step by step.

613 OOP I, 375 (*Synopsis meditationi secundae* §113): “Omnesque supra memorati cogitandi modi non magis à mente mea separari possunt sive existere absque ea, quàm rotunditas à figura, vel binarius ab unitate tolli eàve remotâ superesse valeat.”

*the definition is most general, it must be established in first place; if subaltern, in the middle place; if most specific, in the last place. Definition, however, of itself signifies no methodical arrangement, just as a genus does not indicate whether it is the highest, intermediate, or lowest genus.*⁶¹⁴

Ramus' ambivalence regarding definitions comes as a critique of Galen's third kind of method, the one of definition. What we learn from the above passage, however, is that for Ramus as for Clauberg, the definition makes the matter from which a method can be made. Although we arrive at a definition, this does not yet give us the order of our research or argumentation; it rather gives us only the *tessera* (mosaic stones) out of which we can construct our mosaic of the world.

The figural dynamics bring the researcher towards the formation of an idea or a configuration of the thing: "I add, that a definition of a thing is nothing but a clear and distinct idea of the thing."⁶¹⁵ Reaching this definition is nothing other than forming a clear and distinct idea of the matter, this time in strictly Cartesian terms. Clauberg clarifies and accentuates for us the fact that this definition has always an essential lingual character. This humanistic approach to the subjects of inquiry brings us again, surprisingly, to the latent Zabarellist character in Clauberg's method. The definition of things that we seek through methodical procedure is the one that places the thing in a certain order of reasons, producing an order of matters, deducing and inferring correct definitions of things. However, it is only when we expose the idea of the thing as clear and distinct that we can say we achieved its proper methodical configuration.⁶¹⁶

614 Ramus, "One method," 145; Ramus, *Methodus*, 18.

615 OOP I, 604 (*De cognitione Die et nostri*, V, § 19): "Addo, quòd definitio rei nihil aliud sit, quàm clara et distincta rei idea."

616 The inferential, rational understanding of things was elaborated by Spinoza in his knowledge of the second level. See Guttorm FlØistad, "Spinoza's theory of knowledge," *Inquiry* 12, no.1-4 (1969), 41-65; Spencer Carr, "Spinoza's Distinction Between Rational and Intuitive Knowledge,"

The Philosophical Review 87, no.2 (April 1978): 241-252.

3.2.4. The Role of the Figure: Physical Things as Instruments in Cartesianism

In Descartes' epistemology, Jean-Luc Marion suggests⁶¹⁷ that we can talk of a process of defiguration of perception, which however does not amount to a *disfiguration* of perception. It is rather the case that in the Cartesian framework, one goes in and out of the figure: from figures to ideas and *mathema*, from ideas to procedures of examination, from procedures of examination to the formation of principles. Figuration is inherently instrumental; it does not present things as they are nor how we perceive them according to our moods; rather it furnishes them according to the requirements of a certain inquiry. If there is figural interpretation of perception, according to Marion it is in fact a process of alienation of the world which is achieved.⁶¹⁸ If in Descartes we can talk about defiguration, in Clauberg we are talking already of an interpretative *configuration of matters*. This configuration works at the synthetic level of solving matters, deciphering their codes. Clauberg defines the figure primarily as an instrument of measure. It is a mode that defines the edges (the outlines) of the magnitude of things, as for example 'roundness' regarding a thing which in reality has the three-dimensional form? of

[...] *a mode of measuring. Figure is that certain mode, with which some magnitude is measured, like the roundness of a globe, or the form of a table. And strictly speaking as 'Form' one denotes the situation in which the figure has also a colour, whence it can be said beautiful, shaped or deformed.*⁶¹⁹

We must ask what this clear and distinct idea is that we supply of a physical thing, of the subject of an inquiry, such as the rainbow we observe, the society that we describe or the state of our own passions? In the first place, we must return to the description of common sense by Descartes and the formation of figures, this time as they appear in the *Conversation with Burman*, that Clauberg must have known by heart as he was the technical author of the text:

617 Jean-Luc Marion, "L'établissement du code : La perception comme (dé-)figuration," *Sur la métaphysique blanche de Descartes* (Paris: Presses Universitaires de France, 1991), 231–263.

618 Ibid., 263: "Du sensible à la figure, le monde n'a de cesse de s'adonner à l'interprétation, de se distendre et de s'aliéner. C'est au sein de cette aliénation qu'il faut, désormais, penser, et trouver au savoir un fondement."

619 OOP II, 915 (*Logica contracta*, §36): "*Figura est certus ille modus, quo magnitudo aliqua terminatur, ut rotunditas globi, forma mensæ. At proprie Forma dicitur, si figuræ color accedat, unde quid pulchrum seu formosum aut deforme censetur.*"

*It is a special mode of thinking, which occurs as follows. When external objects act on my senses, they print on them an idea, or rather a figure, of themselves; and when the mind attends to these images imprinted on the gland in this way, it is said to perceive.*⁶²⁰

The pineal gland plays a central role in this process of imprinting. It is important that Descartes corrects himself and underlines that what is imprinted is not an idea but rather a figure. Hence, there is *an action* that influences my senses, and this is imprinted on the gland by a series of mechanical movements passing from the movement of nature through my sense organs to the *esprits animaux*, all the way up to the gland. This in its turn creates what we call the sensation of external objects. The figures imprinted on the gland are in this sense like instruments registering the movement being effectuated on our senses through external objects. Figures are like recording, or rather writing, instruments. This instrumentalism is accentuated even further by Clauberg. For him the object is not discussed for itself and in itself, but only in relation to some task the thing must fulfil and the thing as it is *inscribed* (said or written). For example, Clauberg makes a specific distinction between the concept of the object in Cartesian and Scholastic philosophy. The difference is that in as much as Scholastic philosophy spins and turns the object in general, Cartesian philosophy looks at things only in relation to some task or mission:

*The fourth difference [of Cartesian philosophy] is that from a thing either everything said together or from different places, and only in retrospect brought together.*⁶²¹ *In general one takes as artful totality the teaching, in which everything that can be said regarding a thing, will take place in a time and in a place, and not decided in advance, and not that regarding a thing, something is said, and then there something else is examined, and the material is divided in such a way into parts and bits.*⁶²²

620 *Conversation with Burman*, 42.

621 Johannes Clauberg, *Unterschied zwischen der cartesianischer und der sonst in Schulen gebrauchlicher Philosophie* (Duisburg: Wyngarten, 1657), 57: “Der Vierzchende Unterscheid daß von einem Ding entweder alles aufeinmals gesagt oder aus gewisse orte vertheilt/ und nur nachgelegenheit beygebracht werde.” (the difference in script from the normal German scription is due to the ancient 17th century German, which I retained).

622 Clauberg, *Unterschied*, 57: “In allgemein hält man für eine kunstmässige Vollkommenheit derlehre/ daß alles was von einem ding kann gesagt werden/ zu einer Zeit und auf einem orte geschehe ganz unzertheilet/nicht aber daß von einen sachen hie[r] etwas / dort wieder etwas gehandelt/ und die materialso zerstücket und von ein ander weit abgesondert werde.”

Clauberg hence demands that the account one gives of things is already regulated and refined in advance. Cartesian method supplies a preliminary selection of the matters to be examined. We can articulate things only after a process of examination has already taken place. More bluntly, Clauberg emphasises the difference between the attitude he calls historical, the attitude that recounts all there is to say regarding a thing, and the attitude he aligns with Cartesianism that sees things as hunters see their prey; there is an action of chase that concentrates only on the relevant aspects of the thing:

*In conclusion Cartesius brings from all that he knows regarding a thing, or what one must know of this thing regarding in a place for a day, but rather all the registered time and hour, how such then also comes from the 12th difference, when one wants to have a historical description, that everything which is observable regarding a thing regards always certain places, as when the painter, a man, that one can find as a hunter in the forest, then as a fisher in the sea in another time as a student in the school, and then as a traveller on his route, and after that as a soldier in the battlefield, as the painter, I say should paint this person in one of those places with the appropriate habits and customs.*⁶²³

Here is another decisive point: The philosopher is constantly compared by Clauberg to a painter who must paint his object in certain circumstances using certain habits and attributes. In other words there are no abstract matters: All matters are particular; all are produced and are in this sense artificial, and the task of philosophy, as that of a good painter, is to capture the special character of the matter, always in relation to the usage and the task of the matter being examined. From that approach we see that for Clauberg, the model for philosophy is the one of the arts, not of the sciences (but also not of morals). In other words reason works as a painter, as a teacher, a healer. The work of painting supplies many exemplary models for the understanding of how reason

623 Clauberg, *Unterschied*, 58 (§74): “In summa Cartesius bringt mit alles was er von einem ding weiß/ oder was aucheinander davon wissen muß an einem orte für den tag/sondern alles zugebührlicher zeit und stunde/ wie solches denn auch auß dem zwölften unterscheid erfolgt alldieweil es eine historische Beschreibung so haben will, Er achtetes sovngereimt/daß man alles was von einer sachen zu betrachten ist auf n^o orte abhandele/ als wenn der Mahler einen, Menschen/welcher jetzt sich als ein Jäger im Wald finden lässt / jetzt als ein Fischer am Meer auf eine andere Zeit als ein Studentin der Schulen/ bald als ein Wandersman auf der Reise / her nachher als ein Soldat in der Schlacht, als wenn der Mähler/Sage ich einen solchen Menschen auf einem dieser orten wolte abbilden mit allen Solchen habiten und kleidungen.”

works.⁶²⁴ Even though we may think that at the stage of figuration we are already free from the stage of doubt; still, one should

*Observe again how the [specific] doubt differs from metaphysical doubt: for here concerning singular things he was mostly observing what could be called into doubt, and what could present us occasion for wrong judgement, as is said in the Dissertation on Method [...].*⁶²⁵

Hence, we must maintain our doubt and our effort towards figuration always active regarding singular things. Things should always be well configured, and the drawing of conclusions should not be precipitated.

3.2.5. The Geometrical Modelling of the Thing

A figure provides the researcher with a clear and distinct outline of the matter under examination. It is interesting that at least for Clauberg, the figure is considered as more fundamental than the form. The form is only created by the secondary qualities of the matter, and this is the level at which we can speak about beauty. The figure in itself has no beauty or deformity:

*A figure is certain in this mode, in which some magnitude is terminated, as in the roundness of the globes, the form of a table. And one calls properly a “form,” if the figure accedes to colour, in which one can assess beauty or deformity.*⁶²⁶

624 For scholars paying attention to the painterly and artistic-figural potential of Descartes’ philosophy, see Dennis L. Sepper, *Descartes’s Imagination: Proportion, Images, and the Activity of Thinking* (Berkeley-Los Angeles-Oxford: University of California Press, 1996); Pierre Guenancia, “L’idée et l’image,” *L’intelligence du sensible: essai sur le dualisme cartésien* (Paris: Gallimard, 1998), 116–154; Adi Eyal-Lautenschläger, “The figural go-between in the Cartesian conception of science,” *Interdisciplinary Science Reviews* 42/3 (October 2017): 269–281; James Griffith, *Fable, Method, and Imagination in Descartes* (London: Palgrave Macmillan, 2018).

625 OOP II, 1181 (*Initiatio*, IX, §B): “Observa rursus differentiam dubitationis **novennalis** **[[that lasts nine days? Regarding Roman funeral cults, a.e.]]** ab hac Metaphysica, ibi enim præcipuè circa res singulas observabat quidnam posset in dubium revocari, & quidnam nobis occasionem malè judicandi præberet, ut loquitur Dissert. de Meth. pag. 26.”

626 OOP II, 915 (*Logica contracta* §36): “*Figura* est certus ille modus, quo magnitudo aliqua terminatur, ut rotunditas globi, forma mensæ. At proprie *Forma* dicitur, si figuræ color accedat, unde quid pulchrum seu formosum aut deforme censetur.”

Hence, when we are seeking after the truth of things, we must trace figures rather than forms. The figure subsists at the level of geometry, at the very substantial level of the *res extensa*. In the *Conversation with Burman* (among other places), Descartes states that geometry is not something that we directly conceive through our senses.⁶²⁷

When we examine through a magnifying glass those lines which appear the straightest to us, we find them to be quite irregular, with undulating curves throughout. And hence, when in childhood we first saw a triangular figure drawn on paper, the figure could not have taught us how to conceive of a real triangle, as studies by geometricians [...]

This makes it quite clear why I can imagine a triangle, pentagon, and suchlike, but not, for example, a chiliagon. Since my mind can easily form and depict three lines in the brain, it can easily go on to contemplate them, and thus imagine a triangle, pentagon, etc. It cannot, however, trace and form a thousand lines in the brain except in a confused manner, and this is why it does not imagine a chiliagon distinctly, but only in a confused manner. This limitation is so great that it is only with the greatest difficulty that we can imagine even a heptagon or an octagon. The author, who is fairly imaginative man and has trained his mind in this field for some time, can imagine these figures reasonably distinctly; but others lacks this ability. This now also makes it clear why we see the lines as if they were present in front of us, and it further explains the surprising mental concentration we need for imagining, and for contemplating, the body in this way.

In Descartes' writings it is clear that things should be approached according to their geometrical modelling even if the last target is to reach a more cypher-like algebraic symbolisation of the state of affairs. As far as my knowledge of his corpus reaches, in none of his writings does Clauberg engage with algebraic *mathemes*. Instead, he focuses quite often on geometric figures.

What is a figure then, for a Cartesian thinker, if we understand Cartesianism through Clauberg? The figure takes the role of *the putting of a sample into the test ampule*, finding the manner to relocate the given. In Descartes it is obvious that the

627 Descartes, *Œuvres* VI 382; Descartes, *Conversation with Burman*, trans. Cottingham, 39, 40 [39, 42]

figure, in the first place the geometric figure, has an essential role to play in the development of method. Regarding this, Clauberg differentiates between the pure and the non-pure study of things. The non-pure investigation gives us knowledge of concrete things which are dependent on figures and sizes: “*To comprehend the difference of pure [studies like] arithmetic and geometry, from the non-pure: that is to say, [studies that] discuss abstract numbers, figures, size, but not concrete things for these are subject to this or that figure or size.*”⁶²⁸

The bodies of the world can be compared, according to Clauberg, to gifts intended for different recipients. Again, the specification of each body is emphasised as explaining what one may describe as the special utility of specific bodies. The emphasis is on that which is found, on existing matters and on the usages of men.

*The roundness that so many bodies in the world share is usually explained with this reason, that it is derived from the perfection of this figure. It cannot be a surprise to anyone, if the most perfect creator has given the most perfect form to his creations, **where** the form did not hinder the movements to which he destined each one. This reason often takes place in composite bodies, heterogeneous and organisms, rarely in simple and homogeneous [bodies].*⁶²⁹

One result of this view is that from the figures of things one can draw conclusions regarding their usage and place in the world, in other words on their place in the order of things. The figures of things are the packaging in which they are given to us as gifts. They call for our understanding. Clauberg finds that figures and signs provide the manner for us to be attentive mathematically and parallels this to the sacraments as standing for spiritual truths: “Mathematical objects are made visible to us on account of attention by signs and figures. Spiritual promises are indicated and **signified** by the

628 OOP II, 1190 (*Initiatio IX*, §A): “Arithmetica et Geometria intellige puras, non impuras, hoc est, quæ agunt de abstractis numeris, figuris, magnitudine, non de concretis cum his aut illis subjectis. Ad *alias ejusmodi* referre potes Ontosophiam quam dixi an num 27.”

629 OOP I, 119 (*Disputatio Physica XXIV*, §12): “Communis tamen rotunditatis in tot mundi corporibus causa hæc solet assignari, quæ petitur ab illius figuræ perfectione. Nemini quippe mirum videri queat, **si** perfectissimus opifex perfectissimam operibus suis formam dederit, **ubi quidem** illa non obstat motibus, ad quos unumquodque destinabat. **Quæ ratio sæpe locum invenit in** corporibus *compositis*, heterogeneis atque organicis, rariùs in simplicibus et homogeneis.”

sacraments.”⁶³⁰ Again, figures receive a pragmatic, semantic function in the mathematical domain. They are used as work instruments.

Clauberg’s Cartesianism has the character of minimalism: We aspire to bring all our data into a figuration which is as simple as possible so that imposed intuition can take place. The simplest form, Clauberg emphasises, is the one of the circle:

*The superiority of the circle and sphere is heralded everywhere (passim), as you can see everywhere. Therefore, to complete the circle is said proverbially, for that which is, “To make a thing perfect in all of its numbers and in all of its parts.” The Encyclopaedia comes from the word circle [Latinized Greek κύκλος, not a very common Latin word, a.e.], that is to say, a circle, and it is understood as the perfection of doctrine, where the conjunction of the disciplines makes as it were an orb of erudition.*⁶³¹

This is also the reason, according to Clauberg, for the fact that we see the circle as the most perfect form also in matters of beauty:

*The perfection and the beauty of the spherical figure gets entirely stuck in most people’s heads. For, firstly, the spherical form is the simplest and the most uniform; because it is contained by only one border and the distance from the centre is always the same. From where the metaphor originates, in which we say ‘roundly speaking’ for ‘clearly and honestly saying something’. As in French: *Il est tout rond*/ ‘It is all rounded’. In Latin: *vir teres atque rotundus*/ ‘a polished and round man’.*⁶³²

The sphere has also the advantage of being firm and very difficult to negate:

630 OOP I, 787 (*Logica* I, III, § 24): “Sic res Mathematicæ attentionis ergo per notas et figuras oculis subjiciuntur. Sic spirituales promissiones sacramentis nobis designatur atque obsignantur.”

631 OOP I, 119 (*Disputatio Physica*, XXIX, §13): “Circuli et Sphaeræ præstantiam passim prædicari videas. Ita *circulum absolvere* proverbio dicitur, pro eo quod est, rem omnibus numeris omnibusque partibus perfectam reddere. *Encyclopadia* appellatur à cyclo, id est, circulo, et intelligitur perfectio doctrinæ, ubi conjunctio disciplinarum velut orbem eruditionis efficit.”

632 OOP I, 119 (*Disputatio Physica*, XXIX, §14): “Perfectio autem et pulchritudo sphaericæ figuræ in pluribus omnino capitibus consistit. Nam primò quidem *figura sphaerica est simplicissima et maximè uniformis*; quod unico solùm termino, et quidem à medio comprehensi spatii æqualiter distante, contineatur. Hinc descendit metaphora, qua planè et sincerè quidpiam elocuturi perhibemur rotundè *dicere, etwas rund heraussagen*. [...] Sic Galli. *Il est tout rond*. Latini, *vir teres atque rotundu=rotundus, schlecht und recht*.”

The spherical shape is very strong in acting and resisting; *because each of its parts are made firm and sustained by the others.*⁶³³ And: *“Apart from this advantage of mobility the spherical form is uniform and very simple.”*⁶³⁴ And also: *“This variety of figures effects in turn, that the movement varies. Thus, an angled stone is moved less easily than the spherical.”*⁶³⁵

For Clauberg the spherical figure is the most efficient and useful of all figures. Placing the sphere in a special position in physics and metaphysics is of course not new, actually having an antique, notably Aristotelian, source. Because Clauberg talks so often about the sphere, one can say that for Clauberg the sphere is the paradigm of talking about figures. Take notice, however, that the sphere is a three-dimensional, not a two-dimensional figure.

3.2.6. Image and Painting in the *Exercitatio*

In the *Exercitatio* Clauberg brings up some considerations on the nature of the image that are theological in nature. The platform of the discussion is always knowledge of God and the manner by which one can represent the eternal and the infinite. Almost always, Clauberg shows us his tendency towards hypothetical doubt, where we consider the doubtful nature of what we in the end accept. For example:

Image is either assumed ‘broadly,’ in the same manner in which it is for Descartes the image of a thing, the idea of God, the image of God, man made in the image of God, etc. Or [it is assumed] strictly, as sensible, modelled, corporeal

633 OOP, I, 119 (*Disp. Physica*, §19): *“Præterea figura sphaerica est robustissima ad agendum et resistendum ; quod singulæ ejus partes aliis firmentur et sustententur.”*

634 OOP I, 12 (*Physica*, VII, §297): *“Præter mobilitatis istam prærogativam sphaerica figura hoc habet, quod uniformis est et simplicissima.”*

635 OOP I, 12 (*Physica contracta*, VII, §286): *“Quæ figurarum varietas hoc vicissim efficit, ut motus varient. Ita lapis triangularis minùs facilè movetur spherico.”*

*images, in the same manner in which it is prohibited to make images of God or to imagine him.*⁶³⁶

Clauberg hence acknowledges the tension between the iconoclastic tendency in theology and Descartes' various configurations of the divine in his writings. Clauberg solves this tension by accentuating the tropical, even pragmatic nature of the Cartesian references to divine matters. What matters in the methodist framework that Clauberg proposes is the reasoning behind a process of questioning. This also clarifies Clauberg's emphasis on signs of ideas. True to his Ramist education, Clauberg often divides problems into two sides or elements. Hence, in his understanding of ideas, he suggests observing two aspects that constitute a double reality: One is qua operation of the mind, and the other is the objective, an idea which in a way corrupts things:

*In all idea (notion, or concept), one must consider a double being (a double reality or perfection): the one formal or "proper", in the sense that it is an operation of the mind; the other objective or "substitutive," in the sense that it is the image of a thing [which is] thought, or in the sense that it is in the place of a thing. These two things must be carefully distinguished not only in any concept, but also in every other image, and more precisely in every sign.*⁶³⁷

So, on the one hand we have an operation, an act of thought; on the other hand, we have a diminution of the thing. The idea is understood as a replacement of the thing, coming instead of the object. In this sense ideas are not representative of but rather *correlative* to reality. The function of *imaging* the thing makes the objective aspect of any idea. The image is itself a testimony of something it expresses. In other words, for Clauberg all images are realistic images. Some (real, external) exemplar always exists.

No picture can exist without an exemplar. And an idea is like a painting of a thing in the mind. This cannot be without an exemplar. [...] Every image in our

636 OOP I, 670 (*Exercitatio*, XLVII, §13). "*Imago aut latè sumitur, quomodo idea Cartesio est imago rei, idea Dei imago Dei, homo ad imaginem Dei factus, etc. aut strictè pro imagine sensibili, figurata, corporea, quomodo prohibemur facere Dei imagines vel eum imaginari.*" "*And the same distinction between imagination occurs here and there in Descartes' Philosophy. But it is delved into enough now.*"

637 OOP I (*Exercitatio* VII, §2), 607: "In omni idea (notione, conceptu) duplex esse (duplex realitas seu perfectio) considerandum est: unum formale seu *proprium*, quatenus est operatio mentis; alterum objectivum sive *vicarium*, quatenus est imago rei cogitatæ, seu quatenus est vice illius. Et hæc duo non tantùm in omni conceptu, verùm etiam in omni alia imagine, imò in omni signo accuratè sunt distinguenda."

*mind requires something which will be imitated, from which it is derived and from which it will be expressed.*⁶³⁸

Any picture depends on some exemplar for which it stands. Otherwise, it would not be a picture. This is again a quasi-realist position in which a minimal yet satisfying trust in the representational capacity of the picture grounds the pictorial activity, but not any picture is precise in its representation, that is to say materially true. However, at least in the Cartesian framework, this is not so crucial. What is important is that the picture stands correctly for a corresponding object. This correspondence is further described in rather common-sense figurations. For example, here is the description that Clauberg gives of the dynamics of a cause of a cause, which recalls rather Aristotelian terminology:

*A painter paints the king of France, and the painting refers to the cause of the cause. If you consider the drawing of the lines itself seeing that they derive from his hand: so the human mind thinks about God, and he is the cause of the cause of his cogitation or idea, if you look at the operation and action of the mind, which is to think, when he is a thing that thinks (res cogitans), of the man in question; when he is a painter, the action is painting.*⁶³⁹

Clauberg makes explicit the analogies between the human mind and the painter. The human mind is compared to a painter involved in the painting of a model. In a way he suggests a version of the Cartesian proof of the existence of God through the medium of the painterly activity:

It is impossible for a painter to paint the king of France unless he has seen him or at least an image of him; because every painting postulates a prototype:

638 OOP I, 609-610 (*Exercitatio* VIII, §1): “Nulla picura potest esse sine exemplari. Atqui idea est pictura quædam rei in mente. Ergo non potest esse sine exemplari.” [...] “Sic omnis in mente nostra imago requirit aliquid quod imitetur, unde desumatur & exprimatur.”

639 OOP I, 610 (*Exercitatio* VIII, §2): “Pictor pingit regem Galliaë, & sic est causa efficiens picturæ suæ; si consideres ipsos linearum ductus quatenus à manu ejus pendent: ita mens humana de Deo cogitat, & est causa efficiens illius cogitationis sive ideæ, si spectes ipsam mentis operationem & actum, qui est cogitare, cum sit res cogitans, ut hominis illius, cum pictor sit, actio est pingere.”

*similarly, it is impossible for the human mind to make an idea of God, unless he has seen God, or at least an image of him.*⁶⁴⁰

Hence, the mind's work is explicitly paralleled to that of the painter. The mind makes, at least according to this present discussion, figures of existing things, not of non-existent things. If the mind has some image of God, this necessarily means that God exists. This, of course, has implications regarding the working of the mind in general and of the figures it makes for itself. Moreover, one should note that in this small passage, one finds also a testimony for Clauberg's basic realist position, which claims that the image itself is a testimony of the reality of the model.

However, in a similar passage Clauberg mentions further details regarding the characters of the figures we make to ourselves out of the objects of the world. There is a limit to what we can change in the figures that we make for ourselves of the things that interest us:

*A painter can paint the image of a king as a beautiful image (even if we can suppose that the king is not the most beautiful of all men): but our mind is not capable of forming a more perfect idea than the idea of God; which is the idea of the most perfect Being.*⁶⁴¹

Even that the art of painting can make almost any object more beautiful than it is, but this is not the case regarding God, who remains always more beautiful than the image made of him. Hence, mental pictures are inadequate to picture God himself, and Clauberg presents this in a very logical and clear manner:

If the picture has more perfection than is contained in the thing that is said to be depicted, as happens sometimes, then this is derived from the mind of the painter or from some other thing, that is more perfect than the depiction (because indeed the human mind is much more perfect than the human figure which is depicted). But the idea of God (except that it could not contain

640 OOP I, 610 (*Exercitatio VIII*, §3): "Pictor non potest pingere regem Galliae, nisi eum viderit aut certè imaginem ejus; quia suum quaelibet pictura exemplar postulat: ita mens humana non potest formare ideam Dei, nisi Deum ipsum viderit, aut certè imaginem ejus."

641 OOP II, 610 (*Exercitatio VIII*, §8): "Pictor potest pingere imaginem regis imagine pulchriorem (pono enim regem non esse pulcherrimum omnium qui esse possunt hominum): At mens nostra non potest formare ideam perfectiorem idea Dei, hoc est idea Entis perfectissimi."

*anything as perfect as God himself) cannot derive ulterior or better perfections of him from me, since I do not have them, and not from anywhere else than from God, because the sum of perfection is only in the most perfect Being.*⁶⁴²

Hence, in as much as the picture of regular things can be more perfect than things themselves, the picture of God can never be more perfect than God himself. The very idea of the image of God contains a reason that accounts for the fact that there is no danger of heresy in these images as they are lower in perfection than God himself. We should recall here the Calvinist hostility towards using pictures in religious liturgy that must have played a part in the conception of the above passage.⁶⁴³ However, even if Clauberg points out the unbridgeable gap between the picture of God and God himself, he still acknowledges the limited analogy between the mind and the action of painting. As such, he in fact aligns the mind with the action of painting and asks about the image of God, not merely about the figurative representation of the divine.

3.2.7. The Figures of Living Things in the Context of Claubergian Physics

One of the interesting characters of Claubergian physics is the difference that he emphasises and explores in his *Physics* between living and non-living things, notably according to their shapes and figures. It is an interesting methodological point to which to turn our attention as it is through the figural medium of observation that the natural world becomes readable to us. This returns us to the inherent hermeneutic aspect of Clauberg's philosophy, a hermeneutic we can call figural in the sense that it gives an account of the manner in which forms and figures enable us to pinpoint the meaning of reality. Figural hermeneutics cannot be referred to as strictly Cartesian, but neither can they be referred to as strictly Aristotelian, at least not in the Scholastic sense of Aristotelianism. However, this figural hermeneutics is commensurable with these manners of thought. It is indeed the figure of things that one examines, corrects and

642 OPP II, 610 (*Exercitatio, VIII, §9*): “Si pictura habet plus perfectionis quàm reperitur in re, quæ dicitur esse depicta, ut quandoque contingit, illud mutuatur à mente pictoris vel ab alia re, quæ sit perfectior illâ quæ depingitur (ut sanè mens humana multo est perfectior figurâ humanâ, quæ depingitur) Sed idea Dei (præterquam quòd non possit quid perfectius continere ipso Deo) non potest mutuari ulteriores ac meliores suas perfectiones à me ipso, quoniam illas ego non habeo, nec aliunde quàm à Deo, quia summæ perfectiones non sunt nisi in summè perfecto Ente.”

643 See for example Carlos M. N. Eire, *War against the Idols: The Reformation of Worship from Erasmus to Calvin* (Cambridge: Cambridge University Press, 2986), 279–282.

sharpens to face reality correctly. Clauberg claims that in as much as in non-organic things one can think about matter for itself, in living things one must think of the thing through a figure:

*The difference between the living and non-living things, is that non-living things, as of stones, metals and other fossils, the integral body of those non-living being can be gathered under any [contingent] sensible figure, but plants and animals demand a certain figure.*⁶⁴⁴

In other words if from minerals and other non-living beings one can materialise infinite cases of different figures, living beings demand a *certain figure* which makes their infrastructure. In this sense the figure is a sign of life, of organic beings. However, existing in a certain form, the figure of a living thing changes relatively to the needs of its actions. “Only living beings have an *organic* body, that is to say, are endowed with a variety of instruments, of what kind are in the plant: the root, the stem, the branch, the sprout, etc. In animals: the head, the mouth, etc.”⁶⁴⁵ Clauberg hence sees the various figural elements of the plant or the animal as its instruments, all having specific usage and functions. Due to the complexity of the organic world, much escapes our natural eyesight. There are infinitely many things that are corporeal and natural and still evades our perception. In all which is corporeal, not all varieties are fully perceived. Having a specific figure which is always changing is the permanent a mark of the *living thing*; it is a sign of life. In as much as non-living beings can be hyletic, that is to say matter without a figure, all living things assume *a particular figure*. Clauberg hence acknowledges the category of organic beings, which consists of living things that have within themselves many parts, instruments that are not always approachable through the senses.

One may then ask about the status of plants with regard to a mutating figuration as a sign of life. Clauberg tends to count plants rather among *non-living* things: “A plant

644 OOP I, 163 (*Theoria corporum viventium*, II§6): “Differunt autem Viventia à non viventibus, quòd horum, **ut ecce** lapidum, metallorum et reliquorum fossilium, integra corpora sub qualibet figura sensibili consistere possunt: at plantæ et animalia certam *figuram* postulant.”

645 OOP I, 163 (*Theoria corporum viventium*, II, §7): “Hinc solis Viventibus adscribitur corpus *organicum*, hoc est, variis organis præditum, cujusmodi sunt in Planta radix, caulis, ramus, surculus etc. In Animalis caput, os, venter etc.”

can be also found like a dead thing, as the organic parts include varied textures in a sort of artificial machine.”⁶⁴⁶

Living bodies exist always as organisations and compositions. Hence, the beauty of living bodies is inestimable in its variety and details, even if some of these are imperceptible: “Therefore the beauty of living bodies is greater, since it is estimated by variety (Ph. 91, 386). At least, in other bodies such great variety cannot be perceived with the senses.”⁶⁴⁷ The inestimable complexity and variety of organs in living things must do with the countless fibres they contain. Here is Clauberg’s description:

*Such is the texture of living bodies, that they host countless fibres or threads and little hairs, that is to say, the ends of the parts of which they consist, among these lie in great numbers the pores, often even quite widespread.*⁶⁴⁸

These fibres are filled with pores. The inner complexity of pores and fibres makes the internal movement in living bodies. This complexion of fibres and pores creates the capacity of self-movement. Figures result from the self-movement of bodies, whose movement can change their form: “*Fluid bodies time and again cause a variety of forms by colliding with hard matters.*”⁶⁴⁹ This variety of figures influences also on the capacities of movement possessed by bodies, and an angled stone is moved less easily than the spherical.⁶⁵⁰ Moreover, hinges must have soft consistency to be put into the figural flow: “But a configuration of soft and fluid things (fluxorum ac mollium) into hard and consistent things (ad dura et consistentia) is much easier, since they (soft and fluid things) give way to them [the hard and consistent]. [§. 245.] In this way, fluids that are put into a vessel, are formed by the capacity of the vessel. Putting iron in the

646 OOP I, 163 (*Theoria corporum viventium*, II, §10): “At quoniam corpus organicum, partium et figurarum varia textura in machina quoque artificiali, item cadavere vel planta mortua inveniri possunt.”

647 OOP I, 163 (*Theoria corporum viventium*, §8): “Major itaque corporum viventium *pulchritudo* est, quatenus è varietate quidem ea aestimatur Ph. 91. 386. Saltem in aliis corporibus tanta varietas sensu non percipitur.”

648 Ibid. “§9. Adhæc vivorum corporum talis est textura, ut innumeras habeant *fibras* seu sila et villos, id est, extremitates partium ex quibus constant, inter quas pori quamplurimi, sæpe etiam satis lati, interjacent.”

649 OOP I, 12 (*Physica contracta*, VII, §287): “Fluentia quoque corpora iterum atque iterum alluendo rebus duris nunc hanc nunc aliam formam inferunt.”

650 Ibid., §286: “Quæ figurarum varietas hoc vicissim efficit, ut motus variant. Ita lapis triangularis minùs facile movetur spherico.” “This variety of figures in turn effects also the variety of movements. Thus, an triangular stone is moved less easily than the spherical.”

fire prepares it for receiving a broad range of forms; when cooled, it is incapable of doing this. We see the same thing in wax sigillary.”⁶⁵¹ Hence, when we talk about figures, we speak necessarily about movement being imposed from without or determined from within the living body. In the artificial domain and the various domains of art, emotion can create this flux and swerve. Bodies can be changed and shaped by the emotions of the artist: “*Artists teach us, that the cause and source of differently figured bodies (Diversarum in corporibus figuratum) is variety of movement.*”⁶⁵² Hence, Clauberg sees that the passions, the desires of men can also change their figures. At the end of this section, we should ask whether we can think of the order of method itself as belonging to the extended organisation of thought that must be configured and transformed according to the usages of method. Is not method also such an instrument of man?

3.2.8. Figures, Signs and the Semantics of Indication

It is clear from Clauberg’s various notes regarding the figure that for him there exists an explicit and close relationship between thought processes and figural processing. We see also that this lingual dimension continues in his notion of Hermeneutics. For Clauberg an exemplary thing is what is researched to revoke in the hermeneutic process. “The thing signified that corresponds with the image, is called the exemplar.”⁶⁵³ In other words, when we try to understand a phrase or a work, we try to recover that exemplar which corresponds with the image. Clauberg’s hermeneutics works in this manner as reworking and configuring signals. In itself “a signal (signum) makes note of something or indicates it.”⁶⁵⁴ Hence, there is here this realist insistence that all thought, language, signs and figures are messengers of things. The word Clauberg uses here is *indicare*, the action of indicating. Hence, signs and images are *indicators* of things. And this operation of indication is also pertinent to the

651 Ibid., §288: “Verum ad dura et consistentia multò facilius est conformatio fluxorum ac mollium, quæ illis cedant. §. 245. Ita quæ fluunt in vasculum indita ex capacitate ejus figurantur. Ferrum ad recipiendum multas formas ignis admotus parat; sed ubi refrixit, ad eam rem ineptum est. Idem in cera sigillari videmus.”

652 Ibid., §285: “Diversarum in corporibus figuratum causa et origo est motus varietas: id quod opifices nos edocent.”

653 OOP I, 338 (*Metaphysica de ente* XXIII, §342): “Signatum Imagini respondens vocatur Exemplar.”

654 OOP I, 336 (*Metaphysica de ente* XXI §325): “Signum est quod aliquid notum facit vel indicat.”

understanding of our senses: “Sense or sensual perception is made a by material signals, that indicate matters.”⁶⁵⁵ Hence, we have a set of instruments that help us indicate things. I think we must focus our attention on this specific expression *indicare*, which is possibly a poignant one regarding Clauberg’s thought. It seems that in Clauberg’s reasoning, the operation of indication comes in the place of deduction, intuition or even induction.

Clauberg’s semantics are related to his views of the state of childhood. Signs originate in the *voices that are related to things*. The written text has its archaic origin in the spoken and heard. Moreover, signs for Clauberg are always related to *the grasped things*: “*The sign can be considered as connected with the thing signified: thus, words can be connected to things, a name can be given to an infant. The things signified are hence more powerful than the signs.*”⁶⁵⁶

For Clauberg signs only function qua signs when they are intentionally replete, that is when they signify things. The living voice of language is the beginning of our system of signs. Clauberg repeats at another place this origin of language in the living voice:

*Words are sounds as long as they are pronounced by a living voice; they are figures and colours, as long as they are written; I call both of them to be fitting [or proper]: but because words all signify different things and are placed instead of those things, I call this to be a “vicar” of it [to be its “substitute”].*⁶⁵⁷

We are indeed dealing with an intentional conception of language in which signs are always already pregnant with the things for which they stand; in this sense signs *indicate* the things they signify. The indication is transitive in two senses, one descriptive and one prescriptive. In the first, simple sense signs indicate the things they signify in the sense that they describe things and give accounts of them; in the other, stronger transitive sense signs *prescribe* the things they denote. They *order* them; they authorize them. Clauberg uses signs to understand how sensuality works. Formal signs are those that represent things as they are “painted in the mind.”

655 OOP I, 243 (*Conjunctio corporis et animæ* XXXVII, §15): “Sensus sive sensualis perceptio fit per *signa materialia*, quæ res quidem indicant.”

656 OOP I, 336 (*Metaphysica de ente*, chap. 21, §323): “Signum spectari potest tanquam adjunctum rei signatæ: sic **voces** adjunguntur rebus, nomen imponitur infanti. Itaque signata signis potiora sunt.”

657 OOP II, 607 (*Exercitatio* VII, §3): “Vocabula sunt soni dum viva voce proferuntur; sunt figuræ et colores, dum scribuntur; utrumque voco eorum esse *proprium*: at quòd hæc vox hanc rem, illa illam significat et pro illa re ponitur, id appello illius esse *vicarium*.”

Conversely, material signs hold a material continuity with the thing for which they stand:

*The perception of pure understanding is produced through "formal signs" that really represent the things, since they are images of them, painted in the mind. Sense or sensual perception is produced through "material signs" that indicate also things, but they do not represent these [things] in the guise of an image, as for example an ivy bush indicates wine for sale.*⁶⁵⁸

This is a rather accepted distinction that Clauberg recalls, the distinction between the material and the formal reality of the sign. Both pure understanding and perception are signs of things, but in as much as the mind is aided by images, the senses make material signs, not with the help of images but with the thing itself. Hence, Clauberg wants to emphasise that it is the mind or intellectual perception that must use images in order to perceive. Sense perception is devoid of images and is more material; it represents the thing by the thing. In other terms, in as much as the mind makes “photographs” of things, sensuality “samples” things. Moreover, for Clauberg the truth itself is the unification of the prototype and the type: “The truth is nothing other but the union of the archetype with the ectype (...) truth is therefore originally in the archetype and consequently in the ectype.”⁶⁵⁹ The definition of the true we glean from the above passage is a *synthesis of archetype and ectype*; when the two correspond, or in our terms indicate each other, we have *a truth*. Hence, from the Claubergian view of things, the truth is found in things themselves and then it is found in the image that one makes of them in his mind. On the second level of discussion, it is truth itself which is modelled on a figural scheme in which there is a congruence between the archetype and the type. Of course, it is certain that when Clauberg talks about archetype and type, he has also in mind theological formulations, but the truth-validity comes in the first place from the thing; the task of the mind is to make the ectype correctly, to collect images in a truthful manner.

658 OOP I, 243 (*Corporis et animæ in homine conjunctio* 38, §14-15): “Puri intellectus perceptio fit per *signa formalia*, quæ res verè repræsentant, quatenus earum sunt imagines mente pictæ. [§15] Sensus sive sensualis perceptio fit per *signa materialia*, quæ res quidem indicant, ut hedera suspensa monet vinum esse vendibile; sed eas non repræsentant instar imaginis.”

659 OOP II, 620 (*De cognitione Dei et nostri* XVI, § 12): “Veritas nihil aliud est quàm unio archetypi cum ectypo. [...] Est igitur veritas originariè quidem in archetypo, consequenter in ectypo.”

*Moreover, not every sign represents something in particular, **which is [actually] present**, which is something more than “to indicate”. Ivy does indicate the fact that wine is for sale, but it does not represent the wine, as for example a statue or painting [does represent] a man, and the concept of wine shows wine itself.⁶⁶⁰*

Our mental concepts hence function also as a sign for the presence of the thing indicated.

3.2.9. The Meaning of Nuances

Forming a true idea of a thing must take into account nuances, that is to say specific differences and details of the thing under observation:

Any idea or species has two essential reasons of being as it were: for it has, in the first place, a “proper and formal” being (esse), by which it is distinguished from the object, of which it is an idea. In the second place it also has a “replacing/ substitute or intentional” being, by which it is not distinguished from the object, but it is taken for it.⁶⁶¹

Even geometrical entities have their peculiarities, and we must examine their specific characteristics:

660 OOP I, 336 (*Metaphysica de ente*, chap. 21, §327): “Præterea nec omne signum propriè aliquid *repræsentat* seu præsens sistit, quod amplius quiddam est quàm *indicare*. Nempe hedera quidem indicat vinum vendibile, at non repræsentat vinum, ut statua vel pictura hominem, et conceptus vini ipsum vinum exhibet. Repræsentatio igitur similitudinem quandam rei signatæ vel **imaginem ac** simulacrum requirit.” “Representation, therefore, requires some sort of similitude of the thing signified or an image and a likeness.”

661 OOP I, 620 (*Exercitatio XVI*, §9): “Est autem notandum, in idea seu specie quavis esse quasi duas rationes essendi: Primùm enim habet esse quoddam *proprium et formale*, quo distinguitur ab objecto, cujus est idea. Secundùm habet etiam esse quoddam *vicarium seu intentionale*, quo non distinguitur ab objecto, sed sumitur pro illo.”

*But, it is just before that we had the idea of a triangle (the fault of virtue, hors. Art. 19), and this easily identifiable by our intelligence, because it is simpler than the most complex form that the painted triangle can imagine, hence the figure is composed (as advised in Art. 21), but not itself but rather a true triangle can attain.*⁶⁶²

But because the idea of the true triangle (idea veri trianguli) was already in us before (by virtue, from art. 19), and could be conceived more easily by our mind, as being simpler, than the more complex form of the painted triangle, hence the figure is composed (as advised in Art. 21), we understand [apprehendimus] not this figure, but rather the true triangle.

Again, Clauberg makes an analogy between a drawing on a piece of paper and the manner in which the specificity of a geometrical form is inscribed in our mind.

*In the same manner, as, when we regard a sheet of paper, on which ink lines are drawn in such a way that they represent the face of man, it is not so much the idea of those lines that is effected in us, but rather [the idea] of the [depicted] man: that would never be the case, if the human face was not known to us from somewhere, and if we were not more habituated to think about that [face], than about those lines, since we can often not even distinguish one from the other, when they are somewhat far away from us. In this way we could not/ be able to acknowledge a geometric triangle from that what is depicted on the sheet of paper, if our mind did not have the idea of it from somewhere.*⁶⁶³

From all the above comes an interesting view of Clauberg's method, physics and metaphysics in which we find central attention given to the figures of things. In this framework figures are used as a classificatory tool. At the overall level, Clauberg's

662 OOP I, 441 (*Synopsis meditationis quintæ*, §42): "Sed quia jam ante in nobis erat (virtute saltem, ex. art. 19), idea veri trianguli, et faciliùs à mente nostra, utpote simplicior, quàm magis composita figura picti trianguli, concipi poterat, idcirco visâ figurâ composita (velut admoniti, ex. art. 21), non illam ipsam, sed potius verum triangulum apprehendimus."

663 Ibid., §43: "Eodem planè modo, quo, dum respicimus in chartam, in qua lineolæ atramento ita ductae sunt, ut faciem hominis repraesentent, non tam excitatur in nobis idea istarum lineolarum, quàm hominis: quod omnino non contingeret, nisi facies humana nobis aliunde nota fuisset, ac nisi essemus magis assueti de illa, quàm de lineolis istis, cogitare, quippe quas sæpe etiam, cùm aliquantulum à nobis remotæ sunt, ab invicem distinguere nequimus. Ita sanè triangulum Geometricum ex eo, qui in charta pictus est, agnoscere non possemus, nisi aliunde mens nostra ejus ideam habuisset."

method aims to face things as they arrive to our senses by developing a correct figuration of them attesting to their meaning. This meaning belongs to a higher order of synthesis. We take a deeper look at this meaning in the upcoming chapter dealing with the hermeneutic aspect of Clauberg's philosophy.

3.2.10. Figures, Synthesis and the Formation of Methodical Habitus

With the help of figuration, one can pass from the negative to the positive stage of method. In this one begins the installation of the habitus of method. Clauberg himself speaks about the positive "having" which is expressed by habitus:

*Habitus is meant here in general every positive attribute, which also perfects the thing in some manner (All kinds of prosperity and perfection) in such a way, however, that it can also deviate from the thing: as for example life, science, having parents, being operational, being dressed, being armed, etc.*⁶⁶⁴

The habitus of method is a positive having in which what is had and (at least theoretically or virtually) brought to perfection is the truth of things. In this habitus there is a negative element which is the one of doubt; this is the privation which is always conditioned by habitus. Clauberg says, following as always the Aristotelian definitions, that "we understand privation as the absence of habitus."⁶⁶⁵ Ergo, *if we have doubt, it means that we are already found within the framework of the habitus of method.* In the passage from the *privatio* of doubt to the *habitus* of understanding the truth of things, we need the operation of figuration, an analytic tool which is also essentially synthetic.

In order to conclude this chapter, let us briefly define the relation between the role of figures that we saw in Clauberg and Descartes and the advancement of method between analysis and synthesis. Our argument on this matter is that for Clauberg, the mind of man (as the initiated philosopher) is inherently and essentially parallel to the one of the painter. Additionally, Clauberg consciously refers to the affinity between language and painting and to the Horatian dictum of *Ut pictura poesis*, that is to say

664 OOP II, 920 (*Logica contracta*, §97): "*Habitus hinc generaliter dicitur omne attributum positivum, quod rem quoque modo perfecit (allerley wohlstand und vollkommenheit) sic tamen ut possit ab ea abesse: ut vita, scientia, habere parentes, operari, vestitum, armatum esse.*"

665 OOP II, 871: "*Quæmadmodum privatio intelligitur per habitus absentiam.*"

“poetry is like painting.”⁶⁶⁶ Hence, Clauberg returns to the analogy of painting when he discusses the false opinions we have, consisting of un-realistic mixtures of parts of animals from nature:

*An elegant comparison in this matter (hic) can be established in this way: think of our mind as of a painter, of false opinions as of sirens and satyrs, and just as painters who are painting these monsters confuse the parts of different animals (for example, a siren is painted as a girl with a fish tail, and Horace says in the beginning of Ars poetica: If a painter should wish to unite a horse's neck to a human head, and spread a variety of plumage over limbs [of different animals] taken from every part [of nature], so that what is a beautiful woman in the upper part terminates unsightly in an ugly fish below, etc.), so the falsity of our opinions arises from the fact (ita falsitas opinionum nostrarum inde oritur) that we confuse the attributes from different things.*⁶⁶⁷

Our false ideas are like these chimeras, composing imaginary beings through the unrealistic synthesis between different part of distinct animals.

*For example, if we attribute to the body what is of the mind, or to the mind, which is of the body, if we attribute the highest perfection, that agrees with the true God, to the sky or the sun, as the pagans do who see the sun and the stars as gods, if we attribute to the human nature of Christ the things that are divine, and vice versa, if we attribute to the rational anima (**animæ rationali**) the kind of refinement and subtility, that agrees with the wind, the air or the ether.*⁶⁶⁸

666 Rensselaer W. Lee, “Ut Pictura Poesis: The Humanistic Theory of Painting,”

The Art Bulletin 22, no.4 (December 1940): 197–269.

667 OOP II, 1188 (*Initiatio* IX, §24, A.): “Comparatio hîc elegans institui potest ad hunc modum: mens nostra est tanquam pictor: opiniones falsæ sunt tanquam Sirenes et Satyrisci, et quemadmodum pictores monstra ejusmodi pingentes *diversorum animalium membra permiscunt* (...) (v.g. in Sirene repræsentanda superiori parte virginem, inferiori piscis caudam pingunt, et Horatius de arte poëtica initio: *Humano capiti cervicem pictor equinam jungere si velit, et varias inducere plumas, Undique collatis membris; ut turpiter atrum Desinat in piscem mulier formosa supernè*, etc.) *ita falsitas opinionum nostrarum inde oritur, quòd rerum diversarum attributa permiscemus*”. Translation of Horace taken from: Q. Horatius Flaccus (Horace), *The Art of Poetry: To the Pisos.*, translated by C. Smart, edited by Theodore Alois Buckley (New York: Harper & Brothers, 1863), 1.

668 OOP II, 1188–9 (*Initiatio* IX, §24): “v.g. si corpori tribuimus quæ sunt mentis, aut menti quæ sunt corporis, si perfectionem summam quæ vero Deo competit, tribuimus Cælo vel Soli, sicuti fecerunt Pagani Solem et stellas pro Diis habentes, si humanæ Christi naturæ ea assignamus quæ

Hence, at the crux of the matter is the question of synthesis. It is figural synthesis which creates our false ideas, which consist of an imaginary mix between several images. However, it is second synthesis that creates for us the emended figures of things, supplying us with the distinguished figures of the things under observation. This stage is indispensable to the completion of the methodical process, and it leads to the culminating stage in which doubt is turned, really *transfigured*, into a positive kind of judgment producing the meaning of a reality. It is hence the transfiguration of doubt which stands in the centre of the process.

Moreover, we have highlighted the importance of *indication* as the rational operation which is demanded from figural processes. Figures indicate to us things as the archetype is indicated by the ectype. Indication also allows us to reach a judgment of validity regarding a certain thing. In sum, Clauberg leads us to think about something like a figural synthesis, a synthesis which must not be considered only in geometrical terms but also through linguistics and, as we shall see in the coming chapter, even etymological configurations. Clauberg notes that the distinction between many configurations of matters and bodies makes up the core of the occupation in the 6th meditation of Descartes:

*Surely the Author distinguishes his hands from the paper, whic he touches with them, and [distinguishing] his body from the toga he wears, and hence also [distinguishing] his body and its parts (as something certain) from exterior bodies (as from something less sure). You will see this same distinction between my body and texterior bodies again in the next words of this Meditation, in the 6th Meditation even more often.*⁶⁶⁹

Figural synthesis, whether in the mental, geometrical, or even the painterly realms, makes up the fundamental operation of the Cartesian method in its positive manner of

sunt divinæ, aut vice versa, si animæ rationali tribuimus ejusmodi tenuitatem aut subtilitatem, qualis vento, aëri vel ætheri competit.”

669 OOP II, 1185 (*Initiatio IX*, §13 B.): “Nempe Author distinguit suas *manus à charta* quam illis contrectat, et suum *corpus à toga*, qua est indutum, adeoque suum corpus ejusque partes (tanquam certius quid) à corporibus externis (tanquam à minùs certo.) Eandem inter corpus meum et corpora externa distinctionem observabis iterum in sequentibus hujus Meditationis verbis, in Meditatione sexta etiam sæpius.”

creating judgment, as we see from Clauberg's reading. The next chapter is occupied with the active operation of judgment and the results it yields.

Part 4 : Medicina mentis

4.1.

Understanding: The Positive Theory of Judgment and Hermeneutic Emendation

4.1.1. Clauberg's hermeneutical interests vs. the Cartesian attitude; 4.1.2. The active role of judgment in the Ramist conception of art; 4.1.3. Hermeneutics in Philippo-Ramism and Clauberg's milieu; 4.1.4. The place of judgment in the *Logica*, the *Defensio* and the *Initiatio*; 4.1.5. The importance of Bacon for Clauberg's method; 4.1.6. The order of matters and the book of nature; 4.1.7. The truth of things, valid judgment and estimation; 4.1.8. Reaching the literal: Clauberg's Cartesian linguistics; 4.1.9. Judgment and falsification; 4.1.10. From diagnosis of things to self-diagnosis and onwards to the order of the world

4.1.1. Clauberg's Hermeneutical Interests versus the Cartesian Attitude

In the process of method, after the stage of doubt is terminated and a figure of the matter is established, one must resume the inquiry in a *positive* manner in which one establishes *an understanding* of the matter at hand.

*You cannot bring back to life a thief once he has been hung; but what you once rejected as doubtful and false, you can afterwards resume as certain and true, and so you should, as soon as you perceived that that was the case, but not sooner.*⁶⁷⁰

This re-starting of the trail, looking at the matters differently than before, this change of perspective returns the initiating thinker to his inquiry, but only after the process of doubting is accomplished. This is an indispensable part of method. In this present chapter we try to understand what this resuming is and how one comes to the determination of meaning of a certain thing. One has also to recall that the human tendency to err remains constant, and even though error is not sin, there is always a tendency to fallacy which can harm what Descartes calls our “industry”:

Engaging Industry in deceiving me:

*(...) He would have said passive and permissive: so that I am deceived (ego ut fallar), that I am being deceived, [that I am] giving permission so that I am sometimes deceived. Here, on the other hand, where we are discussing about 'Genius' [Genio, referring to the 'evil demon' from Descartes' Meditations], he would not say passive and permissive, but maximally active and positive: engaging all its energy in deceiving me; in the same way, it [the demon]] deployed traps.*⁶⁷¹

670 OOP II, 1147 (*Initiatio* III, §34): “Furem semel suspensum in vitam revocare nequis; at quæ semel tanquam dubia et falsa rejecisti, potes postea *resumere* tanquam certa et vera, et debes resumere, simul ac percepisti talia esse, non autem antea.”

671 OOP II 1202 (*Initiatio* IX, T): “*Industriam in eo posuisse ut me falleret* : (...) “[L]ocutus fuerit passivè et permissivè: *ego ut fallar, me decipi, permittere ut interdum fallar*; hîc autem, ubi de Genio sermo est, non passivè et permissivè, sed maximè activè et positivè loquatur: *omnem suam industriam in eo posuisse ut me falleret*; item, *insidias tetendit*.”

Clauberg says that in the newly constructed technical culture of the Early Modern period, man was constantly placed in contact with great industries of invention, of mechanics and sciences, but these can mislead the thinker through the constant tendency towards infidelity which endures in the believer. Notwithstanding this, we must continue our inquiry. In other words, though synthesis can be hazardous, we must continue to establish and develop our industry.

Hence, the question is how one should proceed forward after halting one's mental movement: What precautions should one maintain in the pursuit of meaning, and what are the expected products of this positive stage of judgment? In the present chapter we supply a precise characterisation of Clauberg's art of synthesis. In previous chapters we demonstrated in what manner it is plausible to view Cartesian method as essentially synthetic. The method in Clauberg leans on a synthetic impulse that is also seen in some of Descartes' writings, most importantly in the *Principles* with its idea of the *tree of philosophy*. Moreover, one cannot understand Descartes' *Geometry* and *Dioptrics* without the help of a synthesis, which Descartes consciously used. Synthesis in this last sense of geometry means *assuming* the searched-for solution to a certain problem and then reconstructing the way towards it. If we take this strategy of synthetic modelling a step further, we can easily see that it is applicable not only in geometry but also in other domains of the arts and sciences; it must do with the emphasis placed on this assumption of a model. This model is, of course, artificial; it is not something that we perceive through our senses but rather something that we construct and erect. Édouard Mehl uses the useful term *la fabrique du monde* to underline this artificial character of the cosmological modelling in Descartes.⁶⁷² Let us see that this is exactly the strategy Descartes uses in *The World* to convince his readers. Descartes constructs a fable that makes the things not too easy to understand.⁶⁷³

*Most minds lose interest when things are made too easy for them. And to present a picture which pleases you, I need to use shadow as well as bright colours. So I shall be content to continue with the description I have begun, as if my intention was simply to tell you a fable.*⁶⁷⁴

672 Édouard Mehl, *Descartes et la fabrique du monde* (Paris: Presses Universitaires du France, 2019).

673 See James Griffith, *Fable, Method, and Imagination in Descartes* (London: Palgrave Macmillan, 2018).

674 Descartes, *Writings* I, 98; Descartes, *Œuvres* XI, 48.

One can look at this important passage as a rhetorical, even a pedagogical, strategy which must be recognised in the Cartesian endeavour. However, we can also take this metaphysically and epistemologically in a serious manner. The rhetorical strategy is only a half-truth. The modelling that Descartes effectuates also testifies to the true faith Descartes has in the veridic capacity of *synthesis*, of the need for the philosopher to produce a telling picture for his listeners so that they will be captivated by its shadows and lights.

So, how does this constructive, synthetic method stand in relation to the need to understand certain texts, things and problems? Does the strategy belong to the domain of Claubergian logic, that is to say to his art of interpretation? Most importantly, how does this synthesis creating interest and complexity stand in relation to the demand for simplicity of the evidence of intuition, of synopsis? It could be that in the Claubergian framework, the middle ground between synopsis and industry is found in the importance of interpretation.

In the Ramist tradition interpretation means application, that is to say, if I arrive at placing my observed object correctly within a certain genre, I also begin to give it a proper application. For Clauberg the process is similar but not identical to the Ramist procedure of judgment. For Clauberg proper understanding of matters at hand means applying all which is validated as proper to the matter and throwing away, actively, all that which is inappropriate, falsified or irrelevant. In this sense the framework of understanding remains synthetic. This direction of the process of understanding by a certain fixed, constructed, synthesised model should appropriately be referred to as modelling.

However, how should one control this necessity of modelling, this artificiality of the assumed solution? This is where the concept of *Verstehen*, understanding, in hermeneutics enters the picture. The synthesis which we discuss here in the context of Clauberg is not only one of interpretation but more particularly one of *understanding*. If we understand a phrase, a sentence or a text, as Clauberg's logic suggests, we can to some extent know that we are not only constructing our modelled truth; we can also understand something which is found *in* the discussed matter. This chapter demonstrates that in Clauberg understanding takes shape as a *diagnosis and even auto-diagnosis*: the estimation of the state of mind of the researcher or the initiate to philosophy.

In this way the present chapter gives an account of the thematics of meaning and understanding (or comprehension) (*Verstehen*) found in Clauberg's philosophy while keeping the issues discussed in previous chapters in the background. Within the

framework of the adaptation of Cartesian method, Clauberg brings to the framework explicitly hermeneutic issues that are absent, or at least are found but are latent, in the Cartesian method. Clauberg's *Logica vetus et nova* is an essay addressing reading and understanding: reading ourselves, understanding our prejudgments and their emendations, and reading the works of others. The *Logic*, as we already shown, culminates in the capability of *judging the works of others*. The action of reading can be viewed both from its analytic and its synthetic aspects; in Clauberg's *Logica* it is only at the level of second analysis that the understanding of the texts of others is achieved. In this sense the whole Claubergian logic is built as a kind as a preface to the art of hermeneutics; it is sometimes presented as belonging to *hermeneutical logic*. However, it is as a process of *analysis* and not of synthesis that Clauberg describes this procedure and what we call second, or synthetic, analysis. The know-how which is demanded in Claubergian logic is the ability to apply principles of understanding to specific cases, notably regarding works of other authors (or one's own work taken as being produced by an "other"). The suggestion of the present chapter is that it is this topology which provides the meaning in the methodical hermeneutics in Clauberg's method. The question of whether this is also fitting to characterise Cartesian method is addressed at the end of the present chapter. The determination of an 'understanding' (*Verstehen*) of a thing furnishes, effectively, the synthetical moment in the proto-philosophical procedures which are prescribed by Clauberg. Comprehension makes a positive moment of method, where the examined element is *assumed*, by its conception. Comprehensive synthesis effectively precedes, at least *ontosopically*, if not *chronologically*, the process of doubt. Hence, Clauberg says that as the Holy Scriptures, that is to say in the Bible, contain also questions and interrogations, nevertheless God is not doubting, and he does not proceed from the less known to the better known, nor from the better known to the less known. God does not need a method. Otherwise put, even if our expressions in the transmission of our method could resemble a sceptical rhetoric, this does not necessarily avow that we are doubting, or worse, that we are sceptics. Again we see that the manner of the transmission of method, that is to say its pedagogical aspect, makes an essential part of method itself. Also, one has to note in the following paragraph the distinction between internal method and external method, a division which is essential for Clauberg :⁶⁷⁵

⁶⁷⁵ OOP II, 1141 (Initiatio 60, II, 7): "Et potest è dictis explicari, quomodo Deus, qui nunquam de ulla re dubitat, neque à noto ad ignotum argumentando procedit, in Bibliis nihilominus quaestiones et argumentationes proponat. Quemadmodum autem is qui quærit exteriore voce, non propterea ipse continuò animo dubius est: ita nec ille qui externa oratione dubia utitur, mentem illico dubiam habet."

[...] how God, who never doubts anything nor proceeds from the known into the unknown while arguing, nevertheless puts forward [proponat] questions and arguments. But just as he who searches with the exterior word, is not because of that himself directly (continuo) in doubt: so does he who uses the doubtful external oration discourse not immediately have a doubtful mind.”

Hence method is essentially a search for comprehension, which has sometimes a sceptical face, but nevertheless the synthesis of meaning must stay always the guiding principle of our procedure. For Clauberg the method of interpretation that we should in the first place learn from Aristotle in his *Hermeneutics*⁶⁷⁶ is the basic science that enables the particular methods of all the other arts:

*But even if the theologians, in their interpretation of places in the holy Scriptures, tend to be occupied with their own interpretations, and even the jurists as well, give the interpretations (only) of legislative texts, one should not conclude, that the right method of interpretation comes from other [venue] than logic.*⁶⁷⁷

There is a question of whether method supplies us with concrete *knowledge* regarding the world or whether it is only intended for the preparation of the mind to learn or know the world. We argued above that the only knowledge method should supply is that regarding all we do not (yet) know how to do; it is meant to supply an estimation of that we do not know by its own nature, an estimation of that which still demands to be known. This estimated unknown is then configured (as we saw in 3.2 above) to serve as a model, a figure which orients the articulation of judgment. The positive judgment which every methodical process should furnish takes place as the determination of the domain in which the problem or unknown object must be located to pursue the path of the inquiry. It is like the tree of philosophy in the *Principles of philosophy* or the three treatises following the *Discourse on method*; it is what we call second philosophy: philosophy applied to science, morals or technique in general. In fact, it seems that for Descartes the methodical process and the judgment it produces are used to determine *in*

676 *De Interpretatione* or On Interpretation (Greek: Περὶ Ἑρμηνείας, *Peri Hermeneias*), see Aristotle, “De interpretatione,” trans. J. Ackrill, *Complete Works*, edited by Jonathan Barnes (New Jersey: Princeton University Press, 1985), 25–38.

677 OOP I, 781–2 (*Logica*, prolegomena, §123): “Quamvis autem Theologi in loco de Scriptura sacra de ejus interpretatione soleant agere, quamvis etiam Jurisperiti de Legum interpretatione tractent, non tamen inde licet concludere, rectam interpretandi methodum ad singulas potius disciplinas, quam ad Logicam spectare.”

what domain one should continue one's inquiry. In other words it is a judgment regarding the domain in which we can know the object a bit better *according to its own nature*. This reception of judgment has both Aristotelian and Ramist precedents. This kind of explanation is technically achievable by the hermeneutical principle of the clarification of an expression by what precedes it:

*If the Reader is left feeling doubtful by the author (...) [as to] what is the aim of such a beginning of a philosophy, then those philosophers who do not know this hermeneutical law: What follows is explained by the antecedent, could have jumped at the opportunity to blame [the author]. But now the reader was warned by the title of the book, the dedication, the preface, that all these Meditations are directed to this: a rational and certain demonstration of the existence of God and the immortality of the human soul and its distinction from the body.*⁶⁷⁸

Hermeneutical process, hence, proceeds as a sequence that begins with the clarification of simple elements and proceeds to the examination of more complex issues that appears in a certain text. This is exactly as Clauberg's logic proceeds. In the last passage of the prolegomena for the *Logica*, Clauberg writes:⁶⁷⁹

We recognize however that this hermeneutical analysis was not always as necessary. The ancients, for example, who had no or not many written monuments, had less need of it. This is the reason, why they did not hand it down, and [why] Aristotle, in the book On Interpretation, barely sketches the first out-

678 OOP II, 1211 (*Initiatio* XI, §43): “Si [...] incertus ab autore relictus fuisset Lector, [...] quò tendat ejusmodi Philosophiæ exordium, tum fortassis illi qui nesciunt regulam hanc Hermeneuticam: *sequentia declarant antecedentia*, Philosophi reprehendendi occasionem inde potuissent arripere. At nunc monitus fuit Lector in libri titulo, in dedicatione, in præfatione, eò dirigi Meditationes hasce omnes, *ut existentia Dei et Animæ humanæ à corpore distinctio atque immortalitas demonstrantur rationibus certissimis.*”

679 OOP II, 782 (*Logica* IV, §124): “Fatetur interim Hermeneuticam illam analyticam non fuisse omni ævo æquè necessariam. Nam *Veteres*, apud quos aut nulla aut pauca admodum exstabant monumenta scripta, minùs ea indigebant. Quæ causa est, cur ab illis non fuerit tradita, & ab Aristotele in lib. de Interpretatione vix primis lineamentis adumbrata. Nunc verò cùm librorum copia ferme oneremur, ac Theologi simul & Jureconsulti principia habeant scripta, maximè illa cuique necessaria est, præsertim Theologiæ & Jurisprudentiæ studiosis; imò omnibus iis, qui de Scriptorum illustrium mente digladiari solent, **cujusmodi & patrum & nostra memoria sunt longè plures, quàm qui de rerum per se consideratarum veritate solliciti.** Et cùm dentur perverso hoc seculo plurimi, qui optimè dicta in alienum sensum detorquere student, sinistra accipientes, quæ magni Scriptores dextrâ præbuerunt, Hermeneuticæ analyticæ est, non tantùm Interpretis ideam, sed etiam Calumniatoris indolem delineare, ut internoscere queat vir Logicus, quæ vera interpretatio, quæ calumnia, quis bonus Interpres, quis Calumniator & Sycophanta malitiosus. At nunc ad quatuor Logicæ partes ordine tradendas accedamus.”

lines. But now, as we are heavily pressed down by a mass of books, and the theologians and the jurists have written principles, this science has become very necessary to everyone, particularly to those that study theology and jurisprudence; or even better, to all those, who—have the habit to dispute regarding the thoughts of famous authors, these men that, in our memory or that of our elders, are more numerous than those that occupy themselves with the truth of things considered for themselves. And even though there are many in this perverse century, who do their best to twist words towards another meaning, taking wrongly what the ancient writers presented well, it is up to analytic hermeneutic, to delineate not only the idea of the interpreter, but also the temperament of the derogator, so that the logician can separate what is a true interpretation from what is a derogation, who is a good interpreter from who is a derogator and a hostile sycophant. Let us begin now with the orderly transmission (ordine) of the four parts of the logic.

In order to refer to the “derogator,” Clauberg uses the term “Calumniator”: Is it total chance that this is exactly how he refers to Revius and Lentulus, the two great critics of Descartes in the time of Clauberg? It seems that the answer is no. This is not mere chance but rather a telling stylistic character. Indeed, in the *Logic* Clauberg not only integrates Cartesian method into Ramism and Aristotelianism; he also furnishes his interpretative tools to deal with the derogators of Descartes and to suggest a right interpretation of Descartes’ writings. One should understand this: Clauberg refers to Descartes as a source that one must comment upon, interpret and defend. Even the *Conversation with Burman* is in fact built as chapters of commentaries on several important passages in Descartes. In other words the framework of Clauberg’s presentation of the ways of reason is hermeneutic and interpretative. He assumes the role of the commentator to transfer onwards the Cartesian content. His way of thinking is “*durch und durch*,” hermeneutic in nature. This hermeneutic reason has its roots in the Ramist intellectual culture from which Clauberg erupted.

4.1.2. The Role of Judgment in the Ramist Conception of Art and Definition as Judgement

For Ramus, according to Craig Walton, judgment amounted to a spiritual operation: “The whole art of judgment, culminating in ‘method,’ was not only the centre of

Ramus' program for human studies but was also 'the chief instrument of man in the quest for salvation.'"⁶⁸⁰ In the assessments of man regarding his own inventions, the judgment's "responsibility is heaviest."⁶⁸¹ In Ramus one finds two complementary levels of judgment: The first exists at the level of construction of a sentence, and the second level of judgment regards the usage of the first judgment after supplementary knowledge regarding the object has been acquired. For Ramus *judgment makes an essential part of the establishment of an art*. In the Ramist method judgment is essentially an act of localisation of the thing in its own proper genre, and the application of the rules into particular cases makes the very heart of the artistic process. To generate an art or science, for Ramus one should proceed from that which is better known to us, that is to say the clear and general principles, to that which is known by itself, that is to say for the particular cases under discussion. For Ramus method is only required when teaching is involved, not when discovery is involved. Teaching and transference of know-how stands at the heart of Ramus' conception of art. However, for Zabarella, Descartes and Clauberg, the generation (discovery) of principles and their transference onwards are one and the same task. Ramus thinks that his understanding of the art is also the manner in which Aristotle, Galen and Plato understood method, that is to say, method is relevant only in the application of principles, not in the establishment of principles. Ramus' view is that what is determining regarding the art of logic is first and foremost its *application*. It seems that Descartes might agree with him on that point. Reason is not so much about learning the rules of reasoning for their own sake but rather of making reason act as if spontaneously, in front of things, in real time, demanding the action of judgment. From the Ramist perspective, Ramus himself argued that judgment is the location of the thing in its own genre, and in Aristotle we have the rule which says that no mixture of genres is recommended in the pursuit of knowledge.

In the last chapter, concerning figuration (3.2.3) we saw that in the establishment of judgment, Clauberg goes in the rather questionable direction of the third kind of method which was dismissed by both Zabarella and Ramus: the method of *definition*. Let us remember that in his essay on the unity of method, Ramus argues strongly against the third method of Galen.⁶⁸² Impregnated with the Ramist, Zabarellist or Cartesian motivation, it seems that a large part of Clauberg's writings work towards the

680 Craig Walton, "Ramus and the Art of Judgment," *Philosophy & Rhetoric* 3, no.3 (Summer, 1970): 159.

681 Ibid.

682 Ramus, "Method," 145; Ramus, *Methodus*, 18.

establishment of a system of definitions and their application to specific problems. Within this framework of the establishment of charts of classifications, Clauberg often approaches philosophical problems from a philological or etymological point of view. For example, in the *Initiatio* he writes,

Let us add from from the philological hoard [è penu Philologica] the etymology of these words, as well as what those words of Menochius⁶⁸³ relate to: Someone is called doubting, when he can choose between, etc. For Isidore, Origins, book 10, says as follows: Doubtful, uncertain, as if of two roads. In Greek: ἀμφιβητέω, as if I go both ways, from ἀμφίς and βᾶω. In German: Zweifeln.⁶⁸⁴

We see that Clauberg turns to the various spoken and written languages that he knows, Greek, German and French, to see what he can *understand* regarding the meaning of the concept of doubt from language itself. Instead of taking one's references from the writings of others (as is the case in the classical style of writings in the Scholastics), Clauberg actually goes towards a rather Aristotelian orientation (in the *Categories*), where he brings many of his examples from the common usage of various languages and uses etymologies to account for the meaning of concepts. It is also notable to see that Clauberg is not satisfied with presenting an example in one language, or rather in his own language, but rather takes care to bring examples from various languages, hence showing what is similar between them. There is, in any case, in Clauberg a trust in the power of words to convey specific (and one can even say true) meanings.

One can hence say that on the one hand, Clauberg inherits the Ramist importance assigned to judgment: A great part of his writings are composed as dispositions of applications of principles in specific cases, while the Claubergian method searches constantly for definitions of matters through the means of understanding (*Verstehen*). This later stage of judgment is no longer Ramist, but it arrives above all from the hermeneutical school that evidently had a presence in the methodological thought of Clauberg.

683 Giacomo Menocchio, 1532–1607. As in his *De praesumptionibus, conjecturis, signis & indiciis commentaria*, 2 vols, (Padova: Tarinus, 1594).

684 OOP II, 1132 (*Initiatio*, §5): “Addamus è penu Philologica ipsarum vocum etymologiam, ad quam pertinent illa Menochii verba: *Dubius dicitur, qui cùm duas vias habet* etc. Nam Isidorus Orig. lib. 10. Sic ait: *Dubius, incertus, quasi duarum viarum*. Sic Graec. ἀμφιβητέω, quasi in utramque partem eo, ab ἀμφίς et βᾶω. Germ. Zweifeln [...].”

4.1.3. Hermeneutics in Philippo-Ramism and Clauberg's Milieu

Clauberg's time and milieu were also the arena where the definitive formation of modern Hermeneutics took place. The term *hermeneutica* (going back to Aristotle) was re-initialised by the Strasbourgian Johann Conrad Dannhauer (1603–1666), who effectuated what Daniel Bolliger recently called an “existentialising” of dialectics.⁶⁸⁵ The interpretative engagement with more or less ancient texts was of course already underway before Dannhauer and was widespread throughout the entire humanist culture. Ramus himself was deeply engaged in a re-reading and commentary of ancient texts. However, Hermeneutics, initiated as a domain of knowledge by Dannhauer, was specifically oriented towards the religious sacred texts, above all the Old and New Testaments. Jacqueline Lagrée characterises Clauberg's *Logic* as an organic part of the development of Hermeneutics as a discipline.⁶⁸⁶ This movement, according to Lagrée, is also the one which leads to Spinoza's hermeneutics as found in the *Politico-theological treatise*.⁶⁸⁷ However, from the point of view of the present research, there is more of a rift than a straight continuity between Clauberg's and Spinoza's hermeneutical methods. For Clauberg Hermeneutics is inherently the same theory of meaning which pertains to logic, sacred texts and metaphysics; that is to say that the theory of interpretation and the expression of judgment of texts that we find in the *Logica* is a general theory of reason that must pertain in fact to any object which the human mind meets on its way. In Spinoza, however, there is *one* method in his metaphysics which is evidently synthetic or geometric *and* the one we find in the *theological-political treatise*,⁶⁸⁸ which is rather analytic in its character, dealing with a part-by-part analysis of a text. In Clauberg, however, we find the tendency to unite interpretation and logic into the same language of reasoning.

685 Daniel Bolliger, *Methodus als Lebensweg bei Johann Conrad Dannhauer. Existentialisierung der Dialektik in der lutherischen Orthodoxie* (Berlin and New York: De Gruyter, 2020).

686 Jaqueline Lagrée, “Spinoza et Clauberg, de la logique novantique à la puissance de l'idée vraie,” in *Méthode et Métaphysique* (Paris: Presses Universitaires de France, 1989), 19-46.

687 On Hermeneutics in Spinoza and the politico theological treatise see Norman O. Brown, “Philosophy and Prophecy: Spinoza's Hermeneutics,” *Political Theory* 14, no.2 (May 1986): 195–213

688 See also Jean-Marie Auwers, “L'interprétation de la Bible chez Spinoza. Ses présupposés philosophiques,” *Revue Théologique de Louvain* 21-22 (1990): 199–213.

Dannhauer is still widely considered the founder of general hermeneutics (*hermeneutica generalis*), defining the purpose of hermeneutics (*finis hermeneuticae*) as the expounding of discourses as well as the infallible discrimination between the true sense and the false one.⁶⁸⁹ Meier-Oeser underlines the importance of supposition theory in Hermeneutics in Melancthon, Dannhauer and in the work of Clauberg himself.⁶⁹⁰ For Dannhauer interpretation and the expounding of texts has also an existential aspect in which this very activity is presented as a way of life.⁶⁹¹ In this tradition logic also can receive its hermeneutical turn, and Clauberg makes an organic part in this hermeneutical logic.⁶⁹² A few decades later Ludwig Meyer (1629–1681) served as a connecting figure between the hermeneutical logic of Clauberg’s age and the later proto-scientific generation of Hermeneutics that one finds in Spinoza’s *Tractatus theologico-politicus*.⁶⁹³ Meyer himself wrote an important treatise on the philosophical interpretation of the Bible which was for centuries attributed to Spinoza.⁶⁹⁴ He was, similarly to Clauberg, a middle man between Dutch Cartesianism and late German Ramism, the milieu of Ehrenfried Walther von Tschirnhaus, whose work *medicina mentis* is discussed in Chapter 4.2 of the present project. Meyer’s work brought Cartesianism into the field of Hermeneutics, and he was closely related to the Spinoza circles in Holland, even exchanging letters with Spinoza himself.⁶⁹⁵ We are talking here, indeed, about the entrance of the question of *meaning* into the centre of Early Modern philosophical discourse, valid meaning as differentiated from false

689 Johann Conrad Dannhauer, *Idea boni interpretis et malitiosi caluminatoris quae obscuritate dispulsa* (1630, 3rd edition, Argentorati: Joani Philippi Mülpii, 1652). See also Stephan Meier-Oeser, “The Hermeneutical Rehabilitation of Supposition Theory in Seventeenth-Century Protestant Logic,” *Medieval Supposition Theory Revisited*, edited by E. P. Bos (Dordrecht and New York: Brill, 2013) 464–481.

690 Meier-Oeser, “Hermeneutical rehabilitation,” 475.

691 Bolliger, *Methodus*.

692 Julius Goebel, “Notes on the History and Principles of Hermeneutics,” *The Journal of English and Germanic Philology* 17, no.4 (October 1918): 602–621; Jaqueline Lagrée, “Clauberg et la logique herméneutique,” in *La logique herméneutique du XVIIe siècle: J.-C. Dannahuer et J. Clauberg*, edited by Jean-Claude Gens (Argenteuil: Association “Le cercle Herméneutique”), 117–123.

693 (Hamburg: Apud Henricum Künraht, 1670).

694 *Philosophia S. Scripturae interpres : exercitatio paradoxa, in qua, veram philosophiam infallibilem S. Literas interpretandi normam esse*, unknown publisher, 1666.

695 Jacqueline Lagrée, “Louis Meyer et la « Philosophia S. Scripturae Interpres » : Projet Cartésien, Horizon Spinoziste,” *Revue des Sciences philosophiques et théologiques* 71, no.1 (Janvier 1987): 31–43; Lodewijk Meyer, *Philosophy as the interpreter of Holy Scripture (1666)*, translated by S. Shirly (Milwaukee: Marquette University Press, 2005).

meaning. The question here is not so much regarding the construction of language but rather regarding *meaning as conveyed in language*.

The birth of Hermeneutics is clearly related to the mentality of the Reformation;⁶⁹⁶ the question of the treatment of symbolism in the sacred texts was constantly in the air of the 17th century, and the Calvinist context regarding the meaning of symbols is also relevant to the case of Clauberg.⁶⁹⁷ The Calvinist attitude is inherently split between the unceasing effort to make the world understandable and the inherently undecipherable nature of God's will epitomised in the Calvinist doctrine of predestination. If we take this into an ocular vocabulary, then the practice of understanding the book of the world furnishes reader-adjusted eyeglasses, enabling the capacity to *see reality correctly*. The reading of the meaning of reality is intimately related to question of analysis and synthesis. Dannhauer's conception of the hermeneutical method was overtly more analytic than synthetic:

*Certainly, the object of Hermeneutics is nothing other than that one which is the occupation of Aristotle's book the Perihermeneias: not in a synthetical reason, which teaches how to express the mental sense in an oration, but an analytical reason, through which the mode of the interpretation of oration is transmitted, which is extended to [those objects that are] other than one own's voice or one own's writing.*⁶⁹⁸

This is indeed an identical definition to that which we find in Clauberg's understanding of analytic logic: finding the true meaning of the works of others. The direct source for Clauberg's usage of the term "analysis" in his logic is Dannhauer's Hermeneutics, and in the context of Reformed philosophy, logic is understood as

696 See Gerhard Ebeling, "L'herméneutique entre la puissance de la parole de Dieu et sa perte de puissance dans les temps modernes," *Revue de Théologie et de Philosophie* 126 (1994): 39–56; Ladislav Tkáčik, "Hermeneutics and Protestantism," *Introduction to Philosophical Hermeneutics* (Bern: Peter Lang, 2016), 27–30.

697 See Alexandre Ganoczy and Stefan Scheld, *Die Hermeneutik Calvins: Geistesgeschichtliche Voraussetzungen und Grundzüge* (Wiesbaden: Franz Steiner Verlag, 1983); Dirk van Miert, Henk J. M. Nellen, Piet Steenbakkens, and Jetze Touber, eds., *Scriptural Authority and Biblical Criticism in the Dutch Golden Age: God's Word Questioned* (Leiden: Brill, 2018).

698 Johann Conrad Dannhauer, *Idea boni interpretis et malitiosi caluminatoris quae obscuritate dispulsa* (1630, 3rd edition, Argentorati: Joani Philippi Mülpii, 1652), 24: "Tum certum est non aliud hermeneuticae objectum esse, quam in quo libri Aristotelis *Peri hermeneias* sunt occupati: quos ego sic dictos existimo, non ratione συνθέσεως, quasi doceant sensa mentis oratione exponere, sed ratione ἀναλύσεως, quia tradunt, modum interpretandi orationes jam dum ab alio seu voce seu scriptura prolatas."

belonging to a Hermeneutic vocation, and the terms of logic and understanding (*Verstehen*) are intimately connected. In other words we are witnessing here a transmutation in the meaning of logic itself, one in which logic is conceived more and more as the art of understanding, and Clauberg's *Logica* takes part in this general transmutation.

4.1.4. The Place of Judgment in the *Logica*, the *Defensio* and the *Initiatio*

We can see that Clauberg directly follows the philosophical style of logical Hermeneutics of his time. Logical Hermeneutics is a method that should be usable in any field of science or art, and in this sense we are well situated within the Ramist credo of the one method, which functions well in combination with a Cartesian conception of science and the general conception of Aristotelian Hermeneutics. The central function of logical Hermeneutics is to establish a set of rules of interpretation that must be relevant and applicable in all domains of human art, as Clauberg writes:

*In fact, there are many rules of investigating true meaning, and they all have the same common utility to theologians, jurisconsults, and all the others. [...], we cannot transmit these universal rules of interpretation otherwise than in logic, because it is a way of interpreting, a way of knowing the true meaning of something said.*⁶⁹⁹

This point is important to note because Clauberg's conception of logic and Hermeneutics can be regarded as not Aristotelian (in the sense that in the traditional reception, Aristotelianism holds that each science must have its own individual corresponding method, adequate to specific objects belonging to a certain genre, and in Clauberg's version of Hermeneutics, we can indeed talk of a unified method being applicable to all discussed matters. In the *Logica* we see logical Hermeneutics coming at the fourth part of the logical construction. This comes as a second analysis, not the analysis of the self but the analysis of the works of others, that is external to the thinking mind exercising the inquiry. This second analysis, as we suggested in Chapter

699 OOP I, 781-782 (*Logica*, Prolegomena, VI, §123): "Nam verum sensum investigandi regulæ multæ sunt, eædemque utilissmæ, Theologo, Jurisconsulto et aliis omnibus communes. (...) non possunt autem communes isti interpretandi canones alibi tradi quàm in Logica, quia modus interpretandi est, modus verum alicujus dicti sensum cognoscendi."

2.3, is the culmination of the Claubergian method. However, this analysis is inherently synthetic as it relates to an object arriving from outside the thinking mind. In this manner, in the fourth chapter of the *Logica*, one reaches the task of weighing the already divided and ordered propositions:

The fourth part, in which the concepts, the definitions, the divisions, the order of thoughts, judgments, the propositions, the questions, the proves and the disputes of men are weighted against the scales of rectified reason (rectæ rationis).⁷⁰⁰

Hence, Hermeneutics and its theory of supposition make for us an important widening of our understanding of the practice of doubt in the Claubergian method. The procedure of doubt makes part of a hermeneutical plan in which the known matters that we already possess are estimated, and their meaning is re-determined. In this sense, again, the *hermeneutical doubt* we encounter in Clauberg is the founding stage in the re-construction of philosophical language, the restructuration of philosophical vocabulary. He takes us through the procedure of taking our pre-given philosophical building blocks and finding out their true sense in order to determine which of them we would like to retain and which must be thrown away. What we learn from this very important hermeneutic orientation of Clauberg's work is the importance of the determination of meaning for the philosophical project, which can be viewed as a valid part also of an endeavour of the Cartesian sort. As such, what one meets here, remarkably, is effectively a meeting point, neither simple nor widely acknowledged, between Cartesianism and Hermeneutics.

4.1.5. The Importance of Bacon for Clauberg's Hermeneutics

As mentioned previously, Clauberg refers to Bacon quite often in his writings, and this is surprising, especially when we take into account the usual understanding of Clauberg's philosophy as a kind of a late Scholasticism. Clauberg estimates Bacon to be an extremely important thinker, and he references him often in support of Descartes' method. This makes evident that for Clauberg the reception of the

700 OOP II, 866 (*Logica*, IV) : "Pars Quarta, In qua hominum conceptus, definitiones, divisiones, ordo cogitationum, judicia, effata, quaestiones, probationes, disputationes ad rectæ rationis stateram appenduntur."

Cartesian position must do with the reception of humanist doubt and not only the renewal Aristotelian tradition. For example, as Clauberg presents Bacon:

Because this Chancellor, Bacon of Verulam, deserves his celebration among the learned, it is agreeable to compare the doubting that he prescribes philosophers to use, with Descartes' [doubt].⁷⁰¹

It is from Bacon as well that Clauberg draws the guidelines for his quasi-empiricism:

He says that to practice philosophical prudence is to never simply trust the senses: he does not reject, however, that we can trust them in some manner. But because the first principles of every human cognition, that Metaphysics supplies in abundance, must be so that we can simply trust them (otherwise they will not be certain Metaphysically, let alone the foundations of every certitude), for that reason the senses cannot be considered as that kind of principles.⁷⁰²

It is also from Bacon that Clauberg draws the guidelines for his own relation to the rules of civil society and above all the division between the philosophy of civil life and metaphysics. For Clauberg Bacon is seen as affiliated with Descartes, first and foremost from the point of view of the usage of doubt in the acquisition of knowledge. One must

701 OOP II, 1212 (*Initiatio* XII, §2): “Et quia Cancellarius ille, Bacon de Verulamio, merito suo celebratur inter doctos, ideo ejus dubitationem, quam philosophaturis praescribit, cum Cartesiana libet conferre.” “For that reason it is clear that this [doubting] should be allowable, even though this [doubting] is rejected.” On Bacon see Dana Jalobeanu, “Core experiments. Natural histories and the art of experiential literata: the meaning of baconian experimentation.” *Societate si Politica* 5 (2011): 88-104; Giglioni, Guido, “Learning to read nature: Francis Bacon’s notion of experiential literacy (experiential literata),” *Early science and medicine* 4-5 (2013): 405-34; Dana Jalobeanu, *The art of experimental natural history: Francis Bacon in context* (Bucharest: Zeta Books, 2015).

702 OOP II, 1184 (*Initiatio* IX, §II): “B : Prudentiae scilicet Philosophicæ esse ait nunquam planè considerare sensibus; non interim negat nos iis aliquo modo posse fidere. Sed quia prima omnis humanæ cognitionis principia, quæ suppeditat Metaphysica, debent esse talia, ut iis possimus planè considerare (aliàs enim non erunt Metaphysicè certa, multò minùs omnis certitudinis fundamenta) idcirco sensus pro talibus principiis haberi nequeunt.”

remember that Clauberg's professor at the Gymnasium of Bermen, Gerard de Neufville (1590–1648), was a reader of Bacon and a professor of medicine, mathematics and physics.⁷⁰³ Hence, Clauberg was initiated very early in his studies to the thought of Bacon. However, it seems that if for the Baconian doubt relates also to the domains within human usage, for Descartes doubt regards metaphysical things that are not directly translatable to the domain of usage:

*And here occurs for the first time the most frequent Cartesian metaphysical distinction: to discern between the usages of life and the contemplation of truth, and to learn from this, that many things in common life can be taken as certain, that will dubious in theory. And because his adversaries, because of their neglect of this distinction, took the opportunity to mock Cartesian doubt, and consequently his Metaphysics that arose from this [doubt].*⁷⁰⁴

Those that reject Cartesian doubt, hence, forget that in Descartes we have in fact two domains of certainty, and each domain plays a different role. If in life we can trust much more the givenness of things, only in the theoretical domain does the demand for fully ascertained certainty rule supreme. The fundamental habitus that Clauberg wants to promulgate in his method is one of the temperance of judgment and the ability to invest time in the weighting of the thing according to reason:

For all this, the disciple of our Philosophy is gradually fashioned and prepared, since no other logical rule is implanted in him while philosophizing so many times, so that he will not make any random and premature judgment, but will rather control the impedance of the soul, until he has pondered the given

703 See A few of Neufville's publications: *Theorica et practica arithmetica, methodice disposita, selectis exemplis declarata et evidentibus demonstrationibus firmata* (Bremen 1624). Also : *Sitionum miscellaneorum, ex universa medicina desumtarum decades III*, 1616 (Basel: Ioh. Iacobi Genathii, Acad. Typographi, 1616). On later Cartesianism in the Bremen Gymnasium (after Clauberg's death), see Reimund B. Sdzuj, "Zum Cartesianismus am Bremer Gymnasium illustre Johann Eberhard Schwelings Dissertation De anima brutorum (1676)," in *Frühneuzeitliche Disputationen*, edited by Marion Gindhart, Hanspeter Marti and Robert Seidel (Wien, Köln, Weimar: Böhlau Verlag, 2017), 179–198.

704 OOP II, 1158 (*Initiatio V*, §31): "Et hic primò occurrit distinctio in Metaphysica Cartesianà frequentissima, ut *inter usum vitæ et contemplationem veritatis* discernas, atque inde discas, multa in vita communi posse haberi pro certis, quæ tamen in theoria dubia sunt. Et quia ex distinctionis hujus neglectu adversarii Dubitationem Cartesianam, et per consequens ejus inde exorsam Metaphysicam cavillandi occasionem sumunt."

*matters [rem] with due attention towards the balance of rectified reason [ad rectae rationis trutinam].*⁷⁰⁵

Hence, it is the emendation of the disposition to judge that is sought by Clauberg. Mental hastiness is viewed as an original sin in the matters of reason and philosophy. The question is, in fact, how the emendation of the will influences our ability to establish meaning. This is examined at more length in Chapter 4.2 where we approach the question of the *medicine of the mind*. Clauberg also thinks, following Francis Bacon, that the doubt philosophy teaches us not only can but must serve for the comprehension of the arts of a more exact and technical nature:

*We understand that the mathematical disciplines and the mechanical arts (that are acknowledged by Verulam to have their foundation in nature and in the light of experience) do not otherwise aspire to their culmination and perfection.*⁷⁰⁶

That is to say that if we begin with the book of nature and passes by the putting-into-doubt and the establishment of the meaning of the matters-at-hand, we must augment our knowledge until it reaches technical activities and the mathematisation of reality. There is almost no doubt that this kind of an argument suits also the Cartesian motivation.

4.1.6. The Book of Nature and the Order of Matters

The framework of reading and the determination of meaning brings us back to a possibility of re-thinking the concept of the *order of matters*. This stage of viewing the order of matters is parallel to the moment of what we call *synopsis*, or imposed intuition, after the division of the problem, when we can in fact view that which is

705 OOP II, 1136 (*Initiatio philosophi*, chap. 1, § 20): “Et hæc autem omnia sensim disponitur ac paratur Philosophiæ nostræ discipulus, cùm nulla Logicæ regula toties ei in philosophando inculcetur, quàm ne temerè et præproperè *judicium* ferat, sed cohibeat animi impetum, donec rem debita cum *attentione* ad rectæ rationis trutinam ponderaverit.”

706 OOP II, 1213 (*Dubitazione XII*, §18): “Neque aliter disciplinas Mathematicas et artes Mechanicas (quas in natura et experientiae luce fundatas esse agnoscit Verulamius) ad culmen et perfectionem suam contendere deprehendimus.”

found in front of our observing mind. Meaning, in this sense for Clauberg, should not be understood anachronistically as a personal interpretation but rather as an intuition, a view that sees that which is found in the matters disposed before our observation, as the German term *Anschauung* proposes. Clauberg says that “the order of the doctrine separates the heterogeneous and unites the homogenous.”⁷⁰⁷ Methodical reading must follow the order of nature, and in this manner, one assumes the habit of reading the world.

In the *logica contracta* Clauberg presents a distinction between order and method:

*In Logic order and method designate the same thing to some, to others however they should be distinguished in this way: ‘method’ pertains to the right conception and judgment of singular things, which is discussed in the first and second grades of logic; ‘order’ on the other hand pertains to the apt disposition of everything together, which we are presently discussing.*⁷⁰⁸

Clauberg hence poses method as more primary than order. In the first place method is directed towards the righteous understanding of a separate act of thought, whereas order is like a general presentation, a synthesis of a state of affairs. Order for Clauberg is hence comparable to Descartes’ order of matters. Putting into order belongs already to the positive move within the philosophical domain. It is in this sense in Clauberg which one can refer to as first philosophy, while method is closer to what Descartes calls the order of reasons, in which a specific act of cognition is amended and rightly understood. It is indeed *this passage from method to order* that makes the move from reading the book of nature word by word, sentence by sentence to the composition of the order of matters of the world that the Claubergian philosophical gesture captures.

Within the framework of method, we actually turn around the issue of errors, and the issue of errors is always, for Clauberg, an issue of reading correctly. We need to find the beginning of the error, and tear it out of our mind, in order to begin anew to plant our tree of knowing: “*And if one wants to rip-up a tree from the earth, it is not necessary to take away the single leaves or to amputate single branches, better to go straight to*

707 OOP II, 827 (*Logica* II, §IX): “Ordo *doctrinae* separat heterogenea, *conjugit* homogenea.”

708 OOP II, 933 (*Logica contracta*, § 251): “Ordo et methodus aliis quidem in *Logica* idem designant, aliis verò ita distinguuntur, quòd *methodus* pertineat ad singular seorsum recte intelligenda et judicanda, de quo in primo et secundo *Logices* gradu actum; *ordo* autem ad omnia conjunctim apte disponenda, de quo agemus in præsentia.”

*the root, it will immediately fall apart altogether.*⁷⁰⁹” Bacon and his follower De Neufville present the task of the interpretation of nature through a process of purging and purification so that the idols of the mind can be put aside:

*Fourthly and lastly, and this is the most important (says Neufville: among the things that he cannot prove in the New Organon of Bacon), that the same author (Bacon), in order to interpret nature, requires a pure mind, that is to say, purged of all of the preconceived opinions or idols, as he says, freed and purified, by means of negation and renunciation of all these things, with a firm and solemn determination [...]*⁷¹⁰

This purging of nature from the false idols of opinion invokes a second childhood, allowing one to enter into the kingdom of truth. Here again Clauberg makes an explicit reference to Bacon:

*He teaches that the intellect must be freed and purged from all idols, that is to say, from all preconceived opinions, so that there is no other way into the kingdom of man, which is founded on the sciences, than into the kingdom of heaven, into which one cannot enter, except in the person of an infant; See in Book I of The New Organon, Aphorism 68. Idem.*⁷¹¹

709 OOP II, 1181 (*Initiatio IX*, §9): “Ita si velis arborem aliquam in terram prosternere, non est necesse, ut singula folia demas, ramos singulos amputes, radicem evelle, cadet illico tota.”

710 OOP II, 1212 (*Initiatio XII*, §3): “*Quartum et postremum idque præcipuum est* (inquit D. de Neufville: videlicet inter ea quæ in Novo Verulamii Organo probare nequeat) quod *idem Auctor* (Bacon) *ad interpretationem naturæ, requirit mentem puram, hoc est, ab omnibus præconceptis opinionibus seu idolis, ut loquitur, liberatam atque expurgatam, idque per abnegationem et renunciationem earundem, constanti et solenni decreto factam [...]*”

711 OOP II, 1125 (*Initiatio*, prolegomena, §7): “Bacon de Verulamio Novi Organi. Lib. I. aph. 68. *Intellectum ab omnibus idolis, id est, præconceptis opinionibus, esse liberandum et expurgandum docet, ut non alius ferè sit additus ad regnum hominis, quod fundatur in scientiis, quàm ad regnum cælorum, in quod, nisi sub persona infantis, intrare non datur* ; ut ibidem ait. [lib. I Organi Novi. Aph. 68.]” (The Aphorism of Bacon is: “So much for the individual kinds of idols and their trappings; all of which must be rejected and renounced and the mind totally liberated and cleansed of them, so that there will be only one entrance into the kingdom of man, which is based upon the sciences, as there is into the kingdom of heaven, ‘into which, except as an infant, there is no way to enter.’” (Silverthorne translation)).

So, we learn that it is through the artificial operations of purging nature through its re-reading that we achieve the second childhood of our mind, allowing us to proceed in our way towards the truth of things. It is through the purging of our language and other signs of reality (i.e. figures and signs) that we arrive at that second childhood. Even the *Physics* Clauberg treats many times according to linguistic categories, having their essence in the naming of the thing:

*Any Philosophy names the things it discusses, and because nobody can do this better or more intelligible, than someone who has first studied the nature and the properties of the things; Hence it is usual in Cartesian philosophy to describe the thing itself (remipsam) first, solidly, from its origin, and then finally to call the same [thing] by its name, or judging about the name for it; in this not only following the first rule of invention, that demands that the matter should be first understood, and then a judgment is to be issued about it.*⁷¹²

To conclude this point, nature is given to us, for Clauberg, essentially as a book that we must learn to *read*. This readability of nature is found in ancient religion in the relationship between divinities and nature in which nature itself is understood as the expression of divine will:

*For the same reason we are always sure and do not doubt, that God exists, that he is one, that he is eternal, that corporeal things exist etc. (...); despite this, at the beginning of philosophy (initio Philosophiae) we are seeking and examining, whether things like this can also be read in the book of nature, with the help of the stars, that perpetually enlightened all the ancient peoples.*⁷¹³

The laws of nature, which already ancient people understood, are guaranteed hence both by God and by the process of methodical verification. Note here also the quasi-

712 OOP II, 1231 (*Differentia*, XI, LXIV): “Unaquæque Philosophia res, de quibus agit, nominibus suis insignit, & quia nemo hoc melius & intelligibilius præstare potest, quam qui naturam & proprietates rerum prius perscrutatus fuit; idcirco Cartesianæ Philosophiæ **mos est**, rem ipsam prius solidè ab origine sua **describere**, & tum eandem nomine suo **appellare**, aut de nomine ejus **judicare**, hac in parte non tantùm primam inventionis regulam sequendo, quæ postulat, ut res primo intelligatur, tumque de illa feratur iudicium.”

713 OOP II, 1149 (*Initiatio*, IV, §9): “Simili ratione nos pro certo et indubitatio semper ponimus, Deum esse, et unum esse, et æternum esse, esse res corporeas etc. [...] hoc non obstante, initio Philosophiæ quærimus atque examinamus, an hæc talia possint quoque legi in libro naturæ, beneficio illarum stellarum, quæ omnibus perpetuò gentibus luxerunt.”

anthropological understanding of Clauberg, seeing in the beliefs of ancient people the signs of their rationality. This again expresses the order of the world which must be learned and trusted, but only through the power of language.

4.1.7. The Truth of Things, Valid Judgment, and Estimation

We have seen that negative and positive judgments are both indispensable for the methodical sequence. We are led by Clauberg from J1 to J2, where J1 is estimated and put into a larger chain of meaning. Hence, the production of J2 is the end product of method. Both judgments are synthetic in character: J2 is what we defined as SA, the second analysis of the elements that we have elucidated in the first process of putting into doubt. SA produces meaning for the specific thing that one investigates. How does judgment stand in relation to intuition in the Cartesian framework? According to Frederick Van de Pitte, in Descartes we should always take into account as constitutional the duality formed between intuition and judgment.⁷¹⁴ In as much as intuition gives us certainty, judgment gives us necessity. Judgment, according to Van de Pitte, is the epistemological tool in Descartes which leans mostly on the process of deduction. The question is how one should relate this deductive order with the particular things that one encounters. In other words, How does one reach the *truth of things* within the framework of the process of the reading of nature itself? For Clauberg this very problem is presented in terms of the understanding of a certain individual carrying such properties that have also universal meaning:

*Eyes, head, hands, body, of the human being, are general [items], that is to say, universal [items] with respect to the eyes, the hands, etc. that I think I have, for these point to an individual and that human being, those refer to the species and the human kind.*⁷¹⁵

714 Frederick P. Van de Pitte, "Intuition and Judgment in Descartes' Theory of Truth,"

Journal of the History of Philosophy 26, no.3 (July 1988): 453–470.

715 OOP II, 1188 (*Initiatio* IX, §23, B): "*oculi, caput, manus, corpus, scilicet humanum, sunt generalia, hoc est, universalia respectu talium oculorum, manuum &c. quales ego me puto habere, nam hæc ad individuum & hunc hominem, illa ad speciem & hominem referuntur.*"

24. OOP II, 1188 (*Initiatio* IX §24): "Nam sanè pictores A. Comparatio hîc elegans institui potest ad hunc modum: mens nostra est tanquam pictor : opiniones falsæ sunt tanquam Sirenes & Satyrisci, & quemadmodum pictores monstra ejusmodi pingentes diversorum animalium membra permiscent (v. g. in Sirene repræsentanda superiori parte virginem, inferiori piscis caudam pingunt, &

The change that method brings to reality is carried out on the level of content, on the level of meaning, not on the level of surface, the level of that which is found. Everything that must do with civil manners can remain as it is, but philosophy can, indeed must, change the manner in which one understands the literal, that which is read in reality as it is. The literal stays as it is, but something in its comprehension, that is to say in the depth of its constitution, is emended. It is as if we make a *regressus* in a Zabarellist manner in which the given is explained through its causes, and its causes are demonstrated as the origin of that which we find before us as a problem to be solved. One cannot say that Cartesian philosophy, at least that found in Clauberg, is essentially a passive one.⁷¹⁶ Methodist philosophy, in general, is essentially an activity promoting activity. The activity being accomplished, however, is the determination of meaning within the pre-established meanings of habitual, literal matters. However, we must better define what are those literal realities that we read in the world.

4.1.8. Reaching the Literal: The Lingual Ordering of Philosophy

Already, around the times of the *Regulæ*, Descartes expresses his belief that order can serve as a basis for forming a universal language, a language of true philosophy in which thoughts themselves are well ordered. This facilitates the efficient learning of alien languages:

Order is what is needed (et ce par le moyen de l'ordre): all the thoughts which can come into the human mind must be arranged in an order like the natural order of the numbers (établissant un ordre entre toutes les pensées qui peuvent entrer en l'esprit humain, de mesme qu'il y en a un naturellement établie entre les nombres). In a single day one can learn to name every one of the infinite series of numbers, and thus to write infinitely many different words in an

Horatius de arte poëtica initio : Humano capiti cervicem pictor equinam jungere si velit, & varias inducere plumas, Undique collatis membris ; ut turpiter atrum Desinat in piscem mulier formosa supernè, etc.) ita falsitas opinionum nostrarum inde oritur, quòd rerum diversarum attributa permiscemus, v.g. si corpori tribuimus quæ sunt mentis, aut menti quæ sunt corporis, si perfectionem sumumam quæ vero Deo competit, tribuimus Cælo vel Soli, sicuti fecerunt Pagani Solem et stellas pro Diis habentes, si humanæ Christi naturæ ea assignamus quæ sunt divinæ, aut vice versa, si animæ rationali tribuimus ejusmodi tenuitatem aut subtilitatem, qualis vento, aëri vel ætheri competit.”

716 As Jean-Luc Marion indeed suggests in his Jean-Luc Marion, *Sur la pensée passive de Descartes* (Paris: Presses Universitaires de France, 2013).

*unknown language. The same could be done for all the other words necessary to express all the other things which fall within the human mind. (établissant un ordre entre toutes les pensées qui peuvent entrer dans l'esprit humain')*⁷¹⁷

It is clear that Descartes was viewing here an understanding of rationality which is lingual in its character. The order that Descartes is trying to furnish in his reason is parallel to the one in language. This is not necessarily a theory of language but rather an elucidation of knowledge itself with the help of the mechanics by which language operates. Especially, the above passage emphasises that it is through a minimal set of tokens that one can come to express as in the above quote “all the other things which fall within the human mind.” This lingual foundation of the understanding of reason and its order is shared, even accentuated, by Clauberg. We can understand Clauberg as taking extremely seriously the linguistic potential that Descartes' philosophy suggests and trying to furnish a full-blown elementary vocabulary to philosophical language. True philosophy is the foundation that enables us to separate the thoughts of men into distinct and clear units that are the prerequisites of any true science:

*[...] without that philosophy (la vraie philosophie) it is impossible to number and order (les mettre par ordre) all the thoughts of men or even to separate them out into clear and simple thoughts, which in my opinion is the great secret for acquiring sound knowledge (la bonne science).*⁷¹⁸

Clauberg is known to be one of the first in Early Modernity to practice the rationality of finding meaning through etymologies, which is known from later stages in German philosophy.⁷¹⁹ In Clauberg's writings we often find passages dedicated to the meaning one can find in certain linguistic articulations. Massimiliano Savini suggests that in reference to Clauberg one should talk about a “semiotisation” of the noetic process in

717 Letter to Mersenne 20 November 1629. Descartes, *Writings* III, 12; Descartes, *Œuvres* I, 80–81.

718 Ibid., 81.

719 See for example Howard Eiland, “Heidegger's Etymological Web,” *Boundary 2* 10, no.2 (Winter 1982): 39–5

which “all being is signifiable.”⁷²⁰ In this Clauberg followed in the footsteps of the Humanists, most notably the Calvinist Joseph Justus Scaliger (1540–1609), also known to be one of the founders of modern philology.⁷²¹ In 1663 Clauberg published the *Ars Etymologica Teutonum*. In this treatise, he concentrates on the origins of the German language and the meaning entailed in the linguistic forms.⁷²² One should emphasise that Clauberg’s art of etymologies is not philological in the scientific sense: He does not declare himself to be a scientist of the origins of accepted speech. Rather, his intention is hermeneutic: He wishes to get from language itself insights and understanding regarding the things that are represented in language, and his linguistic observations can easily be criticised from the scientific point of view. However, words are taken by Clauberg as *configurations* in the sense that we discussed in the last chapter: They are signs that represent things, and as such we must study them through analytic logic, the logic of the understanding of *the products of others*. By embodying that principle, etymologies (as any other products of man) can serve to capture certain meanings that one wants to decipher or elucidate.

4.1.9. Hermeneutics, Meaning and Falsification

It must be noted that Hermeneutics, for Clauberg, is important for the development of method, not only at the constructive, synthetic stage but already in the stage of doubt, the stage of genetic proto-philosophy. In the following passage, one sees that Clauberg uses hermeneutical terms to speak on the process of elimination and falsification of untenable propositions:

All these things must be eradicated, at the same time and once and for all, through restraint of assent, until they have been tested, considered, examined. However, the ones that are perceived to be false during the examination, must be overthrown through negation. The rules of hermeneutics are: A predicate is such that it is permitted by a subject, Words should be understood [intelligenda]

720 Savini, *Clauberg*, 247: “Chez Clauberg [la] noétisation s’accompagne d’une sémiotisation pour laquelle tout étant est signifiable.”

721 On Scaliger and philology see Dirk van Miert, Joseph Scaliger, “The Power of Philology (1590–1609),” *The Emancipation of Biblical Philology in the Dutch Republic* (Oxford and London: Oxford University Press, 2018), 22–52. Clauberg refers to the Scaligers 45 times throughout his *Opera Omnia*.

722 John T Waterman, “Johann Clauberg’s ‘Ars etymologica Teutonum’ (1663),” *Journal of English and Germanic Philology* 72, no.3 (July 1973): 390–402.

*according to the subject matter. Since therefore opinions cannot be overthrown by us in another way, than with those two modes indicated by me, subject matter does not permit another overthrowing, nor must another be modelled [fingi]. We have already mentioned the comparison that illustrates this eradication: of the basket full of apples, including many which have been corrupted [In the 7th response].*⁷²³

Hence, the conception of matters, their touching-upon by hermeneutical interpretation must commence, must be initiated by the process of the eradication of the rotten apples. In this sense the Hermeneutics that Clauberg urges us to use at the beginning of our initiation to philosophy is not one of maintenance of traditional reasons as these are woven into (our personal and cultural) history through the transference of concepts; much more we are talking here about a radical model of Hermeneutics, eradicated Hermeneutics, that begins any reading by not knowing rather than by a presentation of the plurality of opinions.

Hence, one can see that the known Cartesian example of the basket of apples is connected by Clauberg to the rules of Hermeneutics. For Clauberg the two methods support each other. If we follow the rules of Hermeneutics, we can reach in the first place the elimination not only of surface deviations from the truth but also that which stands at the basis of our false opinions. This is also the manner to get rid of unacceptable, ancient understandings and interpretations of the world:

*And if one wants to rip-up a tree from the earth, it is not necessary to take away the single leaves or to amputate single branches, better to go straight to the root, it will immediately fall apart altogether [cadet illico tota].*⁷²⁴

The initiation to philosophy which is carried out as a rigorous process of elimination led by doubt is hence also supported by the hermeneutical process and rules. Hence,

723 OOP II, 1173–1174 (*Initiatio* IX, §2, G): “Omnia sunt evertenda simul et semel per *assensus* *cohibitionem*, donec fuerint probata, expensa, examinata. Quæ autem in hoc examine falsa esse deprehendentur, etiam evertenda sunt per *negationem*. Hermeneutici canones sunt: Tale esse prædicatum quale permittitur à subjecto, Verba esse intelligenda secundum subjectam materiam. Cùm ergo *opiniones* non possint à nobis aliter *everti*, quàm duobus istis modis à me indicatis, **nec** subjecta materia aliam eversionem admittat, **neque** alia fingi debet. Simile hanc eversionem illustrans jam adduximus è sept. Resp. à corbe pomis pleno, inter quæ multa corrupta.”

724 OOP II, 1181 (*Initiatio* IX, §9, A) : “Ita si velis arborem aliquam in terram prosternere, non est necesse, ut singula folia demas, ramos singulos amputes, radicem evelle, cadet illico tota.”

we can determine more clearly that Hermeneutics has a role to play in the initiation to philosophy; it is a member in the set of measures that can help the initiator separate the true from the false. The production of meaning, hence, must be regulated and limited by the rule of falsification, putting aside all that which is not pertinent to the subject under discussion.

4.1.10. From Diagnosis of Things to Self-diagnosis and Onwards to the Order of the World

If judgment remains not only at the initiation but also at the end of the methodical procedure in Clauberg, then it is a process of parallel estimation, an estimation of self which is co-produced with the estimation of things. That which is produced as the in-between of the process of estimation is the meaning of the thing observed. This is what comes out of the hermeneutic aspect that we have tried to expose in this present chapter. This amounts to what this project refers to as “an other empiricism”: an empiricism informed by Bacon, Zabarella and Descartes, but not yet by John Locke. This other empiricism sees in sense perception an active character: Sense perception itself stands at the root of any philosophy, but it is not the case that everything comes down to sense perception and its organisation (as, at least *grosso modo*, in full empiricism). However, we can see in Zabarella, Descartes and Clauberg a certain activism of sense perception, one trying to emphasise the active responsibility of man regarding his sense perception. In this framework it is the main task of philosophy to amend sense perception.⁷²⁵ Note that this interpretation of Cartesianism is quite different from the one given in the idealist reading of Descartes.⁷²⁶ The accentuation we find in Clauberg is not on the moment of the cogito and the cancellation of sense perception but rather on the necessity to amend sense perception in an active manner according to true judgment and the natural light of reason. In this framework philosophy must consider sense experience as making the first human principles of cognition serve as the basis for our understanding of sense perception. The principles, the products of the methodical process of this other empiricism, are the ratio (or *habitudo*) between perceived matters and the constant self-

725 Cecilia Wee, “Descartes and active perception,” in *Active Perception in the History of Philosophy: From Plato to Modern Philosophy*, edited by José Filipe Silva and Mikko Yrjönsuuri (New York and Berlin: De Gruyter, 2014), 207–221.

726 For example see Lewis Robinson, “Le ‘Cogito’ cartésien et l’origine de l’idéalisme moderne,” *Revue Philosophique de la France et de l’Étranger* 123, no.5/8 (May-August, 1937): 307–335.

inspection of the individual reason of the thinker. In what we suggested calling synthetic analysis, starting from the known truth at which we arrived in the process of analysis, we proceed by successive deductive steps until we reconstruct the problem, which in this way is brought to its solution. Perhaps we have then arrived at the point where we can provide a suggestion to the question of the meaning of Cartesian metaphysics according to Claubergian understanding. Metaphysics is the crossing of the frontier between analysis and synthesis, between doubt and the determination of meaning.

As we said above (1.2.9. What is the soul?), the “I” of the researcher is extremely important in the Claubergian conception of analysis. But this “I” is not a “me”: It is an individual point of departure situated amongst spatio-temporal parameters that are constantly changing, motivated by the variety of usages. Moreover, it is a point of departure destined to become the object of itself, the matter of itself, in the always unique process of self-estimation. Method, perhaps differently from the stage of synthesising the order of matters in first philosophy, is extremely individualised:

In fact, Descartes begins philosophy not from being, but rather from the mind (ab mente), not any mind, but his own mind, an existing and singular thing. He progresses from this [one mind] to God, what does not have to be considered absolutely, according to all the attributes, as is the custom of the other metaphysicians, but only according to the attributes that relate to the principles and the foundations of philosophy.⁷²⁷

Those metaphysical foundations are, on the one hand, necessary for the realization of intellectual perfection. However, the questions of everyday life, of the maintenance of the body and the particular arts is not easily or spontaneously connected with those metaphysical foundations. Civil matters are more necessary than philosophy, but philosophy is necessary to the perfection of the human intellect:

Not that they do not have any use, since they are the foundations of every certain cognition, that the human philosopher is capable in this life to obtain. But they are not related closely to civile matters and not to food or the maintenance of the body, as the other arts, in the sense of Aristotle Metaphysics lib. 1 cap. 2: I admit that the others are more necessary than it [philosophy], but

727 OOP II, 1166, (*Initiatio* VIII, §5): “Cartesius verò incipit Philosophiam non ab ente, sed à mente, non ab mente qualibet, sed sua propria, re singulari et existente, ab hac ad Deum progreditur, non absolutè secundùm omnia attributa considerandum, ut aliis Metaphysicis in more positum; verùm secundùm ea tantùm, quæ pertinent ad principia et fundamenta Philosophiæ.”

that there still is no better, *if you want your soul and your life to reach intellectual perfection [in ordine ad animi vitæque intellectualis perfectionem]*.⁷²⁸

The estimation of the self⁷²⁹ which is ordered by Clauberg is fundamentally an estimation of our habituated judgmental tendencies, which are a priori constructed hand in hand with our epistemological dispositions and structures of knowledge. In the context of Clauberg's work, this means in fact putting constantly in question the encyclopaedic knowledge that we have acquired. In this sense Clauberg's understanding of the methodical process means a constant criticism of the "urban-architecture" of encyclopaedic knowledge which is constructed in Philippo-Ramism. One in fact cannot find a better term for this process than *deconstruction*, and this deconstruction is indeed a laborious process:

But is laborious

*Because from early age our mind is so prone to judging, that we are not able to control this [tendency] so easily. **Life habits rely on that which is ancient.** We enjoy an imaginary freedom, since we keep holding on to vulgar philosophy and the use of common sense. Regarding sleep, somewhere Scaliger in Exercit. [Says that] This [Sleep] is the recreation of the forsaken by God, which arrives not only to the body, but also to soul, from the liberty, and as a servant of the lord of him over and over again to escape from the time of this nature at any time, by means of sleep.*⁷³⁰

728 OOP II, 1156-1157 (*Initiatio* V, §23): "Non quòd usum non habeant, cùm sint fundamenta omnis certæ cognitionis, cujus in hac vita capax est homo Philosophus; sed quòd proximè non fasciant ad res civiles neque ad victum et sustentationem corporis, ut aliæ artes, circa quas ut plurimum versari solent homines, quo sensu de Metaphysica dixit Aristoteles *Metaph.* lib. I cap. 2. *eâ magis necessarias esse cæteras, sed tamen nullam meliorem, inquam,* in ordine ad animi vitæque intellectualis perfectionem [...]."

729 On estimation of the self, see recently Jean-Luc Marion, "Connaitre à l'estime," *Questions cartésiennes III* (Paris: Presses Universitaires de France, 2021), 95–130.

730 OOP II, 1203-1204 (*Initiatio* IX, §49): "*Sed laboriosum est* : Quia mens nostra ab ineunte ætate tam prona et præceps est ad judicandum, ut non possit se facilè cohibere. *Ad consuetudinem vitæ, scilicet antiquæ. Imaginaria libertate fruimur, quatenus in vulgari Philosophia et vulgari rationis usu persistimus. De somno alicubi Scaliger in Exercit. quod à Deo factus non solum ad corporis recreationis, sed etiam ad animæ libertatem, cùm servus eo tempore liber sit atque etiam dominus evadat aliquando, per insomnia.*"

Note here the reference to the Renaissance humanist Julius Caesar Scaliger (1484–1558), the father of the Calvinist humanist and philologist Joseph Justus Scaliger (1540–1609), who was doubtlessly known to Clauberg. The work to which Clauberg refers here is the *Exotericæ Exercitationes*,⁷³¹ a treatise in natural philosophy suggesting a neo-Aristotelian approach to hylomorphism. Method is described here by Clauberg as a work, a labour, from which our mind is always prone to fall into sleep as a kind of a release. Even if we want to fall asleep, keeping our body and soul within the resting state of prejudice, we must put ourselves to the work and effort of estimation.

Clauberg finds also that the importance of the principle of doubt as the beginning of the Cartesian methodical process, has also its justification from the rules of Hermeneutics. Whoever blames Descartes for the introduction of doubt at the beginning of method, actually betrays the hermeneutical rules of the relation of a precedent proposition to its following one. In other words, if one follows Descartes not only according to his “order of reasonings” but also having in mind the hermeneutical procedure of clarification, one would not have a basis to blame Descartes:

*If the Reader is left feeling doubtful by the author as to that end for which we propagate the doubt, what is the aim of such a beginning of a philosophy, then those philosophers do not know this hermeneutical law: What follows is explained by the antecedent, could have jumped at the opportunity to blame [the author].*⁷³²

In Hermeneutics we are working within a corpus and canon of tradition, and we try to make our reading relate to that which was said before. The philosopher must however doubt this authority of precedent. Method, hence, is an effort; it is a labour based on the obligation to read *what* was read before but not in the manner in which it was read before. This is very different from the entertainment of prejudgments that are easily made. We must wake up, in Clauberg’s terms, from the sleep of reason found in common philosophy. In this sense we are not only correcting ourselves; we are also

731 See Kuni Sakamoto, *Julius Caesar Scaliger, Renaissance Reformer of Aristotelianism. A Study of His Exotericæ Exercitationes (1557)* (Dordrecht: Brill, 2016).

732 OOP II, 1211 (*Initiatio*, XI, §43) : “Si [...] incertus ab autore relictus fuisset Lector, quò fine dubia proponantur, quò tendat ejusmodi Philosophiæ exordium, tum fortassis illi qui nesciunt regulam hanc Hermeneuticam : *sequentia declarant antecedentia*, Philosophi reprehendendi occasionem inde potuissent arripere.”

correcting history and the past. We choose only those traditional propositions that stand the test of doubt and deduction. Clauberg emphasises that Descartes wants to attack not the things that are generally doubted but only those things that are regarded as true by the common mind and which wrongly serve as the basis of our science:

*He does not talk about these things that are doubted by everyone, but rather about those things that are considered as very true, be it that they are the principles that we thought we understood conclusively, or the conclusions that we believed we knew.*⁷³³

For Clauberg the error in art means being ignorant of art itself. We must be knowledgeable of the art we want to practice to be able to practice it: “*Otherwise Descartes makes explicit in this place, that in the arts the one who errs is not he who fabricates a work of art in a less right way on purpose and knowingly, but he who is ignorant of the art.*”⁷³⁴ We have tried in this chapter to give an account of what is a correct judgment, according to Clauberg, and what is, on the contrary, an incorrect one. One should however understand that this level of correct judgment is still not equivalent to metaphysical certitude, which is traced by the natural light. Here is how Clauberg defines the highest state of metaphysical certitude that according to him is suggested and provided by the followers of the Cartesian way:

*Metaphysical certitude is required in stabilizing the fundament in any philosophy. Therefore “Wherefrom do I know”, that is to say, what reason I give [quam causam dabo] from the natural light.*⁷³⁵

We shall now pass in Chapter 4.2 to a comprehensive description of mental health as achieved through the process of self-edification.

733 OOP II, 1182 (*Initiatio*, IX, §10. B): “Non loquitur de iis quæ dubiæ veritatis sunt apud omnes, sed quæ maximè vera putantur, sive sint principia, quorum putavimus nos habere *intelligentiam*, sive conclusiones, quarum *scientiam* nobis esse credidimus.”

734 OOP II, 1184 (*Initiatio* IX, §10, P.): “In arte peccet non is qui studio et sciens opus minùs recte fabricat, sed qui ignarus artis.”

735 OOP II, 1192 (*Initiatio*, IX, §32): “Certitudine scilicet Metaphysica , qualis hîc requiritur, in fundamentis omnis Philosophiæ stabiliendis. *Unde* igitùr *scio*, hoc est, quam causam dabo ex naturæ lumine, quam ex Philosophia per scientiæ illius, quâ hactenus usus sum, principia, rationem adducam, quæ vim habeat efficacissam demonstrandi, Deum non voluisse talem mihi naturam dare, ut res tales percipiam, quales tamen revera non sunt, quia summam ille habet in omnia potentiam liberrimeque agendi potestatem.”

4.2.

***Medicina mentis*: Mental Habit as Therapy and Pedagogy**

4.2.1. The pedagogical orientation of Clauberg's philosophy; 4.2.2. Clauberg pedagogy as *medicina mentis*; 4.2.3. The medical aspect of Cartesianism and the passions of the soul; 4.2.4. Ramist education and Comenianism; 4.2.5. From bad custom to mental habit; 4.2.6. Tschirnhaus' understanding of the *medicina mentis* : A follow-up on Clauberg? 4.2.7. *Medicina mentis* and *ars inveniendi*; 4.2.8. Hidden truth (Tschirnhaus) vs. the truth of things (Descartes and Clauberg); 4.2.9. Between the extension of knowledge and the estimation of knowledge and civic customs; 4.2.10. Another empiricism: Clauberg's aesthetic artificialism

“Reason is a theoretical habit that tends to comply rigidly and clearly to first principles.”

4.2.1. The Pedagogical Orientation of Clauberg's Philosophy

Over the previous chapters, we been built towards a presentation of the Cartesian-Claubergian method as a process of habituation: but a habituation to what? The answer must be: a habituation to the order of matters. In this sense the methodical process is one of alignment between the order of reasons and the order of matters, and the two orders are essentially inseparable from one another. If we view method in this manner, then it is clearly understood as a synthetic, compositive procedure. On a general level one must recognise the clear pedagogical orientation of Clauberg's reading of Descartes. The philosophical process is clearly presented in Clauberg's writings as a gradual development of self-alignment. Additionally, at the terminological level, the greater part of Clauberg's philosophy is presented as serving a process of instruction, referring constantly to various coordinates of formation and learning. Clauberg is aware that there exists some conflict between Scholastic education which is the widespread manner of teaching the young, and the newly founded principles that Cartesian method offers.

*For although the objective target could definitely finally be reached using this way of inquiring, these things are, however, not suited at all for the Scholastic institution, through which our youth normally is and must be educated in the cognition of things, and this can be a major source of confusion.*⁷³⁶

The initiation to philosophy stands, hence, in an ambivalent relation to general education. For Clauberg what is at stake is formulating the guidelines of a process of initiation to philosophy, a preparation of the mind for the work of metaphysics. Clauberg states clearly that this must be done in the same manner as young children are instructed, a manner that *can* enable (but not necessitate) an adaptation to the philosophical task. This instruction is not one of the simple acquisition of knowledge; rather it is cleansing or preparing the ground, the foundation, for the philosophical

736 OOP II, 1212 (*Initiatio* XII, §6): “Nam licet vel maximè hac inquisitionis via ad scopum propositum tandem perveniri posset; eadem tamen institutioni scholasticæ, per quam juvenus ordinariè in rerum cognitione erudiri debet et solet, minimè est accomodata, maximarumque confusionum causa futura est.”

learning to be enabled. In this manner Clauberg, in his own understanding of Descartes, aligns metaphysics clearly with pedagogy; more precisely he composes a mixture between (analytic) pedagogy and (synthetic) instruction. The analytic phase is performed through the processes of doubting that we presented in previous chapters. The second phase of synthetic instruction constitutes procedures of application. Finally, Clauberg again points in a direction holding that the method is transferrable only through a long procedure of habituation and gradual naturalisation: This process demands time and effort (on the durational aspect of method, see the conclusion, Chapter 5). At the contextual level, we canvassed Clauberg's method on his obvious engagements with the philosophy of the Calvinist milieu and the late humanist philosophy of method. We tried to demonstrate how the two central concepts reigning over the humanist discourse on method, analysis and synthesis appear also in the Claubergian model and how these two methodological elements work together in an intricate and inseparable manner to such an extent that we are called to find a comprehensive model that binds the two aspects of method. In the last couple of chapters, we presented the various configurations that this balancing between analysis and synthesis form in Claubergian philosophy. We discussed the processes of doubt, configurations of matters and hermeneutical diagnosis. We understand, hence, Claubergian methodical art as a process of analysis *and* synthesis, taking shape in a simultaneous manner, or at least in a double sequence. We demonstrated in the last two sections that Claubergian method initiates a process that we term (after Clauberg) the principle of limination, in which under the guise of doubt, a halt in front of an object of inquiry provides the possibility of configuring the matter itself. In the present chapter we approach the possibility of viewing Claubergian method as a whole, trying to characterise its nature. We would like to see what ends and what means are handled by this method, and we will try to define its possible results or products. In this present chapter, we look at Clauberg's method from the later eyes of a slightly younger German philosopher who worked in the next generation of the post-Cartesian thinkers, being also related the Spinozist circles in Holland and Germany: Ehrenfried Walther von Tschirnhaus (1651–1708). Both a medical doctor and a philosopher, in 1687 Tschirnhaus published his *Medicina mentis* (*The medicine of the mind*), which was coupled with a treatise on the medicine of the body (published 1686). Before getting to the medical aspect of method according to both Clauberg and Tschirnhaus, we should turn our attention to the pedagogic orientation of both philosophers, whom we suggest are included in the methodist conceptual genre whose contours we try to portray here. As in Clauberg, also in Tschirnhaus' works we detect a clear pedagogic orientation of the initiation to philosophy. Clauberg writes,

*Just as, in the youngest age, human thought is applied to singular things before being applied to universal things, and contemplates material things rather than the things that are separated from matter, in the same manner/ so the first age of philosophers was especially consecrated to the disciplines that are the closest to singular things, and it searched for the knowledge of physical things which present themselves to the senses rather than to the things that flee from the senses.*⁷³⁷

The infancy of the mind is the stage at which, according to Clauberg, our thought is wholly derived and determined by our sense perception. There are many prejudices of childhood that one must correct through the process of method. Intellectual knowledge is, however, already made by the adult stage with the help of judgment, when we are ready to meet new things and after we have amended our set knowledge, that Clauberg calls also sensual knowledge.

*I call sensual knowledge that of children that is produced without the appropriate attention, or, in any case, according to the prejudices of infancy. [I call] intellectual [knowledge] that which is produced when, in an already advanced age, we form our judgment on the basis of some new observations.*⁷³⁸

In this explicitly pedagogical project, Clauberg takes part in a ‘turn’ in the history of philosophy which was energised by the Reformation, the Ramist revolution and finally the Comenianist movement, which was heavily influenced by Ramism. We refer to the Comenianist element in Clauberg’s oeuvre in Section 4.2.4 below.

737 OOP I, 281 (*Metaphysica de ente*, Prolegomena, §1): “Quemadmodum ab ineunte ætate circa singularia priùs quàm universalialia versatur humana cogitatio, ac potiùs res materiales, quàm à materia secretas contemplatur: ita prima Philosophorum ætas iis potissimum disciplinis dedita fuit, quæ minùs recederent à singularibus, magisque rerum in sensus incurrentium et physicarum cognitionem quæsivit, quam earum quæ sensus fugiunt.”

738 OOP II, 1055 (*Defensio XXXI*, § 53): “*Sensualem* cognitionem voco, quando infantes absque debita consideratione, aut certè secundum infantie præjudicia; *intellectualem*, quando provecta jam ætate ob novas aliquas animadversiones judicamus.”

4.2.2. Clauberg's Pedagogy as a *medicina mentis*

Though I could not find an explicit mention of the term *medicina mentis* in the Claubergian corpus, it seems obvious that he relates to that tradition which sees in philosophy a certain therapeutic activity. The origins of the term *medicina mentis* are found in Roman Stoicism, most precisely in Cicero in his *Tusc. Disp.* Lib III.6: “*est profecto animi medicina mentis:*”⁷³⁹ The medicine of the mind perfects the soul. In the Claubergian presentation of the perfection of the soul, we see a process of self-examination which works if not towards a perfection of the soul, then in any case towards its emendation. Guido Giglioni provides a helpful description of the nature of the tradition of *medicina mentis* also in the context of Descartes' philosophy.⁷⁴⁰

In the phrase medicina mentis (“medicine of the mind”) the genitive mentis can have two meanings, one subjective (i.e. the medicine that the mind administers to the passions in order to heal unruly emotions) or objective (i.e. the medicine that is administered to the mind through external means of control). The subjective genitive (mind's medicine) is implied in the way in which Descartes understood the cure: the mind is inherently healthy and it is the only true treatment. By contrast, the objective genitive (medicine for the mind) is the sense understood by Bacon: the mind is ill (chronically ill, as it were) and needs urgent treatment.

This view of the common, infantile mind as ill and demanding emendation, which is understood explicitly as medicine, is indeed Stoic. In this framework, the task of philosophy is to help in the emendation and re-education of that ill, miseducated mind. In this sense we must acknowledge both communal and elitist tendencies of this educational moment. On the one hand every man is able to enter the process of emendation. On the other hand this pedagogical process of emendation takes the mind above the limits of accepted, vulgar opinions. This is perhaps close to what Descartes refers to as “common sense” at the beginning of the seminal *Discourse on method*.⁷⁴¹

739 Guido Giglioni, “Medicine of the mind in early modern philosophy,” in *The Routledge Handbook of the Stoic Tradition*, edited by John Sellars (New York and London: Routledge, 2016), 189–203.

740 Ibid.

741 Descartes, *Œuvres* VI, 1; Descartes, *Writings* I, 111.

Good sense is the best distributed thing in the world: for everyone thinks himself so well endowed with it that even those who are the hardest to please in everything else do not usually desire more of it than they possess [i]. In this it is unlikely that everyone is mistaken. It indicates rather that the power of judging well and of distinguishing the true from the false – which is what we properly call ‘good sense’ or ‘reason’ – is naturally equal in all men, and consequently that the diversity of our opinions does not arise because some of us are more reasonable than others but solely because we direct our thoughts along different paths and do not attend to the same things. For it is not enough to have a good mind; the main thing is to apply it well. The greatest souls are capable of the greatest vices as well as the greatest virtues; and those who proceed but very slowly can make much greater progress, if they always follow the right path, than those who hurry and stray from it.

We have here again the double level of the Cartesian virtue of the mind: On the one hand common sense exists in each human being; on the other hand we have the labour of application, which is also related to the objects of our method. It is the proper direction of the mind that makes one progress towards the greatest virtue. In this sense what stands before us is the moral aspect of Cartesian method. In order to make more precise our view of the Claubergian kind of *medicina mentis*, we look at the Claubergian project from the later perspective of the writings of von Tschirnhaus, who followed Descartes by applying Cartesian method in a rather different manner. During the 30 years separating Clauberg from Tschirnhaus, much happened, the most important of which was the appearance on the scene of Baruch Spinoza. Tschirnhaus was directly related to the Spinozist circles in the Netherlands and was possibly in contact with Spinoza himself.⁷⁴² He was however in direct relation with Ludwig Meyer, who belonged to the first circle of Spinoza’s disciples.⁷⁴³ Tschirnhaus’ work has a few

742 As we already noted, Spinoza did know the work of Clauberg. However, one should not forget that Clauberg’s closest friend, Wittich, published one of the fiercest attacks of Spinoza, the *Anti-spinoza* much later than Clauberg’s lifetime, in 1690. However one can start to reconstruct a picture of rival camps throughout the netherlandisch-german philosophical Reformed philosophy in the 17th century, in which a part was a Cartesian adherent, the other a Spinozist one. Tschirnhaus was clearly affiliated with this latter circle.

743 Was there any direct contact between Clauberg, Meyer and Tschirnhaus? The places and times partially overlapp. However, Meyer’s first writings date to Clauberg’s very last years of life (the 1660ies).

interesting traits that have importance to us here. The first is that unlike Clauberg, Tschirnhaus knew the *Regulæ* of Descartes which was picked up by Leibniz.⁷⁴⁴ In this sense if Clauberg only presents a plausible reading of Descartes commensurable with what one finds in the *Regulæ*, Tschirnhaus materialises it in a systematisation of method in his treatise the *Medicina mentis* (first published in 1687). In parallel, Tschirnhaus was also active as a follower of Spinoza, with whom he exchanged letters.⁷⁴⁵ It is with the ethics of Spinoza in mind that he writes his *Medicina mentis*. What does it mean, in general and specifically for Tschirnhaus, the medicine of the mind, and should we look at this as a kind of corrective, regulative manner of presenting the habitus of reason?

4.2.3. The Medical Aspect of Cartesianism and the Passions of the Soul

The discussion around the *medicina mentis* offers a useful perspective on the questioning of Cartesian philosophy as an applied attitude in the second half of the 17th century. In this branch of Cartesianism, the medical, therapeutic foundation of Cartesian philosophy is made clear.⁷⁴⁶ In fact, it seems that it is the know-how of medicine instead of logic or ethics that the concept of method in Clauberg presents. We are invited by Clauberg, following Descartes, to establish a fundamental health of the mind that should accommodate the establishment of the various sciences. The medicine of which we speak refers to the fundamental capacities of the order of reasons to align itself with the order of matters.

Having in mind the Stoic origin of the *medicina mentis* that we mentioned above, it is clear that Clauberg endorses to some extent the Stoic tradition. He frequently cites Cicero, and at times he refers to Stoicism as part of his reflections regarding method. Also, the borderline between the theoretical and the civic realms constitutes a

744 Tschirnhaus also knew the manuscript of the *Research after the truth*, see Ettore Lojacomò, “Pour une interprétation et une datation de la recherche de la vérité par la lumière naturelle de René Descartes,” *La recherche de la vérité par la lumière naturelle de René Descartes* (Milano: Francoangeli, 2007), xliii-xlix.

745 In 1676. See from the letters of Spinoza, <https://spinozaweb.org/letters/139>, consulted on 20.12.2020. On the relationship between Spinoza and Tschirnhaus, see: Mark A. Kulstad, “Leibniz, Spinoza, and Tschirnhaus,” in *Spinoza: Metaphysical Themes*, edited by Olli I. Koistinen and John I. Biro (Oxford and New York: Oxford University Press, 2002), 221–240.

746 Steven Shapin, “Descartes the Doctor: Rationalism and Its Therapies,” *British Journal for the History of Science* 33, no.2 (2000): 131–154; Claude Romano, “Les trois médecines de Descartes,” *Dix-septième siècle* 217, no.4 (2002): 675-696; Vincent Aucante, *La philosophie médicale de Descartes* (Paris: Presses Universitaires de France, 2006).

topos that Clauberg himself refers to the Stoics. In that stoic framework, bringing into account the art of medicine, Clauberg observes the problematic nature of the relation between theory and practice: “*Most physicians in medical practice observe what is written in [Galen’s] methodum medendi, and still they do not follow it to the act.*”⁷⁴⁷ *Most physicians decree (statuunt) that [Galen’s] methodum medendi should be observed in medical practice, but/ and still they do not do it* If philosophy has the destiny of acting as a medicine, what does Clauberg think about the maladies of the soul? The maladies of the soul arise on the epistemological soil:

*The maladies of the soul are errors, doubt and the rest of such previously mentioned imperfections, and logic was invented as its related medicine. [...] - first the causes of the maladies have to be investigated, especially if the “maladies [of the soul] are difficult to know, or are more rarely investigated”.*⁷⁴⁸

How are those maladies produced in the soul in the first place? Everything begins with the stage of childhood. For Clauberg what makes the soul ill are the parts of it taken by physical sensations and entities, and by that they remain in an infantile stage which is more directed to the body than to the soul. Hence, the medicine of the mind is first of all a hygienic process, trying to distinguish it in actuality from corporeal reality. In Clauberg’s understanding of Cartesian method, at least at the stage of initiation, we must put aside all that which is not mental. We must, in this sense, get rid of all that which is corporeal to remain only in the territory of mental dealings:

One cannot confront the cause of error in a better and accurate manner, than by Cartesian method, by which we set aside and take away all the bodies and all that which is corporeal, all that which has a relation with the body.

747 OOP II, 1159 (*Initiatio* V, §2, 33): “*Plurimi Medicorum in praxi medica methodum medendi observandam esse statuunt, et tamen non faciunt.*”

748 OOP, I, 770 (*Logica*, Prolegomena, Chap. I, §11): “*Morbi animi sunt errores, dubitatio, et reliquæ suprâ enarratæ imperfectiones, quibus ut medicina paretur, Logica inventa fuit. Priùs ergo illorum causas indagare par est, idque tantò diligentius, quantò animus corpore nobilior, quantòque illius morbi sunt cognitu difficiliores, aut certè rarius investigati.*”

*We do not consider all that, at least in the beginning of philosophy, as if it does not exist and never was, to the aim that we will not use it nor lean on it in any way, as long as we are occupied by the contemplation of the mind [in contemplatione mentis].*⁷⁴⁹

It is interesting to see that even in that mental sphere of activities, what is dominant are the semantic instruments that we discussed in Chapter 3.2. In that sense, even in the domain of spirit, we still have language, definitions and figures to work with to perform the medicine and pedagogy of the mind.

4.2.4. Ramist Education and Comenianism

Clauberg's pedagogical, methodical endeavour must be taken to be part of the Comenian movement which swept through northern and central-eastern Europe during the 17th century. In this framework, philosophy was integrated as part of an encompassing pedagogical project. The Comenian movement was begun by the Czech Calvinist philosopher, pedagogue and reformer, Jan Amos Comenius (1592–15 November 1670), who was more or less of the same generation as Clauberg. Comenius was a Ramist; he extended Ramus' revision of the arts into a comprehensive view of education from primary school onwards. Comenius' views on education develop in an egalitarian orientation similar to that mentioned above, in which the encyclopaedic spread of knowledge enables the beginning student to gradually know the chart of the world. Clauberg refers several times to Comenius throughout his philosophical writings,⁷⁵⁰ and his teacher at the Bremen Gymnasium, Gerard de Neufville, was a declared Comenian.⁷⁵¹ Ulrich G. Leinsle shows the importance of Comenius' thought to the development of Clauberg already in the earlier version of his *Ontosophy*, which

749 OOP I, 600–601 (*Exercitatio* IV, §25): “Huic errandi causæ non meliùs vel accuratiùs obviam iri potest, quàm methodo Cartesianâ, qua corpora omnia et quicquid corporeum est, quicquid relationem ad corpus habet, quatenus tale, seponimus ac removemus, haut aliter totum illud, initio quidem Philosophiæ, spectantes ac si non esset nec fuisset unquam, ut eo non utamur neque nitamur ullo modo, dum in contemplatione mentis defixi sumus.”

750 Comenius appears in the OOP about 30 times, which is relatively a lot relatively to other authors.

751 On Gérard de Neufville see in the first section of the introduction, regarding Clauberg's biography.

was directly influenced by Comenius' *Pansophia*.⁷⁵² Hence, it is not only Comenian metaphysics but Comenian pedagogy which one can clearly detect in Clauberg's writings.⁷⁵³ A middle man who was important to the relation between Clauberg's and Comenius' thought was Tobias Andreae, who was slightly older than Clauberg and his teacher in the Netherlands.⁷⁵⁴ The appearance of "Didactica" as a part of metaphysics is part of Comenian philosophy, and this continues to be the case with Clauberg.⁷⁵⁵ For Comenius, following the Ramist principles of didactics, metaphysics is the knowledge of general principles, and it is enough to know the basic structure of the world. *Metaphysics, hence, in the Comenian framework, is a pedagogical endeavour.* For Clauberg, moreover, as we saw in previous chapters, metaphysics is the exclusive gate to approach the knowledge of individual matters.⁷⁵⁶ From sense perception, which seems singular but is rather a first synthesis which is many times false, we move to an individual order of matters which is already verified and validated by the processes of self-estimation.

There is, in Clauberg's philosophy, similarly to Comenianism, an anti-elitist motivation trying to show that philosophy, and methodical rationality in general, is available for any person on the condition that he would dedicate himself to the processes of self-estimation. Truthfulness in what we know and what we do not know is, in this sense, enough to initiate our way towards philosophy. Different from Tschirnhaus, who is more bluntly elitist, for Clauberg, seeing the thinker necessarily as an inventor (in the Late Modern sense of producing new things) expanding the territories of knowledge and techniques, the task is not widening the field of knowledge but rather emending the existing one. This is deeply Ramist and Comenian in character. From that perspective Clauberg is committed to the Comenian pedagogical project, and he demonstrates in what manner Cartesian methodism is compatible with this framework. One should remember that Descartes was aware of the work of Comenius and found it *extremely*

752 Ulrich G. Leinsle, "Comenius in der Metaphysik des Jungen Clauberg," in Verbeek, *Johannes Clauberg*, 2.

753 Melena Maksimović, Jelena Osmanović and Aleksandra Milanović, "John Amos Comenius' contribution to the development of the didactic methodology," *Siedlce Comeniological Research Bulletin* 5 (2018), 89–104.

754 Andreae taught Clauberg in Groningen in 1646, when Clauberg defended his first Disputatio under the teaching of Andreae.

755 See Melena Maksimović and Sanja Sretic, "Principle of evidence of John Amos Comenius as a basis for development of pedagogical research techniques and instruments," *Siedleckie Zeszyty Komeniologiczne* 2019: 243–256.

756 Ibid., 3.

insignificant. Descartes' was given a copy of Comenius' *Pansophia*, and he determined that "nothing is given there."⁷⁵⁷ Comenius expressed critical stands regarding the Cartesian apparatus.⁷⁵⁸ Hence, one can view the Claubergian endeavour as mediating between these two projects which are both pedagogic in character but in two distinguishable manners.

4.2.5. From Bad Custom to Mental Habit

We come to understand that the Clauberg's method must be understood as a pedagogical endeavour placed within a clear pedagogical movement sweeping through Europe during the 17th century in the aftermath of Ramus and Comenius. Clauberg positioned himself in a unique corner of this pedagogical age; he integrated Cartesian methodism into the Comenian democratic demands. Cartesian methodism in this sense enhances the pedagogic urge that one finds constantly in the Claubergian corpus. As such, philosophy assumes explicitly a task of re-habitation of the mind. In the *Logica contracta*, Clauberg acknowledges the strictly Scholastic model of habitus, which leans on a disposition of the disciple. Logic is artificial; it leans on a disposition towards human rationality, but it must impose certain instructions and processes of acquisition and application which are non-natural and non-intuitive. We can be given a capacity from God or exercise and apprehend a certain capacity to do something.⁷⁵⁹ We know, however, that according to the Cartesian improvement of the theory of habitus, one must begin any process of habituation at a stage of de-habitation; this is the process of doubt which we described in former chapters; that is to say we must take off one habit and put on another. There is a great question in Descartes scholarship regarding whether Cartesian method can be regarded as a habitus. It is well known that in the *Regulae*, at

757 Erik-Jan Bos and J. Van de Ven, "Se Nihil Daturum – Descartes's Unpublished Judgement of Comenius's *Pansophiae Prodomus* (1639)," *British Journal for the History of Philosophy* 12, no.3 (2004): 369–386. See also P. Floss, "Comenius und Descartes," *Zeitschrift für philosophische Forschung* 26, no.2 (1972): 231–253.

758 Y. Belaval, "Comenius critique de Descartes," *Archives de Philosophie* 47/3 (1984): 2–25 (Bulletin cartésien XIII); U. Kunna, *Das « Krebsgeschwür der Philosophie ». Komenskys Auseinandersetzung mit dem Cartesianismus* (Sankt Augustin: Academia-Verlag, 1991).

759 OOP II, 915, §34: "Constantia et facilitas in operando, quæ rei jam natæ advenit, si quidem suo modo consummate sit, *Habitus*; sin inchoate solùm, *Dispositio* nuncupatur. Ita ist præceptore linguæ latinæ invenitur habitus loquendi, in discipulo potest esse dispositio. Sic Logica artificiali hic homo instructor est illo. Habitus vel à Deo *infusus*, ut donum linguarum in Apostolis Act. II, vel studio *acquisitus*, ut linguarum scientia in nobis. Germ. Eine vom Himmel eingagossene/ oder durch übung erlangte Fertigkeit etwas zu tuhn."

the beginning of the first rule, Descartes claims that his method is strictly differentiated from habit in that it aspires to be both unified and immediate in as much as the arts are essentially differentiated from one another and demand long practice and habituation.⁷⁶⁰ In this we see that the Cartesian mind gives us access to what can be viewed as an *automatisation of habitude*. This is an important stage in the development of the concept of habit, pushing this concept towards its later development in the 18th and the 19th centuries. Habit, from the viewpoint of the Cartesian method, must be condensed in a compact, facile and automated way so that the mind can quantify and repeat effortlessly its problems and their solutions in the least time possible.

In the first chapter (1.1), we presented the 16th-century occupation with the question of method. In the framework of that discourse, method is understood almost always explicitly and literally as a habitus. For Zabarella, for example, logic is understood as a *habitus instrumentalis*, as a *second nature* of the mind. Logic is the habitus of the knowledge of principles, and science is the *habitus of demonstration*. Alsted, in his *Philosophia digne restitua* (1612), talks about “hexiology,” the science of hexis. Georg Gutke, in his *Habitus principiorum seu intelligentia* (1625), sees *intelligentia* as a *habitus principiorum*. Theoretical habits are those that tend to comply with necessary things, and this theoretical habit, which is not innate but rather acquired, and tends to complies with the first principles.”⁷⁶¹ Hence, the terminological transformation was already underway when Clauberg entered the scene. Clauberg makes it clear that the construction of mental habit begins always from some crooked habit:

*Crooked habit means following that vicious habit of precipitated judging and following the anticipated opinions from youth. This detracts judgment from the right perception of things, since it does not permit that judgment conforms to perception and corresponds with it, as must indeed be arrived at, if we want to achieve the truth and be freed from error.*⁷⁶²

760 Descartes, *Œuvres X* ; Descartes, *Writings I*, 9.

761 Georg Gutke, *Habitus primorum principiorum, seu Intelligentia* (Berlin: Kallius et Rungius, 1625). The edition I consulted, found in Berlin, is unpaginated. See Section 1, chapter I: “De natura et constitutione habitus Intelligentiae, nempe Definitione, Divisione, objecto et causis dicti habitus.”

762 OOP II, 1199 (*Initiatio IX*, 43, C): “Prava consuetudo significat vitiosum illum habitum præcipitanter judicandi, & anticipatas juventutis opiniones sequendi. Hæc *detorquet iudicium à recta rerum perceptione*, dum non permitit, ut iudicium perceptioni respondeat & conformetur, quod omnino fieri debet, si velimus verum assequi & ab errore liberari.”

Judgment is detracted from by its effects in young children; instead, method must teach the student to correspond with real perception. Mental habit, then, works on the domain of judgment, and if one speaks of judgment, he speaks also of the will. From here it becomes obvious that method constitutes a taming of the will. Doubtlessly, this model *is related* to the Scholastic habitus and theory of virtue.⁷⁶³ However, the question is what the Early Modern period makes of this inherently Scholastic, medieval structure of habit. In general, within the Cartesian framework, the crooked habit is that of falling into error. The corrected, amended (*utopic*) habitus is the one of being infallible. Here is one of the various passages where Clauberg describes the crooked habit of the error-prone mind leaning on prejudice.

Regarding prejudices, their significance [...] there are different kinds of these: one is really (revera) of such a kind/ like that (tale), the other a kind of fiction (Note the ~~origin of the~~ word feign [fingam]), the first one is old, and because of its long custom [this prejudice] becomes a habit, the latter one (posterius) is only assumed [assumitur] for some time from an hypothesis (Note the word for a while [aliquamdiu]) and does not therefore produce a habit (nec gignit propterea habitum). Rather it is introduced (introducitur) to abolish the wrong habit of the precedent prejudices, as these words indicate: vicious custom of my judgment detracts me from the right perception of things.⁷⁶⁴

The work of abolishment that Clauberg indicates as a process of de-habituating is laborious and takes time. This is because the imagination, along with its mixtures, false syntheses and prejudices, helps us enjoy the world and has done so for centuries. These mixtures have their origin, according to Clauberg, in our bodies, that entertains us and gives us rest from the labour of the mind (a paragraph already cited above):

763 See for example in Rolf Darge, *Habitus per actus cognoscuntur: Die Erkenntnis des Habitus und die Funktion des moralischen Habitus im Aufbau der Handlung nach Thomas von Aquin* (Bonn: Bouvier, 1996).

764 OOP II, 1199 (*Initiatio* IX, §43, A): “Praejudicia de quorum ponderibus æquandis hîc sermo est, diversi sunt generis: unum est revera tale, alterum fictivum (nota verbum, *fingam*) prius antiquum est, et propter longam consuetudinem transivit in habitum, posterius ex hypothesi solùm assumitur ad tempus (nota verbum, *aliquamdiu*) nec gignit propterea habitum, sed ad vitiosum præcedentis præjudicii habitum tollendum introducitur, quod his indicatur verbis: *donec nulla amplius prava consuetudo iudicium meum à recta rerum perceptione detorqueat.*” [Descartes, First meditation].

But it is laborious

As our mind, as in the stage of birth, is so naked and rushes to judge, that it cannot in a facile way be controlled: To the customs of life, as in antiquity. We enjoy the freedom of imagination, that the common philosophy and common reason use consistently. Sleep, says somewhere Scaliger in Exercit, (1557. Exotericarum exercitationum liber XV in Cardanum de Subtilitate) of the body that is made by God, not alone to the re-creation, but also to the freedom of the soul, over and over again at home, when he gets to use this free time as evasion, by means of sleep. The same in death.⁷⁶⁵

Instead, we must perform the labour of abolishment and self-estimation in order to be invited into the field of philosophy. The customs of life must be examined one by one in order to throw away all that which is non-essential and non-veridical; this process is one of labour in as much as leaning on our customs and habits is the state of rest and negligence. However, the question is, How do we pass from the stage of labour to the stage of easiness, the stage at which our knowledge is always ready to serve the tasks of reason?

Bad Habit

Bad habit signifies a vicious habit to hurry to judge and to anticipate the sequences of juvenile opinions. [One has] to turn this deformed judgment to a righteous perception of things, not permitting, as in perception when judgment responds and conforms, that is all we need, if we want to assert the truth and to be liberated from error.⁷⁶⁶

765 OOP II, 1203-1204 (*Initiatio IX*, 49): “Quia mens nostra ab ineunte ætate tam prona et præceps est ad iudicandum, ut non possit se facile cohibere : *Ad consuetudinem vitæ*, scilicet antiquæ. Imaginaria libertate fruimur, quatenus in vulgari Philofopia & vulgari rationis usu persistimus. De somno alicubi Scaliger in Exercit. quod à Deo factus non solùm ad corporis recreationem, sed etiam ad animæ libertatem, cùm servus eo tempore liberi sit atque etiam domimus evadat aliquamdo, per insomnia. Sic in morte. Vid. Cocc. In Job III, I, pag. 56, fin.”

766 OOP II, 1199 (*Initiatio IX*, §43) : “Prava consuetudo C. Prava consuetudo significat vitiosum illum habitum præcipitanter iudicandi, et anticipatas juventutis opiniones sequendi. Hæc *detorquet iudicium à recta rerum perceptione*, dum non permittit, ut iudicium perceptioni respondeat et conformetur, quod omnino fieri debet, si velimus verum assequi et ab errore liberari.”

Indeed, the eminent interpreter of Descartes, Jean Laporte, poses this uncommon view that there is an intimate connection between Descartes' method and the notion of habitude: "Descartes' method is an ensemble of habitudes to be taken by each of us, following the example of Descartes, according to analogue ways to those the efficacy of which he personally felt."⁷⁶⁷ Habit is to some extent a public, social matter, but it is in the first place a very private matter given to the design of the individual possessing it. Each thinker, philosopher and initiating philosopher needs to shape for themselves their own philosophical habitudes. This essentially personal choice must be elaborated, extended and embedded in the philosopher's work itself. Descartes always presents his method as a personal cluster of mental habitudes which he has endeavoured throughout his life to place into order. Cartesian method itself, in the manner that Laporte helps us to understand, is a proposal of these clusters of mental habitudes, produced and developed by Descartes, with which each of us can decide our way to adopt and acquire. Method remains always a personal matter which is only partially transferrable. This is why each acquisition of a method is always a synthesis, a composition of several mental habits, and each method is always particular and individual. Indeed, Clauberg, one philosopher who took the methodical habitude and tried to find its particular conformity with the Comenian orientation, was very much aware of this process of fitting habit to a certain carrier:

*Habitus is the way in which clothing or something like clothing is linked to the body [corpori juncum est]: so habitus can be said to be clothed, armed, bearded (...) And in truth habitus is nothing else than an external denomination (externa denominatio) from cloths, arms, etc. Not the cloth or the weapon itself, but the very carrying of the cloth or of the weapon.*⁷⁶⁸

Again, Clauberg uses his sensitivity to words and their etymologies. Habit is also used with the meaning of a cloth, something which dresses the body; even more specifically, it is not the instrument itself but rather the carrying of the instrument, this accessory.

767 Jean Laporte, *Le rationalisme de Descartes* (Paris: Presses Universitaires de France, 1945), 34: "La méthode de Descartes, c'est un ensemble d'habitudes à prendre par chacun de nous, à l'exemple de Descartes, d'après des moyens analogues à ceux dont il a personnellement senti l'efficacité."

768 OOP II, 915 (*Logica contracta*): "§39: *Habitus* est modus, quo vestis aut aliquid instar vestis corpori juncum est: ita vestitum, armatum, barbatum esse dicuntur habitus, [...] Et revera nihil aliud est habitus, quàm externa *denominatio* à vestibus, armis etc. Nicht die kleider oder wafen selbst; sondern das Unhaben der Kleider- das Unhaben der wafen- weswegen einer gekleidet-gewafnet [...]"

Method is a process of taking off old clothes and putting on new ones which are better equipped to handle the truth of things. By this we can indeed return to one of the questions brought up in the introduction to this present work: What is Cartesianism? Following Clauberg's example, we suggest indeed that Cartesianism may be understood as a radical proposal for the rational *personalisation* of philosophy. Cartesianism is in this sense a philosophical call to initiating philosophers, young and old, to produce a method, that is to say to produce in a personal, privatised manner a (particular) mental habit. This demands taking on the responsibility of educating oneself according to one's common sense, the responsibility of being an *autodidact*.

4.2.6. Tschirnhaus' Understanding of the *medicina mentis* : A Follow-up to Clauberg?

As stated above, a few decades after Clauberg's death, one finds the work of Walther von Tschirnhaus as an important development on the trail of the Early Modern art of invention. In the *Medicina mentis*, first published in 1687,⁷⁶⁹ Tschirnhaus aims to make from logic, or rather from his own understanding of it, an art of therapy of the mind. One should see, however, that Tschirnhaus' initial intentions are quite different from those of Clauberg. If for Clauberg the target is in its essence an extended version of a the Ramist *usus*, for Tschirnhaus there is already a new horizon in the methodical explorations: *pleasure*. For Tschirnhaus, the enjoyment, extension and adornment of our lives provides the motivation for determining and practicing the methodical art of invention. This supplement of delectation for method is almost never found in the works of the Calvinist Clauberg; it is like a superficial differentiation, and it seems to betrays quite a lot about the passage from the first generation of Cartesians to that at the end of the century. If in Clauberg's moment there is a sense of urgency to the adoption and practice of Cartesian method, in the next generation we see already a certain *ease* which characterises the usage of Descartes' prescriptions. At this stage Cartesian *medicina mentis* arrives no more as rescue for the mind but rather as an aid for the mind's

769 See Ehrenfried Walther von Tschirnhaus, *Medicina Mentis, sive aris inveniendi praecepta generalia, editio nova* (Lipsiae: Apud Thomam Fritsch, 1695); For a French translation see Ehrenfried Walther von Tschirnhaus, *Médecine de l'esprit ou préceptes généraux de l'art de découvrir*, trans. Jean-Paul Wurtz (Paris : Ophrys, 1980).

nourishment and nurture. In Tschirnhaus as in Clauberg we find the importance of *individuation*. Both for Clauberg and Tschirnhaus, method should serve to adjust the starting point of an inquiry to *one specific person*.

At the opening of the *Medicina mentis*, we read in the title: “*Pars Prima, Qua occasione et Methodo inciderum in Viam, quam praestantissimam judico, omnium quas in hac vita inire licet, quaeque est Inventio Vertiatis per nos ipsos.*”⁷⁷⁰ The style of this sentence is rather obvious: The work is directed to the establishment of the ability to find “the truth by ourselves” through the establishment of judgment of all that comes before us in this life. In *Medicina mentis* Tschirnhaus begins with the distinction between good and bad. This is extremely important. The beginning here is not the pure preparation of the mind but the right orientation and extension of the mind according to the value of happiness and fulfilment.⁷⁷¹ “I have hence established by those considerations this solid and durable foundation, that is to say a certain and incontestable knowledge upon which I edified all my happiness, in the measure when it is accessible by the natural light.” It is hence clear that the target of method in Tschirnhaus is to enable enhanced mental health, which I do not think was either conceived of nor achieved by Clauberg. Clauberg was much more concentrated on the preparatory and prophylactic level of the health of the mind.

4.2.7. *Medicina mentis* and *ars inveniendi*

Tschirnhaus’ *medicina mentis* constitutes one of the central phenomena of passage from Cartesian methodism to Spinozist systematics. The *medicina mentis* of Tschirnhaus is essentially a version of the *ars inveniendi*, the art of invention that, as we have seen above, is the art of finding principles in the analytic aspect of the understanding of method in the 16th century.⁷⁷² However, Tschirnhaus interprets already the art of invention as the art of *creation of things*; that is to say he understands invention in the later modern sense having to do with creativity and production. In this sense he deviates from the original meaning of invention, which is strictly analytic, and uses it in the direction of a synthetic sense of construction and formation of new things.

770 Tschirnhaus, *Medicina mentis*, 1 ; Tschirnhaus, *Médecine*, 46–47.

771 From Tschirnhaus, *Medicina mentis*, 6; Tschirnhaus, *Médecine*, 49.

772 C.A. Van Peursen, “E. W. Von Tschirnhaus and the *Ars inventendi*,” *Journal of the history of ideas* 54, no.3 (July 1993): 395–410.

As did Clauberg's writings with a few of his writings, Tschirnhaus published his *Medicina mentis* in Amsterdam, which was throughout the 17th century a centre of publishing for the Reformed faith. Hence, we are dealing with the same axis of German Cartesianism working closely with the Dutch intellectual milieu. As always in the Ramist context, the aim of philosophy also for Tschirnhaus is practical,⁷⁷³ and the art of invention is meant to "obtain a therapeutic device for the human mind."⁷⁷⁴ In Tschirnhaus we see also a search for "unknown truths" (*detegendi incognitas veritates*), as the subtitle of the first edition of the *Medicina mentis* (1687) states. Tschirnhaus makes a rather mystical turn in the understanding of the Aristotelian dictum presented in the *Physics* that we discussed in the opening chapters: moving from things that are better known to us to those that are better known by their nature. In Tschirnhaus there is already no real usage of syllogism in the presentation of the logic.⁷⁷⁵ Instead, Tschirnhaus emphasizes the importance of the natural light in the institution of the firm fundament of the felicity of the mind:

*To constitute that fundament in a firm and stabile manner, or a knowing which is certain and indubitable, that edifies all the felicity that the natural light can acquire.*⁷⁷⁶

In Clauberg we are not led by the search for the enlarging of the Good but rather by the search after the capability to be truthful. We are not directly going into the practice of things but are remaining in the contemplative realm. Also his doubt is not the general and 'vulgar' one, but rather only regarding the principles of things:

He [Descartes] does not talk about these things that are of a doubtful truth in the view of everybody, but rather about those things that are considered as very true, be it that they are the principles that we thought we understood conclusively, or the conclusions that we believed we knew.

Furthermore, out of intelligence and science [scientia] one composes wisdom [saptientia], as you can see in my Logic question. Art and skill [arte et

773 Ibid., 396.

774 Ibid.

775 Ibid., 406.

776 Tschirnhaus, *Medicina mentis*, 6: "Firmum itaque ac stabile constitui hisce fundamentum hoc, seu certam quandam et indubitam notitiam, cui totam meam felicitatem, quatenus ea lumine naturali potest acquiri, inaedificavi." For the French translation, see Tschirnhaus, *Médecine*, 48-49.

prudential] (together they complete the five (quinque) intellectual habits that ARISTOTLE explains (enarratos) in 5. Ethics.), are not the things our author [Descartes, a.e.] is concerned with here, in order to call them into doubt, because both are concerned with making and doing, but philosophy should only concentrate on contemplative things.⁷⁷⁷

Hence, Clauberg understands Cartesian philosophy to be located beyond the limits of practical *sapientia* in the concentration on contemplative things. For him method and philosophy are not synonymous with intellectual habit, but rather they go above this to a certain realm of contemplative habit, be they as individualised as they may. Also within the contemplative habit, in Clauberg we do not proceed into the mysterious, hidden, supra-rational truths, but rather we stay within the borders of reason:

He [Descartes] does not talk about these things that are doubted by everyone, but rather about those things that are considered as very true, be it that (sive) they are the principles that we thought we understood conclusively, or (sive) the conclusions that we believed we knew. [...] From understanding (intelligentia) and knowledge (scientia) wisdom (sapientia) is furnished, see Ethics, q. 186 (...) Art and skill [...] are not what our author passes into doubt, since both dwell around the things that have to be made or done, the philosopher however dwells around contemplative things.⁷⁷⁸

The work of proto-philosophy, hence, is not only a work of meta-observation; it is actually a work of *preparation*. We see in the coming chapter that this preparatory stage

777 OOP II, 1182 (*Initiatio* IX 10, B): “Non loquitur de iis quæ dubiæ veritatis sunt apud omnes, sed quæ maximè vera putantur, sive sint principia, quorum putavimus nos habere *intelligentiam*, sive conclusiones, quarum *scientiam* nobis esse credidimus. Ex intelligentia autem et scientia componitur *sapientia*, vide Log. meæ q. 186. *Artem et prudentiam* (hi enim complent quinque habitus intellectuales Aristoteli 5. Ethi. enarratos) non respicit hîc Author noster, ut eas in dubium trahat, quia ambæ versantur circa res faciendas et agendas: atqui Philosophus nunc solùm versatur circa res contemplandas.”

778 OOP II, 1182 (*Initiatio* IX, §10, B.): “Non loquitur de iis quæ dubiæ veritatis sunt apud omnes, sed quæ maximè vera putantur, sive sint principia, quorum putavimus nos habere *intelligentiam*, sive conclusiones, quarum *scientiam* nobis esse credidimus. Ex intelligentia autem et scientia componitur *sapientia*, vide Log. Meæ q. 186. *Artem et prudentiam* (hi enim complent quinque habitus intellectuales Aristoteli 5. Ethi. enarratos) non respicit hic Author noster, ut eas in dubium trahat, quia ambæ versantur circa res faciendas et agendas: atqui Philosophus nunc solùm versatur circa res contemplandas.”

makes perhaps the first step in the direction of the Kantian critical project. What Clauberg seeks throughout his corpus is the foundation of philosophising:

*Our philosopher, however, when he wishes to build the temple of wisdom or a very high tower, must dig deep into the sand (that is to say, the mind that is besieged by prejudices), in order to finally arrive at the stones and clay, that is to say, a firm foundation [hoc est ad fundamentum firmum].*⁷⁷⁹

Reaching the foundation not only enables the righteous beginning of the process of learning; it also assures the emendation of the form of growth of the undisciplined branches of the tree of knowledge. Hence, this pedagogical process for Clauberg is also a process of healing, a healing of one's mind through meetings with observed things. It is the truth of things that must be attained as the basis of the healthy *habitus* of the mind.

4.2.8. Hidden Truth (Tschirnhaus) versus the Truth of things (Descartes and Clauberg)

Hence, from a certain point of view, it seems that Tschirnhaus' *Medicina mentis* is closer to the explicit understanding of method as a therapeutic process in which a specific character is nourished and developed. Clauberg keeps quite distinct the rift between method and metaphysics on one hand and practical wisdom on the other hand. Clauberg and Tschirnhaus have quite different developmental models. Tschirnhaus is constantly seeking a development of going-beyond: In the first place the piercing of phenomena in search of hidden truth and in the second place, underlined in the corpus itself, the widening of knowledge and invention of new things.⁷⁸⁰ For Clauberg the task is above

779 OOP II, 1174 (*Initiatio* IX, §2, L.): “Noster verò Philosophus cùm vellet sapientiæ templum ac turrim maximæ molis erigere, tam altè fodere in arenoso solo (id est, mente praejudiis obsessa) debeat, ut tandem ad saxum vel argillam perveniret hoc est ad fundamentum firmum. Cumque expeteret sibi veram ac solidam scientiam, quæ animum redderet, quantum fieri potest, immutabilem (hunc enim scientiæ fructum Philosophi omnes agnoscunt) necessariò debuit Philosophiam ab immotæ veritatis principio clarissimo accessere. Adeo ut tam necessaria haec esse, ut sine ipsis nihil unquam firmum et stabile in Philosophia statui possit, rectissimè sibi persuaserit. Resp. Quvcvart. *Ad ea quæ Theologos*, etc.”

780 Tschirnhaus was indeed also the inventor of porcelain technique. See S. Agathopoulos and C. M. Queiroz, “The Discovery of European porcelain Technology,” in *Understanding people through their pottery*, edited by M. I. Dias, M. I. Prudencio and J. C. Waerenborgh (Lisboa: Instituto Português de Arqueologia, 2005), 211–215.

all preparatory: The therapeutic pedagogy that he offers to his reader means becoming an adult philosophically. This means, in the first place, making sure that one's starting point is stable and proper. What does it mean to have a stable and proper beginning? We learned in previous chapters that a proper beginning means having gone through a preliminary process of sifting, of analysing a given synthesis and reaching a *second synthesis* and a *second analysis: the production of principles and the establishment of their meaning*. However, what happens in Clauberg's methodical suspension is that the initiated philosopher endures on the threshold. Hence, if for Tschirnhaus the therapy is also poietic and productive, Clauberg adopts a more overtly conservative stance in which reality is left as it is, and invention and genesis are kept for the crystallisation of our working principles. This also perhaps supports the clear difference between Tschirnhaus and Clauberg: In as much Tschirnhaus proceeds to mathematics and scientific invention, Clauberg rests fully within the humanist working frame. We see that most of what happens in Clauberg's thought occurs as a preparation process for the beginning of thought.

Although Tschirnhaus undoubtedly takes his philosophical tools from a similar tradition to that from which Clauberg takes his, one should nevertheless point to an extremely different character of the two German, post-Cartesian methodist thinkers. If for Clauberg the initiation to philosophy is inherently pedagogic and is primarily directed to finding one's own place within tradition, for Tschirnhaus the *ars inveniendiis* means first and foremost the generation of new conceptions. Tschirnhaus in this sense is already closer to the 18th-century Enlightenment where the power of invention is seen, for the first time perhaps, in a purely active, liberating, generative and creative role. In Clauberg's mental medicine, it is not the invention of new ideas but rather the emendation of one own's mind which is sought. This returns us to the differentiation between the first, second and third generations of Cartesian influence in Germany. In the first and second generations, it was the examinative, cautious nature of Cartesianism which was adapted from Descartes' thought. In the second generation, drawing towards the end of the 17th century and passing to the 18th century, it is the creative, explorative and technical core of Descartes' thought which is adopted and developed. In both Clauberg and Tschirnhaus, the medicine of the mind is accomplished through a revision of logic, which is no longer conceived exclusively through the syllogism, but is rather a reconstructed version of *an art of memory: the mind remembering itself*. The question asked in both cases is how to retain that which was studied. In line with the Ramist

tradition, for both Tschirnhaus and Clauberg the principal aim of philosophy rests, at its far end, in practicality.⁷⁸¹

We see that Tschirnhaus and Clauberg share a common motivation, to establish the medicine of the mind, and though both were influenced by Cartesian philosophy, in the 30 years that separated them, a whole new generation of methodism arose. If for Clauberg the motivation is emendation of the mind itself, for Tschirnhaus the aim is much wider: Method is not only related to the invention of new things and to the widening of the worlds of knowledge but also to the joy and indulgence of the subject. In this sense, again, we see that the synthetic kernel of method that we found already in Descartes and Clauberg is amplified in this third generation of Cartesianism. Based on this it is clear why Tschirnhaus emphasises in the last part of the *Medicina mentis* that the best results in the development of method are achieved when one begins from one's own inclinations, dispositions and interests. This individualist orientation of the medicine of the mind is much more moderate in Clauberg's method. Though the "me" appears in his method as the one carrying all previous knowledge, obliged to examine and estimate itself, there is no question in Clauberg regarding the expression of one's own tendencies and dispositions. In that sense Tschirnhaus is also more of a naturalist than Clauberg: For Clauberg it is the task of education to make the mind a clean state so it can begin to learn the truth of things, and in this a strong ingredient of industry and artificial processing is needed. For Clauberg the matter at hand is to bring to fruition the nature of the thinking and productive self. Hence, if in the case of Tschirnhaus we have a much freer conception of the medicine of the mind, for Clauberg the emendation is related clearly with discipline, pedagogy and hygiene.

4.2.9. The Extension of Knowledge versus the Estimation of Knowledge

In as much as for Tschirnhaus it is obvious in the framework of the *Medicina mentis* that the method must be *applicable*, that is to say the implications of method are the extension of knowledge and human dealings, for Clauberg there is a threshold which always remains as a border between contemplation and usage; however, this usage is appropriate to the philosophical soul: "It is not that one does not have usage, as are the

781 C. A. Van Peursen, "E. W. Von Tschirnhaus and the Ars Inveniendi," *Journal of the History of Ideas* 54, no.3 (July 1993): 396.

fundamentals of all certain cognitions, those that the philosopher is capable of.”⁷⁸² The bottom line of the methodological work for Clauberg is to enable the education of the philosophical person, and the intended usages of this education are only those that the philosopher can use. In the process, we pass from the level of particulars to the level of universals or “generals.” Clauberg emphasizes that he laboured to retain and emphasize Descartes’ own terminologies in explaining his philosophy:

*The author proceeds gradually from the particulars and composites to things that are more universal and simple (ad magis universalia & simplicia), because of this reason I took care (curavi) that these words of his: particulars, generals, then simples and universals, were printed in another type, in this manner I wanted to show to the reader (Lectori exhiberi volui) also the other [words] I thought (judicavi) needed special attention (imprimis attendenda), for the same reason to be distinctive by [the used] types.*⁷⁸³

Hence, the direction of thought that Clauberg takes is to attain and design types. This entails both a Zabarellist and a Ramist conception of method: On one side the conception is that one begins the inquiry with the task of identifying particular matters, either in oneself or in the world; on the other side we have the Ramist tendency to recruit all our efforts into finding the right definition of a matter-at-hand, based not on sense perception but rather on its precise and verified meaning within an already verified system of classification. However, in his initiation the philosopher must see how the most general types are brought to application in this or that individual case:

782 OOP II, 1156-7 (*Initiatio* V, §23): “Et à communi usu remotæ. 23. Non quòd usum non habeant, cùm sint fundamenta omnis certæ cognitionis, cujus in hac vita capax est homo Philosophus ; sed quòd proximè non faciant ad res civiles neque ad victum et sustentationem corporis, ut aliæ artes, circa quas ut plurimum versari solent homines, quo sensu de *Metaphysica* dixit Aristoteles lib. I cap. 2. *eâ magis necessarias esse cæteras, sed tamen nullam meliorem, meliorem, inquam; in ordine ad animi vitæque intellectualis perfectionem, quam susque de que habent, qui argumentis ab honesto et jucundo spertis eas tantum artes sectantur, quæ ab utili commendantur.*”

783 OOP II, 1188 (*Initiatio* IX, §23, A): “Procedit Author gradatim à particularibus & compositis ad magis universalia & simplicia, qua de causa hæc illius verba, *particularia, generalia, adhuc magis simplicia & universalia, aliis typis describenda curavi, quemadmodum & alia, quæ imprimis attendenda judicavi, similem ob causam typis distincta Lectori exhiberi volui.*”

*Eye, head, hands and body; Of course, humans are generalities, that is to say, universals. In respect of specific eyes, hands, etc., that I myself could have, hence to that individuum and to this man, which are referred to species and to men.*⁷⁸⁴

We return to that other empiricism of Clauberg in which what is sought is the best set of models to approach particular cases addressing particular matters. The movement between the particular exemplar and the general concept is consistent in the Claubergian methodical framework.

At the far end of Claubergian methodical habituation, we see the attention given to civic society, which constituted a constant and organic part of Ramism and Comenianism. For example, Clauberg addresses the cultural differences in dressing and eating to which one needs to sometimes adjust. In this we must also use our capacity to doubt, but still we need to accommodate ourselves to the customs of the culture in which we are found:

*Examples regarding matters relating to work, food and clothing. Sometimes Expert craftsmen doubt whether a work of art [opus aliquod] is created rightly, yes indeed, they know it must be made in another way, and still they are making and constructing in that way, otherwise they would not be able to sell [their products]. ~~De~~ We doubt whether this or that way of dressing is enough to protect our bodies and good-looking [ornandum appositus], whether an out-dated form of dressing is not preferable, and still we are dressed in such a way, that others will not laugh at our strange appearance [peregrino habitu]. In taking in food, we adhere to the custom of the region in which we live, and yet often we doubt whether the body is indeed well nourished.*⁷⁸⁵

784 OOP II, 1188 (*Initiatio* IX, §23, B): “Oculi, caput, manus, corpus, scilicet humanum, sunt *generalia*, hoc est, univiersalia respectu talium oculorum, manuum etc. quales ego me puto habere, nam hæc ad individuum & hunc hominem, illa ad speciem & hominem referuntur.”

785 OOP II, 1159 (*Initiatio*, V, §35): “Exempla in rebus ad *opificia*, ad *victum et amictum* pertinentibus. Dubitant quandoque periti artifices, an rectè sic fiat opus aliquod, imò sciunt alio modo facbricandum esse, et tamen sic faciunt et fabricant, quòd aliàs vendere non possent. Dubitamus, an hic aut ille vestiendi modus satis sit ad corpus tuendum et ornandum appositus, sit nè antiqua amiciendi forma præferenda, et tamen sic vestimur, ne peregrino habitu incedentes derideamur ab aliis. In cibis assumendis tenemus morem illius in qua vivimus regionis, et tamen sæpicule dubitamus, num corpori conducatur.”

This general attitude regarding accepted habitudes is that which we referred to above (3.1.4) as hypothetical doubt. One must learn the habits and customs of the culture in which one works and adapt to them; however, one must maintain a permanent preparedness to be otherwise convinced regarding these habits.

All the above leads us to suggest a definition for the Cartesian concept of *generosity* appearing famously in the *Passions*. There this virtue is defined as the capacity of man to estimate oneself to the highest degree which is legitimate according to reason, and it includes the acknowledgement that the only thing which belongs to me is the free disposition of my will and that the praise or blame that might be given to my thought regards less the execution of the acts and more in the inner feeling of a firm resolution to use my will rightly, that is to say to have the will for enterprise and execution of all the things are judged as being best to perfectly follow virtue.⁷⁸⁶

Clauberg refers to generosity only in passing; these references, however, show a clear acknowledgement of the Cartesian sense of generosity. Clauberg follows Descartes and refers to generosity as a good will, for example, “We appreciate ‘Greatness’ either in our own self, when the case is justified, in the same manner as the good will, or Generosity; or unjustified, as in the form of the body, as in superbia, arrogance.”⁷⁸⁷ In another place, also addressing the conjunction between body and mind and giving account of their effects, Clauberg mentions the Cartesian moral concept of generosity, and cites directly from the Latin translation of the *Passions of the Soul*.⁷⁸⁸ In this article 182 of the *Passions*, Descartes describes the manner by which the generous is able to view not only the events of the world and other men, but also one’s own soul, as in a theatre, using a distanced point of view, though, as in theatre, one can identify or feel empathy with the suffering figures, still some part of the soul rests intact. Again Clauberg joins Descartes in a rather Stoic interpretation of moral virtue. This position

786 See Andras Dekány, “Estime de soi et respect chez Descartes,” *Le Portique* [En ligne], 11 (2003), put online 15 décembre 2005, consulted le 25 mars 2021. URL: <http://journals.openedition.org/leportique/560> ; DOI : <https://doi.org/10.4000/leportique.560>.

787 OOP I, 205 [*Corporum viventium*, §1006]: “Magnitudinem aestimamus vel in nobis ipsis, idque ob causam justam, cujusmodi est bona voluntas, unde *Generositas*; aut injustam, cujusmodi est forma corporis, unde *Superbia, hochmuht*.”

788 OOP I, 257 [Conjunctio, §6]: “De generosis quidem viris ita Cartesius *Passion. art. 187. Generosiores et qui sunt animo fortioti, ita ut nihil mali sibi metuunt et se supra fortunæ imperium statuunt, non carent commiseratione, cum vident infirmitatem aliorum hominum et eorum querelas audiunt. Pars enim est generositatis bene velle unicuique. Verum hujus commiserationis tristitia amara non est, sed instar ejus quam producunt casus tragici, qui in theatro repraesentari videntur, magis est in exteriori et in sensu, quàm in ipsa anima, quæ interim fruitur satisfactione cogitandi se defungi suo officio dum afflictorum casu afficitur.*”

of observation of things as in a dramatic play is found also elsewhere in Descartes.⁷⁸⁹ However, in the *Passions*, in the article that Clauberg quotes, Descartes goes another step further with the theatrical metaphor and places the tragedy in one's own soul. It is through the scrutiny and demands of reason that life circumstances can be played out within our souls in a manner which leaves us intact and stable when we happen to attain the virtue of generosity.

To summarise, if we place the Claubergian references beside of Descartes' definitions, generosity is expressed in the first place out of a proper estimation of the self, which is the establishment of a certain state of the mind in which our capacities are rightfully evaluated and measured to the highest degree our reason allows.⁷⁹⁰ In Descartes generosity is the manner of knowing what I can do and how I can do it, what *is in my power*. If we take this to the epistemological level, generosity is the estimation of what is and what is not in my power to know; it is an act of humility and of self-encouragement at the same time. However, if I can estimate what is in my power to know, then I can also estimate what is less in my power to know. Method in this sense is exactly the *measure* between the better known and the lesser known, or a measure between that which is better known to us and that which is better known for and by itself.

4.2.10. Another Empiricism: Clauberg's Aesthetic Artificialism

If until now we have tried to show the synthetic destination of Cartesian method in the works of Clauberg, we would like to return to the medical nature of synthesis and think about the manner by which Cartesian method was understood to be a kind of an *art of habilitating* the mind. This art has several parts: hygiene (negative use of judgment), putting-in-shape (what we called figuration, customising (positive judgment) and applying (understanding).

789 Letter to Elizabeth, January 1646 (*Œuvres* IV, 355; *Writings* III, 283): "[...] nous pouvons empêcher, ... que tous les maux qui viennent d'ailleurs, tant grands qu'ils puissent être, n'entrent plus avant en notre âme que la tristesse que y excitent les Comédiens, quand ils représentent devant nous quelques actions fort funestes; mais j'avoue qu'il faut être fort philosophe pour arriver jusqu'à ce point."

790 On generosity see Geneviève Rodis-Lewis, "Le dernier fruit de la métaphysique cartésienne : la générosité," *Les études philosophiques* 1 (1987): 43–54; Lisa Shapiro, "Cartesian generosity," *Acta Philosophica Fennica* 64 (1999): 249–276.

What kind of a habitus do we encounter in the Claubergian version of the installation of method? The suggestion here is that the habitus that Clauberg offers us brings the mind into a healthy state and maintains it this way. What is this healthy state of the mind? What does it mean to hold one's mind in shape? I think the former chapters helped us understand better what are the ingredients of mental health, at least in the framework of Claubergian methodism. *A healthy mentality is a one which can approach life with a readiness of understanding.* It is a mind which knows how to read, configure, diagnose and use the situation in front of it, that is to say the *matter at hand*. In this sense a healthy mind is a realist mind; it is a mind able to cope with that which it inspects under the figural constrains discussed in Chapter 3.2. Clearly, a certain Aristotelian model of ethics rests in the background of much of what Clauberg suggests constructing in the process of the initiation of the philosopher:

*The teaching of Ethics following Aristotle prescribes a long recession from one's own vices and [bad] tendencies, from which the voluptuous tendencies develop; to arrive at a mediated position and to realize it, as a distorted line is flexed and made straight.*⁷⁹¹

The model is one of emendation, of constructing a spinal column of the mind, a set of well-established types with which each individual can meet the matters of reality in a well-balanced manner. We have also to define what the medicine of the mind is that developed in this thread of methodism: It is Empiricism again, a rather cautious and hesitant empiricism in which the matters given by the senses are taken as reliable only until repudiated:

*Prudence of Philosophy being that regarding any plain consideration of the senses, as long as we do not bluntly negate it, we can still rely on it to some extent. But the first of all the principles of human cognition, which supports metaphysics, must be such that we can plainly consider them (otherwise they would not be metaphysically certain, and the foundation would also be less certain) and therefore they lack the principles of the senses.*⁷⁹²

791 OOP II, 1128 (*Initiatio*, praefatio, §28): “Ethici docent ex Aristotele, longissimè recedendum esse ab eo vitio ad quod sumus procliviores et ex quo plus voluptatis percipimus, ut ista ratione faciliùs ad id quod medium est perveniamus, eo modo quo ligna distorta flexione recta fiunt.”

792 OOP II, 1184 (*Initiatio* IX, §11): “Prudentiæ scilicet Philosophicæ esse ait nunquam *planè* considerare sensibus, non interim negat nos iis aliquo modo posse sidere. Sed quia prima omnis humanæ cognitionis principia, quæ suppeditat Metaphysica, debent esse talia, ut iis possimus *planè*

We need to move, with the help of the medicine of the mind, from matters of the senses to principles of the senses and then to the principles considered for themselves plainly (*planè*), without the particularities of sense perception. Hence, in the last phase, the initiation of the philosopher is a re-education, a habilitation, of the senses in which sense perceptions are given as the starting but not the end point. The end point is proactive interference in the *aesthesis* (in the Greek sense of αἴσθησις),⁷⁹³ the perceptual capacities of the human being and the first contents of the soul. Let us now proceed to the conclusion of this project, in which the more speculative, radical consequences of this artificial aesthetics are traced.

5 : Conclusion

Method as restoration

considerere (aliàs enim non erunt Metaphysicè certa, multo minùs omnis certitudinis fundamenta) iccirco sensus pro talibus principiis haberi nequeunt.”

793 Immanuel Kant still retained this sense of the aesthetic, in his first *Kritik*, as in the *Die transzendente Ästhetik*.

5.1. Methodical restoration; 5.2. Restoration of innate ideas; 5.3. The order of matters as a guarantee; 5.4. The principle of non-deception and matters as occasions; 5.5. Returning to Zabarella's concept of *regressus*; 5.6. The Spinozist criticism of Cartesian method; 5.7. Method as anamnesis; 5.8. Going into the core of things and Clauberg's limited Rationalism; 5.9. Clauberg between Spinoza and Tschirnhaus: The reinvention of the 'transcendental?'; 5.10. The duration of method and the methodical virtual

That operation [...] which arrives at the artificial recomposition of the thing, in an approximate movement, an approximate imitation, creating its practical equivalent, we called analysis. We have said that analysis was the habitual process of consciousness, a one which is normal to extra-philosophical consciousness, because it is not absolutely normal to philosophize. Analysis is the habitual process of consciousness. **H. Bergson**⁷⁹⁴

5.1. Methodical Restoration

Admittedly, the present conclusion is no more than an *annexe* to the understanding of Clauberg's notion of method deployed in the previous chapters. The present, concluding chapter tries to take the former chapters and place them against a background of a more comprehensive understanding of Claubergian methodology. Hence, the aspiration of this conclusion is to typify in general terms the Claubergian mental habitus. A certain *movement of the mind* which Clauberg's methodism furnishes will be addressed. The mental movement that we find in Clauberg is different from that in Descartes. In Clauberg's Cartesianism methodical experience becomes more of a procedure, almost a bureaucratic procedure, which in the perspective of the present research is so replete with movements and matters that it behaves as an abeyance, a halting, folding in upon itself and erecting a pathway towards philosophy which, due to its saturation, folds back

794 "Cette seconde opération, nous l'avons appelée intuition et alors celle qui aboutit à la recomposition artificielle, au mouvement approché, à l'imitation approchée, équivalent pratique, pourrait-on dire, de la chose, nous l'avons appelée analyse. Nous avons dit que l'analyse était le procédé habituel de la connaissance, on peut dire, normal de la connaissance extra-philosophique, car il n'est pas absolument normal de philosopher. L'analyse est le procédé habituel de connaissance." Henri Bergson, *Histoire des théories de la mémoire. Cours au Collège de France 1903-1904*, edited by F. Worms (Paris : Presses Universitaires de France, 2018).

into itself and prevents one from going into philosophy itself. It is an entrance that remains closed. Moreover, the ego revealed in this methodology is an individual mind which amounts to a *synthesis of mistakes and their corrections*: it is a historical, even a philological, *process* in which an individual figure of learned data is drawn. The methodical process one finds in Clauberg is suggested here to be understood as a *proto-philosophy*, a moment before *first philosophy* can begin; proto-philosophy prepares the terrain. In this rationality itself is configured through the methodological process, before the entrance into the domain of philosophy. This approach refers to the formation of reason as the most basic exercise of the spirit, a spiritual exercise which is at the same time *artificial* and *extended* (*i.e. working within the res extensa*⁷⁹⁵). Indeed, what is at stake here is the definition of Rationalism of the Cartesian kind. The rationalism that Jean Laporte suggests in the work of Descartes and in the philosophical style towards which he orients Western thought is furnished explicitly as a reworking of *habitude*, a process having its own *duration*.⁷⁹⁶ In view of the present research, this is pertinent to Clauberg's methodology. Claubergian methodism entails a restorative understanding of method in which method works as self-estimation; not only the self but also acquired data are examined and scrutinised. We try in this concluding chapter to suggest a theory of method based on the line of questioning of the former chapters, keeping in mind the breadth of Early Modern methodism, from the Humanists to Clauberg, and then returning to Descartes. It will be left for future inquiries to determine to what extent the conceptual genre of methodism was pursued in later generations of philosophy; in the last chapter we try to point in this direction regarding Tschirnhaus' *Medicina mentis*. What is rather established is that the Claubergian chapter of methodism aims to transfigure the mind of the researcher from the infantile stage of the imagination of the senses to the mature state of being able to judge matters-at-hand through forging definitions of them. Those definitions work as configurations of the matters under consideration. If in Descartes the figuration is essentially geometrical and configured into algebraic formulations, in Clauberg figuration works on the linguistic, one can really say, *philological*, level. Let us not forget Clauberg's influential work in German etymology, the *Ars etymologica teutonum* (Duisburg 1663), in which through a restoration of lineage of usages, Clauberg defines (configures) the philosophical terms *Vernunft* (understanding/wisdom/reason), *suchen* (to search) and *Ausspruch* (proposition/saying). Etymology here is taken in a hermeneutic sense, reminding one of

795 This is meant in the sense of working within all that which belongs to extended reality in the larger sense (figures, movements, places, quantities, etc.)

796 On this see also Jean A. Wahl, *Du rôle de l'idée d'instant dans la philosophie de René Descartes* (1920), re-edited by Frédéric Worms (Paris: Descartes & Cie, 1994).

the etymology of the word “etymology” itself: *ἔτυμος*, which in ancient Greek means true or real. The method of configuration of matters in search of their *etumos*, of that which is real and true in them, is the goal of Claubergian methodism.

As suggested in former chapters, if Clauberg’s method is understood as taking part in the rationalist philosophical style, then his rationalism is based on an artificial empiricism in the sense that it searches to know the matter-at-hand (the problem) but only through reconfiguring it so that the matter-at-hand can be brought to the court of reason, that is to say to be *judgeable*. In this process not only the matter-at-hand is configured; the mind itself goes through a process of transfiguration, which, however, does not function without a retroactive process of weighing a reservoir of already acquired ideas, transfiguring the latter through the positive, active process of diagnosis *into a language of reality*. The present chapter concentrates on the retroactive aspect of this mnemonics.

Through the above described process of configuration and transfiguration, method acts like an *anamnetic* process; it restores processes of thought and tries to extract from these the most essential principles which can serve to direct future investigation of similar matters.⁷⁹⁷ Method is intentionally and essentially *retroactive*; it is also inductive in the sense that it leans on prior experiences in various processes of inquiries, and it synthesises these into a set of minimal precepts and principles that *must be again reapplied*. Method is synthetic in many senses but most of all because it tries to take all these experiences and thought processes and distil from them a manner of conduct. Returning to the quote at the beginning of this chapter taken from Bergson’s lectures at the *Collège de France* in the years 1903–1904 regarding the history of the concept of memory, if analysis is indeed habitual,⁷⁹⁸ then it is synthesis that must work as de-habitation and re-habitation, a re-habitation of the mind according to the etymon of matters.

Restorative synthesis helps in understanding the inner workings of method in the Claubergian framework. In the previous two chapters, we saw to what extent one should refer to (the two faces of) judgment as standing at the heart of the motivation of

797 Indeed, the found principles are only accepted as likely valid regarding future inquiries of similar matters. Any new encountered matter demands a new verification process that must begin each time anew.

798 As I understand this quote by Bergson, analysis should be taken as habitual in the sense that it follows the already established sets of classifications and quantifications that the researcher carries with her. Synthesis in this sense is unhabitual, in the sense that it transforms and literally reconfigures the researcher’s set of categories.

Cartesian method. The present conclusion suggests that this double-faced judgment works as an anamnetic process, restoring an empirical moment of an encountered matter through a more-or-less emendated reason. In this sense at the beginning of any methodical process stands a materially valid idea of an encountered matter, and this materially valid idea is guides the methodical process. The valid idea acts, hence, as the *reason* of a certain methodical process. Because matters appear before our mind always as individualised, the restoration of that materially true idea must to some extent change the given configuration of our mind. In this sense this process is essentially *synthetic and transfigurative*.⁷⁹⁹

We saw that both in Descartes and Clauberg, the initiation of method is essentially a retrospective process composed of two orders, the order of reasons and the order of matters, through which are reviewed a posteriori processes of reasoning, comparing them with a set of verified principles. When these two orders are superimposed, a full-fledged methodical model is established. When one is able, with the help of method, to hold that double order (synthetised from the order of reasons and the order of matters) in one's mind, one cannot help but *practice memory*:⁸⁰⁰ One examines in retrospect one's own processes of reasoning, emendating and aligning one own's present state of mind against this retrospection. In this framework Spinoza's observation in the *Emendation of the intellect*⁸⁰¹ that any true method must be based on a given true idea is not misleading: If there is not some existing principle guiding the search for further principles, then there is no true manner of developing a method because the thread, the Cartesian Theseus string, is lost: “[T]here will be no method unless first an idea is given. Hence a method which shows how the mind is to be directed according to the norm of a given true idea, will be a good one.”

In Clauberg, however, this guiding idea remaining at the beginning of method is not known in advance, and it must be *restored* in order for method to take shape. The realist aspect of Claubergian methodism, hence, refers first and foremost to this guiding, predestined idea, directing the synthesis of the construction of an inquiry. In this sense

799 This has also Stoic character. See Pierre-François Moreau, “Calvin: fascination et critique du stoïcisme,” in *Le stoïcisme au XVIe et au XVIIe siècle*, tome I., edited by Pierre-François Moreau (Paris: Albin Michel, 1999), 51-64.

800 Memory, or, history.

801 [translation slightly modified] Spinoza, *Complete works*, trans. S. Shirley, Volume I (Indianapolis: Hackett Publishing, 2002), 11: Latin from Spinoza, *Traité de la réforme de l'entendement-Tractatus de intellectus emendatione*, translated by A. Lécivain (Paris: Flammarion, 2003), 87: “[M]ethodus non dabitur, nisi prius detur idea. Unde illa bona erit methodus, quæ ostendit, quomodo mens dirigenda sit ad datæ veræ ideæ normam.”

the methodical process works as an anamnesis of the idea which exists at the moment of the sense encounter with the matter-at-hand and which the methodical process, through its hygienic procedure, tries to make explicit.⁸⁰² This anamnesis is not a simple memory of some content but rather a memory of a certain order, a certain chain of ideas. It is a memory closer to that which Aristotle defined as *anamnesis*, which is not the search after a lost content but rather a lost movement of thought which was already performed but which since has become hidden from consciousness.⁸⁰³ Descartes himself distinguished between two kinds of memory: the corporeal and the intellectual. In the *Conversation with Burman* (in the framework of the discussion regarding the second meditation), Clauberg transcribes Burman's question and Descartes' reply regarding the bodily and mental nature of memory:⁸⁰⁴

[Burman] But even if traces are not imprinted on the brain, so that there is no bodily memory, there still exists an intellectual memory, as is undoubtedly the case with angels or disembodied souls, for example. And this intellectual memory ought to enable the mind to remember its thoughts.

[Descartes] I do not refuse to admit intellectual memory; it does exist. When, for example, on hearing that the word 'K-I-N-G' signifies supreme power, I commit this to my memory and then subsequently recall the meaning by means of my memory, it must be intellectual memory that makes this possible. For there is certainly no relationship between the four letters (K-I-N-G) and their meaning, which would enable me to derive the meaning from the letters. It is the intellectual memory that enables me to recall what the letters stand for.

802 The platonic undertone of the recovery of innate ideas is clear. Josiane Boulad-Ayoub, "Les récurrences du platonisme chez Descartes," *Philosophiques* 23 ; no.2 (Automne 1996): 405–415.

803 See David Bloch, *Aristotle on Memory and Recollection* (Leiden: Brill, 2007).

804 English translation from Descartes, *Writings* III, 336-337. Descartes, *Œuvres* V, 150: "O. Sed etiam si non imprimantur vestigia cerebro, et sic memoria corporalis non sit, datur tamen memoria intellectualis, ut in angelis et animabus separatis procul dubio, et sic per eam mens suarum cogitationum recordaretur. R. Memoriam intellectualem non nego; ea enim datur. Ut cum, audiens vocem R-E-X significare supremam potestatem, illud memoriae mando, et deinceps per memoriam repeto illam significationem, illud certe sit per memoriam intellectualem, cum nulla sit affinitas inter tres illas literas et earum significationem, ex qua illam haurirem, sed per memoriam intellectualem id memini, eas literas id denotare."

This passage raised some problems in research⁸⁰⁵ as it seems that Descartes endorses on the one hand the concept of an intellectual memory suggested by Burman and on the other hand gives quite a mechanical description of the manner language works in a rather automatic way. In any case we learn from this exchange between Burman and Descartes that indeed some kind of mental, intellectual memory exists, and this memory is indeed different from what we refer to as corporeal, nerve-based memory. Descartes' example is however puzzling: He brings, in fact, the mechanics of language as an example of this intellectual memory, which functions as an immediate imprint of a conventional symbol on our thoughts. The essential question is how one should approach intellectual memory, and in what sense it is different from corporeal memory. In the first instance it seems that Descartes speaks of a difference between direct and indirect memory. In the understanding of the present project and reading Descartes through the perspective of Clauberg's method, both the physical and intellectual aspects of memory remain on the same metaphysical shore, on the side of the *res extensa*. They are both activated by the movement of the living spirits in the gland. However, if corporeal memory is moved by nature, intellectual memory is moved by prudence and custom. It is indeed through linguistic, conventionalised systems that intellectual memory moves. What this intellectual memory enables, according to Descartes, is the putting together, the synthesis, of two mental entities whose relation is not obvious, apparent or easily detected. What is this linguistic capacity? This is exactly the faculty enabling one to pass from a sign to that which it signifies, to that *etumous* which is given by the matter at hand. In other words what method does is restore a lost relation between a matter and its reason, a relation which exists in a virtual, not in an actual, manner. The relation sought is that between the sign and the signified.⁸⁰⁶ Note also that it is to a cultural, even *social*, phenomenon that Descartes turns here: the formation and practice of language. If we follow this passage, we learn that intellectual memory, according to Descartes, is a capacity that gives us access to practices determined by causes exterior to us but nevertheless internalised and automatised by us; in other words, he gives us the example of habit, the formation of a *habitus*. Methodical emendation begins from corrupt mental habits. The revolution of bad mental habits into sane mental *habitus* assumes that some of the orders we were using are not valid, and we must consider and assume others. Conceiving of Cartesian method as a *habitus* is rarely discussed in

805 For example see Richard Joyce, "Cartesian memory," *Journal of the History of Philosophy* 35/3 (July 1997): 375–393. Joyce puts into question this passage. See also Xavier Kieft, "Mémoire corporelle, mémoire intellectuelle et unité de l'individu selon Descartes," *Revue philosophique de Louvain* 104, no.4 (November 2006): 762–786.

806 CF. Clauberg, *Metaphysica de ente*, "Signum et signatum," OOP I, 336–337.

Descartes' research, this suggested by several Descartes scholars. A generalised theoretical account of habit in Descartes was not generated. However, it seems that in Descartes' later years, Cartesianism was indeed received as a habitus to be endorsed or rejected. Cartesianism was presented as a new set of regulations, a new attitude towards the manner to proceed both in philosophy and outside its borderlines. For Clauberg this was doubtlessly the case, and he certainly decided to assume the Cartesian habit even though, as we tried to show in the previous chapters, it is not certain that his motivations were genuinely Cartesian.

5.2. Restoration of Innate Ideas

In Clauberg benevolence and sureness prevail and permeate the operation of doubt. In the order of matters, there is a great part which is not up to us; some of it we can learn through our methodical proceedings. This not-yet-knowing-how is the open end of method. We do not know whether we are destined to be wise, to reach the truth of things, but we must act as if we are destined for that, prepared and summoned by the problems and causes that direct our learning and inquiries. Descartes, in the *Regulae*, speaks exactly on the matter of chance in acquiring knowledges. Some of our findings are, according to Descartes, dependent on luck.⁸⁰⁷ Method and its dynamics of doubt are meant to restrain this open-ended advancement in matters of knowledge of the truth of things based merely on luck. Otherwise put, method makes explicit; it restores not only *how* I came to know what I think I know but also the beginning moment of the trail of (falsified and verified) reasons, that primary idea, or figure, of the matter at hand.

Not only the things of the world, but also thought is to a certain extent destined to perform certain mental processes and respond to certain matters, and it is God's constant care and involvement that makes everything run smoothly so that we can proceed through all the obstacles and storms that we meet on the way. Forming one's method means forming one's own restoration of one own's *history in thought*. Indeed, a child cannot produce a method. One must reach maturity and be already deviated and detracted from the truth of things to be able to undertake this process of reviewing and restructuring. In other terms one must be already corrupted in order to step into methodical emendation. We noted in former chapters (1.1.6., 1.2.7., 2.2.7) the relationship of synthesis with inference: Method must hold all its terms and criteria

807 Descartes, *Writings* I, 15–16; Descartes, *Œuvres* X, 371.

within itself and make them stick together and be dependent on one another in order to function. This part of analysis tells us there are some proto-philosophical mental abilities found through the methodical process. Those proto-philosophical abilities, or rather faculties, correspond with Descartes' innate ideas (*idées innées*). The understanding of innate ideas as standing for mental dispositions was also elaborated by Noam Chomsky in relation to the assumption of an a priori capacity for language.⁸⁰⁸ Descartes effectively talks about an "innate faculty" which is activated regarding a certain matter, on a certain *occasion*. Descartes acknowledges the social manifestations of dispositions and tendencies:

*In the same sense as that in which we say that generosity is 'innate' in certain families, or that certain diseases such as gout or stones are in others: it is not so much that the babies of such families suffer from these diseases in their mother's womb, but simply that they are born with a certain 'faculty' or tendency to contract them.*⁸⁰⁹

He insists that we have some qualities that are innate in us both as individuals and as groups, but he specifies furthermore that what is innate is not the faculty itself but rather the potentiality which is able to contract these qualities. That which is innate in us, hence, is not the habitus itself but rather the potential to contract such habitus. In this sense what is innate in us exists in a virtual manner. Innate ideas, hence, are potentialities. The matters that we meet on our way are occasions to bring into action these innate eidetic potentialities:

We make such a judgement not because these things transmit the ideas to our mind through the sense organs, but because they transmit something which, at

808 Valentine Reynaud, "L'usage chomskyen de l'innéisme cartésien," *Methodos [En ligne]* 18 (2018), <http://journals.openedition.org/methodos/5021>; DOI : <https://doi.org/10.4000/methodos.5021>, consulted on the 28.5.2021; William de Jesus Teixeira, "Quelques remarques sur l'innéisme dispositionnel chez Descartes et chez Leibniz," *Controvérsia* 16, no.2 (May-August 2020):131–146.

809 Descartes, *Writings* I, 303–304; *Œuvres* VIII, 358: "[...] Illas *innatas* vocavi. Eodem sensu, quo dicimus, generositatem esse quibusdam familiis innatam, aliis verò quosdam morbos, ut podagram, vel calculum: non quòd ideo istarum familiarum infantes morbis istis in utero matris laborent, sed quòd nascantur cùm quâdam dispoitione sive facultate ad illos contrahendos."

*exactly that moment, gives the mind occasion to form these ideas by means of the faculty innate to it.*⁸¹⁰

Hence, our sense perception is pre-formed, predestined, by our inner ideas. These predestined inner ideas are facultative and virtual, existing in a non-actualised manner in our soul:

*So everything over and above these utterances and pictures which we think of as being signified by them is represented to us by means of ideas which come to us from no other source than our own faculty of thinking. Consequently these ideas, along with that faculty, are innate in us, i.e. they always exist within us potentially, for to exist in some faculty is not to exist actually, but merely potentially, since the term 'faculty' denotes nothing but potentiality.*⁸¹¹

It is only on the occasions that matters are presented to us that our virtual mental dispositions become activated. Innate ideas present a principle of epistemological predestination that characterises the Cartesian epistemology that also can be found in Clauberg's method. The element of predestination in Clauberg relates exclusively to the fact that it is only the element of predestined truthfulness of a thought, originating in the reality of matters-at-hand, which allows us to proceed in the direction of doubt and towards forming a true configuration of the thing investigated. We suggest referring to the general approach of Clauberg as "an other empiricism," one based on the priority of the order of matters and not on the primacy of sense perception, as later 17th-century empiricism was to claim only a few decades later. This, in the framework of Clauberg's "other empiricism" expresses a certain confidence in a primary order of things and a certain virtual order of reasons, and the drawing closer together of our representations of the two orders makes the task of method. Notably, not everything is artificial or constructible according to the capacities of method. Rather, a non-electable principle of

810 Descartes, *Writings* I, 304; Descartes, *Œuvres* VIIIb, 359: "non quia istæ res illas ipsas nostræ menti per organa sensuum immiserunt, sed quia tamen aliquid immiserunt, quod ei dedit occasionem ad ipsas, per innatam sibi facultatem, hoc tempore potiùs quàm alio, efformandas."

811 Descartes, *Works*, 305; Descartes, *Œuvres* VIIIb, 360-361: "Et sane, quòd visus nihil præter picturas, nec auditus præter voces vel sonos, proprie ac per se exhibeat, unicuique est manifestum: adeò ut illa omnia quæ præter istas voces vel picturas cogitamus tanquam earum significata, nobis repræsententur per ideas non aliunde advenientes quàm à noftrâ cogitandi facultate, ac proinde cum illâ nobis innatas, hoc est, potentiâ nobis semper inexistentes: esse enim in aliquâ facultate, non est, esse actu, sed potentiâ dumtaxat, quia ipsum nomen facultatis nihil aliud quàm potentiam designat."

regulation of thought exists in us, sustaining the process of methodical emendation.⁸¹² This amounts to a certain element of limited predestination in the sense that our thought is not completely free but is rather ordered by the truth of things and the order of matters. The task of philosophy, in this context, is to gradually *uncover* the order of matters to not only find the principles (very obvious from the element of analysis) but also the order of these principles, which is not wholly up to man but is given in the book of the world, albeit in a manner which is not clear and distinct.

Finally, Claubergian philosophical predestination leans on the place of inference in the Cartesian synthesis.⁸¹³ As Gaukroger notes, inference in Descartes has an intimate relation with the manner in which the natural light operates.⁸¹⁴ At its elementary level, inference reaches the point where it must rely on intuition and not deduction. For Descartes, “inference [...] is what our intellect, when it is acting through an *intuitus*, tells us is knowledge.”⁸¹⁵ This is a remarkably helpful phrasing; inference has the heuristic, retroactive responsibility of making the acts of our natural light *tellable*, avowable and teachable. Indeed, this aspect pertains both to the Cartesian and Claubergian conceptions of reason. Moreover, both in Descartes and Clauberg the elementary pedagogy of inference cannot fully function without the guaranty of eternal truth and divine veracity providing a certain predestination of thought.

5.3. The Order of Matters as a Guarantee

In Clauberg’s method, indeed, some orders are revealed by the light of God himself. Clauberg differentiates between the natural light and the supernatural light in the following manner: In as much as natural light belongs to the character of man, supernatural light is always revealed from God.

One says then regarding those matters that must be stabilized, that is to say, that must be demonstrated in a scientific manner that are to be investigated (investigandis) from the foundations (as is evident from his words) of human

812 One possible consequence of the above is to understand the *res cogitans* as the virtual existence of innate ideas. The task of method in such a metaphysics, would be to actualize those ideas according to matters-as-occasions.

813 Stephen Gaukroger, “Descartes conception of inference,” *Cartesian Logic: An Essay on Descartes’s conception of inference* (Oxford: Clarendon Press, 1989), 26–71.

814 *Ibid.*, 53–55.

815 *Ibid.*, 59–60.

*abilities [ingenii] in the natural light. These are not those matters of faith in the Theological [sciences]), for the foundations and principles of these [i.e. Theological a.e.] things are revealed to us in the supernatural light from God.*⁸¹⁶

In Clauberg's methodism the establishment and revelation of the natural light is not given from God but is rather a work, a difficult, laborious and in a certain sense endless task. One must go through a constant process of initiation. One is always initiating in philosophy, even when one passes allegedly to the stage of reconstruction and application. It is also interesting to note that except for the above quote, one cannot find in Clauberg's philosophical corpus the notion of the natural light (*lumen naturale*). This constant initiation is what we call, after Franz Rosenzweig,⁸¹⁷ the hypothetical doubt of Clauberg; this is this permanent underlying hesitation or suspicion which extends to almost all the Claubergian stages of method.⁸¹⁸ However, complementarily to that permanent minimal, liminal suspicion demanding from the philosopher to remain always in the stage of initiation, one has also a guaranty not only from the supernatural light of the non-deceiving God but also from a thought latently guiding one's process of inquiry, preventing one from going entirely astray. This guarantee is occasioned to the researcher through nothing else but the order of matters. This is what is indeed powerful in this idea of the order of matters: At the same time that the order of reasons can be, theoretically, wholly known to the initiator, the order of matters remains to a certain extent always latent or hidden. However, this order of the world, things as they are, which is highly respected both by Descartes and Clauberg (and Bacon), gives the initiated philosopher an Archimedean point from which to begin an inquiry. This Archimedean point is found in the very fact that things exist and arrive to be inspected by the researcher. The road towards their approximate definition, the road that is the endlessly nearing tangent to the figures of things, makes the task of philosophy. Restoring the latent thoughts produced by a certain order of matter at the moment when this order is met by a certain order of reasoning is the task of method or the initiation to philosophy. In other words method is an enduring action of self-owning. However, even

816 OPO II 1174 (*Initiatio* IX, §2, M): "In scientiis stabilire. : M. Loquitur igitur **de iis** tantum quæ stabilienda, hoc est, demonstranda sunt in scientiis ex fundamentis (uti patet è dictis) humani ingenii naturali lumine investigandis, **non de iis** quæ fide creduntur in Theologicis, quorumque fundamenta et principia supernaturali lumine nobis à Deo sunt revelata."

817 Rosenzweig, *Stern*, "Zur Methode."

818 On this see Édouard Mehl, "Descartes ou la philosophie des (re)commencements," *Archives de Philosophie* 81, no.1 (2018): 49–67.

if method is first and foremost a procedure which the mind makes in relation to itself, there is a further step that is made by appropriating something which is near enough: the matter at hand. Method assumes that a knowledge of the truth of things is found from the very moment we come to an encounter with a matter. In order to achieve the estimation of the self, method must make a move beyond self-knowledge; it must be able to respond to specific matters. There is no method if there is no outer reality that one can read and understand. Method is a vehicle; it is an attitude, from *actitude*, *agere* in Latin. It is also an approach: Approach means to come near, from *propriare*, to own. Method brings a problem nearer, making it graspable and ownable by the mind. Through this approach and attitude to matters, the mind owns itself according to the order of its own reasons.

5.4. The Principle of Non-deception and Matters as Occasions

According to Clauberg we live constantly under the shades of some deception. Deception is everywhere; we are always in darkness. However, this is only, according to Clauberg, to test our belief in God, to see *as if the goodness of God is not there*. As Clauberg says:

*So am I deceived? Naturally, in such easiness and clarity. In fact, it is no wonder that in obscure or difficult matters I am deceived. And because it is manifest that I am deceived in these matters, if I am even deceived in those matters [easy and clear], then I am always being deceived, which seems unfitting to the goodness of God.*⁸¹⁹

In fact, the goodness of God is always there in the deception as much as in our true ideas and findings. In this, of course, Clauberg's and Descartes' Gods have slightly different characters: In as much as Descartes' God is imbued with the supernatural power to conserve and maintain, Clauberg's God is also a judge and a tester. He is a teacher and a master.⁸²⁰ It is He who sends human beings to an individual trail of findings and errors,

819 OOP II, 1193 (*Initiatio*, IX, §34, B.): “Nempe in tam perspicuis et facilibus. Nam quòd in obscuris ac difficilibus decipiar non adeo est mirandum. Et quia manifestum est me **his** decipi, si etiam **in illis** deciperer, semper deciperer, quod à summa Dei bonitate videtur alienum.”

820 This principle of non-deception is related to what was titled in Cartesian scholarship the issue of “divine veracity.” On divine veracity see for example Ferdinand Alquié, *La découverte*

occasions to sift through acquired mental habits. The problems and questions we meet on our way result from this testing of man by the divine. The concept of the will is also a bit different between Descartes and Clauberg. In as much as for Descartes freedom of the *libre arbitre* is essential for the definition of man, for Clauberg it is not free will but rather *free consent*: the individual is free to *decide* whether to dedicate, or better surrender, herself to the process of initiation. Hence, in the Claubergian Cartesian method, latently impregnated with Calvinist Arianism, a *moderate element of (pre)destination* accompanies the methodical procedure. This philosophical destination rests on the principle of the distinction between God's cognition and our own, as is given in the title of Clauberg's *De cognitione dei et nostri*. As Clauberg presents it, philosophical destination relates to what we anachronistically call his occasionalism.⁸²¹ Let us attempt a definition of *methodical occasionalism* resting on the previous data we have collected: God sees an order of matters that we will never be able to fully comprehend. He puts the matters of the world before us as an *occasion* for knowing a truth. I find it quite helpful to reproduce here a full passage from a rather uncommented upon article on Clauberg from 1933 by a certain Albert G. A. Balz, which clarifies the relationship between Clauberg's theory of perception (that we have called "an other empiricism") and his metaphysical occasionalism:⁸²²

*Thus, for Clauberg, the problem of the relation of mind and body, so far as suggested by perception, is essentially one of rendering intelligible the correlation of perceptions and things. The diversity and systematic coherence of the perceptions must be related to a diversity and coherence, not qualitative but quantitative, that is intrinsic to the nature of the material world. The crucial fact is this, that we cannot escape the conviction of a perfect correlation between the perceptions of the soul and conditions in matter. Interaction between mind and matter is impossible according to the position of Clauberg. The correspondence of perception and material thing can therefore not be due to a causal influence of matter upon mind. By "cause" we can mean only occasion. **Things, with***

métaphysique de l'homme, 239-259; Ferdinand Alquié, "La véracité divine chez Descartes," *Leçons sur Descartes*, 221-250.

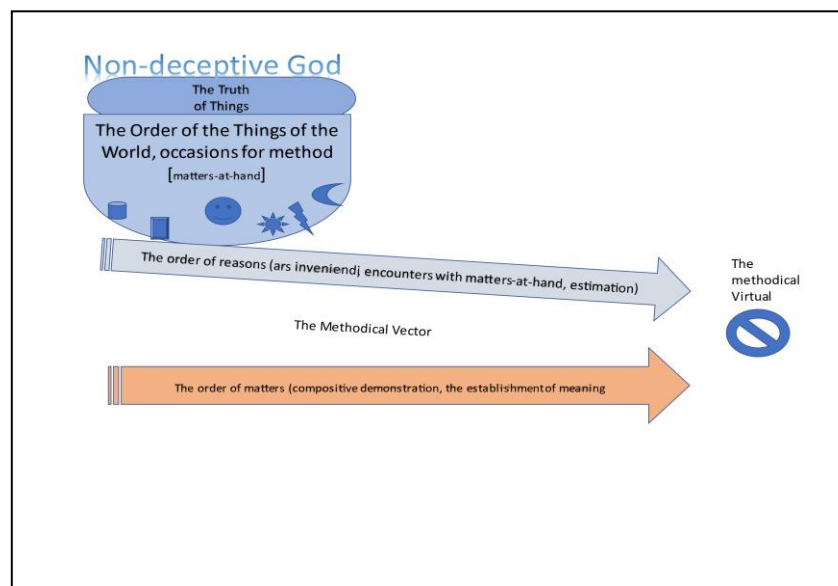
821 Recently Nabeel Hamid argued against understanding Clauberg as an occasionalist. The present interpretation of Clauberg's occasionalism however offers to avoid the true difficulties that Hamid's essay suggests, by understanding occasionalism not from the perspective of interaction but rather from the perspective of method. See Nabeel Hamid, "Substance, Causation, and the Mind-Body Problem in Johann Clauberg," Forthcoming in *Oxford Studies in Early Modern Philosophy* 11 (2022).

822 Albert G. A. Balz, "Clauberg and the Development of Occasionalism," *The Philosophical Review* 42, no.6 (November 1933): 571.

respect to states of mind, can be only occasioning causes [my emphasis, a.e.l]. Cause in the sense of occasion expresses the fact that there is no interaction between the two substances and also that there is a steady correlation between them.

God and the principle of non-deception occasions for us the matters of the world as a test, a challenge, a cypher. The methodical process makes the effort, by the force of the order of reasons, to configure those matters and to reconstruct, gradually, an order of matters. In this way the methodical process in Clauberg can be described as bringing near two lines, two rational sequences that are constantly and simultaneously constructed by the methodical process; that of the order of matters and that of the order of reasons. These two lines meet only virtually, by the truth of things of the non-deceiving God, leaving it to us whether to engage in this initiation and habituation to the truth of things.

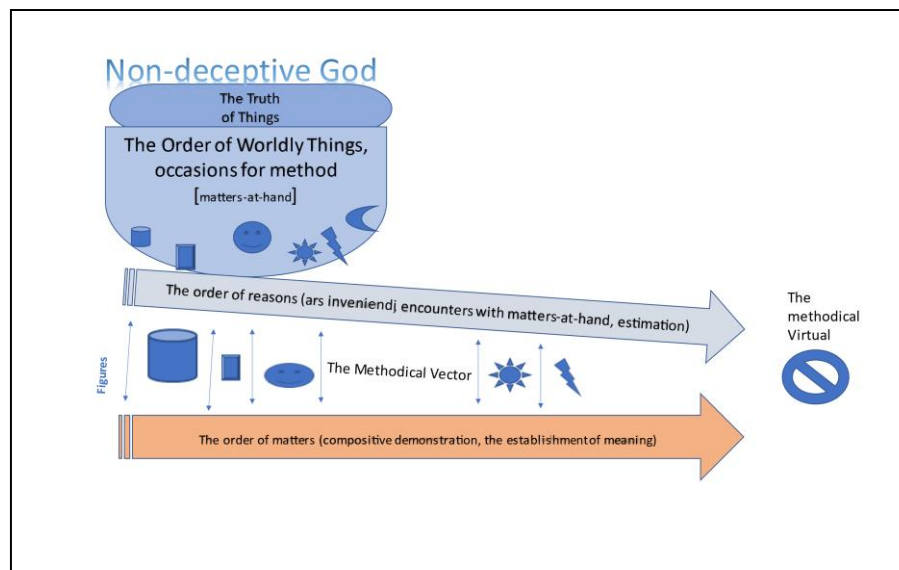
Figure VI: Cartesian methodical habitus according to Clauberg: The order of matters occasioning the order of reasons



As illustrated in figure IV, Clauberg portrays for us the philosophical way as an unending one, having its withdrawing, vanishing point in the divine truth of things, being put in our way by divine veracity as occasions for method. The two orders will never meet in the actuality of method, but they are also not parallel as they may be in

Spinoza. Instead, they endlessly converge; they tend towards each other, and they are constantly nearing each other until they virtually form a tangent. As in perspectival depiction in painting, they converge towards each other in infinite distance. The whole work of the science takes place within these two converging, but never actually meeting, orders. Figure IV suggests as well that this movement towards the truth of things works in a threefold manner as a process of habituation. The two orders work together towards a habituation to the order of the “World;” the order of matters habituates to the order of reasons, and the order of reasons habituates to the order of matters. The basis and first cause of Order is the non-deceptive God, who is only approachable through experience, reading and knowing the order of the world.⁸²³ Philosophical method is an enduring process of autodidacticism, and this process must produce figures to account for the stages of this process of convergence (see figure VII).

Figure VII: Figures as mediating between the order of reasons and the order of matters



5.5. Returning to Zabarella’s Concept of *Regressus*

Even though the permanent and more apparent intellectual affiliation of Clauberg comes from the school of Ramism, it is doubtlessly important to recall the clear traces of the

823 On this see also Daniel Garber, “God, Laws, and the Order of Nature: Descartes and Leibniz, Hobbes and Spinoza,” in *The Divine Order; the Human Order, and the Order of Nature: Historical Perspectives*, edited by Eric Watkins (Oxford and New York: Oxford University Press, 2013), 45–66.

Zabarellist conception of method that finds in Clauberg's writings. Zabarella is mentioned a few times in Clauberg's *Opera omnia*, not very frequently, but it is clear that Clauberg was aware of Zabarella's work. We have already mentioned the importance of Zabarella's conception of synthesis to the Claubergian elaborations of method. However, it is also what Zabarella called the *regressus*, or the regressive method, that one should recall to conclude our occupations with the question of the orientation of the Claubergian method.

Zabarella summarises the method of *regressus* in the following way: "It is a certain sort of reciprocated demonstration such that after we have demonstrated the unknown cause from the known effect, we convert the major premise and then demonstrate the same effect through the same cause, so that we might know why it is."⁸²⁴ This stands at the heart of the Zabarellist conception of the compositive method, and so it seems, this description of Zabarellist method is in the last account very much compatible with that of Clauberg. If analysis tries to show the unknown cause of a certain sensual effect, synthesis must demonstrate the passage from the cause back to the particular effect. Drawing on this concept of *regressus*, we can offer an interpretation of Clauberg's conception of doubt. This will also attest to the essential loyalty of Clauberg to the philosophy of Aristotle, to a certain empiricism, as well as to a synthetic tendency which is more Zabarellist than Ramist in character. Indeed, it is as if Clauberg takes his concept of analysis from Ramus, but his concept of synthesis is taken from Zabarella. It is as if he says regarding the concept of Cartesian doubt: "I am a Ramist, and I take Ramus' method as an instrument to strengthen my Cartesian creed, but Ramist analysis is not enough; we also need the Zabarellist synthetic reconstruction to give a full account of method."

We can allow ourselves to bring doubt, in a radical manner, into the methodical procedure only because we know that at the fundamental level, there is no metaphysical justification for doubt because an underlining chain of causes supports the empirical data that we receive. The doubting strategy is concomitant with the method of *ad absurdum*: "Let us follow the method of scepticism as far as it goes and see what it gives us." If this result cannot possibly be true, then we remain with faith.

Effectively, in the beginning of philosophy, one treats God only in the measure where his knowledge is researched in order to plant the foundations of all human science. But, at the end, one poses a complete study of God and all its attributes

824 See James B. South, "Zabarella, Prime Matter, and the Theory of Regressus," *Graduate Faculty Philosophy Journal* 26, no.2 (2005): 79–98.

*(those that can be known by natural light) are considered with care. That would not be necessary in the beginning, because the attributes of God are not, all, the principles of created things and those that are susceptible of this relation, it is not necessary constantly to explain them more absolutely or plainly that it is demanded by this original relation.*⁸²⁵

Hence, Clauberg argues that it is through the science of the understanding of things, from matters to reasons and back from reasons to matters, that we can reach at the end some knowledge of the *attributes* of God. In the stage of initiation, one is not obliged to inquire into God in a rigorous manner; we can only turn, as Descartes does, to the characters of God as far as they play a part in the constitution of the understanding of human reason. In Clauberg we are called upon to approach the possibility to know a part of God's attributes only after we pass through the regressive process of reading the matters according to their underlying, verified principles and then showing the way from those principles back to the matters of the world.

Although I could not find more than one mention of Zabarella himself in Clauberg's writings, three German Zabarellists are mentioned quite often in Clauberg's philosophical corpus: Bartholomäus Keckermann, Clemens Timpler and Kornelius Martini. All three were Aristotelians in the sense of the emphasis they put on sense perception as the most important beginning of any philosophical inquisition. To the other empiricism of this group of thinkers, Clauberg adds an important element: Sense perception regards not only things of nature but also, and most centrally, the works of men: Languages, texts, historical deeds and so on are empirical matters that summon and occasion the initiation of a method. The method of inquiry must act in its entirety as a compositive process in which a certain matter is brought back to its principle or first reasons, and a path from the principle to the observed matter is demonstrated. In this, method works as a process of establishing a *regressus*.

825 Clauberg, OOP I, 596 (*Exercitatio* II, 7): "Nam initio Philosophiæ non ulterius agitur de Deo, quàm quatenus ejus cognitio ad jacienda omnis scientiæ humanæ fundamenta desideratur. Sed in fine absoluta de Deo tractatio instituitur, omniaque ejus attributa, quae ex naturæ lumine cognosci queunt, expenduntur, quod initio necessarium non erat, quoniam non omnia Dei attributa se habent ut principia rerum creatarum, et quæ hujusmodi relationem possunt recipere, non tamen absolutè ideo aut plenius, quam originis illa relatio postulat, opus est explicare."

5.6. The Spinozist Criticism of Cartesian Method

We find in Clauberg a permanent character of restoration in the methodical process. Method is called to restore, first, an uncorrupted state of the mind and then to restore the figures of things according to the verified principles of method. We have already seen Clauberg's anti-scepticist but radically *favourable* approach to Cartesian doubt as a process of restoring the natural light. Clauberg hence emphasises that even the most radical process of doubt leans necessarily on the basis of some true knowledge. The question remains as to whether all the knowledge we find during the methodical process is artificially acquired or if some a priori true knowledge is found already there in our mind. Moreover, it seems that for Clauberg, unlike Descartes, we also have the instruments of tradition, most of all the Bible, to help us restore these validities of our natural reason. This position of Clauberg, who is confident that some truth must be found underlying the process of doubt, makes one think of the Spinozist reading of the concept of method: In the *Treatise on the emendation of the intellect*, probably written around 1661 (during Clauberg's life), Benedictus Spinoza, who began working on Descartes' philosophy only slightly later than Clauberg, suggests his poignant realist criticism, or some say elaboration, of the Cartesian conception of method. In his view no method can be established without there having been at the beginning of the process at least one true idea. It is only with the help of this true idea that any method can begin to take place. The suggestion here is that the method, as we learned its principles in Clauberg's reading of Descartes, indeed functions as a restoration of such a true idea. However, in Clauberg this true idea must be forged as a configuration of a thing. This process of configuration forms a true judgment of the thing under discussion, and this true judgment must intervene in the accepted treasury of accepted views and perspectives. It is through emendation that the figure of the matter together with the parallel emendation of our given instruments of knowledge that the restoration of the true idea is possible. In that sense, exactly as Spinoza said in the *Treatise*, we forge our instruments of knowledge simultaneously with forging our ideas of the matters at hand. This means that we are in fact constantly emending our intellect by re-habituating ourselves to the truth of things. We are constantly found rewriting the book of nature based on our reading of natures. The occasioned matters are from that point of view merely *occasions* summoned by God to the *constant didactics of reality*.

What we furthermore learned from our exploration of Clauberg's methodism is that for him the question of the definition of matters becomes crucial to the advancement of method, as is also the case for Spinoza. Spinoza's theory of the modes under the rationality of his geometrical, synthetic presentation places a clear emphasis on capturing singular things, first through the formation of their adequate idea in Spinoza's

second level of knowledge, or better in the intuition of their very reality.⁸²⁶ If we want to close the historiographical path that we have been trying to deploy in this concluding chapter, we must observe the following three points of difference between humanist methodism and Cartesian methodism: (1) If in humanist methodism we witness the centrality of analysis and synthesis to the definition of method, in Cartesian methodism we see the problem of doubt as the most crucial problem to be treated by the theory of method. (2) If in humanist methodism (notably in Ramus and Zabarella) we see a blunt rejection of Galens' third method, the one of definition, then in Cartesian methodism the instrument of definition becomes a central and viable one. (3) Finally, we see that in Cartesian methodism we find a clear emphasis on the question of synthesis which becomes gradually stronger, providing increasingly fuller accounts of the order of matters.

5.7. Method as Anamnesis

A method is a process which only an adult can lead. In fact, having a method is a sign of a person passing from childhood to adulthood. It is only when one becomes an adult that one can look at one's experiences and judge them, make of them *a disposition* which can turn into a stable habitus. In this sense we should note a parallel between metaphysics and method: meta-physics comes after physics, which regards nature. *Methodo*, comes after the way, and relates to one's way. This way is, until the moment of the beginning of the inquiry, the central subject of proto-philosophy.

In this sense method can and perhaps should be viewed as a process of anamnesis. It is a restoration of an epistemic process that reviews our acquisition of knowledge from a position of already having some know-how, allowing us to look backwards and ask how we come thus far. Methodical *anamnesis* is necessary before any advancement is allowed because only methodological *anamnesis* can help us estimate what is left to be known. There is, therefore, a relation between analysis and memory. Self-analysis (which can be viewed as auto-invention) must do with the process of trying to go into the state of childhood and see where one has encountered similar problems.

But what about synthesis? This is even more evident. Synthesis, in the sense that we have tried to understand it in the present inquiry, in fact is *nothing else than memory*.

826 See Richard McKeon, "Causation and the Geometric Method in the Philosophy of Spinoza (I)," *The Philosophical Review* 39, no.2 (March 1930): 178–189.

Synthesis in the Claubergian, Ramist-Zabarellist sense is the manner by which we bind a certain perception to the whole reservoir of knowledge that we bring with us to meet and understand the perception. There is some resemblance of this synthesis to the Spinozist level of intuitive knowledge, which binds a particular thing with the entirety of nature.⁸²⁷

Finally on this point, one should note the mnemonical aspect of the *Topica universalis*. A central function of the systems of the *topica universalis* is to be an aid to memory; this memory however is not strictly personal and not wholly spontaneous; it is a cultural, historical and universal memory which is conserved in the encyclopaedic system and is produced as a machine of reminiscence. As such, the scope of memory is extremely wide in the encyclopaedic system of Philippo-Ramism.⁸²⁸ The order and inner logic of the Philippo-Ramist system should assist the student of knowledge not only to find his way forward but also to take account of the knowledge conserved in the products and actions that he himself performs or observes in the products of others. Similarly, Clauberg's description of the method of doubt holds a distinct *mnemonic* element in the sense that one should not only inspect one's acquired knowledge to select only the valid conceptions but also use the available, verified data to perform the process of methodical selection. What is so special about the Claubergian version of methodical mnemonics is that in it, the personal and mental introspection and anamnesis goes hand in hand with a universal, historical, philological, cultural and even moral reflection. This personal and collective nature of the methodical thought process does not exist in this precise way in Descartes' method. In this sense in as much as memory does not seem to play a dramatic role in Descartes himself, in his follower Clauberg we find a reading of Cartesian method which indeed pays tribute to particular and precise processes of restoration of memories and recorded data.

5.8. Going into the Core of Things and Clauberg's Limited Rationalism

Can we, at the bottom line of our research, state in one principle the most important difference between Cartesian philosophy and Scholastic philosophy according to

827 Aaron V. Garrett, "The Third Kind of Knowledge and "Our" Eternity," *Meaning in Spinoza's Method* (Cambridge: Cambridge University Press, 2003), 181–223.

828 Wilhelm Schmidt-Biggemann, *Topica universalis. Eine Modellgeschichte humanistischer und barocker Wissenschaft* (Hamburg: Meiner, 1983), 117.

Clauberg? For Clauberg what distinguishes Cartesian philosophy is its radically *non-dogmatic* position in which an individual is demanded to examine and re-organise her own reservoir of knowledge. This non-dogmatic position must be privatised and individualised to be valid and truth securing. However, the manner in which Clauberg reads Descartes' rules and principle is also profoundly related to a certain dynamic of duration. Doubt, in the manner that Clauberg describes it in his writings, is a technique *for generating time*; it relates to the aging of man and the passage from childhood to adulthood from a philosophical point of view. The Cartesianism we find in Clauberg is not one of mathematisation of reality; it is rather a Cartesianism that directs us in the *moralising* of our rationality and sensuality. It moralises our rationality because it teaches us to go into the heart of the matter: "Cartesian philosophy pushes right to the ground or to the core of the thing; it is occupied merely with the essential matter." ("*Die Cartesianische Philosophie dringt sich recht zum Grund oder zu dem Kern des Dinges; Sie bekümmert sich allein um die Hauptsache.*")⁸²⁹ It moralises our sensuality as it teaches us to be tempered and cautious about our sense data, allowing intuition to occur only on proper occasions. Hence, method according to Clauberg involves the following: when you meet a thing, stop, tame your will, measure your mental history against the matter at hand, pause, produce time, go into the heart of the matter and then and only then continue.

Having arrived at these last pages of our inquiry, we may want to repose the question regarding the definition of rationalism. In this framework of questioning, we would ask whether Clauberg should be counted as a rationalist. Jean Laporte suggests a useful definition of a philosophy which deserves to be called rationalist:⁸³⁰ Rationalism demands for reason an original status which is irreducible to instinct or affectivity. Secondly, rational process always has an orientation of order. Thirdly, rationalism regards reason as a spiritual activity (*activité spirituelle*) that constitutes experience.

829 Clauberg, *Unterschied*, 61 (§77).

830 Jean Laporte, *Le rationalisme de Descartes* (Paris: Presses Universitaires de France, 1945), XV: "Le rationalisme doit donc revendiquer pour la raison une nature originale, irréductible à celle de l'instinct et de l'affectivité." XVII: "Il y a donc quelque chose qui détermine l'orientation du processus dit rationnel. Et ce quelque chose, qu'on l'appelle unité ou identité, ou du nom qu'on voudra, ce sera toujours l'équivalent d'une structure, d'une loi très générale, donc d'une catégorie."; XIX: "En fin de compte, les caractères d'une philosophie rationaliste se résument à deux:

1. Admettre la réalité spécifique d'une raison entendue, soit comme ordre nécessaire des idées et des choses, soit comme activité spirituelle autonome constitutive de l'expérience, (...)
2. Admettre que cette raison vaut, soit pour tout comprendre, soit du moins pour comprendre tout ce qui nous est accessible et pour régler tout ce qui dépend de nous, - la raison abolissant ou plutôt absorbant en elle tout autre prétendu principe de connaissance et d'action, suffisant à l'homme et se suffisant à elle-même."

Lastly, rationalism takes reason to be sufficient to understand all there is to understand. Based on the inquiry we have developed, we suggest that on two of the four mentioned conditions of rationalism, Clauberg lands in the negative: (1) It seems in Clauberg the elements of doubt, judgment and even figuration are more fundamental than reason itself. (2) It seems that Clauberg puts the correction of experience as the first aim of his method. Hence, it is not reason that constitutes experience but rather experience that constitutes reason. However, on two other conditions of rationalism Clauberg receives a positive mark: (3) There is an infrastructure of order that orients the judgment of experience. This order, however, in Clauberg is not all encompassing. (4) Reason is indeed conceived in Clauberg as sufficient to organise all that which man is able to understand. As we suggest above, Clauberg lacks a concept of natural light as well as a rigorous concept of intuition. Hence, we see that on the matter of rationalism, Clauberg's methodism is ambivalent. We cannot say that he is strictly rationalist, but he is definitely not an anti-rationalist thinker.

5.9. Clauberg's Cartesianism between Spinoza and Tschirnhaus

In the *Treatise on the emendation of the understanding*, Spinoza proposes the above mentioned interpretation of the first precepts of method, which is latently also a criticism of the Cartesian kind of method. For Spinoza, even if questioning must be rigorous and encompassing, still a true method cannot take place without there being in advance some true idea. Here is how Aaron Garrett articulated this principle of Spinozist method: "We emend our minds in order that the true idea or true ideas we already have, and which our minds already are, can be better expressed."⁸³¹ In terms of the present work, we suggest calling this idea that sustains the predestined vanishing point of method the methodical virtual (see below 5.10). The methodical virtual necessitates hypothetical doubt, which is a habitus of faith, the trust in method itself. This is the way of the art of not-yet-knowing; it is the approach of the remains-to-be-seen.

On the other side we have Tschirnhaus, who wrote a couple of decades after Spinoza and had contact with the Spinozist circles moving between the Netherlands and Germany. Tschirnhaus poses the beginning of method *after* some certainty has been attained. The constant doubt of Clauberg disappears, and the clear slate of the pure mind is able to continue on its inquiries and its synthetic artifacts, now giving "invention" its

831 Garrett, *Meaning in Spinoza's method*, 87.

new meaning, that of discovering hidden truths and synthesising new things for the world. This position is closer to that of Spinoza, for whom method always returns the methodist to the level of true ideas, being capable of generating the methodical inquiry. In this sense hypothetical doubt is found neither in Spinoza nor Tschirnhaus.

Returning to this idea of method as a process of anamnesis, it seems that the Spinozist model is relevant in the case when some true idea exists in the mind of a thinker but is not consciously acknowledged; this means that we must recover the knowledge. In this sense the whole process of method makes this process of recovery, putting away and overthrowing all which is not verified as standing in valid relation with the true idea. What would be a Claubergian reaction to such a restorative model of true method? In other words is the Spinozist method compatible with the Claubergian method? It seems that the answer *is negative*, and this returns us to the question of analysis and synthesis. Notably, Clauberg's closest colleague, Christoph Wittich, was a declared anti-Spinozist.⁸³² Even more remarkably, it is exactly the concept of the demonstrative method which stands in the opening of his treatise titled *Anti-Spinoza*. Wittich insists on the importance of the analytic method, which is more akin to the possibility of teaching the principles of true philosophy. The geometrical-synthetic method is, in the eyes of Wittich, only an artificial and rigid manner of demonstration which is not fitting to the deciphering of the order of nature.⁸³³ Only the order of reasons, given by analysis, can follow the challenges of nature. However, it seems that Clauberg's position on this point is, as we have seen throughout the previous chapters, more ambivalent than that of Wittich: Though he approves of the genitive method that tries to follow the order of reasons, he still points to what he views as the analytic method, which is, as we saw, a second level synthesis, referring to the meaning of the matter at hand, equivalent to a synthesis of intuition or what we suggest calling imposed intuition.

Another supplementary conclusion we can draw regarding our conceptual genre of methodism in its modern span—from Renaissance humanism to Tschirnhaus, placing Descartes and Clauberg at the middle of that methodist trail—is that for all the practitioners of method in this specific conceptual genre, method is considered as inherently and essentially artistic in the sense of a *techné*. For Zabarella, Ramus, Alsted,

832 Alexander Douglas, "Christoph Wittich's Anti-Spinoza," *Intellectual History Review* 24:2 (2014), 153-166, DOI: 10.1080/17496977.2013.822749; Christoph Wittich, "De methodo demonstrandi," *Anti-Spinoza, sive Examen ethices Benedicti de Spinoza, et commentarius de Deo et eius attributis* (Amsterdam: Joannes Wolters, 1680), 1–6.

833 Christophorus Wittichius, *Anti-Spinoza; sive examen Ethices Benedicti de Spinoza* (Amsterdam: Joannem Wolters, 1690), 1ff: "De methodo demonstrandi."

Keckermann, Descartes, Clauberg, Spinoza and Tschirnhaus, be their metaphysical positions as different from each other as they may, method means a technical procedure implying a know-how in which realist suppositions and the artificialist, synthetical conception of the procedure of the verification of the truth of things go hand in hand. Methodical synthesis, in this methodist conceptual genre, *never* amounts merely to a construction of the imagination. It is restrained from all sides, from the direction of reason and from the direction of matter. This returns us to Descartes and to the meaning of his *fables*⁸³⁴ and *fabrications*:⁸³⁵ These two must be taken as constructions aimed at approaching *a* truth and not as a poetic game of the imagination. That is at least the picture we get from Clauberg's commentaries on the pertinence of Cartesian method.

5.10. The Duration of Method and the Methodical Virtual

We have seen many times throughout the previous chapters to what extent Clauberg is attentive to the sequence of duration extending from childhood to adulthood, and this sequences exactly stands at the heart of the necessity of method:

One should note the time of infancy, of childhood and of the studies of young age, since in part it follows the impulse of corrupted nature, in part the guidance of others; and this is noted by the following word [of Descartes], 'until now'.⁸³⁶

The beginning of method makes a point in time. It marks this saying of the “until now” and tries to establish a manner of a “from now on.” In Clauberg's presentations of method, we are consistently placed on a certain temporal path. We are in fact placed in the passage between the childhood and adulthood of rationality. We saw in the last chapter that Clauberg identifies childlike rationality with the primary importance of the senses, and adulthood is identified with the ability to sift the right from the wrong after viewing all our accepted prior judgments regarding the senses. The initiation of the philosopher is exactly this passage of the mine from the state of childhood to the state of adulthood. Claubergian method takes place within this passage, and as such it is

834 As in Griffith, *Fable*.

835 As in Mehl, *Fabrique*.

836 OOP II, 1181 (*Initiatio* IX, §9, D): “Notatur tempus infantiae, pueritiae et juvenilium studiorum, quatenus partim naturae corruptae impetum, partim aliorum ductum est secutus. Idem designat vox sequens, hactenus.”

constantly enduring in the space between the state of beginning to question and the ripening of the mind when one becomes capable of activating one's own innate dispositions, on the occasions of encountered matters. Not all is false in the education we receive as children. Some of it brings us forward and takes us to this point *until now*.

The process of methodical initiation postpones the passage between being a child and being an adult, and it so to speak endures within this passage. Philosophy itself, in this sense, can begin only when adulthood is reached. This state of adulthood, when in Ramist terms the person can locate her own art in the pre-established chart of human arts and practices, is the pre-given orientation of the methodical process. This methodical duration accompanies the ages of the human being and makes a process of becoming self-conscious. This process is both descriptive and regulative, destined for the creation of a reasonable person. In this sense philosophy is inherently a pedagogical occupation. The duration of doubt, which receives in Clauberg's philosophy the most important place in the methodical process, is taken from Descartes' method, and in this sense the place of Cartesian method in the Claubergian method is determining and crucial. It is not a simple process of sceptical doubt but rather as a layered, labyrinthian process of analysis and synthesis that method uses to exercise the mind to be able to perform judgment on the matters appearing in its way. The process is in the first place described as a personal activity (differently from the Baconian process of doubting, which is always public and collective in nature), almost intimate in nature. It also supplies a process of *individuation* of the subject: that specific, existing, questioning person, a person with a history. The idea which supplies the orientation to the whole methodical process is a figure of the person leading the process and going through the methodical therapy of healing the mind. This is not a fixed model of man in general but rather a figure of one's mind which directs the entire process from its initiation. That *figure of one's mind* is an object, definitely artificial, that is shaped through the methodical process, and it is also the synthesised product of its proceedings whose essence (in the sense of *ente*) endures throughout the entire process of the initiation of philosophy. This process should be understood as *proto-philosophical*. The habitus which is being developed in this process is that of the relation of one's mind to the figure of itself, understood as a well-furnished object. It is the habitus of the right estimation of the self which is a cardinal element in the Cartesian definition of generosity. In this Clauberg maintains a relation both to Descartes and the Scholastic conception of habitus as the essence of virtue. It is important to see that Clauberg himself sees in the duration of method one of the distinguishing marks of Cartesian philosophy. He writes in his book dedicated to the difference between Cartesian and Scholastic philosophy:

*Cartesian philosophy is given and transmitted as a historia, through which one conceives of things with the entirety of their environment. They are conceived first in their very beginning. However through growth and development at the end they arrive to perfection.*⁸³⁷

Again, we are persuaded by Clauberg to consider Cartesianism as having to do with a *historical* method, a method of description, compared to what happens in court, when the sequence of an event is reported, restored and rehearsed:

*And how Cartesianism is similar to a historical description, can be also easily compared to a [court] process, in which the presented will be described to us, as if we hear some speakers or advocates, in which a wide time push around, always contradict each other, come also to miswording in the meanwhile, until in the end the Judge decide to one side (he understands the matter, or not).*⁸³⁸

This present research began with the Aristotelian formulation of analysis, the passage from things as they are known to us to things known by their own nature. We demonstrated that in order to make progress in the methodical process, one must use a procedure of estimation and determination of that which is yet to be known. The estimation of the not-yet-known is what the initiation of the philosopher takes as its central task, and it is a laborious process. It seems that both in the Cartesian and the Claubergian versions of method, what stands as a virtual reality, being assumed as the meaning being sought, is the truth of things; it is of an ontosophic nature, to use the anachronistic, yet relevant term. However, Claubergian ontosophy and Cartesian ontosophy are not the same. For Clauberg ontosophy is in the first place a pedagogical term, functioning as a lexicon of signs for reality and being. This language of signs one finds in the *Ontosophia*. This language of signs of matters can, as we noted in 3.2.8, can indeed be considered a kind of Cartesian linguistics. For Descartes, however, the truth

837 Clauberg, *Unterschied*, 49 (§59): “Die Cartesianische Philosophie beschrieben und wird heraußgegeben als eine *histori* / dadurch man die Sachen begreift mit allen ihren Umständen wie sie in ihren ersten Anfang nehmen / darnach allgemächlich erwachsen und mit der zunehmen/endlich aber zur Vollkommenheit gelangen.”

838 Clauberg, *Unterschied*, 50-51 (§62): “[U]nd wie die Cartesianische einer historischen beschreibung ganz ähnlich ist also kann diese füglich vergleichen werden mit einem Proceß / welcher uns dergestalt beschrieben wird, daß wir ein par für sprechere oder procuratoren anhören / welche sich eine geraume zeit mit kibbeln herumbtreiben/ sich immerhin widersprechen und entgegen seind/ auch wohl zu Scheltworten bißweilen gerahten/ bis endlich etwa der Richter nach seinem gutfinden. (er verstehe die Sache/oder nicht) den ausschlaggiebet/.”

of things lies elsewhere: It is found always as a solution to a problem, a solution which comes in the form of a formula (geometric or algebraic), a mathematical, quantitative construction of the matter-at-hand.

Let us conclude this inquiry by suggesting a term fitting to refer to that reality which stands to be estimated by the Claubergian methodical process. We can call this reality the *methodical virtual*. This methodical virtual is the innate idea of *method* itself; it is a *meta-techné*, a complete knowledge of the know-how of thought regarding the order of the matters-at-hand, which is in itself never fully realisable but which nevertheless serves as a guarantor and a guide for all method. It is the rational instance which serves as the basis for the process of self-estimation. This methodical virtual is a latent engine of thought. It is activated by any encounter with a matter under inquiry. Clauberg does not give us a clear definition of that methodical virtual, but its presence can be viewed throughout his philosophical corpus.

The methodical virtual works as a common estimator, synthetic in nature, ever expanding and ever mutating, reconfigured continuously through the sum of people's actions and operations. We must not forget that for Clauberg philosophy has always a *utilitarian* telos. When one assumes the task of initiation to philosophy, one works more consciously at the service of that methodical virtual; the task is to prepare a ground which can serve as a basis for future inquiries. This common estimator is diffused and infused throughout all given matters; it is cached, latent and inexhaustible. This is exactly what Descartes describes in the first rule of the *Regulæ* as the light of reason: It is this light which passes through all things.⁸³⁹ Also, it functions as common sense, lingering in and through all given matters. It is also common in the sense that as a reasonable capacity, it is innate in all persons. One should also note that in all the previous inquiries, *one cannot find a Claubergian theory of intuition*. Indeed, differently than Descartes, who gave to intuition a precise place in his method, Clauberg's method lacks intuition in the Cartesian sense. As to this, one can say that Clauberg's version of method is never spontaneous and is always artificial, demanding effort and synthesis.⁸⁴⁰

839 Descartes, *Œuvres* X, 360; Descartes, *Writings* I, 10.

840 The word *Intuitu* or appears in Clauberg only in the sense of the perception of things, as for example "intuitu rerum hinc perceptarum." (OOP II, 893). Interestingly enough, one can find affinities between Clauberg's conception of method and what Spinoza will define as the third, intuitive kind of knowledge.

This methodic virtual is what the methodist seeks but never finds. As we tried to show in the various chapters of this work, the virtual common estimator dwells in a diffused manner in all parts of the Cartesian conception of method. Here it is the researcher himself that is left to pursue his risky constructions in his search after the truth of things. The methodical virtual is that concentric, vanishing point that remains as the nature of the thing of which we think. The methodical virtual is an ideal situation of understanding. In this, our interpretation of Cartesian method is a realist one: Methodical process is an artificial process of an unending attempt towards assimilation into things, towards perceiving them *properly*. This is what we called in Section 3.1.10 Clauberg's "an other empiricism." Methodical work requires proceeding at a tangent to matters, drawing nearer and nearer to their reality. Cartesian realism as it is presented to us by Clauberg means training our mind to produce a maximal, optimal imitation of the matter we observe through a process of self-examination and self-estimation. The assumption is that an innate idea is actualised by our encounter with a certain matter in reality. The methodical process works as a restoration of this primary, evanescent idea.

In addition to unattainable methodical virtual, we have also a methodical actual, which is a good enough idea of the matter-at-hand. Only a good enough idea of a matter can begin for us a methodical process in the sense that a good enough idea of a matter is *produced* (and not restored, as in the methodical virtual) in any encounter with things in the world. The good enough idea of the thing enables us to proceed in the direction of metaphysics, that is to say to integrate the specific thing in the field of metaphysics. In a more Ramist manner, it is the idea that enables us *to use* the encountered thing. This good enough idea is an instrument for working with a certain thing, making usage of the thing. In fact, this good enough and reasonable idea of the thing is the positive judgmental content that we receive after the activation of judgment.

Through processes of resolution and composition (to use the Zabarellist vocabulary), we hope to have demonstrated, notably in Chapters 1.2, 4.1 and 4.2, that method works inherently as a habitus: It is a habitus in which one becomes accustomed, habituated to the truth of matters through the only two elementary tools that human reason possesses: resolution and composition. In that process of habituation, the most determining part is the first degree of habituation, the initiation of the philosopher, which is already the beginning of habituation to the order of matters. This initiation of the philosophical habit demands a hygienic, prophylactic process which, for the lack of another term in the tradition, we refer to as doubt, the emendation of previously received judgments. The methodical virtual, that common estimator, is like an unrevealed prototype of reason, a fully energised and realised reason. It is an *Ur-figura* of reason which, through method, we strive endlessly to achieve, like a diligent painter working

on his figures. The prototype of the common estimator guides the methodical process as a pre-destined thought, a predestined plan of reason that is only partially revealed to us, gradually, through the process of initiation and habituation to the truth of things.

From this perspective, *method* in the Cartesian context that we have tried to reconstruct in this concluding chapter can be defined as *the restoration of the activation of an innate idea by the encounter with a certain matter*. It is this process which can be then applied on similar matters and passed onwards, be taught, rehearsed and criticised. It may be that it is that methodical virtual which has passed onwards from philosopher to philosopher (or from a philosopher to his pupils) throughout the history of philosophy. The transference and transfiguration of that methodical virtual create what is called the philosophical tradition. Hence, philosophical tradition (differently from the philosophical canon) is that which passes onwards and outwards a methodical virtual which is the enduring initiation of the philosopher passing from a philosopher to his (or her) hearers and readers. What is described here may constitute the beginning of an articulation of methodical duration, which is an abeyance, a suspension, a postponement of thought, an effort to join the trail of a thought generated by a true idea (Spinoza), a valid empirical intuition of a particular matter (Clauberg) or a problem (Descartes). All method, in the Cartesian context, includes a process of de-habituation in which that which is already acquired as mental habit is placed in abeyance, under examination, diagnosed and, if and when verified, is being reconfigured in preparation for further pursuits of thought.

Remaining threads of questions:

Finally, regarding further research regarding Clauberg, this project leaves unanswered several points that should be more fully addressed: 1) In this concluding work, Clauberg's work was researched in relation to Aristotelianism (or less correctly, Scholasticism). The conclusion of the present research points however in the direction in which the *Platonic* conception of anamnesis of ideas must also be researched regarding Claubergian method. 2) A further question that must be asked is whether, in the last instance, one can indeed see in Clauberg a rationalist philosopher in the conventional sense of the term. The tendency of the present research is to answer this in the negative. In this case one should ask whether Cartesianism must also be 'rationalist,' and if so, one may want to re-ask whether Clauberg is a Cartesian thinker.

3) Similarly, further research should be dedicated to the more general issue of the meeting point between Cartesianism and Hermeneutics, especially that found in the Claubergian framework. 3.1) In this last framework one may wish furthermore to articulate Descartes' philosophy in hermeneutical terms, a task that may be a bit easier and feasible to achieve following the work of the present research.

Bibliography

Clauberg's Original Writings

Johannes Clauberg. *Disputatio Theologico-practica de Conscientia*, Praesidio D. Matthiae Pasoris. Groningen: Augustini Eissens, 1646.

— *Thesium Philosophicarum: Logicae ab aliis Disciplinis quibuscum vulgo confundi assolet distinction*, Moderatore Tobia Andreae. Groningen: Johannis Nicolai, 1646.

— *Unterschied zwischen der cartesianischer und der sonst in Schulen gebraeuchlicher Philosophie*. Duisburg: Adrian Wyngarten, 1657.

— *Redenkunst, Het menschelyk verstandt in de dingen te beghrijpen, oordelen, en onthouden, stierende*. Amsterdam: Jan Rieuwertsz, 1657.

— *Ars etymologica teutonum*. Duisburg: Daniel Asendrio, 1663.

— *Opera Omnia Philosophica*, J. T. Schalbruch ed. Amsterdam: P. and I. Blaev., 1691 (Reprint by Hildesheim-Zurich-New York: Olms, 1968).

Clauberg Translated

Clauberg, Johannes. *Logique ancienne et nouvelle*, trans. J. Lagrée et G. Coqui. Paris: Vrin, 2007.

Primary sources

Baillet, Adrien. *La vie de monsieur Descartes*, 2 vols., Paris: Daniel Horthemelz, 1691.

Conrad Dannhauer, Johann. *Idea boni interpretis et malitiosi caluminatoris quae obscuritate dispulsa*, 3rd edition (1630). Argentorati: Joani Philippi Mülbii, 1652.

Descartes, René. *Œuvres philosophiques* [AT], ed. Charles Adam and Paul Tannery, 10 Volumes. Paris: Vrin, 1982.

— *L'entretien avec Burman*, éd. Jean-Marie Beyssade. Paris: Presses Universitaires de France, 1981.

— *La recherche de la vérité par la lumière naturelle*, eds. Ettore Lojacono and Erik Jan Bos. Milano: FrancoAngeli, 2002.

Gutke, Georg. *Habitus primum principiorum, seu intelligentia*. Berlin, Johannis Kulij and Georgij Rungij, 1625.

Keckermann, Bartholomäus/ *Systema Logicae compendiosa compendiosa methodo adornatum pro iis, quorum captus artem brevem ac facilem desiderat : cum Progymnasmatibus usus logici*. Hannover, Apud Haeredes Wilhelmi Antonii, 1612.

Melanchton, Philipp. *Erroremata dialectices*. Wittenberg: Iohannes Lufft, 1547.

Menocchio, Giacomo. *De praesumptionibus, conjecturis, signis & indiciis commentaria*, 2 vols. Padova: Tarinus, 1594.

Meyer, Lodewijk. *Philosophia S. Scripturae interpres : exercitatio paradoxa, in qua, veram philosophiam infallibilem S. Literas interpretandi normam esse*. unknown publisher, 1666.

Ramus, Petrus. *Institutionum Dialecticarum libri tres*. Paris: Typographia Matthaei Davidis, 1552.

— *Institutionum dialecticarum libri très*. Paris: David, 1552.

— *Dialectique*. Paris: Wechel, 1555.

— *Quod sit unica doctrinae instituendae methodus*. Paris : Wechel, 1557.

— *Dialectica*. Basel: Eusebium, 1569.

— *Dialectica A. Talaei praelectionibus illustrata*. Basel: Per Eusebium, Episcopium et Nicolai, 1585.

Revius, Jacobus. *Methodi cartesianae consideratio theologica*. Lugd. Batavarum: Hieronimum de Vogel, 1648.

Spinoza, Benedictus de. *Tractatus theologico-politicus*. Hamburgi: Apud Henricum Kühnrat, 1670.

— *Traité de la réforme de l'entendement-Tractatus de intellectus emendatione*, bilingue, traduction André Lécrivain. Paris: Flammarion, 2003.

Von Tschirnhaus, Ehrenfried Walther. *Medicina Mentis, sive aris inveniendi praecepta generalia, editio nova*. Lipsiae: Apud Thomam Fritsch, 1695 [1687].

Wittich, Christoph. *Anti-Spinoza, sive Examen ethices Benedicti de Spinoza, et commentarius de Deo et eius attributis*. Amsterdam: Joannes Wolters, 1680.

Zabarella, Jacopo. *Opera logica*, Venice: Apud Meietum, 1578.

Wittichius, Christophorus. *Anti-Spinoza; sive examen Ethices Benedicti de Spinoza*. Amsterdam: Joannem Wolters, 1690.

Translations of primary sources

Acontius, Jacobus (Aconcio). *De Methodo, Über die Methode*, translation by Alois von der Stein, Annotated by Luty Geldsetzer. Duesseldorf, Stern Verlag, 1971.

Aristotle. *Categories. On Interpretation. Prior Analytics*. Translated by H. P. Cooke, Hugh Tredennick. Loeb Classical Library 325. Cambridge, MA: Harvard University Press. 1938.

Aristotle. *The complete works of Aristotle: the revised Oxford translation*, Jonathan Barnes ed., 2 Vols. Princeton, N.J.: Princeton University Press, 1984.

Aristotle. *Problems*, Volume I: Books 1-19. Edited and translated by Robert Mayhew. Loeb Classical Library 316. Cambridge, MA: Harvard University Press, 2011.

Arnauld, Antoine and Pierre Nicole. *Logic or the art of thinking*, ed. J. V. Buroker. Cambridge: Cambridge University Press, 1996.

Bacon, Francis. *The New Organon* [1620], ed. L. Jardine and M. Silverthorne. Cambridge: Cambridge University Press, 2000.

Descartes, René. *Compendium of Music*, trans. Walter Robert, Musicological Studies and Documents 8. Michigan: American Institute of Musicology, 1961.

— *Entretien avec Burman: manuscrit de Göttingen* (2 édition) traduit et annoté par Charles Adam. Paris: Vrin, 1975.

— *Conversation with Burman*, trans. J. Cottingham. Oxford: Clarendon, 1976.

— Frans Burman, Jean-Marie Beyssade, *L'entretien avec Burman*. Paris: Presses universitaires de France, 1981.

— *Philosophical Writings*, 3 vols., trans., J. Cottingham, D. Murdoch, R. Stoothoff and A. Kenny. Cambridge: Cambridge University Press, 1984–1991.

— *Discourse on Method, Optics, Geometry and Meteorology*, Revised edition, trans. Paul J. Olskamp. Indianapolis and Cambridge: Hackett Publishing, 2001.

— *Etude du bon sens, La recherche de la vérité et autres écrits de jeunesse (1616-1631)*, trans. Vincent Carraud and Gilles Olivo. Paris, Presses Universitaires de France, 2013.

Galen. *On the Constitution of the Art of Medicine. The Art of Medicine. A Method of Medicine to Glaucon*. Loeb Classical Library 516, I-IV, trans. Ian Johnston. London: Harvard University Press, 2016.

Kant, Immanuel. *Kritik der reinen Vernunft*. Hamburg: Felix Meiner Verlag, 1998.

Meyer, Lodewijk. *Philosophy as the interpreter of Holy Scripture* (1666), trans. S. Shirly. Milwaukee: Marquette University Press, 2005.

Ramus, Petrus, 2018. “That there is but one method of establishing a science,” trans. Eugene J. Barberand Leonard A. Kennedy. In *Renaissance Philosophy: New Translations (Reprint form 1973)*, edited by Leonard A. Kennedy, 109–113. Berlin and New York: De Gruyter Mouton, 2018.

Spinoza, Benedictus de. *The Collected Works of Spinoza*, trans. Edwin Curely, Volume I. Princeton: Princeton University Press, 1985.

— *Complete Works*, trans. S. Shirley. Indianapolis: Hackett Publishing, 2002.

Von Tschirnhaus, Walter Ehrenfried. *Médecine de l'esprit ou préceptes généraux de l'art de découvrir*, trans. Jean-Paul Wurtz. Strasbourg : Presses Universitaires de Strasbourg, 1995.

Zabarella, Jacques. *La nature de la logique*, trans. Dominique Bouillon, Paris: Vrin, 2009.

Zabarella, Jacopo, 2014. *On Methods* (Latin-English), Volume 1, Books I-II, edited and translated by John P. McCaskey. Cambridge, Mas.: Harvard University Press, 2014.

Secondary literature

Agathopoulos, Simeon, and Carlos Araújo Queiroz. “The Discovery of European Porcelain Technology.” In *Understanding People through their Pottery*, edited by M. Isabel Dias, M. Isabel Prudencio and João Carlos Bentes Waerenborgh, 211–215. Lisbon: Instituto Português de Arqueologia, 2005.

Alquié, Ferdinand. *La découverte métaphysique de l’homme chez Descartes* [1950]. Paris: Presses Universitaires de France, 2005.

— “Notes sur l’interprétation de Descartes par l’ordre des raisons.” *Revue de Métaphysique et de Morale* 61, no. 3-4 (1956): 403–418.

— *Leçons sur Descartes: Science et métaphysique chez Descartes, Les Cours de Sorbonne*. Paris: La table ronde, 1955.

Alvarado, Ruben. *The Debate that Changed the West: Grotius versus Althusius*. Aalten: Piscator, 2018.

Anderson, R. Lanier. *The Poverty of Conceptual Truth: Kant’s Analytic/Synthetic Distinction and the Limits of Metaphysics*. Oxford: Oxford University Press, 2015.

Anfray, Jean-Pascal. “Leibniz and Descartes.” In *The Oxford Handbook of Descartes and Cartesianism*, edited by Antoine-Mahut, Delphine Steven Nadler, Tad M. Schmaltz, 721–737. Oxford and New York: Oxford University Press, 2019.

Antoine-Mahut, Delphine. “Philosophizing with a historiographical figure: Descartes in Degérando’s *Histoire comparée des systèmes de philosophie* (1804 and 1847).” *British Journal for the History of Philosophy* 28 (2020): 533–552.

Antoine-Mahut, Delphine Steven Nadler, Tad M. Schmaltz, eds. *The Oxford Handbook of Descartes and Cartesianism*. Oxford and New York: Oxford University Press, 2019.

Arbib, Dan. *Descartes, la métaphysique et l’infini*. Paris: Presses Universitaires de France, 2017.

- Ariew, Roger. "Descartes and the Tree of Knowledge." *Synthese* 92, no. 1 (July 1992): 101–116.
- *Descartes and the last Scholastics* (Ithaca: Cornell University Press, 1999).
- "Descartes, les premiers cartésiens et la logique." *Revue de métaphysique et de morale* 1, no. 49 (2006): 55–71.
- *Descartes and the First Cartesians*. Oxford: Oxford University Press, 2014.
- Aucant, Vincent. *La philosophie médicale de Descartes*. Paris: Presses Universitaires de France, 2006.
- Auwers, Jean-Marie. "L'interprétation de la Bible chez Spinoza. Ses présupposés philosophiques." *Revue Théologique de Louvain* 21-22 (1990): 199–213.
- Backus, Irena. "The Teaching of Logic in Two Protestant Academies at the End of the 16th Century. The Reception of Zabarella in Strasbourg and Geneva." *Archiv für Reformationsgeschichte* 80 (1989): 240–251.
- Baillet A.-F. "Descartes à la recherche de la vérité." *Bulletin de l'Association Guillaume Budé* 2 (June 1963): 209–215.
- Balz, Albert G. A. "Clauberg and the Development of Occasionalism." *The Philosophical Review* 42, no. 6 (November 1933): 553–572.
- Belaval, Yves. "Comenius critique de Descartes." *Bulletin cartésien XIII, Archives de Philosophie* 47, no. 3 (1984): 2–25.
- Beysade, Jean-Marie. *Etudes sur Descartes. L'histoire d'un esprit*. Paris: Seuil, 2001.
- Bloch, David. *Aristotle on Memory and Recollection*. Leiden: Brill, 2007.
- Blumenberg, Hans. *Die Lesbarkeit der Welt*. Frankfurt am Main: Suhrkamp, 1981.
- *Die Legitimität der Neuzeit*. Frankfurt am Main: Suhrkamp, 1996.
- Bolliger, Daniel. *Methodus als Lebensweg bei Johann Conrad Dannhauer. Existentialisierung der Dialektik in der lutherischen Orthodoxie*. *Historia Hermeneutica* 15. Boston: De Gruyter, 2020.
- Bos, Erik-Jan and Jeroen van de Ven. "Se nihil daturum- Descartes's Unpublished Judgement of Comenius's Pansophiae Prodromus (1639)." *British Journal of the History of Philosophy* 12, no. 3 (2004): 369–386.

Boss, Jeffrey. "The 'Methodus medendi' as an index of change in the philosophy of medical science in the sixteenth and seventeenth centuries." *History and Philosophy of the Life Sciences* 1, no. 1 (1979): 13–42.

Boulad-Ayoub, Josiane. "Les récurrences du platonisme chez Descartes." *Philosophiques* 23, no. 2 (Automne 1996): 405–415.

Brown, Norman O. "Philosophy and Prophecy: Spinoza's Hermeneutics." *Political Theory* 14, no. 2 (May 1986): 195–213.

Bruyère, Nelly. *Méthode et dialectique dans l'œuvre de La Ramée. Renaissance et âge classique*. Paris: Vrin, 1984.

Burns, C. Delisle. "Leibniz and Descartes." *The Monist* 26, no. 4 (October 1916): 524–533.

Buzon, Frédéric de. "Mathématiques et dialectique : Descartes ramiste ?" *Les Études philosophiques* 75, no. 4 (2005): 455–467.

— "La nature des corps chez Descartes et Clauberg: Physique, mathématique et ontologie." In *Chemins du cartésianisme*, edited by Antonella Del Prete and Raffaele Carbone, 85–108. Paris: Garnier, 2017.

Carr, Spencer. "Spinoza's Distinction Between Rational and Intuitive Knowledge." *The Philosophical Review* 87, no. 2 (April 1978): 241–252.

Carraud, Vincent. "L'ontologie peut-elle être cartésienne ? L'exemple de l'Onstosophia de Clauberg, de 1647 à 1664 : De l'ens à la mens." In *Johannes Clauberg (1622–1665) and Cartesian Philosophy in the Seventeenth Century*, edited by Theo Verbeek, 13–38. Berlin and New York: Springer, 1999.

Cassan, Élodie. "La théorie cartésienne du jugement," *Labyrinthe* [Online], 19, no. 3 (2004), URL : <http://journals.openedition.org/labyrinthe/251>, consulted 22 August 2018.

Cassirer, Ernst. "La place de la *Recherche de la Vérité par la lumière naturelle* dans l'œuvre de Descartes," P. Schrecker trans., *Revue Philosophique de la France et de l'Étranger* 127, no. 5/6 (May-June 1939): 261–300.

Chomsky, Noam. *Cartesian linguistics: A Chapter in the History of Rationalist Thought* [1966]. Cambridge: Cambridge University Press, 2009.

Collacciani, Domenico. “Devenir cartésien ? La méthode de l’ontologie de Gerhard de Neufville à Johann Clauberg.” *Les Études philosophiques* 203, no. 3 (2020): 37–58.

Cook, Harold J. *The Young Descartes: Nobility, Rumour, and War*. Chicago and London: Chicago University Press. 2018.

Coqui, Guillaume. L’obscurité du sens chez Clauberg.” *Methodos* [En ligne] 7 (2007), URL : <http://journals.openedition.org/methodos/656>; DOI : 10.4000/methodos.656, Consulted 26 July 2018.

— “La Logique de Clauberg et sa théorie cartésienne de la connaissance” (PhD diss., University of Dijon and University of Sienna, 2008).

— “Le Cartésianisme de Clauberg.” In *Descartes et l’Allemagne*, edited by Jean Ferrari, Margit Ruffing, Matthias Vollet and Pierre Guenancia, 29–44. Hildesheim, Georg Olms, 2009.

Cottingham, John. “The Intellect, the Will, and the Passions: Spinoza's Critique of Descartes.” *Journal of the History of Philosophy* 26, no. 2 (April 1988): 239–257.

Courtine, Jean-François. “Les méditations cartésiennes de Martin Heidegger.” *Les Études philosophiques* 88, no. 1 (2009): 3–115.

Daniel, Stephen H. “Descartes’ Treatment of ‘lumen naturale,’” *Studia Leibnitiana* 101, no. 1 (1978): 92–100.

Danneberg, Lutz. “Logique et herméneutique au XVII siècle.” In *La logique herméneutique du XVIIe siècle : J.-C. Dannhauer et J. Clauberg*, edited by Jean-Claude Gens, 15–65. Argenteuil: Association “Le cercle Herméneutique”, 2006.

Darge, Rolf. *Habitus per actus cognoscuntur: Die Erkenntnis des Habitus und die Funktion des moralischen Habitus im Aufbau der Handlung nach Thomas von Aquin*. Bonn: Bouvier, 1996.

Darge, Rolf, Emmanuel J. Bauer and Günter Frank, eds. *Der Aristotelismus an den europäischen Universitäten der frühen Neuzeit*. Stuttgart: Kohlhammer, 2010.

Dekány, Andras. “Estime de soi et respect chez Descartes.” *Le Portique* [En ligne] 11 (2003), URL : <http://journals.openedition.org/leportique/560> , DOI : <https://doi.org/10.4000/leportique.560> , consulted 18.6.2021.

De Oliveira, Érico Andrade M. “La genèse de la méthode cartésienne: la *mathesis universalis* et la rédaction de la quatrième des Règles pour la direction de l’esprit.” *Dialogue* 49 (2010): 173–198.

- Des Chene, Dennis. "From habit to traces." In *A History of Habit- from Aristotle to Bourdieu*, edited by Tom Sparrow and Adam Hutchinson, 121–132. Maryland: Lexington, 2015.
- Dever, Josh. "What is Philosophical Methodology?" In *The Oxford Handbook of Philosophical Methodology*, edited by Herman Cappelen, Tamar Szabó Gendler, and John Hawthorne, 3–26. Oxford and New York: Oxford University Press, 2016.
- Douglas, Alexander. "Christoph Wittich's Anti-Spinoza." *Intellectual History Review* 24/2 (2014): 153–166.
- Dubouclez, Olivier. *Descartes et la voie de l'analyse*. Paris: Presses Universitaires de France, 2013.
- Duncan, Howard, 1989. "Descartes and the Method of Analysis and Synthesis." In *An Intimate Relation: Studies in the History and Philosophy of Science Presented to Robert E. Butts on his 60th Birthday*, edited by James Robert Brown and Jürgen Mittelstrass, 65–80. Berlin and New York: Springer, 1989.
- Durling, Richard. "Method in Galen." *Dynamis. Acta Hispanica ad Medicinae Scientiarumque Historiam Illustrandam* 15 (1995): 41-46.
- Eberhardt, Kai-Ole. *Christoph Wittich (1625-1687): Reformierte Theologie unter dem Einfluss von René Descartes*. Vandenhoeck und Ruprecht, Göttingen, 2019.
- Edwards, Michael. "Time and Perception in Late Renaissance Aristotelianism," In *Theories of Perception in Medieval and Early Modern Philosophy*, edited by Pekka Kärkkäinen and Simo Knuutila, 225–244. New York and Berlin: Springer, 2008.
- Efal, Adi, 2014. "Generic Classification and Habitual Subject Matter." In *The Making of the Humanities, Volume III: The Modern Humanities*, edited by Rens Bod, Jaap Maat and Thijs Weststeijn, 345–358. Amsterdam: Amsterdam University Press. 2014.
- Efal-Lautenschläger, Adi. "The figural go-between in the Cartesian conception of science," *Interdisciplinary Science Reviews* 42, no. 3 (October 2017): 269–281.
- Eiland, Howard. "Heidegger's etymological web," *Boundary 2* 10, no. 2 (Winter 1982): 39–58.
- Eire, Carlos M. N. *War against the Idols: The Reformation of Worship from Erasmus to Calvin*. Cambridge: Cambridge University Press, 1986.
- Favaretti Camposampiero, Matteo, Mariangela Priarolo and Emanuela Scribano, eds. *Occasionalism: From Metaphysics to Science*. Turnhout: Brepolis, 2018.

Feingold, Mordechai, Joseph S. Freedman, and Wolfgang Rother, eds. *The Influence of Petrus Ramus: Studies in sixteenth and seventeenth century philosophy and sciences*. Basel: Schwabe, 2001.

Fichant, Michel, 2020. "Leibniz, dynamics, and metaphysics according to Martial Gueroult." *Revue internationale de philosophie* 291, no. 1: 13-29

Field, Richard W., "Descartes on the Material Falsity of Ideas." *The Philosophical Review* 102, no. 3 (July 1993): 309-333.

Fløistad, Guttorm, 1969. "Spinoza's theory of knowledge." *Inquiry* 12, no. 1 no. 4: 41–65.

Floss, Pavel, 1972. "Comenius und Descartes." *Zeitschrift für philosophische Forschung* 26 no. 2: 231-253.

Forsman, Jan. "Descartes on Will and Suspension of Judgment: Affectivity of the Reasons for Doubt." In *The Concept of Affectivity in Early Modern Philosophy*, edited by Gábor Boros, Judit Szalai & Oliver István Tóth, 35–58. Budapest: Eötvös University Press, 2017.

Foucault, Michel. *Les mots et les choses*. Paris: Gallimard, 1966.

Frank, Günter and Andreas Speer, eds. *Der Aristotelismus in der frühen Neuzeit. Kontinuität oder Wiederaneignung?*. Wiesbaden: Harrassowitz, 2007.

Frank, Günter and Herman J. Selderhuis, eds. *Philosophie der Reformierten*. Stuttgart: Frommann-Holzboog, 2012.

Freedman, Joseph. "Aristotelianism and Humanism in the Late Reformation German Philosophy: The case of Clemens Timpler." In *The Harvest of Humanism in Central Europe: Essays in Honor of Lewis W. Spitz*, edited by Manfred Fleischer, 213–232. St. Louis: Concordia Publishing House, 1992.

— "The Diffusion of the Writings of Petrus Ramus in Central Europe, c. 1570-c. 1630." *Renaissance Quarterly* 46, No. 1 (Spring 1993): 98–152.

— "Classifications of Philosophy, the Sciences, and the Arts in Sixteenth- and Seventeenth-Century Europe in The Modern Schoolman." *Modern Schoolman* 72 no. 1 (1994): 37–65.

— "The Career and Writings of Bartholomew Keckermann (d. 1609)." *Proceedings of the American Philosophical Society* 141/3 (September 1997): 305–364.

— “‘Professionalization’ and ‘Confessionalization:’ The place of physics, philosophy, and arts instruction at Central European academic institutions during the Reformation Era.” *Early Science and Medicine* 6, no. 4 (2001): 334–352.

— “A neglected treatise on scientific method (*methodus scientifica*) published by Johannes Bellarinus in 1606.” In *Geschichte Der Hermeneutik Und Die Methodik Der Textinterpretierenden Disziplinen*, edited by Jorg Schoenert and Friedrich Vollhardt, 43–82. New York and Berlin, Walter de Gruyter.

Freedman, Joseph, Christoph Strohm, Herman J. Selderhuis eds. *Späthumanismus und reformierte Konfession: Theologie, Jurisprudenz und Philosophie in Heidelberg an der Wende zum 17. Jahrhundert*. Tübingen: Mohr Siebeck, 2006.

Ganoczy, Alexandre and Stefan Scheld. *Die Hermeneutik Calvins: Geistesgeschichtliche Voraussetzungen und Grundzüge*. Wiesbaden: Franz Steiner Verlag, 1983.

Ganther, Heinrich. “Weiterbildung der aristotelischen Wissenschaftslehre bei Jacopo Zabarella (1533-1589).” In *Der Aristotelismus an den europäischen Universitäten der frühen Neuzeit*, edited by Rolf Darge, Emmanuel J. Bauer and Günter Frank, 99–110. Stuttgart: Kohlhammer, 2010.

Garber, Daniel. *Descartes Embodied: Reading Cartesian Philosophy through Cartesian Science*. Cambridge: Cambridge University Press, 2000.

— “God, Laws, and the Order of Nature: Descartes and Leibniz, Hobbes and Spinoza.” In *The Divine Order, the Human Order, and the Order of Nature: Historical Perspectives*, edited by Eric Watkins, 45–66. Oxford and New York: Oxford University Press, 2013.

Garber, Daniel and Leseley Cohen. “A Point of Order: Analysis, Synthesis, and Descartes's *Principles*.” *Archiv für Geschichte der Philosophie* 64, no. 2 (1982): 136–147.

Garcia, Jorge J. E., 2011. “Categories vs. Genera: Suárez’s difficult balancing act.” In *Categories and What Is Beyond*, edited by Gyula Klima and Alexander Hall, 1–16. Cambridge: Cambridge Scholars Press, 2011.

Garrett, Aaron V. *Meaning in Spinoza’s Method*. Cambridge, Cambridge University Press, 2003.

Gaukroger, Stephen. *Cartesian Logic: An Essay on Descartes's Conception of Inference*. Oxford and New York: Oxford University Press, 1989.

- Genette, Gérard. *Des genres et des œuvres*. Paris: Seuil, 2012.
- Gens, Jean-Claude. *La logique herméneutique du XVIIe siècle : J.-C. Dannhauer et J. Clauberg*. Argenteuil: Association "Le cercle Herméneutique", 2006.
- Giglioni, Guido. "Learning to read nature: Francis Bacon's notion of experiential literacy (experientia literata)." *Early science and medicine* 4-5 (2013): 405–34.
- "From the woods of experience to the metaphysics: Bacon's notion of silva." *Renaissance Studies* 28, no. 2 (April 2014): 242–261.
- "Medicine of the mind in early modern philosophy." in *The Routledge Handbook of the Stoic Tradition*, edited by John Sellars, 189–203. New York and London: Routledge, 2016.
- Gilbert, Neal Ward. *Renaissance concepts of method*. New York: Columbia University Press, 1960.
- Gill, Christopher. "Galen and the Stoics: Mortal Enemies or Blood Brothers?" *Phronesis* 52, no. 1 (2007): 88–120.
- Goebel, Julius. "Notes on the History and Principles of Hermeneutics." *The Journal of English and Germanic Philology* 17, no. 4 (October 1918): 602–621.
- Goudrian, Aza, ed. *Jacobus Revius, a Theological Examination of Cartesian Philosophy: Early Criticisms (1647)*. Leiden and Boston: Brill, 2002.
- Grabiner, Judith V. "Descartes and Problem-Solving." *Mathematical Magazine* 68, no.2 (April 1995): 83–97.
- Graves, Frank Pierrepont. *Peter Ramus and the Educational Reformation of the Sixteenth Century*. New York: Macmillan Company, 1912.
- Griffith, James, *Fable, Method, and Imagination in Descartes*. London: Palgrave Macmillan, 2018.
- Grosholz, Emily R. *Cartesian method and the problem of reduction* (Oxford: Clarendon Press, 1991).
- Grunert, Frank und Kurt Seelmann, eds. *Die Ordnung der Praxis. Neue Studien zur Spanischen Spätscholastik*. New York and Berlin: De Gruyter, 2001.
- Guenancia, Pierre. *L'intelligence du sensible: essai sur le dualisme cartésien*. Paris: Gallimard, 1998.
- Gueroult, Martial. *Descartes selon l'ordre des raisons*. 2 vols. Paris: Aubier, 1953.

— *Études sur Fichte*. Paris: Aubier-Montaigne, 1974.

— *Philosophie de l'histoire de la philosophie*. Paris: Aubier-Montaigne, 1979.

Guillory, John. "Marlowe, Ramus, and the Reformation of Philosophy." *ELH* 81, no. 3 (2014): 693–732.

Hamid, Nabeel. "Domesticating Descartes, Renovating Scholasticism: Johann Clauberg And The German Reception of Cartesianism." In *Reshaping Natural Philosophy: Tradition and Innovation in the Academic Milieu*, edited by Andrea Sangiacomo, special issue of *History of Universities* (forthcoming).

— "Substance, Causation, and the Mind-Body Problem in Johann Clauberg." Forthcoming in *Oxford Studies in Early Modern Philosophy* 11 (2022).

Hamou, Philippe. "Sur les origines du concept de méthode à l'âge classique: La Ramée, Bacon et Descartes." *Revue LISA* 12, no. 5 (2014), <https://hal.archives-ouvertes.fr/hal-02326900/> consulted on 15.11.2020.

Hintikka, Jaako and Unto Remes. *The Method of Analysis, Its Geometrical Origin and Its General Significance*. Dordrecht and London: Springer, 1974.

Hoffman, Paul, "The Unity of Descartes' Man." *The Philosophical Review* 95 (1986): 339–369.

Hotson, Howard. *Johann Heinrich Alsted 1588–1638: Between Renaissance, Reformation, and Universal Reform*. Oxford: Oxford University Press, 2000.

— *Commonplace Learning: Ramism and its German Ramifications, 1543-1630*. Oxford: Oxford University Press, 2007.

Jacquette, Dale. "Brentano's Concept of Intentionality." In *The Cambridge Companion to Brentano*, edited by Dale Jacquette, 98–130. Cambridge: Cambridge University Press, 2004.

Jalobeanu, Dana. "Core experiments. Natural Histories and the Art of *Experientia literata*: the meaning of Baconian Experimentation." *Societate si Politica* 5 (2011): 88–104.

— *The Art of Experimental Natural History: Francis Bacon in Context*. Bucharest: Zeta Books, 2015.

Janik, Allan. "Notes on the Origins of Fleck's Concept of 'Denkstil.'" In *Cambridge and Vienna. Vienna Circle Institute Yearbook* 12, edited by M. C. Galavoti, 179–188. Dordrecht: Springer, 2006.

Jardine, Nicholas. "Keeping Order in the School of Padua: Jacopo Zabarella and Francesco Piccolomini on the Offices of Philosophy." In *Method and Order in Renaissance Philosophy of Nature. The Aristotle Commentary Tradition*, edited by Daniel A. Di Liscia, Eckhard Kessler and Charlotte Methuen, 183–209. Aldershot: Ashgate, 1997.

Jayasekera, Marie. "Responsibility in Descartes's Theory of Judgment." *Ergo: An Open Access Journal of Philosophy* 3, no. 12 (2016), <http://dx.doi.org/10.3998/ergo.12405314.0003.012>, consulted on 16.12.2020.

Jesus Teixeira, William de. "Quelques remarques sur l'innéisme dispositionnel chez Descartes et chez Leibniz." *Controversia* 16, no. 2 (May-August 2020):131–146.

Joyce, Richard. "Cartesian memory." *Journal of the History of Philosophy* 35, no. 3 (July 1997): 375–393.

Kambouchner, Denis. "La liberté chez Descartes et la psychologie." In *Autour de Descartes. Le problème de l'âme et du dualisme*, edited by Jean-Louis Vieillard-Baron, 101–140. Paris, Vrin, 1991.

— "La méthode en pratique." In *La méthode*, edited by Patrick Wotling, 101–131. Paris: Vrin, 2019.

Kulstad, Mark A. "Leibniz, Spinoza, and Tschirnhaus," In *Spinoza: Metaphysical Themes*, edited by Olli I. Koistinen and John I. Biro, 221–240. Oxford and New York: Oxford University Press, 2002.

Kunna, Ulrich. *Das Krebsgeschwür der Philosophie. Komenskys Auseinandersetzung mit dem Cartesianismus*. Sankt Augustin: Academia-Verlag, 1991.

Lachterman, David Rapport. *The Ethics of Geometry: a Genealogy of Modernity*. New York and London: Routledge, 1989.

Lagrée, Jacqueline. "Louis Meyer et la 'Philosophia S. Scripturae Interpres' : Projet Cartésien, Horizon Spinoziste." *Revue des Sciences philosophiques et théologiques* 71, no. 1 (January 1987): 31–43.

— 1989. "Spinoza et Clauberg, de la logique novantique à la puissance de l'idée vraie." In *Méthode et Métaphysique* edited by Groupe de recherches spinozistes, 19–46. Paris, Presses Universitaires de France, 1989.

— "Sens et vérité chez Clauberg et Spinoza," *Philosophiques* 29 (2002): 121–138.

Laporte, Jean. *Le rationalisme de Descartes*. Paris: Presses Universitaires de France, 1945.

Le Gall, Jean-Marie. "Ramus et la réforme de l'Université de Paris en 1562." In *Les Transformations des universités du XIIIe au XXIe siècle, actes du colloque tenu à l'Université du Québec à Montréal 2003*, edited by Yves Gingras et Lyse Roy, 41–68. Québec, Presses Universitaires du Québec, 2006.

Le Blond, Jean-Marie. *Logique Et Méthode Chez Aristote : Études Sur la Recherche des Principes Dans la Physique Aristotélicienne*. Paris: Vrin, 1939.

Lee, Rensselaer W. "Ut Pictura Poesis: The Humanistic Theory of Painting." *The Art Bulletin* 22/4 (December 1940): 197–269.

Leinkauf, Thomas. *Grundriss Philosophie des Humanismus und der Renaissance (1350–1600)*, 2 Vols. Meiner: Hamburg, 2017.

Leinsle, Ulrich G. "Comenius in der Metaphysik des jungen Clauberg." In *Johannes Clauberg (1622–1665) and Cartesian Philosophy in the Seventeenth Century*, edited by Theo Verbeek, 1–12. Berlin and New York: Springer, 1999.

Lohr, Charles H. "The sixteenth-century transformation of the Aristotelian division of the speculative sciences." In *The Shapes of Knowledge from the Renaissance to the Enlightenment*, edited by Donald R. Kelley and Richard H. Popkin, 49–58. Dordrecht: Springer, Dordrecht, 1991.

Luiz, Eva. "Bacon's Doctrine of the Idols and Skepticism." In *Pyrrhonism in ancient, modern, and contemporary philosophy*, edited by Diego E. Machuca, 99–129. New York and Berlin: Springer, 2012.

Macherey, Pierre. *Querelles cartésiennes*. Villeneuve d'Ascq: Presses universitaires du Septentrion, 2014.

Maksimović, Jelena and Osmanović Aleksandra Milanović. "John Amos Comenius' contribution to the development of the didactic methodology," *Siedlce Comeniological Research Bulletin* 5 (2018): 89–104.

Maksimović, Jelena & Sanja Sretic. "Principle of evidence of John Amos Comenius as a basis for development of pedagogical research techniques and instruments." *Siedleckie Zeszyty Komeniologiczne*, seria Pedagogika 6 (2019), 243–256. DOI: 10.5604/01.3001.0013.6255, consulted 26.12.2020.

Marion, Jean-Luc. "L'ego et Le Dasein: Heidegger et la 'Destruction' de Descartes dans 'Sein Und Zeit,'" *Revue De Métaphysique Et De Morale* 92 no. 1 (1987): 25–53.

— *Sur la théologie blanche de Descartes* [1981], édition corrigée. Paris: Presses Univesitaires de France, 1991.

- *Sur l'ontologie grise de Descartes* [1975], nouvelle édition. Paris: Vrin, 2000.
- *Sur la pensée passive de Descartes*. Paris: Presses Universitaires de France, 2013.
- “Le doute comme jeu suprême.” *Les Études philosophiques* 205/1 (2021): 5–36.
- *Questions cartésiennes III: Descartes sous le masque du cartésianisme*. Paris: Presses Universitaires de France, 2021.
- McKeon, Richard. “Causation and the Geometric Method in the Philosophy of Spinoza (I).” *The Philosophical Review* 39, no. 2 (March 1930): 178–189.
- McRae, Robert. “The Unity of the Sciences: Bacon, Descartes, and Leibniz.” *Journal of the History of Ideas* 18/1 (1957): 27-48.
- *The Problem of the Unity of the Sciences: Bacon to Kant*. Toronto: University of Toronto Press, 1961.
- Meerhoff, Kees. “Bartholomew Keckermann and the Anti-Ramist tradition at Heidelberg.” In *Späthumanismus und reformierte Konfession: Theologie, Jurisprudenz und Philosophie in Heidelberg an der Wende zum 17. Jahrhundert*, edited by Joseph Freedman, Christoph Strohm and Herman J. Selderhuis, 169–206. Tübingen: Mohr Siebeck, 2006.
- Mehl, Édouard, “La question du premier principe dans La Recherche de la Vérité.” In *Nouvelles de la République des Lettres* 1 (1999): 77–97.
- “Descartes critique de la logique pure.” *Les études philosophiques* 75, no. 4 (2005): 485-500.
- “Philosophia interpres naturae. L'interprétation de la nature au seuil de l'âge classique.” *Revue de Métaphysique et de Morale* 2 (2009): 167–186.
- “La science capitale : Johann Valentin Andreae et les mathématiques.” In *Religion und Naturwissenschaft im 16. und 17. Jahrhundert*, edited by Kaspar von Greyerz, Thomas Kaufmann, Kim Siebenhüner, Roberto Zaugg, 196–214. Gütersloh: Gütersloher Verlaghaus, 2010.
- Reviewed Work(s): *La logique herméneutique du XVII e siècle*. J. C. Dannhauer et J. Clauberg, (coll. « Phéno ») by Jean-Claude Gens, *Revue Philosophique de la France et de l'Étranger* 200, no. 2 (April-June 2010): 258–259.
- “Descartes et L'égalité des esprits.” *L'enseignement philosophique*, 64, no.2 (2014): 23-36.

— “Une polémographie de la modernité”: Sur les *Querelles Cartésiennes* de Pierre Macherey.” *Methodos* 16 (2016) <https://journals.openedition.org/methodos/4653>, consulted on 23.12.2020.

— “Descartes ou la Philosophie des (re)commencements.” *Archives de Philosophie* 81 (2018): 49–67.

— “Ego sum qui sentio: Phenomenology and the Reembodied Ego.” *Methodos* 18 (2018), <https://doi.org/10.4000/methodos.5066>, consulted 14.4.2021.

— *Descartes en Allemagne 1619-1620 : Le contexte allemand de l'élaboration de la science cartésienne*, 2e édition revue et augmentée. Strasbourg : Presses Universitaires de Strasbourg, 2019.

— *Descartes et la fabrique du monde*. Paris: Presses Universitaires du France, 2019.

Mehl, Édouard and Sophie Roux, eds. *La Science et sa logique. Le statut épistémique de la logique de Descartes à Husserl*. Cahiers philosophiques de Strasbourg 34. Strasbourg: Presses Universitaires de Strasbourg, 2012.

Meier-Oeser, Stephan. “The Hermeneutical Rehabilitation of Supposition Theory in Seventeenth-Century Protestant Logic.” *Vivarium* 51, no. 1 no. 4 (2013): 464–481.

Menn, Stephen. “Plato and the Method of Analysis.” *Phronesis* 47, no. 3 (2002): 193–223.

Micknight, Douglas and Stephen Triche. “The quest for method: the legacy of Peter Ramus.” *History of Education* 33, no. 1 (2004): 39-54.

Monfasani, John. “Toward the Genesis of the Kristeller Thesis of Renaissance Humanism: Four Bibliographical Notes.” *Renaissance Quarterly* 53, no. 4 (Winter 2000): 1156-1173.

Moreau, Denis. *Deux Cartesiens: La Polemique Entre Antoine Arnauld et Nicolas Malebranche*. Paris: Vrin, 1999.

Naaman-Zauderer, Noa. *Descartes' Deontological Turn: Reason, Will, and Virtue in the Later Writings*. Cambridge : Cambridge University Press, 2010.

Neto, José R. Maia. “Academic Skepticism in Early Modern Philosophy.” *Journal of the History of Ideas* 58/2 (April 1997): 199–220.

Newman, Lex. “Attention, Voluntarism and Liberty in Descartes’s Account of Judgment.” *Res Philosophica* 92, no. 1 (January 2015): 61–91.

- 2019. “Descartes on the Method of Analysis.” In *The Oxford Handbook of Descartes and Cartesianism*, edited by Delphine Antoine-Mahut, Steven Nadler and Tad M. Schmaltz, 65–88. Oxford and New York: Oxford University Press, 2019.
- Oldrini, Guido. “En quête d’une méthodologie : la position du ramisme.” *Argumentation* 5 (November 1991): 387–401.
- *La disputa del metodo nel Rinascimento: indagini su Ramo e sul ramismo*. Florence: Le lettere, 1997.
- Olk, Cartesn. *Kants Theorie der Synthesis: Zu einem grundlegenden Gedanken der kritischen Philosophie. Kantstudien Ergänzungshefte 192*. Berlin and New York: De Gruyter, 2016.
- Ong, Walter J. *Ramus, Method, and the Decay of Dialogue: From the Art of Discourse to the Art of Reason [1958]*. Chicago and London: University of Chicago Press, 2005.
- Ong-Van-Cung, Kim Sang. *L’objet de nos pensées. Descartes et l’intentionnalité*. Paris, Vrin, 2012.
- Pagin, Peter. “Indeterminacy and the Analytic/Synthetic Distinctions: a Survey.” *Synthese* 164, no. 1 (September 2008): 1–18.
- Palmer, Terri. “The Dictates of Reason: Bacon, Ramus, and the Naturalization of Invention.” *OSSA Conference Archive* 80 (1997), <https://scholar.uwindsor.ca/ossaarchive/OSSA2/papersandcommentaries/80>, consulted 26.12.2020.
- Panza, Marco. “François Viète, Between Analysis and Cryptanalysis.” *Studies in History and Philosophy of Sciences* 37 (2006): 269–289.
- Peden, Knox. “Descartes, spinoza, and the impasse of french philosophy: Ferdinand Alquie versus Martial Gueroult.” *Modern Intellectual History* 8, no. 2 (2011): 361–390.
- Peregrin, Jaroslav. *Inferentialism; Why Rules Matter*. London: Palgrave Macmillan, 2014.
- Popkin, Richard H. “Charron and Descartes: The Fruits of Systematic Doubt.” *The Journal of Philosophy* 51, no. 25 (December 1954): 831–837.
- Popkin, Richard H., and Arie Johan Vanderjagt, eds. *Scepticism and Irreligion in the Seventeenth and Eighteenth Centuries*. Leiden: Brill, 1993.
- Pozzo, Riccardo. “Ramus and other Renaissance Philosophers on Subjectivity,” *Topoi* 22 (2003): 5–13.

— “Umdeutungen der aristotelischen Habituslehre in der Renaissance.” In *Der Aristotelismus in der frühen Neuzeit. Kontinuität oder Wiederaneignung?*, edited by , Günter Frank and Andreas Speer, 259–273. Wiesbaden: Harrassowitz, 2007.

— *Adversus Ramistas. Kontroversen über die Natur der Logik am Ende der Renaissance*. Basel: Schwabe, 2012.

Rabouin, David. *Mathesis Universalis: L’Idée de Mathématique Universelle d’Aristote à Descartes*. Paris : Presses Universitaires de France, 2009.

Ragni, Alice. “Ontologia e analogia entis tra Johannes Clauberg e Jacob Thomasius.” *Archivio di Filosofia* 3 (2016): 155–166.

— “L’oggetto in generale. L’orgoglio dell’ontologia da Clauberg a Leibniz.” PhD diss., Université de Paris Sorbonne, 2016.

— “Johannes Clauberg and the Search for the Initium Philosophiae: The recovery of (Cartesian) Metaphysics.” In *The Oxford Handbook of Descartes and Cartesianism*, edited by Delphine Antoine-Mahut, Steven Nadler and Tad M. Schmaltz, 465–480. Oxford and New York: Oxford University Press, 2019.

— “Bibliographia Claubergiana : Tracking a Crossroads in the History of Philosophy.” *Journal of the History of Philosophy* 57, no. 4 (2019): 731–748.

Rebhorn, Wayne A. *Renaissance Debates on Rhetoric*. Ithaca: Cornell University Press., 1999.

Renz, Ursula. “Doxastische Selbstkontrolle und Wahrheitssensitivität: Descartes und Spinoza über die Voraussetzungen einer rationalistischen Ethik der Überzeugungen.” *Archiv für Geschichte der Philosophie* 96, no. 4 (2014): 463–488.

Robinet, André, ed. *Pierre de la Ramée (Ramus), Revue des Sciences philosophiques et théologiques* 70, no. 1 (January 1986).

— *Aux sources de l’esprit cartésien, l’axe La Ramée-Descartes: De la Dialectique de 1555 aux Regulæ*. Paris: Vrin, 1996.

Rodis-Lewis, Geneviève. “Le dernier fruit de la métaphysique cartésienne: La générosité.” *Les Études philosophiques* 1 (January-March 1987): 43–54.

Roling, Bernd. “Aristoteles zwischen melanchtonischem Bildungssystem, Paracelsismus und Descartes: Die Diskussion des Leib-Seele-Problems an den schwedischen Universitäten des 16. Und 17. Jahrhunderts.” In *Der Aristotelismus an den europäischen Universitäten der frühen Neuzeit*, edited by Rolf Darge, Emmanuel J. Bauer and Günter Frank, 203–234. Stuttgart: Kohlhammer, 2010.

- Romano, Claude. "Les trois médecines de Descartes." *Dix-septième siècle* 217 (2002/4): 675–696.
- Rozemond, Marleen. *Descartes's Dualism*. Cambridge: Harvard University Press, 1998.
- Ramis-Barceló, Rafael. "The reception of Petrus Ramus in Catholic thought." *Revue des sciences philosophiques et théologiques* 103 (2019/2-3): 379–406.
- Reiss, Timothy. "Neo-Aristotle and method Between Zabarella and Descartes." In *Descartes' Natural Philosophy*, edited by Stephen Gaukroger et al., 195–227. New York and London, Taylor & Francis, 2000.
- Recker, Doren A. "Mathematical demonstration and deduction in Descartes's early methodical and scientific writings." *Journal of the History of Philosophy* 31/2 (April 1993): 223–244.
- Reynaud, Valentine. "L'usage chomskyen de l'innéisme cartésien." *Methodos* 18 (2018), <http://journals.openedition.org/methodos/5021>; DOI: <https://doi.org/10.4000/methodos.5021> , consulted on the 28.5.2021.
- Riska, Augustin. "Methodology and philosophy," *Metaphilosophy* 3/3 (July 1972): 219–237.
- Robinson, Lewis. "Le 'Cogito' cartésien et l'origine de l'idéalisme moderne." *Revue Philosophique de la France et de l'Étranger* 123, no. 5/8 (May-August 1937): 307–335.
- Rosenzweig, Franz. *Stern der Erlösung* [1921], ed. A. Raffelt, Freiburg am Beigsau: Universitätsbibliothek, 2002.
- Roux, Sophie. "Premiers éléments d'une enquête sur Jacques du Roure." *Bulletin cartésien* 49 (2020): 168–180.
- Sabot, Philippe. *Le Même et l'Ordre. Michel Foucault et le savoir à l'âge classique*. Lyon, ENS Éditions, 2015.
- Sakamoto, Kuni. *Julius Caesar Scaliger, Renaissance Reformer of Aristotelianism. A Study of His Exotericae Exercitationes (1557)*. Dordrecht: Brill, 2016.
- Savini, Massimiliano. "Le développement de la méthode cartésienne dans les Provinces-Unies (1643-1665)." PhD diss., École pratique des hautes études, 2002.
- "L'insertion du cartésianisme en logique : la Logica vetus & nova de Johannes Clauberg." *Revue de métaphysique et de morale* 49, no. 1 (2006): 73–88.

— “La Panacea Philosophica de Johann Heinrich Alsted: un projet architectonique d'accès au savoir.” In *Branching Off: The Early Moderns in Quest for the Unity*, edited by Vlad Alexandrescu, 211–215. Bucharest: Zeta Books, 2009.

— *Johannes Clauberg, Methodus cartesiana et ontologie*. Paris: Vrin, 2011.

Schachter, Jean-Pierre. “Descartes, Divine Veracity, and Moral Certainty.” *Dialogue*, 44, no. 1 (2005): 15–40.

Schmaltz, Tad M. *Radical Cartesianism: The French Reception of Descartes*. Cambridge: Cambridge University Press, 2002.

— “PanzerCartesianer: The descartes of martial Gueroult's descartes selon l'ordre des raisons.” *Journal of the History of Philosophy*, 52, no. 1 (2014): 1–13.

— *Early Modern Cartesianisms, Dutch and French Constructions*. Oxford: Oxford University Press, 2016.

— “Spinoza and Descartes.” In Michael Della Rocca ed., *The Oxford Handbook of Spinoza*, edited by Michael Della Rocca, 63–83. Oxford and New York: Oxford University Press, 2017.

— “Gueroult on Spinoza and the Ethics.” *Revue internationale de philosophie* 291, no. 1 (2020): 51–62.

Schmid, Stefan. “Faculties in Early Modern Philosophy.” In *The Faculties: A History*, edited by Dominik Perler, 150–198. Oxford: Oxford University Press, 2015.

Schmidt-Biggemann, Wilhelm. *Topica Universalis: Eine Modellgeschichte humanistischer und barocker Wissenschaft*. Hamburg: Felix Meiner, 1983.

Schmitt, Charles B. “Experience and experiment: A comparison of Zabarella's view with Galileo's in De Motu.” *Studies in the Renaissance* 16 (1969): 80–138.

— *Aristotle and the Renaissance*. Cambridge and London: Harvard University Press, 1983.

Schneider, Daniel. “Spinoza's epistemological methodism.” *Journal of the History of Philosophy* 54, no. 4 (October 2016): 573–599.

Schuster, John. *Descartes agonists: Physico-mathematics, Method & Corpuscular-Mechanism 1618-33*. New York and Berlin: Springer, 2013.

Scoville, Warren C. “The Huguenots and the Diffusion of Technology. I.” *Journal of Political Economy* 60, no. 4 (August 1952): 294–311.

- Sepper, Denis. *Descartes's Imagination: Proportion, Images, and the Activity of Thinking*. Berkeley, Los Angeles and Oxford: University of California Press, 1996.
- Shapiro, Lisa. "Cartesian Generosity." *Acta Philosophica Fennica* 64 (1999): 249–276.
- Shockey, R. Matthew. "Heidegger's Descartes and Heidegger's Cartesianism." *European Journal of Philosophy* 20 (2012): 285–311.
- Smith, Pamela H., Amy R. W. Meyers, and Harold J. Cook eds. *Ways of Making and Knowing: The Material Culture of Empirical Knowledge*. Ann Arbor: University of Michigan Press, 2013.
- Smith, Arthur David. "Spinoza, Gueroult, and Substance." *Philosophy and Phenomenological Research* 88, no. 3 (2014): 655–688.
- South, James B. "Zabarella and the Intentionality of Sensation." *Rivista di Storia della Filosofia* 57, no. 1 (2002):5–25.
- Selderhuis, Herman J. "Die Heidelberger Artistenfakultät zur Zeit der Schüler Melanchton." In *Philosophie der Reformierten*, edited by Günter Frank and Herman J. Selderhuis, 47–66. Stuttgart: Frommann-Holzboog, 2012.
- Sepper, Dennis L. *Descartes' s Imagination: Proportion, Images, and the Activity of Thinking*. Berkeley-Los Angeles-London: University of California Press, 1996.
- Sgarbi, Marco. *The Aristotelian Tradition and the Rise of British Empiricism: Logic and Epistemology in the British Isles (1570–1689)*. New York and Berlin: Springer, 2012.
- *Kant and Aristotle: Epistemology, Logic, and Method*. New York: Suny, 2016.
- Shapin, Steven. "Descartes the Doctor: Rationalism and Its Therapies." *British Journal for the History of Science* 33, no. 2 (2000): 131–154.
- Shein, Noa. "Geometrical Exposition." In *The Cambridge Descartes Lexicon*. Edited by Lawrence Nolan, 319–321. Cambridge: Cambridge University Press, 2015.
- Siegler, Frederick. A. "Descartes' Doubts." *Mind, New Series* 72, no. 286 (April 1963): 245–253.
- Somos, Mark. *Secularisation and the Leiden Circle*. Leiden: Brill, 2011.
- Sosa, Ernest. *A Virtue Epistemology: Apt Belief and Reflective Knowledge, Volume I*. Oxford and New York, Oxford University Press, 2009.
- *Judgment and Agency*. Oxford and New York: Oxford University Press. 2015.

—*Epistemology*. New Jersey: Princeton University Press, 2017.

South, James B. “Zabarella, Prime Matter, and the Theory of Regressus.” *Graduate Faculty Philosophy Journal* 26, no. 2 (2005): 79–98.

Stanley, Jason. *Know How*. Oxford University Press, Oxford and London, 2011.

Strazzoni, Andrea. *Dutch Cartesianism and the Birth of Philosophy of Science: From Regius to 's Gravesande*. Berlin and Boston, 2019.

Sdzuj, Reimund B. “Zum Cartesianismus am Bremer Gymnasium illustre Johann Eberhard Schwelings Dissertation *De anima brutorum* (1676).” In *Frühneuzeitliche Disputationen. Polyvalente Produktionsapparate gelehrten Wissens*, edited by Marion Gindhart, Hanspeter Marti and Robert Seidel, 179–198. Vienna, Cologne, Weimar: Böhlau Verlag, 2017.

Trachsel, Alexandra. “Johannes Sturm und seine Übersetzung der Rhetorik des Aristoteles.” In *Der Aristotelismus in der frühen Neuzeit. Kontinuität oder Wiederaneignung?*, edited by Günter Frank and Andreas Speer, 173–190. Wiesbaden: Harrassowitz, 2007.

Trendelenburg, Adolf. “Les catégories d’Aristote (1833),” trans. Alain Petit. *Les études philosophiques* 183, no. 3 (2018): 345–362.

Treweek, Athanasius Pryor. “Pappus of Alexandria, The manuscript tradition of the *Collectio Mathematica*.” *Scriptorium* 11, no. 2 (1957): 195–233.

Tulenheimo, Tero. “Johannes Rudbeckius’s View on the Nature of Logic.” *Studia Neoaristotelica* 15, no. 2 (2018): 135–215.

Vadana, Mihai-Dragos. “Descartes and Voetius on the Innate Knowledge of God and the Limits of Natural Theology.” *Annals of the University of Bucharest, Philosophy* LXV, no. 2 (2016): 37–50.

Valverde, Josè Manuel Garcia, ed. *Giacomo Zabarella, De rebus naturalibus vol. 1*, Leiden: Brill, 2016.

Van Miert, Dirk. “Joseph Scaliger, The Power of Philology (1590–1609).” *The Emancipation of Biblical Philology in the Dutch Republic 1590-1670*. Oxford and London: Oxford University Press, 2018, 22–52.

Van Miert, Dirk, and Henk J. M. Nellen, Piet Steenbakkens, and Jetze Touber eds. *Scriptural Authority and Biblical Criticism in the Dutch Golden Age: God’s Word Questioned*. Leiden: Brill, 2018.

- Van Bunge, Wiep. "The Early Dutch Reception of Cartesianism." In *The Oxford Handbook of Descartes and Cartesianism*, edited by Delphine Antoine-Mahut, Steven Nadler and Tad M. Schmaltz, 417–433. Oxford and New York: Oxford University Press, 2019. Antoine-Mahut, Nadler and Schmaltz 2019.
- Van Peursen, C. A. "E. W. Von Tschirnhaus and the ars inveniendi." *Journal of the History of Ideas* 54, no. 3 (July 1993): 395–410.
- Van de Pitte, Frederick P. "Intuition and judgment in Descartes' Theory of Truth." *Journal of the History of Philosophy* 26, no. 3 (July 1988): 453–470.
- Van de Ven, Jeroen & Erik-Jan Bos. "Se Nihil Daturum – Descartes's Unpublished Judgement of Comenius's Pansophiae Prodomus (1639)." *British Journal for the History of Philosophy* 12, no. 3 (2004): 369–386.
- Van Gelderen, Martin. "Hot protestants: Predestination, the Freedom of Will and the Making of the Modern European Mind." In *Calvinism and the Making of the European Mind*, edited by Gijsbert Van den Brink and Harro Höpfl, 131–154. Dordrecht: Brill, 2014.
- Van Santen, Leo. *Bremen als Brennpunkt reformierter Irenik: Eine sozialgeschichtliche Darstellung anhand der Biografie des Theologen Ludwig Crocius (1586-1655)*. Leiden: Brill, 2014.
- Verbeek, Theo and Jean-Luc Marion. *René Descartes et Martin Schoock, La Querelle d'Utrecht*. Paris: Concours Philosophie Impressions Nouvelles, 1988.
- Verbeek, Theo, ed. *Johannes Clauberg (1622–1665) and Cartesian Philosophy in the Seventeenth Century*. Berlin and New York : Springer, 1999.
- Vidal-Rosset, Joseph. "La distinction kantienne entre jugement analytique et jugement synthétique a-t-elle un sens?" In *Actes du Colloque Kant et la France- Kant und Frankreich*, edited by Jean Ferrari, Margit Ruffing, Robert Theis and Matthias Vollet, 133–145. Hildesheim-Zürich -NewYork: Olms, 2005.
- Viljanen, Valtteri. "The Young Spinoza on Scepticism, Truth, and Method." *Canadian Journal of Philosophy* 50/1 (January 2020): 130–142.
- Vitz, Rico. "Descartes and the Question of Direct Doxastic Voluntarism." *Journal of philosophical research* 35 (January 2010): 107–121.
- Wahl, Jean A. *Du rôle de l'idée d'instant dans la philosophie de René Descartes (1920)*, re-edited by Frédéric Worms. Paris: Descartes & Cie, 1994.

- Walton, Craig. "Ramus and the Art of Judgment." *Philosophy & Rhetoric* 3, no. 3 (Summer, 1970): 152–164.
- Waterman, John T. "Johann Clauberg's "Ars etymologica Teutonum" (1663)." *Journal of English and Germanic Philology* 72/3 (July 1073): 390–402.
- Watkins, Eric ed. *The Divine Order, the Human Order, and the Order of Nature: Historical Perspectives*. Oxford and London: Oxford University Press, 2013.
- Weber, Jean-Paul. *La constitution du texte des Regulæ*. Paris: Société d'édition d'enseignement supérieur, 1964.
- Weber, Claude. "Clauberg et les Origines de la Langue Philosophique Allemande. Une Lecture de L'Ars etymologica Teutonum (1663)." In *Johannes Clauberg (1622–1665) and Cartesian Philosophy in the Seventeenth Century*, edited by Theo Verbeek, 95–112. Berlin and New York: Springer, 1999.
- Weber, Max. *Die protestantische Ethik und der "Geist" des Kapitalismus (1905/1920)*, Berlin and New York: Springer, 2016.
- Wee, Cecilia, *Material Falsity and Error in Descartes' Meditations*. London and New York: Routledge, 2005.
- "Descartes and active perception." In *Active Perception in the History of Philosophy: From Plato to Modern Philosophy*, edited by José Filipe Silva and Mikko Yrjönsuuri, 207–222. New York and Berlin: De Gruyter, 2014.
- Williams, Robert. *Art, Theory, and Culture in sixteenth century Italy: From Techne to Metatechne*. Cambridge: Cambridge University Press, 1997.
- Wilson, Emma Annette and Steven Reid eds. *Ramus, Pedagogy and the Liberal Arts: Ramism in Britain and the Wider World*. London and New York: Routledge, 2018.

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