CHAPTER 12

The Categories in Lutheran Denmark

Sten Ebbesen

This essay is about the fate of the *Categories* in Lutheran Denmark in the sixteenth and seventeenth centuries, but it should be understood that the story would hardly be significantly different if I had chosen a Northern German Lutheran principality instead.

Three major forces determined the fate of philosophy in sixteenth-century Northern Europe: scholastic tradition, humanism and Lutheranism. Two of these were fundamentally anti-scientific.

Most of Northern Europe was only just beginning to be influenced by renaissance humanism at the time of the Lutheran reformation. Lorenzo Valla's ranting attacks on the ten categories and much else in traditional logic will have been known by very few. Some more probably knew of Rudolph Agricola's *De inventione dialectica*, which had appeared in print in 1515, thirty years after the author's death. Agricola's preference for topical argumentation over demonstration was to exert a deep influence on developments in the North. Valla's and Agricola's humanistic line was further developed by Petrus Ramus (Pierre de la Ramée) in the 1540s-60s. Ramus tried to replace both ordinary logic and metaphysics with a jejune logic founded on a set of elementary topical relations. By the 1580s Ramism reached Denmark.

The Lutheran reformation was, among other things, an antiphilosophical movement. Luther was deeply suspicious of all branches of philosophy save logic. Melanchthon was a little more liberal, but not all that much.

Melanchthon ran the reformed university of Wittenberg, and he was the man who laid down the rules for university education in all Lutheran lands. He is often entitled *Præceptor Germaniæ*, but might well deserve also the title of *Præceptor Daniæ*. When the twin kingdoms of Denmark and Norway went Lutheran in 1536, the king (Christian III) invited Melanchthon to come and reorganize the one university of his territories, the University of Copenhagen (founded 1479), but he had to content himself with one of the great *præceptor*'s assistants by the name of Johann Bugenhagen.¹

According to the new statutes, the university was to have just two philosophical chairs, one in dialectic and one in natural philosophy. The dialectician was required to spend quite a bit of his time on rhetoric and Roman poetry, but his main job was to teach Melanchthon's *Erotemata dialectices*,² and so dialectician after dialectician did until the end of the sixteenth century, though the last ones to do so obviously were very tired of being obliged to use the book. Strangely, it was left for the professor of natural philosophy to give a weekly lesson on Aristotle's logic, preferably based on the Greek text, but a Latin translation could be used instead.³ In practice, it seems that the *dialecticus* soon took over that job.

^{1.} For further information about philosophy at the University of Copenhagen in the 16th and 17th centuries, see Ebbesen & Koch 2003. All the Danish logicians mentioned in this essay are dealt with there, but not with a focus on their views on the *Categories*.

^{2.} Norvin 1940: 30: "Secundus Lector erit Dialecticus. Hie quatuor ordinariis diebus tantum tradat aliquam breuem et planam Dialecticam, qualis est Cesarii, aut absolutior et commodior illa Philippi Melanthonis. Hac absoluta, adiungat elementa Rhethorices, uidelicet libellum Ciceronis ad Herennium, aut potius elementa Rhetorices a Philippo scripta, que his temporibus sunt accommodatiora. His absolutis enarret unam Ciceronis orationem, in qua monstret usum illorum preceptorum, nec addat plures orationes aut autores. Postea statim redeat ad Dialecticam. Hanc enim assidue in Scholis inculcari oportet. Et cogat hic lector auditores ediscere precepta, et inter docendum ab eis ea reposcat. ... Alteram lectionem legat die Lune et Martis, alias Vergilium, alias Ouidii Metamorphosin, alias partem aliquam Liuii." No Copenhagen *dialecticus* seems to have availed himself of the permission to use Johannes Cæsarius' *Dialectica* from 1520 instead of Melanchthon's work.

^{3.} Norvin 1940: 31-32: "Quintus Lector Physicus. Hic quatuor ordinariis diebus tradat primum ordine compendium aliquod Physices ... Preterea unus dies et certa hora ei statuatur, ut semel in hebdomada legat ordine totam Aristotelis Dialecticam Grece, ut in Schola ars Methodi et perfecta Dialectica conseruetur. Si uero Grece hoc non potest, legat ex aliqua commodiore translatione Aristotelis latine. Ita tamen ut semper apud sese conferat latina cum Grecis ante lectionem, ne sepe, ut fit, aliena a

So let me start with a look at Melanchthon's work.

Melanchthon defined dialectic as the art of teaching in the right way, orderly, and clearly.⁴ Dialectic is to be applied to all matters that men ought to be taught,⁵ and it only differs from rhetoric in its lack of embellishment of the argumentation.⁶ Although he does not say so explicitly, the book makes it amply clear that the sort of teaching he is really thinking of is the teaching of Christianity. Melanchthonian universities were seminaries with the purpose of breeding Lutheran pastors.

Melanchthon thought Agricola's *De inventione dialectica* was a good book, but he also thought that some acquaintance with the categories and other parts of traditional logic might be useful to a pastor.

His approach to the subject is influenced by late-medieval nominalism in that he holds that universals are words⁷ and underlines the point that everything that is, is *eo ipso* singular.⁸ He also holds that a universal is a mental act that paints a picture which is common in the sense that someone carrying it around in his mind can apply it to several individuals after having made a comparison between each

6. Melanchthon, *Erotemata* col. 515: "Quid differunt Dialectica et Rhetorica? ... Dialectica circa omnes materias versatur, et rerum summas propriis verbis nude proponit, nec unam sententiam pluribus verbis aut adhibitis luminibus figurarum pingit. Sed Rhetorica addit ornatum in his materiis, quae orationis copia et splendore illustrari et varie pingi possunt." Similarly in *Elementa rhetorices* cols. 419-420: "Tanta est dialecticae et rhetoricae cognatio, vix ut discrimen reprehendi possit. ... Verum hoc interesse dicunt, quod dialectica res nudas proponit. Rhetorica vero addit elocutionem quasi vestitum. Hoc discrimen etsi nonnulli reprehendunt, ego tamen non repudio." 7. Melanchthon, *Erotemata* cols. 519-520: "Universalia dicuntur, quia sunt gradus vo cabulorum communium. ... Species est nomen commune, proximum individuis, de quibus praedicatur in quaestione, Quid sit Genus est nomen commune multis speciebus, et praedicatur de eis in quaestione: Quid sit"

8. Melanchthon, *Erotemata* col. 520: "Tenenda est sententia vera et rectissime tradita a Boëthio: Omne quod est, eo ipso quod est, singulare est, id est: Quaecunque res in natura vere et positive est quiddam extra intellectionem, est singularis per sese."

sententia autoris dicat. Et forte hoc in principio magis proderit, donec Schola possit habere uirum, qui ista Grece tradat."

^{4.} Melanchthon, *Erotemata* col. 513: "Dialectica est ars seu via, recte, ordine, et perspicue docendi."

^{5.} Melanchthon, *Erotemata* col. 514: "*Circa quas res versatur Dialectica?* Circa omnes materias seu quaestiones, de quibus docendi sunt homines."

individual and the mental picture. Such a mental act or picture – he is not consistent on this point – is what Aristotle called a species and Plato an idea.⁹ Melanchthon provides no explanation of the relation between the concepts and the corresponding words.

A category is defined as "a series (*ordo*) of genera and species under one most general item, which signifies either substance or accident", and, he continues,¹⁰

The whole table containing the categories is a brief table of the totality of things <and> distributes substances and the accidents of substances. If we were to unfold the categories completely, we should have to talk about all parts of nature. Now we just recite the naked list of words, which, however, is useful because thus we learn the limits within which all thought must be kept, so that, namely, we start from the highest word 'being' (*ens*), and then consider the various natures as its branches, as it were, and ask about the thing confronting us whether it is a substance or an accident, and in which branch of substances or accidents it should be put.

So, the list of categories is one of the ways in which we can, and must, conceptualize the world's constituent parts. However often Melanchthon speaks of the categories as words, he nevertheless as-

^{9.} Melanchthon, *Erotemata* col. 520: "... communis illa imago cervi, quae vocatur species, non est quiddam extra intellectionem, nec est, ut Graeci loquuntur ὑφιστάμενον, seu hypostasis. Sed est revera actus intelligendi, pingens illam imaginem in mente, quae ideo dicitur communis, qua applicari ad multa individua potest, ut circumferens in mente imaginem cervi, agnoscit cervos ubicunque oblatos, figuram ad imaginem in mente conferens. Nec aliud Plato vocat Ideas, quam quod Aristoteles nominat species seu εἴδη."

^{10.} Melanchthon, *Erotemata* col. 526: "Quid est Praedicamentum? Est ordo generum et specierum sub uno genere generalissimo, quod aut substantiam, aut accidens aliquod significat, quia tota haec tabella, quae continet praedicamenta, est exigua tabella universitatis rerum, distribuit {distribuens scribendum?} substantias et substantiarum accidentia. Ac si integre explicanda essent praedicamenta, de omnibus naturae partibus dicendum esset. Nunc nuda vocabulorum series tantum recitatur, quid ipsum tamen utile est, quia discimus, quibus limitibus includenda sit omnis cogitatio, videlicet, ut a summo vocabulo Entis exorsi, postea diversas naturas, velut ramos consideremus, et quaeramus de re proposita, an sit substantia, aut accidens, et in quo ramo substantiarum aut accidentium collocanda sit."

sumes a strong ontological foundation. Nor is he bothered by the equivocity of being. Having listed the categories he says:¹¹

They are called most general, i.e., highest, genera because from them one goes straight to the word that is the first of all in the nature of things, being, that is.

And his first piece of information about substance is:12

A substance is a being (*ens*) that truly has a being (*esse*) of its own and is not in anything else so that it owes its being to its subject. This definition is common to God and created substances.

Because of the difficulty of understanding God, we may, however, use a narrower definition for ordinary purposes, viz.¹³

A substance is a being (ens) that has a being (esse) of its own and supports accidents.

Concerning each category Melanchthon finds something to say of relevance to Christian teaching. Thus the fact that mental habits are a species of quality occasions a long excursus on virtues and vices, secular as well as theological.

Melanchthon's treatment of relations contains many medieval features. He starts with a distinction between absolute names and relative ones, the absolute being those that signify substances,

^{11.} Melanchthon, *Erotemata* col. 528 "Dicuntur autem genera generalissima, id est, summa, quia ab his proxime acceditur ad vocabulum, quod inter omnia in rerum natura primum est, videlicet Ens. Ut igitur ordo rectius tenerei possit, supra ordines praedicamentorum semper memineris collocandum esse vocabulum Ens, ut in inquisitione rerum habeat mens quasi metam, ubi resistat. Si enim sine fine vagaretur, fierent incerta et confusa omnia."

^{12.} Melanchthon, *Erotemata* col. 528 "Substantia est Ens, quod revera proprium esse habet, nec est in alio, ut habens esse a subiecto. Haec definitio communis est Deo, et creatis substantiis."

^{13.} Melanchthon, *Erotemata* cols. 528-9: "Est ergo satis accommodata definitio: Substantia est Ens, quod habet proprium esse, et sustinet accidentia."

quantities or qualities,¹⁴ and later introduces the distinctions between *relativa secundum dici* and *secundum esse*,¹⁵ and between real relations and relations of reason. In order not to look scholastic, he defends the last-named distinction by claiming that it is neither otiose nor a recent (i.e. medieval) invention, for it may be found in Ammonius.¹⁶

Perhaps the most interesting part of the whole chapter is the treatment of relational entities that are not natural but introduced by human institution or divine will, such as a border-post or a schoolmaster.¹⁷ In the former case the foundation is a stone, in the latter a person, but they are what they are in virtue of their directed-ness towards their respective *termini*. I know of no medieval precedence for this type of *relativa*. One remark made in passing also deserves to be noticed:¹⁸

Traditionally, schoolmen have called the following words transcendent, because they are common to many categories: 'being', 'one', 'true', 'good'. But 'true' and 'good' rightly belong among the relatives.

We are offered no explanation why this is so, but the reason seems to be that 'good' and 'true' indicate a relation to the divine measuring rod.

17. Melanchthon, *Erotemata* col. 552 "Scholasticus est persona ordinata voluntate Dei, ad discendam doctrinam generi humano necessariam de Deo et de aliis rebus bonis, ne extinguatur noticia Dei inter homines, sed servetur Ecclesia, et multi fiant haeredes vitae aeternae, et servetur disciplina, et habeant homines alias honestas utilitates ex artibus, ut ex Medica curationes morborum, ex Arithmetica computationes, ex Geometria mensuras, ex Astronomia anni cognitionem, et alias utilitates."

18. Melanchthon, *Erotemata* col. 554: "Usitate in scholis nominarunt haec vocabula transcendentia: Ens, unum, verum, bonum, quia communia sunt multis praedicamentis, sed verum et bonum recte inter relativa recensentur."

^{14.} Melanchthon, *Erotemata* col. 544: "Nomina alia dicuntur absoluta, alia relativa. Absoluta sunt nomina significantia substantias, aut quantitates, aut qualitates."

^{15.} Melanchthon, *Erotemata* col. 546: "Alia sunt relativa secundum dici, alia secundum esse."

^{16.} Melanchthon, *Erotemata* col. 551: "Relationum aliae sunt reales aliae rationes. Haec distinctio nec ociosa est, nec recens, sed ab Ammonio etiam recitata."

One notable feature of Melanchthon's chapter on categories is the complete absence of the *Antepraedicamenta*. He does not even offer an excuse for omitting them.¹⁹ The *Postpraedicamenta* are treated, but he seems unhappy with Aristotle's apparently arbitrary choice of a few ambiguous words – 'opposite' etc. – at the expense of others.²⁰

Very little is preserved of whatever the Copenhagen professors may have written in the first decades after the reformation. By the late 1570s sources begin to be available, and by then Peter Ramus was beginning to exert considerable influence on several professors, as he was to continue to do until about 1620, though few dared openly profess their allegiance to the heretical idol – although this did not show in his writings, he was a Calvinist, and Calvinists were almost worse than Papists in the eyes of the Danish authorities. Generally, the Danish crypto-Ramists contented themselves with placing the doctrine of the topics immediately after that of the categories, but some went further.

One of the early Danish Ramists, Jacob Madsen (Jacobus Matthiæ in Latin) took upon him to demonstrate what Ramus' *lex iustitiæ* meant for logic, which deals only with matters of mind and reason. The Ramist law of justice required homogeneity for each discipline: any scientific proposition belongs in just one discipline and only propositions with the right sort of mutual coherence belong together. For the contents of the *Categories*, this meant that the *Antepraedicamenta* should be left to grammar, and while certain of the single categories really pertain to theology, physics, geometry or some other discipline, the general system belongs to no particular discipline, and so not to logic: ²¹

^{19.} Cæsarius, of whose book Melanchthon approved, had kept the antepredicaments, and in general followed Aristotle much more closely than Melanchthon.

^{20.} Melanchthon, *Erotemata* col. 561: "Postquam utcunque exposita est doctrina de praedicamentis, adiecta est commonefactio de paucis quibusdam vocabulis ambiguis, cum multo plura recenseri potuissent."

^{21.} Matthiæ, *Doctrina de ratione docendi discendique* 43-44: "In logica, quæ ut ait Arist. lib. I. cap. 8. Post. mentis et rationis tantum est. In hac primum est nominum, verborum homonymorum, synonymorum, paronymorum, adeóque orationis doctrina: quæ doctrina Grammatice propria est, ut ipse Arist. Top. ait: Utile est, inquit, observare

A category is nothing but a classification of homogeneous things by most general, subaltern and most special. But this classification of things is not particular to dialectic, for such a *kategoría* and classification of things is nothing but art in general. For art is nothing but the method, gathering, disposition and ordering of homogeneous things by genus, subalternate genera and most special items. For in this way arithmetic is the correctly ordered *kategoria* of numbers, and geometry the correctly orderes *kategoría* of magnitudes.

Accordingly, Professor Madsen praises Agricola for having omitted the categories in his dialectic.²² As so often with the Ramists, Madsen's attack on the categories is an almost verbatim quotation of their great idol. The word 'classification' in my translation renders *descriptio*. But soon people were to talk about the categories as *classes*.

One of the last Copenhagen professors of dialectic to use Melanchthon was Hans Poulsen Resen (Johannes Pauli Resenius,

quot modis vocabulum accipiatur. Sed hæc de vocabulis consideratio non est propria Dialecticæ. Deinde in Dialectica est doctrina prædicamentorum et inventionum {misprint for intentionum ?} tradita. Est autem Prædicamentum nihil aliud nisi rerum homogenearum per generalis<si>ma, subalterna et specialis<si>ma descriptio. Hæc autem rerum descriptio Dialecticæ propria non est. Est enim talis rerum κατηγορία et descriptio nihil aliud [est] quàm ars in genere. Ars enim nihil est aliud quam rerum Homogenearum per Genus, genera subalterna et specialis<si>ma, Methodus, comprehensio, dispositio, ordinatio. Sic enim Arithmetica rectè descripta numerorum. Sic Geometria rectè descripta magnitudinum κατηγορία est" I take it that Mathhiæ is here using *descriptio* in the sense of *discriptio*. His source is easily identifiable: Ramus, Scholae dial. 4.10, p. 112: "Video autem Categoriam esse categorematum homogeneorum ordinationem et descriptionem per generalissimum, subalterna, specialissima." Ibid. p. 114: "Sed tamen res intelligatur; sitque Categoria, homogeneorum descriptio per generalissimum, subalterna infima. Quæ categoriæ definitio, nihil aliud est, quám {sic!} artis et scientiæ vera methodo dispositæ definitio: Ars enim, est rerum homogenearum per generalissimum, subalterna, specialissima, comprehensio et ordinatio: Sic Arithmetica numeros, Geometria magnitudines methodicé traditas complectentur {sic/}." On pp. 116-17 Ramus throws synonyms and homonyms out of logic and sends paronyms to the locus a coniugatis in the Topics. Notice that 'categoremata' is Ramus' Greek for 'prædicabilia'.

^{22.} Matthiæ, *Doctrina de ratione docendi discendique* 45: "Doctrina igitur Prædicamentorum, i.e. artium omnium Dialecticæ Homogenea non est. Unde est <quod> Rodolphus qui accuratissimè Dialecticam subduxit eam doctrinam, ut non Homogeneam prætermisit."

1561-1638), who held the job in the 1590s. In the form of a series of disputations he developed an elementary handbook of logic of his own, a version of which was printed in 1605 for use in the schools of Denmark and Norway. Resen lived at a time when Ramism, while strong in some protestant countries, was beginning to be replaced by a new Aristotelianism in Wittenberg and other leading Lutheran universities. The Neo-Aristotelian wave was motivated first and foremost by the wish to be able to enter into discussions with Jesuits without falling through for lack of training in metaphysics and logic. The Lutherans were not afraid of learning from their enemies, so Suárez was much read, and in logic the new Aristotelianism took its cue from the somewhat Averroistic Paduan professor Zabarella and his *De natura logica*, which had appeared in 1578.

Resen is a transitory figure between the 16th century and Neo-Aristotelianism. His treatment of the categories contains some loans from Melanchthon, but none of any real significance. Melanchthon's interesting ideas about the category of relation have left no trace, and 'true' and 'good' are explicitly counted as transcendentals.²³ Resen also deviates from Melanchthon by including the *Antepraedicamenta*.

Resen divides logic into a *pars generalis* and a *pars specialis*, and in so doing he owes a debt to Zabarella, who had counted the doctrine of predicables, categories, propositions and general syllogistic as *pars communis*, the treatises on demonstrative, dialectic and sophistical syllogisms being the *pars propria*. But Resen crosses this division with a semi-Ramistic distinction between *apprehension* and *comprehension*. Apprehension deals with simple concepts, comprehension with combinations of concepts. The result is the following:²⁴

23. Resenius, Στοιχείωσις logicarum præceptionum disp. II.2: "Transscendentia, sev τὰ μετὰ τὰ φυσικὰ, superiora sunt heic, quæ summorum generum rationem legitimam transgrediuntur eminenter: ut Ens, (Res, aliquid,) unum, verum, bonum &c."

24. The table represents the structure of Resen's *Parva Logica* from 1605. With negligeable variations the same system is presented in his $\Sigma torgeiworg$ logicarum hypothesium and $\Sigma torgeiworg$ logicarum præceptionum.

Apprehensio	Categorica		Topica	Pars generalis
	Prædicabilia	Categoriae	Loci	
	Isagoge	Categoriae		
Comprehen- sio	diacrisis axiomatica De Interpretatione		diacrisis syllogistica	
			Analytica Priora	
Methodus	Analytica Posteriora, Topica, Elenchi			Pars specialis
Ordo				

The important feature of this division of logic is the place given to the *loci*, on which the humanistic-Ramistic tradition laid so much weight. Dialectical syllogisms belong in *pars specialis*, but the *loci*, i.e. the fundamental relations that link one simple concept to another, are introduced as a part of the theory of simple concepts, and immediately after the predicables and categories.

In 1611 *doctor medicinæ* Caspar Bartholin (1585-1629) returned to Copenhagen after several years of studies abroad. He was all of 26 years old, and he already had considerable experience in how to become someone in the academic world. With Bartholin the university acquired a pure-bred Neo-Aristotelian, who had learned his logic in Wittenberg under one of the new movement's foremost proponents, Jakob Martini (1570-1649). In 1608 Bartholin published the first version of a handbook of logic that was to undergo several revisions and many reprints in several places – most of them outside Demark.²⁵

^{25.} For an English-language introduction to Bartholin's logic, see Ebbesen 2001.

Bartholin drops Resen's compromise between humanism and traditional Aristotelianism. He divides logic in the same way as Zabarella, and he takes the *Antepraedicamenta* seriously. He is not in doubt about the equivocity – or more precisely, analogy – of being: *ens* is used equivocally, that is, analogically, of substance and accidents and of God and creatures.²⁶

There was a current debate whether Aristotle's *Categories* is really a work of logic or of metaphysics. Bartholin is somewhat unclear about the ontological status of the categories, but he is adamant that they do have a foundation in reality. As for which philosophical discipline Aristotle's work really belongs to, he opts for logic, but mainly because Aristotle himself thought that was where it belonged, and he ought to know what he was writing about.²⁷

A similar willingness to bow to tradition appears when Bartholin asks if there must be exactly ten categories. Much like John Buridan some three hundred years earlier,²⁸ Bartholin acknowledges that there is no proof whatsoever that the list is the optimal one, but he accepts it all the same because it is traditional.²⁹

^{26.} Bartholinus Logica major 44v-451: "Æquivoca consilio seu analogiâ ... definitiones partim easdem partim diversas habent. Suntque triplicia. 1. Similitudine ... 2. Proportione ... 3. Relatione & attributione ... ubi genus ad alteram speciem propendet magis, dicitúrque; genus analogum, quod magis principaliter de una specie dicitur; minús & secundariò de altera; ut Ens de substantia & accidente, de Deo et creaturis."

^{27.} Bartholinus *Logica major* 57v: "Philosophi nostri autoritates hîc prævalent; qui, quid in prædicamentis trataverit, omnium optimè novit. Is ergo doctrinam hanc non inscripsit, περὶ τῶν ὄντων, sed περὶ τῶν κατηγοριῶν. Unde prædicamenta, dicuntur summa genera Logico; At Metaphysico summa rerum entia, quia σχέσιν categoricam non curat."

^{28.} See Ebbesen 2005: 252, and also Amerini in the present volume.

^{29.} Bartholinus Logica major 56r: "Quamvis autem hæc ita facillimè solvi omnia queant, quæ denarium numerum impugnant; tamen non negandum magis numerum hunc ex recepta Philosophorum (Pythagoræorum præcipuè, ut fuit Architas, quibus solus denarius perfectus) sententiâ et consuetudine constare, quàm firmâ demonstratione." Cf. Commentarii Collegii Conimbricencis 263: "Peripateticam igitur, & veram sententiam, quæ dena statuit prædicamenta, si quidem præter antiquorum, & recentium Philosophorum autoritatem, euidentiam non habet, vt aliqui falso existimarunt, aliqua ratione confirmemus."

A few reminiscences of Melanchthon may be detected, as when he explains that "a *notio* (concept) is a picture or representation of some thing that the mind has encountered."³⁰

Bartholin's type of Neo-Aristotelianism is anything but exciting, though he does adopt the new fashion of speaking about classes: "The categories are classes of simple beings".³¹ He only rarely provides the standard entertainment of his age, that is, twisting common sense for the sake of theology, and, being a protestant, he can even reject one such twisting to which catholics were committed, and claim that inherence is essential to accident.³² The interpretation of Aristotle is based on that of the late 13th century, but none of the characteristically medieval contributions to logic is allowed to play a role. Thus supposition is a non-word. Later in the 17th c., several writers tried to recover some medieval theory, but that was of only scarce relevance to Aristotle's *Categories*.

The first important attempt to pep up Neo-Aristotelianism by putting Aristotle's book to new use was due to the German Georg Gutke (1589-1634), whose theories achieved a break-through in Denmark in the 1650s, a generation after they had first been presented in a book entitled *Logicæ divinæ seu Peripateticæ libri duo*.³³ In the process of pepping up Aristotelianism the Gutkians approached Ramist views on a number of points, but based on different foundations. Their principal aim was to find a way to make logic a really useful hand-maiden of Lutheran theology.

^{30.} Bartholinus *Logica major* 19r: "Est autem notio rei imago vel effigies animo objecta."

^{31.} Bartholinus *Logica major* 50r: "Incomplexa tantùm pertinent ad Categorias, quæ sunt classes Entium simplicium."

^{32.} Bartholinus *Logica major* 64r: "Estque inhærentia de essentia Accidentis, per quam Accidens differt à substantia."

^{33.} Gutke was a pupil of Jakob Martini. For his life and work, see Sparn 2001: 582-585. The first edition of his *Logica divina* appeared in Berlin in 1626 (so Risse 1964: 361 n. 363). The first Danish Gutkian I have found is one Paulus Andreæ Arhusius (Danish: Poul Andersen fra Århus) who in 1651-52 issued a series of twelve disputations under the common title of *Exercitationum Logicarum Disputationes* (about which see Ebbesen & Koch 2003: 192-195).

The Gutkians made the Ante- and Postpraedicamenta the foundation of their logic. Their main idea was this: the principle of contradiction, 'it is or it is not', is the foundation of all truth; therefore the doctrine of affirmative and of negative predication must be the foundation of all logic. The elements of affirmative predication are presented in the Antepraedicamenta, those of negative predication in the *Postpraedicamenta*.³⁴ From the *Antepraedicamenta* the Gutkians focus on the notions of synonymy and paronymy, that is univocation and denomination in traditional Latin terminology. In predication one wants either to provide information about the subject's essence or about something inessential, yet relevant. In the first case, the predication is synomymous and the predicate is a genus, differentia or species; in the second case the predicate is a an accident, whether proper or common, and the predication is denominative.³⁵ In this way the Porphyrian predicables were fitted into the system of the Anteprædicamenta. The most important Danish Gutkian, the theologian Christian Nold in 1666 summarizes some of the main points of this doctrine as follows:

Any term is either consentaneous or dissentaneous. A consentaneous term is affirmatively related to some other term. There are two types, the nominal and the real. The former agrees only in name [with some other term], as is the case with equivocals, whereas the latter also agrees thing-wise, and is either synonymous and agrees essentially, or paronymous and agrees extra-essentially. ... A dissentaneous term is related negatively to some other term, and is either disparate or

^{34.} Cf. Gutkius, Logica divina 62 (at the beginning of ch. II): "Logica est docere modum distinguendi conceptus affirmativè disponi aptos à conceptibus negativè disponi aptos." After which follows the treatment of synonymy and paronomy. Later, on, at the beginning of ch. IV, on p. 250: "De Formali instrumento Logico, qvod vulgo Post-prædicamentum salutatur quidem, sed juxta rerum veritatem continet modum distingvendi conceptus negativè disponi aptos à notionibus affirmativè disponi aptis."

^{35.} Cf. Gutkius, *Logica divina* 80: "Synonymon prædicamentale est, qvo notantur conceptus à creaturis deprompti, dividitúrque in genus, Speciem, & differentiam." *Ibid.* 130: "Paronymon Prædicamentale est, qvo notantur conceptus primi à creaturis deprompti, qvi non essentialiter alios respeciunt, dividiturque in Proprium, & accidens."

opposite; the former is equally incompatible with several others, as *man* with *sun*, *moon* and *stone*; the latter is more incompatible with one than with another, and is either relative, contrary, privative, or contradictory.³⁶

Nold's "contradictory terms" are infinite terms like *non-man*, which may be called contradictory to *man* because *tertium non datur*.³⁷ Nold is not confusing term-negation with sentence-negation, in fact he holds that there are no infinite verbs, because in *non-currit* and the like we actually have a negation of the copula and not an infinitization of the verbal content. Regrettably, however, he also considers *cold fire, white blackness, blind seeing* and *deflowered virgin* as instances of contradictory terms being joined.³⁸

The Gutkian system appealed to Nold and his likes because it offered the prospect of a *logica divina* sharing fundamental traits with ordinary logic. Synonymous and paronymous predication could also be found in the sphere of theology, and even in the sphere of non-entities.³⁹

In fact, Nold's logic is ready to deal with all sorts of terms, be

^{36.} Noldius, *Logica recognita* 41-46: "Terminus ... est consentaneus, vel dissentaneus. consentaneus alium terminum respicit affirmativè: et subdividitur in nominalem, vel realem. ille consentit tantùm secundum nomen, ut æqvivoca: hic consentit etiam secundum rem. et est vel synonymicus, qvi consentit essentialiter; vel paronymicus, qvi consentit extra-essentialiter. ... Terminus dissentaneus, alium terminum respicit negativè, estque vel disparatus, vel oppositus. ille, cum pluribus pugnat æqvaliter: ut homo cum sole, lunâ, lapide. hic, magis pugnat cum unô qvàm cum altero: et est relativus, contrarius, privativus, vel contradictorius."

^{37.} Nold had late 13th-century precedent for classifying infinite nouns as contradictory, as appears from Marmo 2003, but it is unclear whether there is a causal connection.

^{38.} Noldius *Logica recognita* 47: "contradictorius, est inter ens et non-ens; estque vel explicitus, cum additur particula non, ut homo non-homo: vel implicitus, (dictus contradictio in adjecto) qvando tale aliqvid termino tribuitur, per qvod termini essentia evertitur. ut ignis frigidus, alba nigredo, cæca visio, virgo deflorata."

^{39.} Cf. Gutkius, *Logica divina* 63: "Modus distinguendi conceptus affirmativè disponi aptos à conceptibus affirmativam dispositionem respuentibus peragitur per exactam cognitionem Synonymorum & Paronymorum, h.e. qvando Logica docet, omnem conceptum affirmativè disponi aptum, sive is à rebus divinis, sive à transcendentibus, sive creatis sit depromptus, notare titulo vel Synonymi vel Paronymi."

they supra-predicamental, predicamental, or infra-predicamental.⁴⁰ All of these fall into ordered representational classes, within which one can see a super- and subordination much as in a traditional Porphyrian tree.

The infra-predicamental realm is populated by fictive, negative and syncategorematic terms.⁴¹ Among the fictive ones we find not only the chimera and her close relatives, purgatory, Papal primacy and the Calvinist decree (a reference to the Calvinist doctrine of God's decree about predestination), but also all second intention terms and universals *in essendo vel afficiendo* – to be carefully distinguished from what had often been called *universalia in prædicando*. Among the negative ones we find (a) those that negate truth, including, i.a., deformity of body, intellect, or signification (i.e. falsehood); such as negate the good, i.e. the words for evil, a motley crowd including, e.g., the loss of the original image (the loss of man's original likeness to God), work in the sweat of one's brow, tyranny, bad memory, blindness and original sin. Nold distributes all of his examples in a neat table with classes, subclasses, and subsubclasses.⁴²

Supra-predicamental terms are real: they signify realities. They fall in two classes, that of the mystical terms and that of the transcendental ones.⁴³ The mystical class contains words for the entities peculiar to Christian theology, such as *Sacred Scripture, Word of God, The Persons of the Trinity, God's providence* and the like,⁴⁴ and there is a syn-

44. List in Noldius Logica recognita 75-78.

^{40.} Noldius *Logica recognita* 69: "Ordines Logici differunt à Metaphysicis. Præcipuè latitudine seu objecto, et fine. Ordines Metaphysici exhibent nonnisi ens determinatum: illud enim in disciplinis inferioribus, (qvibus Metaphysica hoc qvod habent assignat) non tractatur. At ordines Logici etiam extendunt se ad non-ens et entia ficta: imò ad mystica, et ad entia in abstractô, qvin et ad modos."

^{41.} Noldius *Logica recognita* 108: Ordo infra-prædicamentalis est ordo repræsentatitius terminorum fictorum, negativorum, & syncategorematicorum.

^{42.} The examples are taken from a table in Noldius Logica recognita 110-111. Cf. ibid. 44: "Curæ hic nobis sunt, non qvævis synonyma & paronyma, sed prædicamentalia. Nam dantur etiam supra-prædicamentalia, & infra-prædicamentalia.... Synonymice infra-prædicamentaliter se respiciunt: cerberus & ens fictum, purgatorium & non ens."

^{43.} Noldius *Logica recognita* 74: "Ordo supra-prædicamentalis, est ordo repræsentati<ti>us categorematum realium, mysticorum vel transcendentalium."

onymous supra-predicamental relationship between *God* and the three divine persons, between *Law* or *Gospel* and *God's Word*, whereas there is a paronymous supra-predicamental relationship between *God* and his attributes, *God* and *man*, the *Eucharistic host* and the *body of Christ.*⁴⁵

The transcendental terms include the highest terms in the three realms of philosophy: Gnostology, Noology and Ontology – a recently invented tripartition.⁴⁶

While Nold thought it important to arrange terms in predicational hierarchies, he was not too enthusiastic about the Aristotelian categories. He did distribute predicamental terms over ten categories, but at the same time he taught that the number 10 has its origin in Pythagorean superstition, and in fact there are only five accidental categories, namely quality, motion, when, quantity and relation.⁴⁷

In 1701 a schoolmaster called Søren Glud (Severinus Gludius, 1662-1705) published a brief introduction to logic based on Nold's expansive book. This epitome of Nold was standard fare in Danish and Norwegian schools far into the 18th century. But that was just

^{45.} Noldius Logica recognita 44: "synonymice supraprædicamentaliter se respiciunt: Deus & tres divinitatis personæ, Lex vel Evangelium & verbum Dei, substantia et ens, unitas, veritas, &c. & affectio, Deus et substantia Metaphysica. ... Paronymice autem supraprædicamentaliter se respiciunt: Deus & eius attributa, Deus & homo, panis eucharisticus & corpus Christi, vinum eucharisticum & sangvis Christi, attributa entis inter se et ens."

^{46.} Noldius Logica recognita 78-79: Heading: "Classis, seu repræsentatio, Terminorum Transcendentalium." Follow examples, including scibile, conceptus, abstractio, notio, principia, ens, affectio entis, and then: "Unô verbo: ad classem terminorum transcendentalium pertinent omnes communissimi trium supremarum disciplinarum termini: qvæ sunt *Gnostologia* seu scientia de scibili qvà scibili, Noologia seu habitus intelligentiæ circà rerum affinitatem ad principia, & Ontologia sive Metaphysica, de ente qvà ente." The triad of gnostology, noology and ontology had been introduced by the Wittenberg theologian Abraham Calov (1612-1686), about whom see Sparn 2001: 575-578.

^{47.} Noldius, *Logica recognita* 80: "Placuit hîc sequi tritam orbitam: propter rudiores. Sed si qvis nostram amat sententiam (fertur enim numerus hic esse ex supersitione Pythagoræ, qvi nihil existivavit perfectum, nisi qvod constaret ex denariô) habebit Classes accidentium non nisi qvinqve, et illas hoc ordine: Qualitatem, motionem,(actionem et passionem) qvando, qvantitatem, et relationem."

the usual story about school-books lagging some generations behind scholarship.

Already in Nold's own lifetime the Aristotelian categories were subjected to more scathing criticism than his. In the 1660s Baconians and Cartesians made their entry on the Copenhagen scene, and they clearly professed what was perhaps latent in Nold as well as in Ramus, namely that only one type of predication is needed, so that all the categories may be collapsed, or, if more than one line of predication is needed, this will be on the basis of a totally different ontology.

Not by accident, the advent of this new line of thought coincided with the incipient collapse of Lutheran orthodoxy. Soon logic would cease to be considered a handmaiden of theology. But if it was not even a necessary auxiliary force to keep Calvinist and Papist enemies at bay, or if those enemies were no longer thought to be great threats, what was the use of it?

There was a hard time ahead for logic, and Aristotelian logic in particular. But we still talk about the *quality* of tomatoes.

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