# Grammar and Mental Language in the Pseudo-Kilwardby

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Summary: In his commentary on the *Priscianus Maior*, the author known as the Pseudo-Kilwardby proposed inner speech as the proper object for scientific grammar. It is shown here that this *sermo in mente* is something quite different from William of Ockham's later *oratio mentalis*: it is a mental representation of words and not of things in general. The Pseudo-Kilwardby, in effect, delineates a purely intellectual level of linguistic representation, with a universal deep structure richly furnished. This doctrinal development is situated in its context, against the background of the increasing popularity of Aristotle's *Posterior Analytics* at the mid thirteenth-century university.

In the 1975 volume of the *Cahiers de l'Institut du Moyen Age grec et latin*, Margareta Fredborg, Niels Jørgen Green-Pedersen, Lauge Nielsen, and Jan Pinborg edited a rich selection of passages from a long commentary on *Priscianus Maior* probably written in the 1250s or 1260s. The treatise had once been ascribed to the influential English Dominican Robert Kilwardby, but Osmund Lewry in his introductory essay on the authorship raised doubts about this attribution and, whoever he is, the author has since come to be known as 'the Pseudo-Kilwardby' (hereafter: Ps-K.).

Ps-K. turned out to be an exciting thinker on many accounts, and a keen analyst too. He has, in particular, fascinating things to say on mental speech, and that is what I will be interested in here.

In his "Introduction to the text" in the *Cahiers*, Jan Pinborg drew attention to the salient idea of a *sermo in mente* which is found in Ps-K.'s treatise. But he judged this idea to be "somewhat ambiguous" (pp. 6+-7+). The *sermo in mente*, in its intellectual form, is asserted by Ps-K. both to be common to all and to constitute the proper object of grammar as a theoretical science. Since this *sermo in mente* is supposed to abstract from particular languages, Pinborg reasoned, it should be identified with the "conceptual contents of the mind", Aristotle's *passiones animae*. But this, he goes on, "makes it somewhat difficult to see exactly which kind of problems the grammarian is supposed to solve": how, after all, can the primary object of grammar be utterly independent from the vari-

ety of particular languages and "the actual choice of vocal forms"? (p. 7+).

What I will be doing in the first part of this paper is to search for a philosophically acceptable solution to Pinborg's difficulty on the basis of Ps-K.'s edited texts. And in the second part, I will endeavour to provide a historical setting for this rather special theory of the *sermo in mente*, showing its place and significance in the array of medieval doctrines about mental language.

# 1. Levels of linguistic representation

**1.1.** A first – and crucial – element of the solution to Pinborg's riddle is that the *sermo in mente* which, in Ps-K.'s view, is the proper object of grammar as a science is simply not to be identified with language independent conceptual contents, as Pinborg thought. Concepts, in the Aristotelian tradition, are intellectual similitudes of external things. But mental discourse, in Ps-K's sense, is basically *a mental representation of spoken discourse*. His *sermo in mente*, in this regard, is utterly different from Augustine's *verbum mentis* or William of Ockham's later *oratio mentalis*. <sup>1</sup>

To see this, let us take a close look at the two main passages in the edited selection of texts, where Ps-K. gets quite explicit about mental discourse. The first one is toward the beginning of the treatise, in the section numbered 1.2.1 by the editors, about whether there can be an authentic science of the *sermo* (pp. 9-11). Having recalled, along the traditional Boethian line, that there are three different ways for discourse to exist: in writing, in pronunciation, and in the mind, the author goes on to specify that only the latter can be a proper object for science:

Tertio modo [= sermo in mente] habet esse intelligibile, et sic habet universale et est idem apud omnes et ens necessarium, et sic est subiectum scientiae, non primo modo vel secundo (p. 10).

Pinborg's puzzlement is quite understandable. Ps-K., here, does posit the mental *sermo* as being "the same for all". And this, according to the *Perihermeneias* tradition, is a salient character of mental concepts seen as intellectual similitudes of external things.

<sup>1</sup> I concur on this with others who have recently written on Ps-K.'s conception of grammar. See: Fredborg 1981, Marmo 1994, Rosier 1994, Sirridge 1995.

It is very tempting, then, to identify this mental *sermo* with pure conceptual representation. If this is done, though, one is at a loss to see how mental discourse can still be an appropriate object of *grammar*, since grammar, in Ps-K.'s own view, typically bears on syntactical and phonological features of words.

If we are to make good sense of the doctrine, the way out of this predicament is surely to resist the temptation to identify the *sermones in mente* with the whole range of concepts of external things. What Ps-K. must mean, I take it, is that there are in the mind certain linguistic representations – representations of linguistic units, that is – which are universal in the sense, primarily, of abstracting from particular utterances of words.

This intelligible *sermo in mente* is not to be conflated, to be sure, with the concrete representation of a particular word that a speaker forms within her imagination when she wants to utter the word. The latter is always linked with a particular utterance—the one the speaker is about to produce—while the former, by contrast, abstracts from particular tokenings of words, syllables, or letters. This is a distinction Ps-K. is explicit about:

Notandum etiam quod sermo est in mente duplex: uno modo per abstractionem a particularibus sermonibus significativis vel non significativis in se (quod dico propter litteras et syllabas quae non significant in se) et sic est subiectum scientiae, quia per hunc modum est universale, et ratio cognoscendi sermones particulares, qui sunt extra. Alio modo est sermo in mente per affectum et imaginationem, et sic est principium vocis sensibilis exterioris [...] (p. 10).

But the intelligible mental discourse and the concretely imagined word, however distinct from each other, have an important feature in common for Ps-K.: they both are representations of "particular words which are outside" (sermones particulares qui sunt extra).

This becomes very clear in the second main passage on mental language, in section 2.1 of the treatise (pp. 56-59). The author, at that point, is discussing how conventional words receive their meaning. He resorts, in this context, to his previous distinction between two modes of linguistic representation within the mind. But he now formulates it in slightly different terms:

[...] notandum quod vox habet esse in anima secundum duplicem modum: uno modo sicut in substantia cognoscente per abstractionem sicut alia cognoscibilia; sicut enim mediante sensu habet anima cognitionem de rebus, sic habet *cognitionem* 

de vocibus, et hoc est verum tam de proferente quam audiente. Habet enim vox esse in anima ut in principio efficiente; vox enim est percussio aeris ab anima, ut scribitur secundo *De anima*; et tunc habet esse in ea per appetitum et imaginationem (p. 57; the italics are mine).

It is straightforward in these lines that the first brand of what the author now calls 'vox in anima' is an intellectual abstract representation of certain spoken units: it is a cognitio de vocibus, not de rebus. And this must hold mutatis mutandis for the corresponding variety of sermo in mente he had previously proposed as the object of scientific grammar. Ps-K.'s point is that we can have general intellectual knowledge of spoken words, just as we have general knowledge of all other sensible things: by abstracting from singular instances.

It must be noted, though, that the new distinction, as it appears in section 2.1, does not amount exactly to the same as the previous one: Ps-K. now uses vox in anima instead of sermo in mente. The relevant terminological contrast between vox and sermo is basically the same here as in Abelard, for example: the vox is the vocal sound, while the sermo is the significative word (the sound taken along with its meaning). Ps-K. transfers this duality into the mind. Describing how signification is imposed upon conventional words, he explains that when a signifiable content is present to his mind, a speaker can think – intellectually – of a spoken sound by which this content will be signified. Considered in itself, the signifiable content - which Ps-K. calls the intentio significabilis - is a language independent concept, an abstract intelligible similitude of certain external things. The intentio vocis, by contrast – which is certainly the same as the *vox in anima* – is a mental representation of a spoken sound. And the association of an intentio significabilis with an intellectual intentio vocis precisely yields as its result the intellectual brand of sermo in mente which can be the proper object of scientific knowledge:

Ex his igitur plane patet quod apud animam est sermo intranee dispositus, quo quidem et ad cuius similitudinem fit prolatus. Apud animam igitur statim cum habet intentionem significabilem fit praeexcogitatio vocis, qua talem intentionem

<sup>2</sup> See Abelard, *Logica 'Nostrorum Petitioni Sociorum*', pp. 522 *sq.* In the late thirteenth century, Radulphus Brito, for example, still draws the same distinction: "[...] qui sermo non solum est vox nec solum significatum sed aggregatum ex voce et significato [...]" (*Quaestiones super Priscianum Minorem*, quest. 2, p. 94).

sive intelligentiam deceat vel oporteat significari, et illi intentioni vocis applicatur intentio significabilis sicut finis ei quod est ad finem [...] Et igitur vox exterior sensibilis habet quadruplicem comparationem: unam ad intentionem vocis interioris ad cuius similitudinem figuratur, aliam ad intellectum seu similitudinem rei, tertiam ad ipsum sermonem interiorem complentem tam speciem significabilem quam vocis intentionem, quartam ad rem extra quae per vocem significatur intellectu movente (p. 59; italics mine).

The intelligible *sermo interior* achieves the association of the intellectual representation of some external things with that of certain spoken sounds. Insofar as it includes this second component, it truly constitutes a mental representation of external discourse, the *sermo prolatus*, which is produced, in Ps-K.'s own terms, as a similitude of it: "[...] *sermo intranee dispositus*, [...] *ad cuius similitudinem fit prolatus*".

**1.2.** This is not enough, though, for a complete resolution of Pinborg's original problem. The question still remains as to how far exactly this internal *sermo* should be linked with particular languages. As we have seen, Ps-K. considers the *sermo* in mente to be "the same for all". But, on the other hand, he does associate, along with the *Perihermeneias* tradition, "not being the same for all" with the diversity of conventional languages:

Non enim voces sunt eaedem apud omnes, ut dicit Philosophus, et de se planum est. Non enim eisdem nominibus nominatur res eadem Latine, Graece et Hebraice, et similiter Latine et vulgariter [...] (p. 57).

It seems to follow that if mental discourse is the same for all, then it is prior to the diversity of languages, just like concepts of external things are. How could that be? How could the *sermo in mente* incorporate a representation of spoken words, yet be common to all?

Admittedly, Ps-K.'s theory of the mental construction of words is not spelled out in an entirely satisfactory way and there can be "some question", as Mary Sirridge has recently put it, "about whether it is consistent". But a nice way out is hinted at by certain passages of the text. What Ps-K. is committed to, I take it, is a new distinction *within the intellect* between two levels of linguistic representation: first, a deep level where the most important syntactical

<sup>3</sup> Sirridge 1995: 118.

and semantical features of words are represented (along with universal laws governing pronunciation in general); and second, a more superficial level – but still within the intellect – where accidental phonological or graphic features are implemented. Both these levels, in this interpretation, would be prior to – and underlie – the formation of the concrete non-intellectual linguistic representation per *affectum* (or *appetitum*) *et imaginationem*; the deeper one would correspond to features of language that are taken to be "the same for all" by Ps-K.

Such a line is suggested, for example, by the following development, where the author reflects on what, in language, is the same for all and what, by contrast, can vary from one conventional language to another, and where he draws, accordingly, a corresponding distinction between two sorts of grammatical principles:

[...] dicendum quod principiorum grammaticae quaedam sunt de esse, quaedam de bene esse. De esse sunt litterae, elementa, syllabae, dictiones, orationes et modi pronuntiandi substantiales elementorum, ut cum omnis vocalis per se sonat, consonans cum alio, et quod omnis vox postposita plus sonat se ipsa praeposita, et similiter modi significandi et consignificandi generales, et haec sunt necessaria et eadem apud omnes. Alia sunt principia de bene esse tantum, sicut sunt figurae elementorum et nominationes et accidentales potestates, et alia accidentia quae sumuntur a parte vocis cuiusmodi sunt terminatio in -a vel in -us. Et haec non sunt necessaria nec eadem apud omnes (pp. 28-29; italics mine).

The distinction here is between the descriptive and the normative basis of grammar. The former is provided by elements and laws which are "necessary and the same for all". This includes, on the one hand, certain basic phonological units and principles which are deemed universal by Ps-K. and, on the other hand, what he calls the *modi significandi et consignificandi generales*, which correspond to universal syntactical and semantical features.<sup>4</sup> The normative side of grammar, by contrast, has to do with superficial features which vary from one language to another, such as the special phonological shape of particular words, whether they terminate with -a or -us for example.

Since both sorts of features are within the range of grammar as a science, they must both be abstractly representable to the intellect, according to Ps-K.'s own conception of what a science is. And

<sup>4</sup> For a discussion of the medieval notion of *modi significandi generales* (by contrast with *accidentales*), see the paper by C.H. Kneepkens in the present volume.

this, in turn, strongly suggests a corresponding duality within every speaker's intellectual representation of her own language and discourse. Ps-K. gets very close indeed to what Chomsky (1966) took to be the main tenant of "Cartesian linguistics": the distinction between deep and surface structure in the mental representation of language.

The following process is what is suggested. The mental association of a particular conceptual content with the intellectual representation of a sound is done in two stages within the speaker's intellect. First, he must associate the content he wants to convey, with certain "general" modes of signification; he must determine, for example, whether the required phrase should be a noun, a verb, an adverb, a whole sentence, or whatever else is admitted among basic grammatical types, whether it should be in the singular or in the plural, negative or affirmative, and so on. The result of this first stage will be a very abstract representation of the required external phrase. Only in the second stage will the words be given a particular phonological form and be attributed, for example, a determinate declension. It is true that Ps-K. explicitly admits the universality of some general phonological principles (as seen in the last quotation above), but it would surely be implausible to have these play a role at the first stage of the mental formation of words. From the sort of examples given in the text, it is apparent that these universal phonological laws are to be thought of as a set of general constraints on the combination of some basic linguistic sounds. But which ones among these constraints are to be relevant in any particular case obviously depends on prior choices which are variable from one group of speakers to another.

The need for such a duality between deep and surface structure in mental intellectual discourse is confirmed by yet another interesting passage, in section 2.1.13 of the treatise, where Ps-K. wonders about something he calls the *forma dictionis*: What is it that gives a word its intelligible form? He introduces there a distinction again between two ways in which a significative word can be considered:

Dicendum quod vox significativa potest dupliciter considerari: uno modo in quantum vox et secundum suam substantiam, et sic eius forma est *modus proferendi*. Alio modo in quantum est significativa, et sic potest dici quod eius forma est *significatio*, non substantialis sed accidentalis (p. 80; the italics are mine).

When a word is looked at as a mere sound, what we are interested in is its phonological form, the *modus proferendi*. But it can also be considered as a meaningful unit and the relevant form, then, is purely semantical: it is the *significatio* itself, described by Ps-K. as an accidental form given to the sound from outside, something we would now call a function. It seems natural to extrapolate from this that in the mental generation of words, these two forms – semantical and phonological – are implemented at distinct stages.

Conventions, in this picture, come in at the level of surface structure. For in Ps-K.'s eyes, the association of a conceptual content with general semantical and syntactical features leaves no freedom of manœuvre yet: these features are utterly determined by the intelligible content the speaker wants to convey and by the intellectual mode under which this content is thought of, the modus intelligendi.<sup>5</sup> And consequently, there will be no differentiation between languages at the deep level of mental discourse. Whether a certain concept should be expressed by a noun, a verb, or an adverb, for example, is not a matter of free choice for speakers or groups of speakers. Convention, as Ps-K. sees it, serves only to regularize, within a given community, the vocalization of this intellectual sermo into particular sounds recognizable by the members of the community. The constraints from signification still leave open a plurality of possibilities among available sounds: one given sound may be used to express widely different concepts;6 and that is where conventions are needed.

To sum up, Ps-K.'s theory of the generation of speech, as I propose to reconstruct it, displays the following levels of mental representation:

a) conceptual similitudes of external things; those are the "signifiable intentions", the old Aristotelian noemata; in Ps-K.'s view, they involve modes of intellection (modi intelligendi) as well as pure intelligible objects; in principle, they are language independent, but those among them which happen to be abstract similitudes of spoken sounds (intentiones vocis) do play a special role in language formation;

 $<sup>5~{\</sup>rm See}~{\it Commentary...},~{\rm pp.}~104\text{-}105$  (e.g. p. 105: "modus significandi respondet modo intelligendi").

**<sup>6</sup>** See *Commentary...*, p. 80: "Et quia eiusdem secundum substantiam possunt esse plures perfectiones accidentales, ideo possunt eiusdem vocis secundum substantiam et modum proferendi esse plures significationes [...]".

- b) abstract intellectual representations of external words; they constitute the intelligible sermo in mente which is the proper object of grammar as a theoretical science; each unit, at that level, is the result of intellectually associating an intentio significabilis with an intentio vocis; although it is not entirely explicit in the text, I proposed that Ps-K. needs to subdivide this intellectual internal speech into:
- b1) a deep level, where the intended conceptual content is linked with "general modes of signification and consignification"; and
- b2) a more superficial phonological level, where abstract representations of the accidental "modes of pronunciation" are intellectually implemented;
- c) concrete imagined representations of the words to be produced; this is the aspect of the sermo in mente which exists per affectum et imaginationem; it is causally linked with the external production of singular speech tokens.

When Ps-K. writes, toward the beginning of his treatise (quoted above), that the intelligible speech in the mind is "the same for all", I surmise that it is the b1 level he is then talking about, the b2 surface structure obviously being variable from one language to another.

The sole alternate possibility I can think of would be to simply do away with the b2 level and to suppose that all language dependent phonological features are implemented within the concrete imagination, at the c level. But this, it seems to me, would unduly impoverish, in Ps-K.'s own eyes, the intellectual component of language, and hence of grammar.

# 2. Historical setting

**2.1.** There existed, by the time of Ps-K., a very old tradition of referring to the mental representation of external words within the imagination. Aristotle, in De Anima II (420b32), had linked the capacity to produce significant spoken sounds with the presence of some imagined representations in the mind of the speakers, and later commentators, such as Ammonius or Boethius, came to speak of "lexical imagination" in this regard (λεκτική φαντασία,

*imaginatio proferendi*).<sup>7</sup> Avicenna's *Isagoge* – which was available in Latin by the thirteenth century – has a striking passage about the imagined words (*verba imaginata*) being indispensable in practice for human thinking.<sup>8</sup> And Ps-K. himself refers to the second book of Averroes's commentary on the *De Anima* for the idea of a mental discourse which is per *affectum et imaginationem*.<sup>9</sup>

Augustine also mentioned on different occasions in his De Trinitate the mental images of linguistic sounds, which he sharply distinguished from the verbum mentis proper, the latter being utterly language independent in his view. 10 Anselm, in the Monologion, gave these Augustinian ideas a form which was to become canonical in thirteenth century theology. He listed, in effect, three ways in which a person can "talk" about something ("rem unam tripliciter loqui possumus"): one is the use of external audible speech, while the other two precisely correspond to Augustine's duality between mental representation of linguistic signs and mental representation of things themselves. 11 Anselm was quoted by name and commented upon on this by such authors as Alexander of Hales and Albert the Great.<sup>12</sup> His ternary scheme eventually became common stock in the second half of the thirteenth century. It is in the context of explaining this very distinction, for example, that Thomas Aquinas speaks of "the imagination of the word" (imaginatio vocis), 13 and others of a verbum imaginabile. 14

<sup>7</sup> See Ammonius, In Aristotelis De interpretatione 23, 1; Boethius, In Librum Aristotelis Peri Hermeneias. Secunda editio I, 1, p. 6.

<sup>8</sup> See Avicenna, *Logyca*, 3rb: "[...] cogitatio quasi locutio est inter ipsum hominem et cogitatum suum verbis imaginatis [...]".

<sup>9</sup> Commentary..., p. 10. See (in the Latin version): Averroes, Commentarium magnum in libris De Anima 90: "[...] vox est sonus qui fit cum ymaginatione et voluntate [...] primum enim movens in voce est anima ymaginativa et concuspicibilis". In a later passage, Ps-K. simply associates the idea of a mental representation of words per appetitum et imaginationem, with De Anima, book II, without mentioning Averroes (Commentary..., p. 57).

<sup>10</sup> See, for instance, Augustine, De Trinitate IX, 15 and XV, 19.

<sup>11</sup> See Anselm, Monologion 10.

<sup>12</sup> See Alexander of Hales, *Quaestiones disputatae 'Antequam esset frater'* 9, 1, 1, and *Summa theologica* I, 419; or Albert the Great, *Summa theologiae* I, 1, tract. 8, quest. 35, chap. 3, art. 1.

<sup>13</sup> See Thomas Aquinas, Summa theologiae I, 34, art. 1.

<sup>14</sup> See for example: Richard of Middleton, *In I Sent.* 27, art. 2, quest. 1; John of Paris, *In I Sent.* 27, quest. 2; or John Duns Scotus, *Reportata Parisiensa* I, 27, quest. 2, n. 8.

**2.2.** But what sets Ps-K.'s theory apart from this double tradition – both Aristotelian and Augustinian – is that he postulates a more fundamental level of linguistic representation not only within the imagination – something he admits, of course – but also *within the intellect itself*. And it is noticeable that he is led to posit such an intellectual level of linguistic representation precisely in order to locate the object of grammar as a theoretical science.

Ps-K.'s theory on this is not completely original, for all that. It is closely related, for example, to what we find in an anonymous thirteenth-century Tractatus de grammatica once ascribed to Robert Grosseteste: the intellect, there, is said to be the medium in which representations of things (species rerum) are associated with representations of spoken sounds (species vocum). 15 A similar doctrine had been sketched by Albert the Great in his Summa de creaturis, written at Paris in 1246. 16 Wondering how spoken sounds receive their conventional meaning, Albert was led to borrow the idea of an internal sermo from John Damascene's authoritative De fide orthodoxa. 17 There is a part of reason, Albert explained, whose function is to generate and organize speech within the mind. Some call it the "interpretive faculty" (potentia interpretativa); and it is through the exercise of this very faculty that determinate significations are assigned to spoken sounds. Prior to Albert, Alexander of Hales had already referred to the intellectual representation of the spoken word. He called it the verbum intelligibile vocis. 18

Alexander, however, was content to merely mention this intellectual level of linguistic representation and he paid it no more tribute. And Albert's passage, while quite close in certain respects to those of Ps-K. we examined above, nevertheless remains much sketchier. Albert was not very explicit, in particular, as to how exactly the postulated interpretive faculty was to be located with respect to intellect and imagination.

<sup>15</sup> See Anonymus, Tractatus de grammatica, 6, p. 32.

<sup>16</sup> See Albert the Great, Summa de creaturis II, q. 25, art. 2. Rosier 1994 also discusses this particular passage and provides a French translation of it (pp. 303-315).

17 Albert's reference here is to John Damascene, De fide orthodoxa II, 21-22 (chap. 35-36 in the Latin version of the work by Burgundio of Pisa); the same passage is quoted by Ps-K. (Commentary... 2.1, p. 58). Damascene also mentions the internal discourse (λόγος ἐνδιἀθετος) in De fide orthodoxa I, 13.

<sup>18</sup> See Alexander of Hales, Quaestiones disputatae 'Antequam esset frater' I, quest. 9, 5; and Summa theologica I, 419.

The general picture, then, is the following. The idea of a mental representation of spoken sounds had become quite common among Parisian academics by the middle of the thirteenth century, whether they called it species vocis as Roger Bacon did, 19 or cogitatio vocis with Bonaventure, 20 or intentio vocis as in Ps-K. himself. A few authors, such as Alexander of Hales, occasionally proposed to locate such mental representations of spoken sounds not only within the imagination, but within the intellect as well. This idea is precisely what we find further theorized in Ps-K.'s Commentary, in relation to the theme of the sermo in mente, the author's doctrinal motivation being to include grammar among the theoretical sciences. To satisfy the requirements of his times for this - those of Aristotle's *Posterior Analytics* – he thought that a universal and intelligible object was needed for such a science: something less precarious than spoken or imagined tokens of words, but ultimately linked, nevertheless, with the generation of language.

Although many authors of the period, including Ps-K.himself, credit the theme of the internal discourse to John Damascene's *De fide orthodoxa*, <sup>21</sup> the Greek theologian can hardly be seen as the main doctrinal source for this idea of a specifically *intellectual* level of linguistic representation. The passages on mental speech that were regularly quoted from Damascene's compilation were far from explicit with regard to this particular point. <sup>22</sup> Aquinas, for one, identified Damascene's *logos endiathetos* with the *imagined* – and not the intellectual – representation of the external words, the *imaginatio vocis*, <sup>23</sup> and nothing in John's text directly contradicts this reading. The postulation of a purely intellectual deep structure for language was facilitated by Damascene, but it was not

<sup>19</sup> See Roger Bacon, *De signis* 16-18 and 166. Albert the Great attributes the expression 'species vocis' to the magistri; see *In I Sent.* 27, art. 7: "Magistri distinguunt etiam triplex verbum, scilicet rei, vocis et speciei vocis".

<sup>20</sup> See Bonaventure, In I Sent. 27, pars II, quest. 4, p. 489.

**<sup>21</sup>** See for example: John of La Rochelle, *Summa de anima* 72; Alexander of Hales, *Glossa in I Sent.* 10, n. 6; Albert the Great, *Summa de creaturis* II, quest. 25, art. 2; *In I Sent.* 27, art. 7; *Summa theologiae* I, 1, tract. 7, quest. 30, chap. 1 and tract. 8, quest. 35, chap. 3, art. 1; Peter of Spain, *Scientia libri de anima* 11, chap. 10.

**<sup>22</sup>** These passages were inevitably from *De fide orthodoxa* I, 13 on the one hand, or II, 21-22 (35-36 in the Latin version) on the other hand.

**<sup>23</sup>** See Thomas Aquinas, *Summa theologiae* I, quest. 79, art. 10, *ad* 3. Aquinas also quotes Damascene on inner speech in *In I Sent.* 27, quest. 2, art. 1 (where he closely follows Albert).

inherited from him. It was, I surmise, the result of Aristotle's requirements for science being applied to the field of grammar at mid-thirteenth century universities, especially Paris.

**2.3.** Ps-K.'s search for a range of universal, but properly linguistic, objects seems to pave the way for the modistic conception of grammar as a science of linguistic universals. Some of Ps-K.'s developments regarding the *sermo in mente*, in fact, are repeated *verbatim* in John of Denmark's modistic *Summa grammatica*, apparently written around 1280.<sup>24</sup>

In the late thirteenth and early fourteenth century, at any rate, reference continued to be made from time to time to the intellectual representations of linguistic units. When John Duns Scotus, for one, puts forward the *enunciatio in mente* as the proper object of Aristotle's *Peri Hermeneias*, he is alluding, I take it, to something very much like Ps-K.'s *sermo in mente*.<sup>25</sup> And so is the Dominican William Crathorn, in the 1320s, when he boldly proposes – against Ockham – to identify discursive thought in its entirety with the mental manipulation of 'intelligible similitudes' of external *words*.<sup>26</sup> There is a recognizable line of thought here, running roughly from Alexander of Hales and Albert the Great to Crathorn in the 1320s, with Ps-K.'s *Commentary* as a salient landmark on the way.

This view of mental discourse as intellectual representation of external words eventually collided with a different conception of inner speech as made up by conceptual representations of things, as in Ockham. There is no direct contradiction between these two notions, of course. Ps-K., after all, did admit of language independent conceptual similitudes of external things – which he called the "signifiable intentions" – and those are precisely what Ockham's oratio mentalis is composed of. But the contentious question that eventually arose was that of the proper object of logic, as the science of discursive thinking. Given that mental reasoning is seen as a sequential combining process (along the Aristotelian line),

**<sup>24</sup>** On the relation between John of Denmark and Ps-K., see in particular Sirridge 1995.

**<sup>25</sup>** See John Duns Scotus, *Primum Librum Perihermeneias Quaestiones*, quest. 1: "Quid sit subiectum libri Perihermeneias".

**<sup>26</sup>** See William Crathorn, *Quästionen zum ersten Sentenzenbuch*, quest. 2, esp. pp. 154-65.

what sort of elements does it play with? Mental representations of words or concepts of things? Richard Campsall and Walter Burley, for example, took part in a lively discussion on this very point in the first decade of the fourteenth century.<sup>27</sup> And so did Hugh Lawton, Crathorn, and Robert Holkot in the 1320s and early 1330s.<sup>28</sup> As a result of these debates, the linguistic conception of mental symbols (as represented by Ps-K.'s *sermo in mente*) was somewhat pushed aside and the purely conceptual train of thought was confirmed as the proper object for the science of logic, in the guise of Ockham's non-linguistic – but grammatically structured – *oratio mentalis*.

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How can the sermo in mente be the proper object of grammar as a science, if it is "common to all"? Such was the problem raised by Jan Pinborg in his introduction to the partial edition of Ps-K.'s Commentary in the Cahiers. The solution to the riddle, as we have seen, starts with the recognition that Ps-K.'s internal discourse is something quite different from William of Ockham's later oratio mentalis. Both are syntactically and semantically structured, it is true, but contrary to Ockham, Ps-K. wanted to delineate a mental level of linguistic representation, a cognitio de vocibus not de rebus. His sermo in mente, insofar as it is the object of grammar, is an abstract representation of "particular words which are outside". It is proposed as a legitimate object for scientific knowledge, precisely because it abstracts from singular tokens of speech utterance. In this sense it is universal, without having to be identified directly with pure concepts of non-linguistic things. Its specificity, rather, is to associate such "signifiable" concepts with the mental representations of certain sounds. What Ps-K. was looking for thus turns out to be something like our modern notion of a linguistic type. And this he did with an eye toward providing an appropriate range of combinable units for grammar to study. He resorted, in the endeavour, to an *intellectual* level of linguistic representation, which he clearly distinguished from the almost physical anticipation of concrete speech per affectum et imaginationem; and he en-

<sup>27</sup> See Panaccio (forthcoming).

<sup>28</sup> See Gelber 1984, Panaccio 1996.

dowed it with a special mode of existence: that of intelligible being (esse intelligibile).

Whether in Ps-K. himself or in some of his contemporaries who hit on similar ideas, such as Albert the Great, this development can be seen as an attempt to show how grammar can satisfy Aristotle's main requirement in the *Posterior Analytics*: the object of a science must be something *necessary*. In the mid-thirteenth century, the University of Paris was in the process of spreading Aristotelian canons for science all across the board. Ps-K. interpreted these canons as requiring the postulation of special *intelligible* objects for grammar: specifically linguistic objects ultimately graspable by pure intellection.

A striking result of this approach was to suggest the existence of a very rich deep linguistic structure common to all languages. Ps-K., as I have striven to show, is committed to the acceptance of a distinction, within the very domain of intelligible objects, between representations of words from the sole point of view of their basic semantical and syntactical functions, and representations of significative words with their phonological particularities. For Ps-K., only the latter would involve conventions. The "general modes of signification and consignification" which correspond to the former are linguistic universals in the Chomskyan sense: they are the same across all human languages. Ps-K.'s acceptance of the Aristotelian requirement for science results in the delineation of a specific domain for a universal brand of grammar. This is the trend that will be exploited further on by the Modistic grammarians of the late thirteenth and early fourteenth century.

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