Studies in the History of the Language Sciences

# The Mirror of Grammar

Theology, philosophy and the Modistae

L.G. Kelly

# THE MIRROR OF GRAMMAR

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Volume 101

L. G. Kelly

The Mirror of Grammar Theology, philosophy and the Modistae

# THE MIRROR OF GRAMMAR

## THEOLOGY, PHILOSOPHY AND THE MODISTAE

L. G. KELLY
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# COMITIBUS CARISSIMIS INGENIO ET IUCUNDITATE PRAESTANTIBUS ROBERTO HENRICO ROBINS ATQUE BIBIANAE ANNAE LAW

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### FOREWORD

It is no accident that the first moderns to do any significant work on the *modistae*, Martin Grabmann, for instance, classed their theory as a *Sprachlogik*: their grammars have all the trappings and intellectual rigour of a medieval logical treatise, and many of them were logicians as well as grammarians. But the word, *Sprachlogik*, would certainly have caused some indignation among the *modistae*, who would have acidly pointed out that the object of their science was the workings of language, not the norms of reasoning. This claim to independence raised the question of the place of *grammatica speculativa* in the intellectual life of the time, and the material left aside from my edition of Michel de Marbais (1995) contained some interesting material on the antecedents of the *modistae*. Historians of linguistics had paid little attention to the rise of the *modistae*, although much was already known about the attention paid language by contemporary philosophers and theologians.

In its early years the project was supported by the Social Sciences and Humanities Research Council of Canada (Grant 410 94 0442), whose assessors supplied many helpful comments. I have on many occasions thought ruefully about their dire warnings about the complexity of the task over the seven years I took to complete it. The University of Ottawa kindly released me from one course in the autumn term of 1994, and awarded me a sabbatical leave which I spent at Darwin College, Cambridge, for the academic year 1995–1996. Darwin then gave me an academic home on my retirement from Ottawa. The willing and expert help given me by librarians on both sides of the Atlantic was crucial. The work began in the libraries of the University of Ottawa and of l'Université St-Paul, Ottawa, and was completed in the University Library, Cambridge, and the British Library in London.

In a work of this type the question of citations raises a number of thorny problems. Modistic Latin is deceptively transparent, and very vulnerable to skewing when translated into English. I have therefore left the snippets quoted in Latin, and where expedient, have given a guide to their interpretation in the context. For similar reasons I have quoted Aristotle in the medieval Latin translations: some of these, particularly the twelfth-century versions, do tend to be skewed, and it is important that the modern reader know what was presented to the medievals as Aristotle's doctrines.

This project would have been impossible without the thorough grounding given me years ago by Father Thomas O'Reilly CM at Holy Cross College, Mosgeil, New Zealand, More immediately, Irène Rosier generously gave me considerable useful material and much good advice as the project was getting under way. Since then the book has benefited from many discussions with colleagues at Darwin College and from the questioning one usually undergoes when presenting papers at academic congresses. I owe much to the helpful and incisive comments of the late Professor Robins and of Professor John Gallup of Université Laval, Québec, and to the encouragement of the late Dr Vivien Law of Trinity College, Cambridge. I am also grateful to my readers, Professors John Joseph of Edinburgh and Mark Amsler of Milwaukee, for saving me from the worst of my indiscretions, and to Professor Konrad Koerner for his guidance on preparing the book. He and John Benjamins have been very patient throughout the long saga of writing, rewriting and preparing copy. Lastly to my family I owe much for their patience in accepting yet another group of medieval visitors into the household.

Cambridge, March 2002

## ABBREVIATIONS

The following abbreviations refer to both the originals and the medieval commentaries on them.

APost. Aristotle, Analytica Posteriora

Cat. Aristotle, Categoriae / De praedicamentis

CEut. Boethius, Contra Eutychen

De an. Aristotle, De anima

De dial.Augustine or Abelard, De dialecticaDe div. nom.Ps.Dionysius, De divinis nominibusDe trin.Augustine or Boethius, De trinitateDoc. christ.Augustine, De Doctrina christianaL. VI. princ.Anon., Liber sex principiorum

Metaph. Aristotle, Metaphysics
PeriH. Aristotle, Perihermeneias

Phys. Aristotle, Physics

Sent. Peter Lombard, Liber Sententiarum

STheol. Summa theologiae

# INTRODUCTION SITUATING THE MODISTAE

The final object of the medieval speculative sciences is to perfect the human being by elucidating God's works and Man's place in them.<sup>1</sup> At their heart is a peculiarly rigorous concept of knowing:

Scire est causam rei cognoscere et quoniam illius est causa, et non contingit aliter se habere. (Hamesse 312 #8  $[APost.\ 1.ii\ 71b10]$ )

Knowledge of the play of causality and uniqueness in the subject of a science comes about through demonstration and proof of hypotheses:

Scire est per demonstrationem intelligere. (Hamesse 312 #10 [APost. 1.ii 71b10–17])

And finally speculative sciences were built on shared common principles which assure their validity and lay the ground for interdisciplinary work and cross-influences:

Omnes scientiae communicant secundum communia principia ex quibus demonstrantur. (Hamesse 1974:316 #60 [APost. 1.xi 77a28]).

Metaphysics provided the pattern for the speculative sciences. As it considered Being as Being ( $\vec{n}$ ) ő  $\nu \hat{\eta}$  ő  $\nu [Aristotle, Metaph. IV.i 1003a20]), metaphysics postulated that the functions of any object were founded on its proper mode of being and on a specific causality which guaranteed its autonomy and freedom of action (de Muralt 1995:102). Crucial to this causality is the order of exposition embodied in the medieval logician's prius et posterius, that is, what must come before what, and what comes after what temporally or logically (de Muralt 1995:101). Grammatica speculativa then, sought to become a habitus demonstrativus which drew the rectaratio speculabilium of language by abstracting its proper principles from the evidence of one's senses.$ 

Traditionally *speculativa* was derived from a *speculum* (a mirror): seeing something in a mirror (*per speculum*) is perceiving cause through effect, because in an effect 'the similitude of the cause shines forth' (Aquinas, *STheol.* 2a2æ 180.3 ad 2). In the sense 'to examine scientifically', *speculari* 

<sup>&</sup>lt;sup>1</sup>Kilwardby, *De ortu scientiarum* 13.25–27: "Scientia speculativa est pars philosophiae humani aspectus perfectiva per cognitionem rerum divinarum, id est naturae divinae et naturarum a Deo per seipsam conditarum."

dates from Boethius's *Opuscula sacra*, who emphasises the necessity for the scientist to rigorously specify the object of his investigations.<sup>2</sup> A tradition going back to at least Augustine (*De trinitate* XV.viii) rejects *specula* (an act of assiduous observation) as its etymology despite the fact that *speculari* means to observe carefully and to draw inferences from the evidence.

The object of grammar as a speculative science was to find the recta ratio scibilium of language, that is its origin and causes, through common principles and interdisciplinary research. It is no wonder then that a number of modistae opened their Summas by showing that grammar is a speculative science by means of the Aristotelian scientific principle epitomised in the florilegia. There are three generations of modistae, the first rising in about 1270, the second being mainly commentators, and the third, that of Thomas of Erfurt and Siger of Courtrai, during the early years of the fourteenth century. Their basic model remains stable in its essentials throughout the three generations, although there are significant variations in detail. It is the first generation of modistae which interest us here, that is those who, as far as we know, worked in the 1260s and 1270s. It includes Vincentius Heremitus, Michel de Marbais, the Danish grammarians, Boethius, Joannes, and Martinus, and the later questions of Simon Dacus.

Irène Rosier (Gosvin de Marbais vii) has shown that this first generation taught in competition with the university grammarians. Indeed they attempted to displace the orthodox university grammar, but without much success. It is somewhat difficult to draw a firm boundary between the orthodox and our rebel grammarians. University grammarians like Gosvin de Marbais, Matheus Bononiensis and Siger de Brabant share some of the characteristics of the modistae, while some important early modistae, Joannes Dacus in particular, retain some of the key elements of university grammar. The wide differences between the Domus grammaticae, a university grammar, and the modistic Quaestiones super Priscianum minorem ascribed to Simon Dacus suggest that they were written by different people, but the events of the late 1960s, when transformational-generative grammar was gaining ground, do demonstrate that grammarians can change theory if the conditions are compelling enough.

Our task is to trace the antecedents of the *modistae*, and to place this first generation in its intellectual context, and, if at all possible, to see them through thirteenth-century eyes.

 $<sup>\</sup>overline{^2}$  Boethius,  $Quomodo\ substantiae\ 89-91$ : "Multa sunt quae cum actu separari non possunt animo et cogitatione separantur: ut cum triangulum vel cetera a subiecta materia nullus actu separat, mente tamen segregans ipsum triangulum proprietatemque eius praeter materiam speculatur."

Richard McKeon (1975:153) claims that since the Renaissance, histories of culture and science have been 'written backwards from present conceptions of culture and present interpretations of science', and therefore they have given a skewed interpretation of the facts they chronicle. He rejects the common idea that sciences progress onwards and upwards through successive discoveries of the truth and rebuttal of ancient error: sciences are organised within cultures, which are grounded in the organisation and expression of ideas within a society. A culture then, is a structure of values and an organisation of social, practical and theoretical knowledge.

The Latin West saw the changes in its science at the beginning of the twelfth-century as a result of intimate contact between Latin Christian and Arabic Muslim 'Enclyclopedias'. The most important elements of these Encyclopedias are not the documents they contain, but their structure of heuristic principles, derived from the materials, methods and goals of education, formal and informal, peculiar to each society. In the West the early medieval Encyclopedia had its roots in the Greek, Roman and Hebrew encyclopaedias handed on to the Middle Ages by the classical world. The Greek Encyclopedia is mainly literary and its form of expression derives from the epideictic rhetoric of the second Sophistic (McKeon 1975:162). Its cohesion comes from the educational systems of the ancient Greek world, which developed the hermeneutics furnishing templates for rhetoric and for commentary on rhetoric and literature. In the third century Origen christianised this Encyclopedia by demonstrating that its techniques were ideally suited to biblical exegesis.

The Roman Encyclopedia was organised according to dialectical principles derived from the *Topica*. Topics were not demonstrative principles, but 'places of discovery, places of memory', that is things and facts (McKeon 1975:186–187). Like the Greek Encyclopedia the organisation of the Roman Encyclopedia was rhetorical, according literature a central place. Education therefore was text-based. It was Augustine and Jerome who fused the Greek and Roman Encyclopedias by following Origen's example and integrating the Roman grammarian's technique of *enarratio* into Biblical criticism. Boethius added the finishing touches with his translations of Aristotle and commentaries on them. The Hebrew Encyclopedia is a mass of information about law and its interpretation. One of its major concerns was the proper use of secular learning in the exegesis of Scripture (McKeon 1975:154).

The early medieval Encyclopedia these three evolved into was centred on hermeneutics, whose aim was to elucidate the meanings of terms, their contexts and their relevance. Its written embodiment is books like Isidore of Seville's *Etymologiae*, which contains collections of practical information,

whose cohesion comes from the deliberative devices of Roman rhetoric in their classical Hellenised form (McKeon 1975:152). To sum up, the Encyclopedia of the early Middle Ages was essentially rhetorical; its book list is rooted in classical Greek and Latin literature, the Bible, the Greek and Latin Fathers, the ancient philosophers and their Greek and Latin commentators.

By the early twelfth-century this book list included the high points of the immense Carolingian production, in particular the work of Joannes Scottus Eriugena, school editions of Donatus, and commentaries on Priscian. Hermeneutics, besides being the art of interpretation, was also the art of discovery of things, which could be objects, ideas or arts classed factually according to  $\tau$ 0  $\tau$ 0 or . This Encyclopedia was also God-centred. Because the world was constituted according to the Great Chain of Being, religious faith enhanced one's understanding of the created world, and one's understanding of the world deepened one's faith. God, the most perfect being, was at the top of the Chain, and at the bottom of the Chain were created beings of the utmost imperfection.

The Muslim Encyclopedia, which translators brought to Europe during the twelfth century, was also God-centred. And in its hands the Great Chain of Being became the alchemists' Macrocosm and Microcosm, in which lower levels replicated the upper to the best of their ability. The Macrocosm was God, and in relation to him Creation acted as Microcosm: but Creation was the Microcosm in which Man, the ultimate Microcosm, existed. The Muslim encyclopedia had its origin in the Hellenism of Alexandria, but the Arabs turned the Greek hermeneutic tradition towards the discovery of principles rather than of objects.

Consequently, where early medieval Latin science was data-oriented, Arab science was theory-oriented. In its Arabic guise Aristotelian science became a programme of proof and demonstration whose goal was the explanation of nature. Alfarabi's *Enumeration of the Sciences*, for instance, begins from the axiom that sciences are based on 'rules', which are universals or comprehensive statements that clarify the individual concepts underlying an art (Mahdi 1975:118). An art is practical knowledge, while Alfarabi's 'science of rules' is knowledge of principles. An essential part of its character was the use of systems from one science to organise others. Medicine held a central place in this interdisciplinary science: logic was one of its tools, and it was in close relation with theology (McKeon 1975:155).

Under the impetus of the twelfth-century translations from Arabic the structure of knowledge systems in the Western Encyclopedia changed radically: while the ancient content was not displaced, but merely supplemented, it was subjected to a 'science of rules' which assumed its underlying structures were amenable to rational analysis. Continuity between old and new was assured by the authority the ancient authors exercised. The ancient  $\epsilon \gamma \omega \alpha \cos \pi \alpha i \approx i' \alpha$  was neither repudiated nor replaced under Arab influence. the birth of a new encyclopedia in which the ancient topic-based sciences of structure became structures of science did not entail the transfer of methods of enquiry or scientific systems, but rather the rearrangement of shared schemata and the reorganisation of data, methods and truths making those schemata (McKeon 1975:157).

Michel Foucault's archéologie du savoir attempts to find out why particular sets of statements and no others appear at particular times and places, and how new methodologies, new objects for a science, and at times, new sciences appear (Foucault 1969:39). It is more explicit than McKeon's hypothesis, and can be more easily related to individual sciences. Like McKeon, Foucault treats sciences as intellectual artefacts organised within specific cultures. A science creates its object through the discourse the scientist finds appropriate (Foucault 1969:67). A science then is a champ d'énoncés relating to a specified set of objects, that is an assemblage of statements and rules or 'discursive practices' governed by a definable set of regularities in order, correlation and function. The paradigmatic structures thus created embody the rules of the theory, which maps the organisation found in nature.

Énoncés are systematically related to other énoncés both within the same science and in other sciences (Foucault 1969:41). This intertextuality depends on the épistémè, which is

l'ensemble des relations pouvant unir, à une époque donnée, les pratiques discursives qui donnent lieu à des figures épistémologiques, a des sciences, éventuellement à des systèmes formalisées. (Foucault 1969:250)

Scientific discourse practices take their creativity from the social conditions under which scientific ideas first emerged, the intellectual attitudes according to which they were delimited, and the systems determining how the objects studied are specified, classified and grouped (Foucault 1969:57–58). In its turn the  $\acute{e}pist\acute{e}m\grave{e}$  depends on the archive which is

la loi de ce qui peut être dit, le système qui régit l'apparition des énoncés comme événements singuliers (Foucault 1969:170)

As the *archive* defines the intellectual system within which the enunciations of a science function, the questions one can ask scientific data, the way one reads books in the booklist and the answers one will find depend upon the reactions between *archive* and *épistémè*.

A science reacts to external factors, social, educational and intellectual, by changing direction through *une rupture*, that is *un repérage d'un type nouveau de rationalité et de ses effets multiples* (Foucault 1969:1–11).

This 'new type of rationality' does not entail abandoning the old archive and certainly not the book list which helps feed it; nor does it break the continuity of the life of a science. It demands a general redistribution of the existing épistémè, and, as McKeon says, the rearrangement of intellectual schemata. This was why the medieval reverence for ancient authority was tempered by their instinctive refusal to leave their own culture, so that the old took on the colour of the new:

L'archive n'est pas non plus ce qui receuille la poussière des énoncés redevenus inertes et permet le miracle éventuel de leur résurrection; c'est ce qui définit le mode d'actualité de l'énoncé-chose; c'est le système de son fonctionnement (Foucault 1969:171).

Both McKeon and Foucault postulate two major objects for the history of ideas: the rise and fall of intellectual systems, and the interplay between learning and society. But while Foucault's archéologie du savoir is synchronic in intent and orientation and tolerates historical depth only when it cannot be avoided, McKeon's very similar ideas lay the ground for a diachronic approach to the intellectual history of the Middle Ages. Our task of tracing the rise of grammatica speculativa falls between the two. It is to our purpose to analyse modistic discourse as a bundle of practices subject to unique systematic rules, and to isolate the theoretical and expository constants linking it to other contemporary disciplines (cf. Foucault 1969:182). But this does not preclude the historian's task of tracing the evolution of modistic discourse, and placing it in relation to what went before and what followed despite huge gaps in the record. The other difficulty is their almost complete silence about their antecedents.

Our original intention was to start at about the time of Abelard, in whom many modistic ideas are already in germ. However it soon became obvious that this was impractical because it ran counter to the medieval épistémè. The Past was not as different a country for the Middle Ages as it is for us. The great authorities like Aristotle and Plato had written sub specie aeternitatis, so that the absence of the dead was balanced against the sense that their writings enshrined in the archive were always in some way contemporary. It could be that the habit of projecting a medieval aura on to the great authorities was in part prompted by the sense that they had enjoyed some share of divine inspiration. Thus, just as the figurae of

<sup>&</sup>lt;sup>3</sup> Roger Bacon, Compendium philosophiae 424: "Quoniam Deus dedit philosophis omnem veritatem, sicut sancti docent, et maxime Augustinus secundo Doctrinae christianae [2.40.60]; et hortatus Christianos ut aurum sapientiae, et argentum eloquentiae Christiani auferant a philosophis, tamquam ab iniustis possessoribus, et tamquam proprium Christianis."

the Old Testament were read in the light of their fulfilment in the New, the ancient authorities, Christian and pagan, were often seen as guides and precursors of the High Middle Ages.

In consequence the story of the *modistae* spreads over twelve centuries instead of two, and classical culture is omni-present, often in the strangest of ways. Grammar, Philosophy and theology were in a triangular relationship first forged by the school of Gilbert, bishop of Poitiers from 1142. This relationship was then fully exploited during the thirteenth century by the turbulent Franciscan, Roger Bacon, and his confreres, Alexander of Hales, the first to seriously apply Aristotle to theology, and his pupil, Bonaventure, who harmonised Aristotle with Augustine. Equally important was the influence of the Dominicans, Albertus Magnus, who founded the Dominican *Studium generale* at Cologne in 1248, and his pupil, Thomas Aquinas, professor of theology in Paris from 1269.

It was Augustine (De doctrina christiana 1.2.2) who set the tone of medieval learning and science, as always: Omnis doctrina vel rerum est vel signorum, sed res per signa discuntur. But the thirteenth century uses this oft-quoted dictum merely as a starting-point. The signs making up a science denote not only things, but point towards Aristotle's four causes:

Theologiae nomine ipsa non dicit nisi rationem vel sermonem de Deo, sermo autem de Deo debet esse declarativus Dei, non solum esse et substantiam tantum, sed secundum quod est principium et finis eorum quae sunt, quae aliter perfecte non cognoscitur (Albertus Magnus, STheol.~1.2. ad 3 [9.10–15]).

While the first part of Albertus's definition of theology is traditional, its juxtaposition of ratio and sermo has an air of Foucault: Albertus's theology is a discourse that seeks to find God's recta ratio scibilium, to demonstrate him as a being engaged in an activity proper to himself. Beside Augustine stood Boethius. He was the only conduit for Aristotle's ideas until the translations of Greek philosophy from the Arabic arrived; his Opuscula sacra, which were composed to provide rational arguments for orthodox doctrine still discharged that function during the Middle Ages; and his Consolatio philosophiae held an unrivalled position as a book of spiritual comfort.

The development of grammatica speculativa is strikingly similar to the rise of grammaire générale in the late sixteenth and early seventeenth centuries. During the early sixteenth century the goal of grammar had been commentary on canonical texts (Foucault 1966:93). But with the advent of the philosophical movements of the late sixteenth century, in particular the work of Petrus Ramus,

on ne cherche plus à faire lever le grand propos énigmatique qui est caché sous ses signes; on lui demande comment il [le langage] fonctionne: quelles

représentations il désigne; quels éléments il découpe et prélève, comment il analyse et compose, quel jeu de substitutions lui permet d'assurer son rôle de représentation. Le *commentaire* a fait place à la *critique* (Foucault 1966:94).

The work of the Ramist grammarians did not reach fruition until it assimilated what logic had to offer, passed through Port-Royal and into the general grammars of the eighteenth century. The proper object of general grammar is not thought, but the succession of verbal signs in discourse (Foucault 1966:97). Therefore it does not concern itself with the rules proper to individual languages (les langues), but seeks the universals of le language (Foucault 1966:101).

On these criteria medieval speculative grammar also set out to be a criticism of language. Grammar had begun as a tool of exegesis and a preparation for rhetoric.<sup>4</sup> Grammar, logic and rhetoric had long been ranked as language sciences with different analytical functions:

Quidquid ergo est in anima, aut est per modum conceptus, aut per modum assensus, aut per modum affectus. Ad iudicandum conceptus est Grammatica; ad iudicandum assensum est Logica; ad iudicandum affectum est Rhetorica. (Bonaventure, *Hexaemeron IV.*19 [V.532b)

Tradition still retains considerable hold on the role of grammar during the thirteenth-century. One still occasionally finds the classical definition of grammar which had commentary in view, and in the 1270s many theologians of a slightly old-fashioned stamp like William de la Mare (1 Sent 8 [44.58–60]) still asked that Grammar furnish exegeses of Scripture. But for the majority of scholastic theologians, grammar analysed the modus significandi, its relation to the part of speech, and how its derivation reflected features of the world extra animam.

Modistic definitions of grammar, however, make it clear they are not in the business of exegesis:

Grammatica est scientia habita per demonstrationem, quia per propria principia sermonis consignificativi demonstrentur suae passiones de ipso; et est scientia speculativa quia propter scire. (Ps.Albertus 4 resp.)

And indeed exegesis was not the theologian's business. He required a grammar whose agenda was parallel to that of metaphysics. For this reason speculative grammar sought to consider language selon qu'il est, dans la mesure où il est (de Muralt 1995:101). It follows the agenda set out in *Physics* 1.i 184a16–22: it argues from the immediately observable notiora of language to the more certain and universal (certiora et universaliora), that is its causes in the Aristotelian sense. The immediately observable notiora of language

<sup>&</sup>lt;sup>4</sup> Cf. Rhabanus Maurus, *De clericorum institutione* 3.18 (*PL* 107.595B): "Grammatica est scientia interpretandi poetas atque historicos, et recte scribendi loquendique ratio."

were embodied in the sermo significativus, so that grammarians defined grammar as the science which examined the ways in which the concepts of the mind were to be expressed (Kilwardby, De ortu 165.12). Accounting for how one expressed mental concepts was the final cause of grammar. Its material cause grammar is the physical shape of the word, its formal the shape of the sentence, and its efficient the modi significandi. But these three causes are scientifically subsidiary to the final cause, because in a certain sense they are its instruments. The four causes were the scibilia of grammar in the full scientific sense sense (Boethius Dacus 31–32; Ps.Albertus 10 resp.).

Alfarabi's De ortu scientiarum had taught that grammar is the first of the sciences, because its analysis of how languages mean is what one must know before tackling other sciences (Joannes Dacus 41.14–18). This, of course ran parallel to classical tradition: Joannes Dacus for example, conflates Isidore (Etymologiae I.41.2) on the hermeneutic role accorded grammar with Martianus Capella's image of Grammar as a stern and benevolent nurse. The unstated assumption on the part of all concerned was that grammar was a system of processes by which language came to be and progressed towards the perfection of clear expression. It followed that this semi-realist model of language was a guide to understanding how God worked in the Universe because it exploited universally valid processes. Grammar therefore is a speculative science because only like can be an auxiliary to like (Joannes Dacus 50.14–18; Boethius Dacus 18.63–70).

The claim that Grammar was a speculative science assumes that language was a natural phenomenon which, like every created being in the Great Chain of Being, works towards its own perfection through the impulse put in its elements by God. This raises questions about how the *modistae* played Augustine's sign model off against the Boethian triad of *esse*, intelligere and significare and the later models taken from the Arab versions of Aristotle. By now there were two grammars and two theologies: the traditional monastic theology which arose out of scriptural interpretation was matched by the traditional grammar one finds in Donatus, while speculative grammar was the instrument of the academic theology which was taught in universities. The second issue, which rises to some extent out of the first, was the claim that Grammar deals with what is necessary. In answer to the argument to the contrary argument drawn from the existence of differing natural languages like English and French, speculative grammarians including the *modistae* claimed that they were looking for the universals by

<sup>&</sup>lt;sup>5</sup> Joannes Dacus 42.8–10: "Haec enim est ministra logicae, magistra rhetoricae, interpres theologiae, medicinae refugium, necnon et totius quadrivii fundamentum."

which all languages were generated from one's understanding of the world. The central issue here was distinguishing their grammar from traditional grammar, from out-of-date speculative models created by the *antiqui*, and from current rival models of which they did not approve.

The last of these issues rising out of the contemporary defence of speculative grammar was the question of universality of terms and the things they denoted. According to the modistae the principle, res scientiae eadem est apud omnes, meant that every scientific concept is the same for all scientists, and that the essentials of grammar were the same for all languages. Consequently the thirteenth century treated the traditional grammatical terms, which the *modistae* knew the ancients had not used in their strict medieval senses, as a terminology in search of a theory. The model of modi significandi that emerged was based on the categories seen as both qualities in nature, qualities perceived or modelled in the mind, and signified in the word. Similarly they were happy to argue from Priscian's authority that grammar was a science, though they had long been uneasy that his rulings depended on textual authority and not on scientific argumentation. They seem unaware that in Priscian's Latin scientia means 'knowledge', not 'science' in the strict sense, even though the traditional definitions represent grammar as Foucault's science of textual commentary and as McKeon's science drawn from the topic tradition.

The strong sense that scientific terms should be univocal was countered by the variation in sense of terms like *consignificare* depending on the science involved. This was a question that had to be dealt with by grammarians in the light of both tradition and current usage in the other sciences. Identity of terms and concepts was essential for a fruitful intertraffic of ideas and terms between the speculative sciences. It is obvious that Grammar contributed to other sciences, but the test of whether grammar was a speculative science or not depends largely on the creation of an intertextuality through which other sciences contributed to grammar. A modern historian of ideas would require that the terminology of speculative grammar map its theory. How far was modistic terminology is an example of Alfarabi's 'science of rules'? It is an open question as to how conscious the *modistae* were that they were building a model of language, although they were extremely aware of the parameters of a medieval science. They regarded themselves as a significant turning-point in the history of grammar, but did they bring about a rupture in the sense that Foucault speaks about?

# CHAPTER ONE VOX. ARTICULATION AND PORPHYRY

Medieval discussion of the word begins in Augustine's De dialectica vii.6: Verbum est uniuscuiusque signum, quod ab audiente possit intelligi, a loquente prolatum. Speculative grammarians set out to model the genesis of Augustine's linguistic sign according to Aristotle's principle, ars imitatur naturam in quantum potest (Martinus Dacus 3.11; cf. Hamesse 1974:145 #60). The first stage in their task was establishing the economical matterform structure linking vox, dictio and part of speech which an assiduous reader in about 1300 scrawled at the head of a page in a copy of Michel de Marbais's Summa de modis significandi:

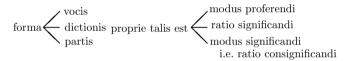


Figure 1.1: Gloss from BN Lat16222 f9v (Michel de Marbais, Summa XXII)

## 1.1. Sounds and Letters

The second-century Roman literary gossip, Aulus Gellius, one of the few classical authors to be directly quoted by the modistae, passed on three ancient opinions on the constitution of sound to the Middle Ages (Noctes atticae V.xv). The Stoics called sound,  $\partial \hat{\eta} \rho \pi \in \pi \lambda \eta \gamma \mu \acute{\epsilon}$  to  $\varsigma$  (air that has been struck). The canonical Latin gloss, ictus aer, seems come from Seneca the Elder (ca 55BC-40AD): Quidni, cum vox nihil aliud sit quam ictus aer? (Naturales Quaestiones II.29). Vox was a body because only a body could affect another body like an ear. Gellius's second opinion comes from Plato: sound was a not a body but a beating of the air,  $\pi \lambda \eta \gamma \dot{\eta}$   $\dot{\partial} \acute{\epsilon} \rho \varsigma$  — in Gellius's translation [aeris] plaga ipsa et percussio. In third place, Gellius cites Epicurus and Democritus for whom sound was a flow of particles through the air, a  $\dot{\rho} \acute{\epsilon} \nu \mu \alpha \lambda \acute{\delta} \gamma \nu$  (flow of words).

Augustine gave such physical considerations second place: he always comments on sound as the physical constituent of the word. The *sonus* of a word is transitory and takes time to pronounce (*De quantitate animae* xxxii.68). The trace it leaves in the mind is shaped by intonation, varies

according to particular languages, and provides templates for listening and speaking (*De catechizandis rudibus* ii.3). Letters being the signs of sounds and their *species*, our mind shapes them before the hand writes them (*In Ioannem* xviii.8). These ideas are a constant background to the three classical definitions of the *vox* known to the *modistae*:

Philosophi definiunt, vocem esse aerem tenuissimum ictum vel suum sensibile aurium, id est quod proprie auribus accidit (Priscian 1.1~[GL~II~5.1-2])

Vox est aeris per linguam percussio, quae per quasdam gutturis partes, quae arteriae vocantur, ab animali profertur. (Boethius, PeriH. (2nd ed.) PL 64.393B)

Vox est repercussio aeris inspirati ad vocalem arteriam cum imagine significandi. (Aristotle,  $De\ an.\ II.viii$ , in Hamesse 1974:180 #77)

Priscian's definition echoes the Stoics, Boethius's Plato, and Aristotle implies potency to imposition.

The medievals vigorously discussed the three alternatives offered by Aulus Gellius on the nature of sound in the light of these definitions. The Porretani were the most prominent partisans of the theory that the vox was a body, an opinion met by the objection that a body could not be in several places at once, as sound obviously was. Against this some glossators argued that the vox does not 'fill the hearing' materially but formally. Just as the ripples caused by a stone dropped in water perpetuate themselves, a sound diffused from its source produces forms which are the same in each ear that receives it (Boethius, De musica I.14). Later writers drew an analogy with sight: just as the eye sees by projecting a ray towards the objects seen, so the soul emits some aerial substance towards the person speaking, which brings back the form in the disturbed air to the soul. Gellius's second definition gave rise to attempts to fit sound to one of the accidental categories. The time taken in uttering a sound and some elementary articulatory phonetics characterising vowels like [o] as 'fat' and [i] as 'thin' suggested that sound was in the category of quantity. The third opinion whose immediate source was Boethius, was that sound was a quality of air, because it had been struck to produce the sound: it was well known that sound was a vibration, whether it was visualised as Epicurus's flow of particles or Boethius's concentric ripples.

But for Petrus Helias vox was neither substance nor accident, but the result of phonation which thinned, warmed and purified the air so that it could vibrate in an appropriate way (Petrus Helias, Summa 67.29–68.53). Despite his distaste for placing the vox in a category, the theory of matter and form laid out in the Liber VI principiorum was peculiarly relevant.

Substantial form conferred being  $(L.\ VI\ princ.\ \S3)$ , and some forms rose from nature, others from acts of various sorts  $(ibid.\ \S4)$ . Accidents were due to contingent form, so that some accidents were in the subject  $(in\ subjecto)$ , others about the subject  $(de\ subjecto)$ . So the debate as to whether vox was a  $passio\ passibili\ qualitati\ adiuncta$ , or a quantity, or even an action, was vigorously pursued.

Both the *modistae* and their predecessors owe a considerable debt to various commentaries on De anima, in particular the Averroes Commentarium magnum II in the Michael Scotus version of 1220: there sound is motus factus a percutiente et percusso in aere (Averroes, Comment. 263.29–30). A true vocal sound is one made by an animal by means of its vocal tract. even though its primum movens is the imaginative soul (ibid. 268.33–34). Averroes assigns sound to motus, the postpraedicamentum common to the categories of actio and passio. John Blund (De an. §145) reading the Arabs through Augustine, defines sound as a passion generated by collisions in the air which violently constrict the air between striker and struck. The passibilis qualitas of sound, which varies according to the material from which it is produced, is sonoritas, the remote principle of hearing (ibid. §153). On Avicenna's authority he defines hearing as a power in an extended muscle designed (ordinata) to apprehend sound as a form coming to it through vibrations in the air (*ibid*. §145). Once handed to the soul by the ear, the sound becomes Augustine's incorporeal *species* fixed in the memory.

In their student days the *modistae* had learnt all this from classroom manuals, particularly the florilegia. In the first place, 'sound is caused by the collision of bodies violently breaking the air' (Hamesse 1974:180 #74; Cf. Aristotle, *De an.* 2.8 419b9–11). The vocal organs are merely its instruments, because their prime purpose is to sustain life. The florilegia pick up Aristotle (*De an.* 2.8 420b17–29) on the tongue: by nature it has two tasks, taste and speech. The Merton College *Quaestiones de anima* formalise these principles. Sound exists only in potency in bodies that strike and are struck: it is not in act unless it is in both air and ear (Giele et al. 1971:438.14–16). Sound is formally in air that has been struck according to Priscian's principle that sound requires the thinning and vibration of air (*ibid.*:438.22–24). Sound propagates itself in a circular form (*ibid.*:101.42–58). The efficient cause of speech sounds is the soul, which causes the vocal tract to produce them for the purposes of communication.

Thus what came into grammatica speculativa were the ideas on speech in Augustine and Priscian rethought through Aristotle. The modistae picked up the idea that sound was occasioned by the collision of some sort of body with another (Joannes Dacus 93.26–28). The efficient cause of speech, its

causa movens et non mota is the soul, while the vocal organs, the instrumental cause, are causa movens et mota (Simon Dacus, Domus 6.14-15; cf. Joannes Dacus 93.18), Considered as a temporary disposition of air, sound is in dispositio, a division of the first species of quality, a dispositio transiens sive transitiva (Joannes Dacus 86.12). But to the extent that it is united to a mental species with a certain permanence, vox also had the quality of habitus (Simon Dacus, Domus 6.1-2). Under Aristotle's second species of qualitas, potentia et impotentia, comes the active potency of the vox to affect the ear. The third species of qualitas, passio vel passibilis qualitas fits the vox for its proper operation, forming Augustine's species in the mind. The circular form in which sound propagates itself places it in the fourth type of quality, figura (cf. Joannes Dacus 95.23–28). In this form it is delimited (dimensionata) in the air (Joannes Dacus 85.26). The vox is measured by the utterance (Joannes Dacus 88.14–19), a point taken from Augustine, (De quantitate animae xxxii.68). Being bounded by time, it was subject to quantitas, and as Averroes had said, it was a type of motus. Finally sound was a substantia per accidens with matter and form.

Priscian's proprium sensibile auditus became the final cause of the vox as a physical phenomenon. Building on Augustine, and probably the Glosulae, Joannes Dacus (94.9–16) postulates two parallel generations of sound, one in the speaker's mouth, the second in the hearer's ear. This second, reflecting Priscian's vox est suum sensibile aurium, is the propria operatio of the vox, because through it the sound leaves its species in the mind. On the principle that operatio arguit formam, the substantial form assigned to the vox was modus proferendi vel pronuntiandi, the play of breath within the vocal tract by which the sound acquired esse simpliciter, and created within it the potency for imposition (Figure 1.2):

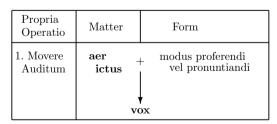


Figure 1.2: Vox as a Substance per accidens.

The *modistae* have little original to say on 'letters'. A letter is a sign of a *passio* in the soul, a minimal unit of speech whose *potestas* is a *passibilis* qualitas perceived by the ear (Joannes Dacus 115.21). Its written shape is

the sign of the spoken, but where written letters are permanent, spoken are transitory (*ibid*. 115.7–12). The material cause of a *littera* is air viewed as regulare reverberatum; its formal cause is regularis reverberatio, which is characterised by perfect breaking (fractio) of the air, another reminiscence of the florilegia. Its acoustic shape can be written, which distinguishes it from coughs and other involuntary noises (*ibid*. 104:8–11). Its efficient cause is regulare verberans induced by the human anima sensitiva in the organs of phonation (*ibid*. 103.22–23).

## 1.2. Articulation, Imposition and Porphyry

The sign-theory out of which the medieval dictio grew owed much to classical rhetoric, though the medievals believed with some justification that signum as a modus loquendi de rebus came from dialectic (Petrus Helias, Summa 191:43). In classical times articulare had meant to articulate a sound with the tongue and shape it by the lips. In Augustine vox articulata means 'a sound bearing a meaning' and is synonymous with vox litterata, for what is clearly pronounced can also be written (De magistro x.34). Such a spoken sound was a sign because it was known to be such (De trin. X.i.2).

Grammar and theology had to come to terms with Man's ability to set aside rationality in favour of affect and to communicate by the same inchoate sounds as animals. Medieval discussion drew on *De anima* 2.2 and *Nicomachean Ethics* I.13 1102a35 on the rational and irrational powers of the soul. The rational powers through which one perceives forms both present and absent and designates them by the *modus conceptus* are proper to the human being. The irrational powers shared with the animals are the 'irascible' through which we love or hate something, and the concupiscible in which are rooted joy in present good, hope for future good, sorrow over present evil, and fear for evil to come (Jean de la Rochelle 191.5–9). These give rise to the *modus affectus* which produces the interjection.

Whether animals could speak had been discussed at least since Augustine pictured the rooster calling the hen to share food he had found and the dove calling to its mate (*De doctrina christiana* II.ii.4). Animal cries are articulated, but no matter how perfect the vocal tract of an animal, its anima sensibilis being imaginative not rational cannot produce words. It follows that animals communicate by non-verbal noises, because, unlike human beings, they are controlled by their animal nature, and do not have the human diversity of imagination (Albertus Magnus *De an.* 2.3.22 [131.41–

<sup>&</sup>lt;sup>1</sup>Cf. Lucretius, *De rerum natura* IV.551–552: mobilis articulat verborum daedala lingua formaturaque labrorum pro parte figurat.

43]). Abelard (*Logica* 329.19–20) accords the imagination some ability to create peculiar modes of signifying, but animals lack the power of consideration (*discretio attendendi*) necessary for language. Yet the crowing of Augustine's rooster, though an expression of affect rising from the *anima sensibilis*, was a *signum ad placitum*, that is a *signum ordinatum ab anima*.

Much of this theorising with its contrast between animal and human souls was developed by Biblical commentators discussing animals that talked intelligently, like Balaam's ass (Numbers 22.28) and the Serpent who spoke to Eve in the Garden of Eden (Genesis 3.1). Alexander of Hales (STheol. 2.2 §189 [III.201]) holds the normal thirteenth-century opinion on how the Devil managed to do this: he turned the Serpent's imperfect speech organs to the service of his rational soul. For angels, even the fallen ones, can harness the vocal tract of an animal to their own intellect to produce speech sounds. The modistae do little more than define voces significativae secundum naturam as animal cries and involuntary human noises like groans which were natural signs of affect.

Augustine's argument depends on defining the arbitrarily instituted word as a sign derived from properly formed thought and the intention to communicate. He also seems to look forward double articulation through Porphyry's principle that words have reference to both thing signified and to themselves as sign (*De magistro* viii.24). Two centuries later Boethius, the logician, presents the traditional *vox articulata* as a physical and mental reality ripe for interpretation:

Linguae percussione, articulato vocis sonitu, imaginatione aliqua proferendi, fit interpretatio. Interpretatio namque est vox articulata per seipsam significans. (Boethius, PeriH. Prologus (2nd ed.) PL 64.394B)

Vox articulata per seipsam significans includes both word and utterance. Linguae percussione and articulato vocis sonitu pertain to pronunciation, while imaginatione aliqua proferendi follows on from a second Aristotelian definition of vox in the beginning of this same commentary:

Illa quoque potest esse definitio vocis, ut eam dicamus sonum esse cum quadam imaginatione significandi. ( $ibid.\ PL\ 64.393C$ )

Boethius's echo of Aristotle's *De anima* II.viii 420b30–35 passed unrecognised until the *De anima* was translated in the early twelfth century by James of Venice and the definition circulated under Aristotle's name. By introducing interpretation into his discussion Boethius is laying claim to the traditional task of grammar, thus leaving *vox* as a polysemous term denoting both the sound uttered (*materia vocis*) and its signification (*sensus*).

Priscian treats litterata et illitterata, articulata et inarticulata as vocis differentiae, universals dividing voces into classes. His definition of vox articulata distinguished it from the vox litterata, and replaces Augustine's, at least among grammarians:

Articulata est, quae coartata, hoc est copulata, cum aliquo sensu mentis eius qui loquitur profertur. (GL II 5.6)

Though the vox articulata secundum naturam did have some sort of meaning, vox articulata ad placitum was proper to language. His typology of articulation later became a generative flow-chart of the vox (Figure 1.3).

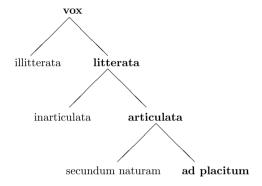


Figure 1.3: Priscian's Vox significativa et non significativa

During the twelfth century there was concern that readers will misconstrue Priscian's focus on production and Boethius's on interpretation. There is, in fact, no contradiction: vox articulata and vox significativa are synonymous, so that Boethius's vox articulata per seipsam significans is actually redundant. The Middle Ages exploited the double meaning of articulata: Hugh of St Victor (De sacramentis 1) argues that one's knowledge of a word includes both meaning and pronunciation, while Abelard (Logica 13.26–33) (about 1115) follows Augustine's vox qui foras sonat and verbum intus: vox is the physical sound, and sermo the meaning conveyed.

Impositio seems to have been first used by the Roman grammarian, Varro (116–27 BC). The imposition by which vox became sign was prompted by what the impositor perceived (Varro,  $De\ lingua\ latina$ , VII.32). Through Boethius and Porphyry, Varro's legacy merged with Augustine's, whose thought on language drew together Stoic language theory, Cicero's synthesis of rhetoric and dialectic and Christian Platonism. Porphyry's commentary on the Categories, which was not translated into Latin until the sixteenth century, postulates that language operates by two  $\theta$   $\sigma \epsilon \iota \varsigma$  (Porphyry, Cat. 57.29–58). By the first  $\theta$   $\sigma \iota \varsigma$ , the subject of Aristotle's Categories, a name is imposed on a thing, quality or action. The second  $\theta$   $\sigma \iota \varsigma$ , the subject of

*Perihermeneias*, then labels the names imposed according to their form and their function in sentences (Lloyd 1990:37).

The link between Porphyry's two  $\emptyset$   $\sigma \epsilon \iota$  is predication. The verb, 'to predicate', is  $\kappa \alpha \pi \eta \gamma \epsilon \iota' \iota$ , "to accuse' or 'to say something about'. Because the categories denote different *genera* under which things themselves exist and words signify them, only the inflected parts of speech can be the matter of a  $\kappa \alpha \eta \gamma \rho \epsilon' \alpha$ , which immediately places this discussion against the background of Porphyry's five *praedicabilia* (genus, species, difference, property, accident). It would seem that when Porphyry's second  $\emptyset$   $\sigma \iota \varsigma$  labelled declinable words according to form-classes, he assumed that each of these classes were morphologically defined (Lloyd 1990:41). In later writers Porphyry's first imposition often becomes first intention, which designates the thing as it is and names it; second imposition is then second intention, which puts things and their names into *genera* and *species*.

Though Porphyry may have left his mark on Priscian, it was Boethius's commentary on Aristotle's *Categories* that transmitted Porphyry's two impositions to the Middle Ages:

Prima igitur illa fuit nominum positio, per quam vel intellectui subiecta vel sensibilia designaret. Secunda consideratio qua singulas proprietates nominum figurasque perspicerent, ita ut primum nomen sit ipsum rei vocabulum: ut verbi gratia, cum quaelibet res 'homo' dicatur. Quod autem ipsum vocabulum, id est 'homo', nomen vocatur, non ad significationem ipsius refertur, sed ad figuram, idcirco quod possit casibus inflecti. (Boethius, Cat. I PL 64.159B)

As scholars who comment on their own translations often do, Boethius was probably working from the Greek original: positio, the literal translation of  $\emptyset$   $\sigma\iota\varsigma$ , corresponds to Varro's impositio, which, however, does appear elsewhere in these commentaries.  $Proprietates\ nominum\ figurasque$ , the object of his  $secunda\ consideratio$ , covers both flexional and derivational morphology, the whole field of the modistic etymologia. Thus homo is called a noun because of its inflections, not because of its signification. Porphyry's principle naturally follows: only the declinable parts of speech were subject to imposition, because a word signifies both things and the categories under which they are understood (Boethius, PeriH. (1st ed.)  $PL\ 64.298D$ ).

Boethius ensured Porphyry a rather ghostly, fragmented life during the first part of the Middle Ages: the distinction between determinatio secundum significationem and determinatio secundum impositionem in Garlandus Compotista (65.27–28) rests on first and second intention. And it is this meaning that appears in Petrus Helias (Summa 833–835) as prima et secunda impositio. The crucial turning-point between this and the modistae was Abelard, who drew on Porphyry and Boethius. The first imposition

is the province of the Categories, and the second of the Perihermeneias (Abelard, Logica 113.31–33). The significatio de rebus resulting from the first imposition is 'natural' in that words like 'man' and 'run' signify the natures of their referents; the second 'scientific' imposition assigns these words to classes by imposing names on them like 'noun' and 'verb', which constitute significatio de intellectibus (ibid. 112.11–17). In accord with the principle that vocabulum rei datum est, ut intellectum constituat, the secondary signification places in a category all simple words that can be predicated of something else. Albedo and album, for instance, signify their principal signification (whiteness) through the categories of substance and quality respectively (ibid. 115.30).

The twelfth-century advent of Aristotle's De anima focussed attention on the distinction between articulata ad placitum, the product of the faculties of reason, and articulata secundum naturam, which depended solely on imagination. Even in the thirteenth century many refused to go far down the Aristotelian road, defining articulata as what can be written, so that speaking is presenting signs articulata voce, a good Augustinian or even Lucretian cliché (Henry of Ghent, Summa 73.1 [f264rB]). From the mid-twelfth century imposition was the addition of a linguistic form to the vox (Petrus Helias, Summa 914.21). But grammarians had not forgotten Augustine's point that a word could refer to itself, as in the sentence, homo est nomen. For this Petrus Helias adopts Priscian's term, materiale impositum (ibid. 914. 17–20). First and second imposition were of vital concern to dialectic: the Summa Sophisticorum Elenchorum gives vox, individuum, res, qualitas as nouns of first imposition, while nomen, oratio, terminus are nouns of second imposition (de Rijk 1967:II.ii 298.35–37).

We do not really know whether there is a model of double imposition behind Vincent de Beauvais's articulata est quae copulata est significationi, sive consignificationi (Speculum doctrinale 2.3 [83C]). But when Magister Jordanus (2) designates articulatum primo and articulatum ex consequenti as pertaining to word and sentence level, he is looking back to Boethius and Porphyry and giving a syntactic twist to Abelard's distinction between the natural impositio prima and the impositio secunda: articulatum primo is a dictio signifying lexically (per suam propriam significationem), articulatum ex consequenti is a sentence signifying per impositionem partium. Similarly Thomas Aquinas (PeriH. I.3 [14.39–50]) teaches that the mind deals with a word in two stages. The first operation is setting up the concept by relating word to thing through the dictio, which is a Boethian interpretatio interioris apprehensionis (cf. Aquinas, De an. 3.3). Though this is possible with words in isolation, words are normally used in sentences, so that we sub-

ject them to a second operation, that of compounding and dividing, which relates to logical function (Aquinas, *PeriH*. I.5 [29.277–288]). For Jordanus the imposition of parts results in the syntactic unit, *articulatum ex consequenti*, while for Aquinas logical function entails syntax, which depends on morphology, the result of Boethius's *secunda positio*.

Jordanus and Aquinas seem to take double imposition for granted, but it did not necessarily pertain to grammar. A name given to a substance or a person is a noun of first imposition: it is also a noun of second imposition because it can present its significate as an individual (Aquinas, 1 Sent. 26.1.1 ra 3). It can also apply to polysemy: by first imposition medicina means a drug prescribed by a doctor; but by second imposition it means the art of medicine (Aquinas, STheol. 2a2æ 57.1 ad 1). When grammar was an issue, the ghost of Abelard was still abroad. Late in the thirteenth century the theologian, Richard Middleton (1 Sent. 22.3sc.) distinguished between significatio conceptus and significatio rei, pointing out that according to the order of nature the simple preceded the composite. Therefore significatio rei comes first, and significatio conceptus follows because it was formed from the thing.

Imposition depended on the principle that every natural thing strives towards its own perfection by fulfilling active and passive potencies matching its own. Most grammarians had met the principle in the florilegia:

Potentia activa et passiva ad invicem se respiciunt, unde quaelibet potentia activa correspondet potentiae passivae, et econverso. (Hamesse 126 #137. Cf. Aristotle, Metaph.~10.15~1021a~14-19)

Although it is not often cited by our *modistae*, grammarians were as indebted to the *Liber sex principiorum* as anybody else for a framework of actio and passio. Actio is the beginning of motus, and passio its end. An action, though not in its agent, proceeds from agent to receiver, in which it produces a passio or effect (L. VI princ. 10.5). Activum was defined broadly (communiter) or strictly (proprie). Strictly defined, 'something is said to be active which brings about (inducitur) being' (Alexander of Hales, Summa 2.2 §1 [III.4a]), for an active actualises the powers of the passive receiving it. Consequently an action bringing about being in something else is received within the potencies of the passive.

There was some question over whether immaterial substances had passive potencies, and whether these potencies were separate from their substances. In his *Quaestiones in Metaphysicam* 9.3 Peter of Auvergne accords immaterial beings passive potencies to receiving being, but these potencies are not different from the nature of these beings in reality, but only *in ratione*. Passive potency being in the substance of the intellect, Peter considers

the intellect according to its nature and according to its operations. As operations are immediately caused by accidents, these considerations differing solum in ratione can be placed in order of prior and posterior. While Peter of Auvergne's discussion is directly applicable to imposition of words, approaching imposition through the passive potencies of sound seems to have been controversial in the early 1270s. Although the modistae treated articulatio ad placitum and impositio as synonyms, articulatio is a functional term denoting the linkage between signifier and signified as a state, and impositio a formal term denoting the assignment of meaning as a process.

His expertise and status authorised an *impositor* to impose a word on an object, provided that he knew the *res*, real or imaginary, on which the word was imposed, and his knowledge of the object was proportionate to its nature (Boethius Dacus 49.23–27; Joannes Dacus 188.34–35). The simplest type of *dictio* is the *nomen impositionis*: proper names like John and Martin are imposed by an arbitrary mental act (Albertus Magnus, *Super Isaiam* IV.14 [83]). Simon Dacus (*Domus* 8.20–22) has a different view, which remained a minority opinion. Proper names are created by an *impositio secunda* which is no guarantee of a *proprietas verbi* because it depends on an arbitrary *nuda voluntas*, which infringes the prerogative of the qualified *impositor*; for it can be exercised by any country bumpkin.

These norms of imposition fell within the two complementary ideas of word-meaning later discussed by Scotus (Marmo 1995:172), 'code-oriented', based on impositio, and 'communicative', based on usus. This double approach is already present in Bacon, who sought to balance a strict theory of imposition against pragmatics and communicative purpose For usage can look to the purpose for which the sign exists. For example by its institution visio means the act of seeing, but, 'because of the dignity and reliability of sight, common usage extended its meaning to all types of cognition proper to other senses' (Aquinas, STheol 1a2æ 67.1.resp). In the 1240s Roger Bacon demonstrated that language in general is as arbitrary and even pragmatic as any sign (De Signis §7 [83]).

In the Compendium studii theologiae he took the matter up again in relation to ratio impositionis: a word can only signify something extra animam according to the ratio impositionis, which means that a word signifies the thing on which it is imposed according to the property of the imposition, not according to the property of the thing (Bacon, Compendium theologiae §59 [68.17–26]). Thus bread in a baker's window is not a sign of bread — a thing cannot be a sign of itself — but a sign that bread is for sale (Bacon, Compendium theologiae §§57–58 [68.6–16]). Likewise the barrel-hoop hanging outside a wine-shop has a pragmatic ratio signi. As part for whole,

it functions as the sign of a wine-barrel, which is itself the sign of its final cause, wine to be drunk (Aquinas, Q.D. de veritate 4.1. ra 7 [118.65–68]). Its ratio signi therefore pertains to its final cause and effect rather than to its material or formal cause, because the cause of the hoop has nothing to do with what it signifies (ibid. ad 7 [121.318–321]).

Bacon postulates an *intentio finis* which overrides the essence of the object. The *modistae* however, prefer to ignore pragmatics in favour of the simplest of the sign functions, by which word and thing are directly related:

Sicut circulus pendens ante tabernam est signum vini existentis in ipsa taberna, sic etiam dictio est signum rei intellectae ab anima. (Michel de Marbais, Summa~6.10-12)

This could explain why Michel de Marbais (Summa 11.110–114) defines first and second impositions in terms of intention: words of first imposition signify things, words of second imposition mental concepts like genus or species. Boethius Dacus (286.10–16) illustrates a common variation: saepe is an adverb of first imposition directly reflecting a modus essendi, but its comparative, saepius, a word inclining away from the primary nature of the adverb, is due to a second imposition. A schema of the impositions is given in Figure 1.4.

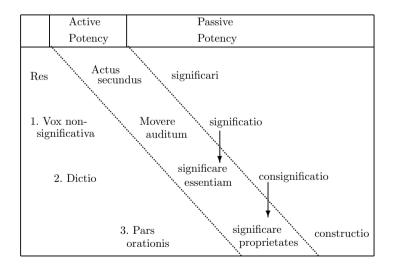


Figure 1.4: Active and Passive Potencies of Res and Vox

First and second imposition follow the same pattern. *Vox*, *dictio* and *pars* are recursively generated by the activation of passive potencies peculiar

to them. Granting part of speech autonomy from *dictio* through conceptualising object and its properties *separatim et divisim* (Martinus Dacus 9.7) and assigning them different potencies of signifying and consignifying was an innovation crucial to the *modistae*.

## 1.3. Rationes et Modi Significandi

The modistae refused to accept significatio as the form of the dictio: for them it was the operation rising from the form (cf. Michel de Marbais Summa 8.37–47). Neither would they accept significatum: a form is in its substance, while significatum, whether it be a real being, a being in the intellect or a being signified, lies outside dictio (cf. Michel de Marbais Summa 7.9–25). Neither significatio nor significatum accord the dictio the esse tale wrought through accidental form. Both of them depended on a ratio significandi.

Signifying is constituting understanding, a formula ascribed on somewhat questionable grounds to Aristotle.  $^2$  *Ratio*, a post-verbal of *reor*, means a consistently ordered cause or principle:

Ratio omnis est de his qui habet causam ordinatam vel semper vel frequenter. (Albertus Magnus, Phys. 2.2.15 [122.20])

Consequently ratio significandi being a compromise between reality and the powers of the mind and between Platonist and Aristotelian views of meaning met a number of interpretive dilemmas. Augustine's four senses of Scripture went well beyond logical models of words and reference, and Pseudo-Dionysius had left behind him the paradox that God, although unknowable, was spoken about. Ratio significandi does not seem to antedate the twelfth century, and at this time one cannot be sure whether it is a fully fledged technical term:

Quod vero tertio repetitur hoc nomen quod est 'Deus' cum et Pater nuncupatur Deus et Filius nuncupatur Deus et Spiritus Sanctus nuncupatur Deus sicut nominis, ratione significandi, sicut et rei illius ex qua horum quisque dicitur Deus ratione propositi, repetitio fit. (Gilbert of Poitiers, *De trin*. 103:45–51).<sup>3</sup>

Significandi ratione is not a standard order in the grammarians, and the contrast with ratione propositi would suggest it is an instrumental ablative meaning 'by reason of'. But the situation is not always as clear-cut as one would like:

 $<sup>^2</sup>$  Abelard, *Logica* 335.29–30; cf. Hamesse 1974:305 #36: "Ipsa enim secundum se dicta verba nomina sunt et significant aliquid — constituunt enim qui dicit intellectum, et qui audit significat." Cf. *PeriH*. 3 16b 19–21.

<sup>&</sup>lt;sup>3</sup> Re Boethius, *De trin*. II.23: "Cuius haec de trinitatis unitate sententia est: 'Pater,' inquiunt, 'deus, filius deus, spiritus sanctus deus'."

Quae significandi ratione eadem sunt, plus quam semel dicendo numeramus distributione vel ea, quae vere est, sicut dicitur distributione, ut cum de Platone et Cicerone loquentes dicimus 'homo, homo', numerantes tam illos qui sunt, quam diversas humanitates, ab altera quarum alter et alter ab altera dicitur 'homo'. (Gilbert of Poitiers De trin. 104.95–97)

While it makes good sense to read *significandi ratione* here in the thirteenth-century technical meaning of 'by the principle of signifying', it is more likely that it means 'by reason of signifying'. This ambiguity remains in thirteenth-century theological usage:

Quod legitur in Exodo [3.14]: 'Ego sum qui sum'. Et si quaesierunt, rem non est dictum ratione significandi, sed ratione significati, non proprietate dicendi, sed proprietate essendi. (MS Royal 9.E.xii f172r)

The balance between ratione significandi and ratione significati in this sentence would suggest that in this context ratione significandi means 'by reason of signifying' matching ratione significati meaning 'by reason of the significate'. However the author's instrumental ablative leaves the medieval room to play the technical sense off against the non-technical usage, while frustrating the modern urge to have a completely univocal term.

Boethius had made it clear that the primary function of a word was signifying a thing, and that its secondary was signifying its properties (Magee 1989:69). By the 1240s ratio significandi was being used in the semantic sense to be taken over by the modistae. By now it was clear that ratio significandi was a principled selection of means of signification even in the face of the impossible:

In divinis nulla vox potest habere naturalem congruentiam perfectam; ut similitudo vocis et rei possit esse originalis causa sive ratio significandi Deum. (Henry of Ghent, Summa~ f262vL)

The acceptance by the *modistae* of the *pars orationis* as a separate entity entailed two things: reifying the accidents of things and words, and accepting that the operations of the *pars orationis* were of a different order from those of the *dictio*. In consequence the *modus significandi* was the form of the *pars*. Further, Boethius's observation that the objective existence of a *res significata* is not a prerequisite for signification (Magee 1989: 82) accepted that signification could be arbitrary, and granted the *modus significandi* a certain independence from the stimulus that had produced it.

The sequence diagrammed in Figure 1.5 begins from moving the ear, the 'real operation' of the vox. This comes from its substantial form. But signifying, an actio secundum rationem, rises out of a forma secundum rationem (Joannes Dacus 198.4–12). The question Joannes poses at this point, utrum ratio significandi sit aliquid reale additum essentiae vocis, reflects the

debate exemplified by Peter of Auvergne's discussion of whether immaterial things can have potencies. As the *ratio significandi* added to the essence of the *vox* only *secundum rationem*, because it fulfils a passive potency of something insubstantial (Joannes Dacus 197.29). And then, even though it is an accidental form of *vox*, *ratio significandi* is counted the substantial form of *dictio* according to the principle, *operatio arguit formam*. For it is the principle on which the functions of the *dictio* rest.

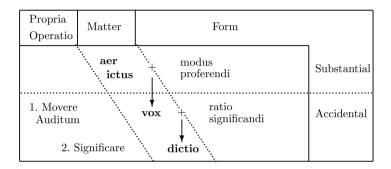


Figure 1.5: Imposition of *Dictio* 

In an important article on naming God, Rosier (1995:138) discusses the use of the term, modus significandi, by thirteenth-century theologians. In the first place they utilise a modus significandi ut which pertains to the general semantics of essence. Modus significandi ut depends on a type of feature analysis, as in concrete and abstract nouns. Take the analysis of deus and deitas by Stephen Langton, the Archbishop of Canterbury at the end of the twelfth century, in Ebessen (1987:426):

'deus' significat deitatem

- ut rem animantem et agentem et personam
- ut inhaerentem / participatam
- ut cuius aliquid est;

'deitas' significat deitatem

- ut subsistentem
- ut proprietatem
- ut quae est alicuius

Because such *modi significandi* bring semantically based syntactic constraints, they raise questions of congruity. Langton claims it is possible to say *deus est in lapide*, but not *deitas est in lapide*. *Deus* is a concrete

noun, while deitas is abstract. When deitas stands for the divine essence as a property, the noun in the ablative is named for the essence (Ebessen 1978:418). Consequently deitas est in lapide conjures up images of idolatry, while deitas est in pane is a possible statement about the Eucharist.

The Biblical text also put the classical rhetoricians' translatio and its communicative value under the nose of the theologian. Roger Bacon developed the idea that the interlocutor could 'renew the meaning' of a word (Rosier 1994:135). His discussion of renewal of imposition in Compendium studii theologiae (§§66 & 67) and De signis (§129) looks back to both Augustine's rules on Biblical exegesis and to the practice of classical rhetoricians. If it is to have any force, the 'renewed mode of signifying' (Rosier's modus significandi ut) cannot completely supplant the 'literal meaning' of the word, as this is due to the expertise of the original impositor. But through the naive reactions of the reader or hearer, this reimposition plays up salient features of the new significatum be juxtaposing it with the old. Thus modus significandi ut is the familiar rhetorical figure of translatio.

For example, the lion was considered an apt figure for Christ by reason of its nobility and courage, but its savagery and rapacity and the fear it inspired also made it fit the Devil.<sup>4</sup> But although this often made a useful modus significandi ut inadequate, or even philosophically misleading, such modes of signifying could not be unfitting. Thus God, being simple and the First Mover, acts according to his essence. Thus he should not be represented as acting through his power, unless one realises that it is added to his essence only according to a modus significandi (Aquinas, Q.D. de potentia. I.i.5).

This type of modus significandi ut easily became modus significandi ut qualitas, which treated the ten categories as elements of semantics. However, the common twelfth-century usage suggests that modus significandi in this sense was a vague term proper to logic, applying to the property of a predicate adjective to signify inherence of a quality in its subject. Thierry of Chartres' commentary on the list of categories with which Boethius opens De Trinitate IV reminds the reader that Boethius insisted that the meaning of the categories was valid for both word and thing.<sup>5</sup> But in God all categories predicated are substantial: goodness and justice, for instance, are

 $<sup>^4</sup>$  Apocalyse 5.5: "The lion from the tribe of Judah, the Scion of David, has won the right to open the scroll and break its seven seals." Cf. 1 Peter 5.8: "Your enemy, the Devil, like a roaring lion prowls around looking for someone to devour."

 $<sup>^5</sup>$  Cf. Boethius, Cat. I Prologus (PL 64.161A): "Ergo decem praedicamenta quae dicimus, infinitarum in vocibus significationum genera sunt, sed quoniam omnis vocum significatio de rebus est, quae voces significantur in eo quod significantes sunt, genera rerum necessario significabunt."

part of his essence, while in creatures they are accidents. In God however essence and qualities referred to the one nature. The corollary is that the mind enjoyed a certain liberty in forming a modus significandi (Thierry of Chartres 204.34–37). In his comment on this Boethius passage, for which he adduces an impressive number of authorities, Thierry's pupil, Clarembald, quotes Boethius's praedicamentum est genus significationis in vocabulis. In his view, modus significandi is not only a mode of signifying, but also a mode of predication characterised by categorial function (Clarembald 147.§1).

Modus significandi hardly occurs in the theology of Gilbert of Poitiers. and is rarely differentiated from ratio significandi. Gilbert (CEut. I.15) commenting on Boethius's borrowing from Augustine, quoniam etiam ipsum nihil significat aliquid sed non naturam, makes the point that aliquid and nihil signify the same quality but different substance. He ascribes his use of substantia and qualitas to grammarians, but his point still pertains to logic. Aliquid and nihil differ in the quality they signify. Aliquid signifies something that is of vague quality, and which may or may not exist: Nihil removes quality, whether true or fictitious from the substance it signifies (Gilbert of Poitiers, CEut. I.40 [250.21–27]). Later writers were well aware that the *Porretani* had developed theories of imposition from the Boethian and Carolingian discussions of the relationship between God and the categories. God is called *Dominus* by reason of a mode of signifying which invokes the categories of relatio — because relationship with slaves is implied (innuitur) by the concept of master — and of actio, because he is the cause of creation. Epithets applied to God can signify through any of the categories: immensus (unmeasured) and aeternus signify the divine essence as quantity and quality respectively; and the biblical picture of God amictus lumine sicut vestimento (Psalm 103.2) invokes the category of habitus (dress) (William of Auxerre, fIX r2).

Modus significandi appears in grammar around the time of Abelard, whose modus significandi has a slight touch of nominalism: Aristotle's categories are features not of things, but of the way language describes them (Abelard, Logica 116.35–117.2). A word is not inextricably bound to its referent, and modus significandi is something arbitrary under the control of the speaker, though the arbitrariness of word assignment is tempered by some sort of proportion between word, thing and perception. In Abelard's usage modes of signifying are features of first imposition of nouns (ibid. 113.4–

<sup>&</sup>lt;sup>6</sup> Cf. William of Auxerre, Summa fVIII v1: "Ex hoc ergo modo significandi quod divina essentia significatur ut divinum et ut relatio, innuitur et coasseritur servitus de creatura unde Deus."

7). A noun embodies the features of the thing itself (causa impositionis) which can rely on similitude (ibid. 357.12 et seqq.), and also on the manner in which the word imposed signifies absolutely and in context. Abelard's contemporaries accorded modes of signifying to other declinable parts of speech: albet, albedo et album signify the same thing but through diverse modes (cf. Notae dunelmenses f93 r2). The later Glose M on Priscian VIII.2 recognises modus significandi as the element directly determining the signification of the verb, but it does not yet seem to be a principle of verbal accidents:

VERBO ACCIDUNT OCTO: SIGNIFICATIO SIVE GENUS. Est igitur significatio aequivocum ad tria: ad ipsum significatum, ad modum significandi, ad accidens quod hic vocatur genus (in Fredborg 1973:29)

Early twelfth-century grammarians normally use modus significandi in the sense passed as a synonym for the more common officium or causa inventionis, the term which William of Conches preferred and handed on to Petrus Helias and the school of Ralph of Beauvais (Fredborg 1973.31). But while Petrus religiously gives a causa inventionis for each part of speech and restricts officium to syntactic and logical function, he remarks that part is distinguished from part by modus significandi. But modus significandi is diversifying from the version in Glose M: the common noun shows what type of thing the utterance is about (Petrus Helias, Summa 203.95), and its accidents are modi significandi (ibid. 368.84–89).

John of Salisbury (Metalogicon 124.6) writes that noun and adjective differ by significatio secundaria, modus significandi and consignificatio, which all mean the same thing. He cites with some admiration the metaphor with which Bernard of Chartres illustrated secondary signification. The noun, albedo, is like a virgin, the verb, albet, like the virgin getting into the marriage bed, and the adjective, album, the virgin having lost her virginity. The noun, albedo, signifies quality of whiteness simpliciter, without any participation in or by a subject; albet has whiteness as its principal signification, but entails the participation of a subject. And album signifies the same quality of whiteness, but mixed with a subject and somewhat corrupted (John of Salisbury, Metalogicon 3.2 [120]). He follows this with a discussion of bonitas and unitas, bona and una, which illustrates how etymologically related nouns and adjectives share significatio while differing in consignificatio, and thereby assume different roles in predication.

In the early thirteenth century, the matter of the *dictio* was *vox* and its form, *significatio*, and as Augustine said, the mind made a composite of them by matching *species rerum* with *species vocis* to form the *vox significativa* (Ps.Grosseteste 32.5–10). Causa inventionis had fallen by the wayside

and modus significandi was accepted as a property of the word: words differ according to modus significandi or officium (Jordanus 23).

Modes of signifying, both semantic and grammatical, were properties rising out of the substance of the dictio in the manner common to all natural substances. Kilwardby's view (In III Donati 21.621), that the modus significandi is formalis ad orationem looks forward to double articulation. But like Petrus Helias, Ps.Grosseteste taught that modi significandi rise out of the dictio both from the matter of the vox and from the form which makes it a particular part of speech. From the matter of the vox came accidents like figura and species. Those accidents rising out of the form were termed paradigma, which relates directly to the ratio formae, an external cause which occasions the shaping of the material. The ratio formae of the wooden sole of a sandal is a form or 'image' dictated by convention and use, and it therefore termed a paradigma. It is a type of image which is worked into the material which 'imitates' it. In the same way the material of the vox is shaped by convention and utility to produce the form and accidents of the nomen (Albertus Magnus (Phys. 1.3.17 [75.21–27]).

Theologians speak of modi significandi et consignificandi, and flavour all types of modus significandi with pragmatics. Consequently they often exploited modus significandi sic et ut together, exploiting the intersection of semantics and grammar through terms like significare substantive, significare verbaliter. Generatio being a verbal noun designates an action, while paternitas, an abstract noun derived from pater, is the habitudo ponens istam actionem (Richard Middleton, 1 Sent. 1.27.2 resp.). But theologians also recognise that one comes to terms with an inexpressible reality through arbitrary modes of signifying. There is no composition of matter and form in God, but the simplicity of the divine is not incompatible with diverse modes of signifying, as long as they match his diverse attributes. And among the attributable attributes are substance and quality, signified by the noun (Albertus Magnus, Metaph. 8.1.6 [396.26–30]). That this arbitrary type of signification was applicable to language in general was quite obvious.

Most modistae took an extremely narrow view of the florilegium snippet, significare est intellectum constituere. Joannes Dacus (180.30–34) is one of the few of them to consider the possibility that a word will be shaped by a particular intentio significabilis, if the soul is to satisfy its need for knowledge and self-expression. But this principle from the florilegia was as relevant to the pars as it was to the dictio in all disciplines. Bacon emphasises that the part of speech and its accidents 'constituted an understanding' as a result of deliberate imposition guided by a mental concept interpreted as the mind saw fit:

'Quid est aliud esse partem orationis nisi mentis conceptum significare?' (Priscian 11.2.7 [GL II 551.1–2]) et pars orationis significat ad placitum et per impositionem: Dicendum quod ibi non accipit mentis conceptum qui est habitus cognitivus, sed mentis conceptum, id est rem conceptam a mente. (Bacon, Compendium theologiae §61 [70.9–10])

Just what Bacon means by pars orationis is far from clear. But whether he or Priscian had been referring to part of speech in the modern sense or not, it is this sentence that bears the seeds of autonomy for the part of speech. Differentiating part of speech from dictio depended on reifying the accidents of words, and treating the traditional categorial terminology in the strict terms laid down in Metaphysics and by Porphyry's two  $\theta$   $\sigma \epsilon \iota \varsigma$ . The argumentation of the modistae follows Porphyry: the categories as real qualities are none of their business, but categories as represented in language are.

As the dictio signifies the esse of its referent and the pars its sic esse, pars autem non solum est vox significativa, sed sic significativa. Significare pertains to the res itself, and sic significare to modus rei (Incerti auctores Q54.36). The only early modista to take this formulation up is Michel de Marbais (Summa 17.53–57). But the nub of the matter is that signification and consignification are separate operations. Dictio and pars therefore rise out of separate impositions, and under second imposition different categories make the same dictio into different parts of speech. The mechanism is the recursive process diagrammed in Figure 1.6.

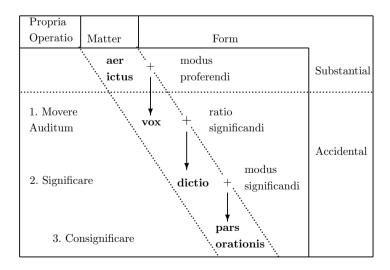


Figure 1.6: Imposition of *Dictio* and *Pars* 

## 1.4 Ratio Consignificandi

The modistae coined ratio consignificandi in binary opposition to ratio significandi, because significatio and consignificatio were inseparable. Hence it was not unusual for grammarians to straddle innovation and tradition by introducing pars orationis in terms of ratio consignificandi at the beginning of their grammars, and then in the body of the work passing to the traditional modus significandi.

The ancient authorities use *consignificare* in two senses. In Priscian prepositions and conjunctions consignify by completing their meanings in various ways through construction with declinable parts of speech:

[Praepositiones et coniunctiones] semper consignificant, id est coniunctae aliis significant, per se autem non. Itaque variatur earum significatio ad vim coniunctorum eis. (Priscian, 17.10 [GL III 114.18–20])

Priscian's consignificare is probably a translation equivalent of Apollonius Dyscolus  $\sigma\sigma\sigma\eta\mu\alpha\iota'$  is it which in Varro (8.11) becomes adsignificare 'to signify in the company of' (Rosén 1989:229). Adsignificare pertains to grammatical properties: some parts of speech adsignificant casus, others adsignificant tempora. In Aulus Gellius, adsignificare is semantic: in his view, petorritum, a light four-wheeled vehicle, takes its name from the Gallic word for speed. On the other hand, Boethius obviously calqued consignificare on Aristotle's coinage,  $\pi\rho\sigma\sigma\eta\mu\alpha\iota'$  is in Perihermeneias 3 16b6 (Verbum est quod consignificat tempus) the term means 'to give a sign of' and pertains specifically to the grammatical properties of the verb (Rosén 1989:227).

Rosén argues that the two senses of consignificare were conflated as early as the sixth century. But one need not postulate conflation. Such breadth of usage is nothing unusual in verbs compounded with prepositions, for as Donatus (389.19) says in the  $Ars\ minor$ , prepositions fill out, change or diminish the meaning of words they are constructed with. Cum 'fills out or changes' the sense of the verb it is compounded with in three ways. The most transparent is adding the simple sociative sense recognised by Priscian, cf.  $colloquor\ cum\ aliquo$  (to converse with someone),  $combibere\ cum\ aliquo$  (to drink with someone).

More often, *cum* adds an aspectual value to its verb, either inceptive, e.g. *conclamare* (to let out a yell), or perfective, *conficere* (to bring something to an end, i.e. to perfect or to destroy). Transitive verbs of this sort shade off into intensitives, e.g. *concacare* (to foul) from *cacare* (to defecate),

 $<sup>\</sup>overline{}^7$  Aulus Gellius XV.xxx.3: "Nam quum quaereretur, petorritum quali forma vehiculum, cuiatisque linguae vocabulum esset, et faciem vehiculi ementitus est longe alienam falsamque, et vocabulum graecum esse dixit, atque adsignificare volucres rotas interpretatus est."

*combibere*, (to drink up).<sup>8</sup> Finally such verbs move easily into metaphorical senses, for instance *artem combibere* 'to steep oneself in a subject'.<sup>9</sup>

Well aware of the power of the compound verb, the twelfth century had little problem with the versatility of consignificare. Glose M calls it a polissemis sermo and details three meanings. First, it means secundario significare as in verbum est quod consignificat tempus. It also means 'to specify', as in praedicatum consignificat subjecto. Finally, it means to signify something in a context closely associating the word consignifying with a head word which completes its meaning (Fredborg 1973:31). Owing to the wide meaning of the word most dialecticians and grammarians from William of Conches until the thirteenth century in all good conscience give Priscian's cum alio significare priority.

Thus because consignificare could be taken semantically as well as grammatically, Peter of Poitiers can argue that God's justice, while requiring the severest possible punishment for Judas, also strongly implies (subinnuit) that Judas's merits be taken into account. For, seeing that Judas's act of betrayal was necessary to the redemption of the human race, God's justice demands that Judas be punished less than he deserved. Divine justice therefore consignifies mercy (Peter of Poitiers 101–102). Not all consignifications were as paradoxical as this. Albertus Magnus's comment on the commandment to love one's neighbour in Matthew 22.39<sup>10</sup> equates consignificatio with the wide powers of suggestion in the modus significandi of a word:

Secundum simile est huic: Simile dicitur, non aequale. Dicitur autem simile, quia de simili; est autem de proximo, qui est ad Dei similitudinem. Diliges proximum tuum sicut te ipsum: Et ex modo consignificandi notatur perseverantia, quia vult in futurum extendi dilectionem. (Albertus Magnus, Super Matthaeum 545.18–27)

While  $significare\ cum\ alio$  has no obvious counterpart in her typology of  $modus\ significandi$ , the second sense of consignificatio listed in  $Glose\ M$  has the important features Rosier ascribes to  $modus\ significandi\ ut$ . All the indeclinables were characterised by this vague and ill-defined consignificatio, defined as a meaning that could only be clarified in a congruent construction. In seeking an etymology for consignificatio, the early Middle Ages

<sup>&</sup>lt;sup>8</sup> "Tum vero vultum magni ut viderunt Iovis,

Totam timentes concacarunt regiam." (Phaedrus, IV.xvii.10-11)

<sup>&</sup>quot;Toxicum,

Combibere iussit ipsum, posito praemio." (ibid., I.14.9)

<sup>&</sup>lt;sup>9</sup> Cicero, *De finibus* III.9: "Sed tamen iam infici debet [puer] iis artibus, quas si, dum est tener, *combiberit*, ad maiora veniet paratior."

<sup>&</sup>lt;sup>10</sup> "The second [commandment] is like it: 'Love your neighbour as yourself'."

glossed  $\kappa \alpha \pi \gamma \rho \rho' \alpha$  as praedicatio vel significatio (cf. Thierry of Chartres 186.11–14). Con- was treated as an inseparable particle equivalent to  $\sigma \psi$ , which they often glossed by simul (Petrus Helias, Summa 184.86), perhaps on the authority of the Nicene Creed. 11

As their cover term for the indeclinables was syncategoremata, the thirteenth century preferred to relate consignificatio to the Greek term, syncategorema. Nicholas of Paris (5.1–17) glosses wath p of  $\mu a$  as significans and relates the prefix,  $\delta w$ , to the inseparable preposition, con-, derived from cum, which signifies the concomitance of an equal, superior or inferior. While other words signify as equals, a syncategoreuma signifies as an inferior, because it completes its significant through something else.

Consignificare was synonymous with innuere, which is a function of modus significandi in William of Auxerre (Summa fVIII v1 [n19 above]). Innuere in this sense was common property among theologians, who often matched it with consignificare:

Cum autem dicitur, 'Essentia divina est in aliquo', nihil consignificatur vel subinnuitur, quia iste terminus nil consignificat vel innuit. (Peter of Poitiers 108.15-17)

In other words, the divine essence was too simple to have second meanings. Peter continues with a discussion of what is consignified of God, for example, goodness, power, knowledge, etc., most which are predicated of him as qualities, but doctrinally they are part of his essence. *Potentia* was ambiguous. When it meant 'power', it could be predicated of God; but meaning 'potency', it could not. From at least the time of the *Porretani* the word, *Deus*, consignified power as a *relatio* between God and his creation.

Semantic extensions vital to theology lend themselves to expression through grammatical categories. When signifying essence, persona necessarily consignifies the quality of distinctness, in grammatical terms, singularity (Alexander of Hales, Glossa in I Sent. 23.2). Homo and animal both signify substance, but rationality is the specific difference of homo, and the power to perceive the specific difference of animal (Richard of St Victor, De trin. iv.6). Therefore masculine and feminine were the proper genders for human beings, angels and God, as gender consignified rationality. In a climate permeated by commentaries on the Perihermeneias it is a short step from saying that the syncategoremata signify cum alio to regarding the dictio as an aliquid aliud together with which flexions consignify something beyond semantic content through Rosier's grammatical modus significandi:

 $<sup>\</sup>overline{}^{11}$  "[Spiritus Sanctus] qui cum Patre et Filio simul adoratur et conglorificatur [The Holy Spirit, who together with the Fater and the Son is adored and glorified]."

Verbum consignificat tempus, id est: cum alio significat tempus, sicuti amat quod principaliter significat amantem ex intentione proferentis vel imponentis, et secundario significat tempus illud in quo est amor ille, scilicet praesens tempus. (Garlandus Compotista 71.20. My italics)

Boethius (*PeriH*. I.3 [*PL* 4.307AB]) had allowed for the noun to consignify categories abstracting from time, while affirming that time was essential to the verb. But the usage of Garlandus Compotista (71.20) and Abelard was much stricter than that of Boethius: *consignificatio* is a property of verb not noun. Unlike *qualitas* in the noun, *tempus* is not a category, but a significate apart from the *res verbi*, while *qualitas* is inherent in the noun. The crucial turning-point leading from *secundario significare* to modistic ideas on *consignificare* comes in Abelard:

Consignificare tempus, id est suam principalem significationem quam in sua sententia tenet, significare ut comitantem tempus, id est ut permanentem tempore existente. (Abelard, *Logica* 345.1–3)

Abelard's definition is remarkable for two things. *Comitari* ('to dance attendance on' or 'to be a comrade in arms') implies that it is the principal signification of the verb which is dancing attendance on the secondary signification, time; and the gloss with its ablative absolute, *tempore existente*, suggests that time as secondary signification sets bounds to the principal signification, an idea which fits easily with the idea of time as a measure of the *res verbi*.

But the range of consignificatio was being extended beyond tense into a general modus significandi sic. Petrus Helias (Summa 930.29) notes that the verb consignifies a mood like doubt by variation of flexion. But it seems to be the Compendium logicae porretanae that is the first to explicitly class nominal flexions as consignificationes. Throughout the century the exact force of secondary signification or consignification remained vague. Stephen Langton, writing in about 1190, takes the significate to be the principal signification, and secondary signification is anything else signified, what Ebbesen (1987:424) calls semantic nucleus and tail. However a semantic nucleus can have a grammatical tail: in relation to the divine, similis as a substantive signifying the same essence as its principal signification cannot be plural, as it would then impute plurality to the divine essence through its secondary signification. In the next century logicians maintained the link between signification secundaria and consignificare. But for them it was the dictio which consignified, <sup>13</sup> a function glossed anew by coinsinuare:

 $<sup>\</sup>overline{^{12}\ Logica\ Porr\ I.2}$  [3.76–78]: "Id inde cautum est, ut nominis principii identitate principalis eadem esse notetur significatio, terminationum vero variationem perpendatur consignificationum variatio."

Sed qualiter inquit verbum non significare tempus sed consignificare? Aut quia significare quidem est principaliter significare aliquid, consignificare autem quod cum principaliter significato secundario et aliud aliquid coinsinuat. Verba autem principaliter quidem actiones vel passiones significare volentes proferimus, adiuncta autem tempora actionibus vel passionibus, secundum quae esse dicuntur vel fuisse vel fore, cum his velut coinsinuata videmus. (Ammonius, *PeriH*. 92.86–94)

Consignificatio and modus significandi were now confirmed as functional synonyms. Kilwardby (De ortu scientiae 163) remarks that the consignificationes of a word in context have one of two values. Some types of consignificatio, for example demonstratio in a pronoun, which implies something beyond its surface meaning, are actus exerciti, and others which, like person in a verb, are quite transparent, are not.

Much thirteenth century discussion of consignifying is rooted in dicibile, a favourite term of Augustine's, even if the word itself is rarely found in grammarians. As dicibile is medium inter conceptionem et rem (Ammonius 32.33), dictio in its role of part of speech becomes part of the theory of predication. Like modus significandi, consignificatio was at the discretion of the impositor, who was bound by the limits the mind imposed on the dicibile. This limitation is of prime importance in expressing the inexpressible. One cannot avoid consignifying time when speaking of God, because his existence outside time cannot be imagined and is therefore not a dicibile. However this difficulty was often turned to theological advantage by playing time off against eternity. God being in eternity is not subject to time: he contains all time and is its measure (Cf. Aquinas, 1 Sent. 40.3.1).

One of the few to define grammatical consignification in a way that was theoretically significant was Albertus Magnus (*PeriH*. 1.3.2):

Ex principali intentione consignificare tempus dicit quod non est significare tempus vel significare rem quae necessario est in tempore, sed per modum quo cum tempore, hoc est per modum agere vel moveri.

There are strong echoes of Boethius and Abelard here. The core of this definition is *significare per modum quo cum tempore*, which is undoubtedly

<sup>&</sup>lt;sup>13</sup> Lambert of Auxerre 9: "Dictio dicitur autem consignificare illud quod ei accidit ultra principale significatum, ut 'homo' consignificat nominativum casum et numerum singularem, et alia quae sibi accidunt."

 $<sup>^{14}</sup>$  Albertus Magnus Cat.I~1.2: "Non dicimus quod aequivocum dicitur in singulari, cum tamen unum nomen sit per propriam formam: ratio est quia hic intendimus de praedicabili sive dicibili incomplexo secundum quo ordinabile est in genus."

 $<sup>^{15}</sup>$  Aquinas, QD de Veritate 2.12 resp.: "Difficultas autem in hoc accidit eo quod divinam cognitionem significare non possumus nisi per modum nostrae cognitionis consignificando temporum differentias."

built around a cum signifying time as instrument rather than as accompaniment, given that this phrase is immediately glossed by per modum agere vel moveri. The res verbi is distensa in tempore; but as the verb signifies per modum agere vel moveri and time is the measure of agere, time as quantity is the mensura of the verb, in other words the first and fundamental element in its genus: In unoquoque genere est dare aliquod primum et minimum quod fit metrum et mensura omnium illorum quae sunt in illo genere (Hamesse 1974.135 #239; Cf. Arist. Metaph. II 1052b 18 –19; 31–32). Albertus contrasts the verb with the noun, whose significate is an essence abstracting from time, 'because it signifies its total significate all at the same time, and not as stretched out in time'. Though his definition fleshes out the sic significativus of anonymous commentators on the Elenchi, he is not textually echoed by the modistae.

Albertus Magnus lays out the intellectual underpinnings of this discussion of the verb at some length. His discussion culminates in a typology of mensura (Phys. 4.3.17 [291.46–64]). A univocal mensura is of the same genus as the mensuratum: a horse being compared with a horse or one period of time being measured in terms of another. There are two types of non-univocal measures: essential or accidental. An essential measure determines the quantity of the mensuratum by means of the quantity of the mensura, as when a piece of cloth is measured with a ruler. An accidental measure is the reverse of this: the quantity of the measure is determined by that of the measured, as when the capacity of a bottle is assessed by pouring a known quantity of wine into it.

A measure gives an object its powers, functions and quantity within a certain genus. <sup>16</sup> The *dictio* is the essential measure of the *pars* as they are both vehicles of meaning; but because a *pars* actuates the powers of its *dictio* within the bounds of syntax, *pars* is the accidental measure of *dictio*. *Consignificatio* in Priscian and Boethius, then, presents two different types of measure by reason of the polysemy of *cum* which it keeps in composition. The *virtus*, *cum alio significare*, which Priscian assigns the indeclinables, rises out of the sociative senses of *cum*. In contrast Boethius's usage exploits the instrumental and perfective senses of *cum*. *Consignificare* then denotes the concretisation of the semantics of the *dictio* through a morphology which interprets the accidents of the thing signified through the proper categories.

It is to be expected then that the ratio significandi of the dictio would

<sup>&</sup>lt;sup>16</sup> Albertus, *De causis* 70.54–60: "Est enim mensura esse, quam cum esse rei attingit, totam sui esse habet virtutem et quantitatem. Et hoc modo primi non est mensura, sed mensura aliorum in quolibet genere."

be balanced by the creation of ratio consignificandi for the pars orationis. However modus significandi was already in the field as the form of the pars orationis, so that ratio significandi became an auxiliary term and never displaced its rival. Although theologians often spoke of modus consignificandi, grammarians had their reasons to be reluctant to use it: if the operation of consignification could be shown to depend on basic principles, it rose out of a form. It is unusual for modes, which are normally contingent and therefore accidental, <sup>17</sup> to be the subjects of a science rather than merely the instruments of a necessary ratio. And in any case there was no science about accidents because they are contingent. <sup>18</sup> This is a probable rationale for coining ratio consignificandi to do double duty. In the first place, ratio consignificandi points to the constitution of the parts of speech; then it points up the parallelism between the genesis of dictio and pars. Modus significandi, however, focusses on how the pars makes the dictio function as a communicative unit. L1 H

In constituting the parts of speech, Boethius's instrumental *consignificare* also constitutes the accidents proper to each of them. By the twelfth century it was realised that flexional and derivational morphology were properly counted as *consignificationes*:

Consignificatio est illud quod secundario datur intelligi per terminum, ut genus, numerus, tempus, persona, et huiusmodi alia. (*Introductiones parisienses* [de Rijk 1967:II.ii 371.21])

In both the res extra animam and the linguistic unit, accidens non habet esse, nisi inquantum est dispositio substantiae (Albertus Magnus, Phys. 1.3.13 [65.75]). Therefore the consignificationes accidental to the parts of speech are signa efficientia. They discharge sentential functions through their significations, all of which can be summed up by the range of meaning proper to the preposition, cum, agglutinated to significare. As yet, however, these criteria excluded indeclinable parts of speech.

It was not unusual to distinguish between accidents of the *vox*, like *declinatio*, *figura* and *species*, and accidents of the *dictio*. Because they remain of interest to the grammarian almost exclusively, there is little to be said here on the accidents of the *vox*. And while they are assiduously discussed in manuals of dialectic, they hardly evolve from ancient times. On the other hand, certain accidents of the *dictio* became important tools in exegesis

 $<sup>^{17}</sup>$  Hamesse 1972. 301 #23: "Accidens est quod a dest vel abest praeter subjecti corruptionem."

<sup>&</sup>lt;sup>18</sup> Cf. Albertus Magnus, Metaph. 4.2.4 (180.71–72): "Accidens est quod est in alio in quo habet esse. Accidens potius est esse quam essentia, et ideo perfectam non habet definitionem."

and theology, which materially influenced their evolution in grammar. Our modistae divide the accidents of the dictio into 'absolute', whose sole purpose is designating properties of the thing signified, and 'respective' which besides designating properties of the thing signified are designed to join parts of speech in construction. This distinction, which does not antedate the modistae, rises in dialectic as a development of Boethius, De divisione. (PL 64.890B) according to Ebbesen's Incerti Auctores (Q.824 155–162) who define the respective mode in terms of construction, and distinguished them from the absolute modes which had nothing to do with construction:

Respectiva sunt illa quae conferunt ad constructionem et consequitur in eis proportio, cuiusmodi sunt casus, numerus et persona: haec enim conferunt ad constructionem suppositi cum apposito et adiectivi cum substantiva. Alia autem sunt consignificata absoluta, ut sunt figura, tempus et alia huiusmodi; talia enim non conferunt ad constructionem.

The *modistae* read the ancient terminology in strict thirteenth-century terms. This meant that the accidents or modes of signifying all related to some aspect of the categories, and therefore had a meaning which could be defined by the intellect. The *modistae* would hardly have remained unaware of the careful argumentation which made consignificatio a mensura of a part of speech. And indeed this concept of measure was essential to the status of grammar as a science. This demanded modifying the concepts of imposition and articulation passed on from the ancient grammarians. As Porphyry's double *positio* postulated that the parts of speech were imposed, they were beings in their own right rather than mere secondary significations. And though the pars was inseparable from the dictio, it was the type of necessary being that would be the proper subject of a science, and could be investigated through their accidents. Secondly, like the modern linguist, the modistae aimed at an explanatory science rather than a normative: in their terms grammar had to be a speculative science seeking the processes by which language arrived at its own perfection. This status demanded that res scientiae eadem sit apud omnes, that is that grammatica speculativa fit into the normal scientific models without losing its identity or violating custom. Thus among the *modistae* double articulation became the foundation for a simple recursive model that affirmed the independence of grammar while conforming to and exploiting the analytic norms laid down in the other sciences.

# CHAPTER TWO ESSE, INTELLIGERE, SIGNIFICARE

The ancient theory of linguistic signs and its formalisation by Boethius had already evolved into a theory of signification. But as the *modistae* found it wanting, they scoured sister sciences to develop an economical and simple model of articulation and imposition. In their view *significatio* and *consignificatio* were the provinces of first and second articulation, so that the first articulation set the parameters for the second.

## 2.1. Significatio and Dictio

Under the shadow of Augustine's legacy both Priscian and Boethius passed on to later ages an unashamedly intentionalist view of the dictio. Augustine was most concerned with Michael Halliday's 'meaning potential of the speaker'. His De dialectica had placed the dictio in a four-fold progression from concept to thing. This model begins from the verbum intus, the innate memory of the  $\Lambda\acute{o}$  ps implanted by divine illumination, the basis of the semiotic system stored in the mind (Ruef 1995:8). Augustine patterns his second level, the dicibile, on the Stoic  $\lambda\acute{e}$  kd, which is not the 'meaning' of a word but what was actually said by uttering ( $\pi$  p $\pi'$   $\theta$   $\mu$ ) it in the linguistic and situational context. The dicibile is what gets said and understood, the meaning of an utterance in situation (Amsler 1989:49–51). Augustine's third level is the dictio, the vox articulata or verbum quod foras sonat, a spoken sign with communicative and pragmatic value rising out of a mental species of both sound and sense. The final level, the goal of the sign, is the res the dictio signifies.

At the centre of this model lay a conflict between the arbitrary sign of the Aristotelian and Roman traditions and the Platonist divine word. Word as sign was arbitrarily connected with thing through a mental image that often depended on its most salient feature. Consequently this arbitrary sign did not signify nisi mediante propria industria apprehendentis (Tractatus de proprietatibus sermonum, [de Rijk 1967:II.ii 710.25]); and the Glosulae remarks that the speaker gives words meaning by his intent to signify

 $<sup>^{1}\,</sup>$  Augustine,  $De\,\,dial.$ viii.5: "Quidquid autem ex verbo non aures sed animus sentit et ipso animo tenet inclusum."

(Fredborg 1988:181). But according to the Platonist, names and things are so intimately connected in God's mind, that a human word participates in the nature of the thing it signifies.

All being comes from form, so that a statue gets both name and being from its form, not from its material (Boethius, *De trin*. II.22–26). Commenting on this passage Thierry of Chartres draws the conclusion that God in giving things their form also gave them their proper names. Consequently by divine illumination human impositors imposed names according to what had been in God's mind for all eternity.<sup>2</sup> Therefore, as all being is from form, *nomina essentiant res* (Thierry of Chartres, 172.95).

St Anselm had already postulated a middle way, which bears a close kinship with Augustine's dicibile. Truth was a quality of utterance, not of things. Because truth was based in God, signification was underpinned by a prior rectitudo which governed the mental operations leading to the utterance. It depended on either natural or accidental truth: a naturally true statement expressed reality accurately, an accidentally true statement expressed the speaker's thought accurately (Anselm, De veritate 2 [179.20]). Rectitude then flowed from 'necessary reasons', rational arguments proper to rhetoric rather than to logic, which establish probability, quite often from empirical evidence. For example, a straight stick standing in water appears to be bent. However experience tells us it is straight, and some knowledge of refraction will explain why our perception is false (Colish 1968:119).

Cognitive models combining Augustine and Aristotle appear in the early thirteenth century often in the barest form consonant with clarity. Their operative themes are the ontological identity between the mental species and thing, and the mediation between thing and word effected by the intellectus agens. With an eye to Anselm's rectitudo and Augustine's dicibile, which ordered the pragmatics of interpretation, theology postulated that the rationes intelligendi by which they were understood were inherent in most natural things. These rationes intelligendi inherent in things were the quarry of a different ratio intelligendi, a mental quality by which the mind understood objects presented to it. All understanding is the acceptance of the form of the thing understood into the mind according to its 'intention' and species from which come both sense knowledge and intellectual knowledge. One must distinguish between the forma rei by which matter becomes a thing in act, and intentio rei, through which the thing

<sup>&</sup>lt;sup>2</sup> Thierry of Chartres 172.1–5: "Vocabula namque unita sunt in mente divina ab aeterno ante etiam impositionem ab hominibus factam. Postea homo imposuit ea rebus quibus unita erant in mente divina. Imposuit autem instinctu Spiritus Sancti ut nobis videtur."

understood is signified according to various degrees of abstraction. For it is this which is eventually linked to a sign. This mental image is not an aspect of the thing, but a facet of one's total knowledge of it (Albertus Magnus, *De an.* 2.3.4 [102.27]), so that such *intentiones* can lead to imperfect knowledge of their object (Albertus Magnus, *De Causis* 2.2.31 [125.58]).

Inherent in Albertus Magnus's argumentation is the triad of rationes essendi, intelligendi et significandi. Though this constitutes the first step in modelling the process by which the dictio came to be, it also loosens the image theory of meaning by explicitly assigning the power of filtering to the mind. Therefore at its crudest the tradition equated Augustine's dicibile and concept: according to Simplicius (13.89–91) Aristotle and the Stoics make it plain that dicibilia (what is said and what can be said) are concepts. This Ammonius accepted while adding a refinement not unlike Augustine's: the Stoic dicibile mediated between conception and thing (Ammonius 32.34). It therefore seemed clear from the accepted text of Euclid that the dicibile was a tool of reasoning as well as of representation:

Quaedam enim in *Decimo Geometriae* dicuntur lineae dicibiles sive rationales quibus positis et datis ratiocinantur; quaedam autem dicuntur indicibiles sive mutae et irrationales, quibus positis rationari non possumus. (Albertus Magnus, Phys., "De lineis" 2 [501.1–5])

Logicians and theologians formalised the genesis of the dictio in the light of three key concepts the modistae exploited but hardly mention, dicibile, similitudo and participatio. Similitudo, Boethius's gloss for Aristotle's ὁ μοι΄ φα, lay at the heart of dicibile. It is an essential tool in keeping images in the memory. For memory furnishes the raw material for intellection, the mental image of an object being an animae passio characterised by its likeness to that object (Magee 1989:104). Things can be similar either through their being, as the heat of a fire is similar to that of something it heats; or through a sensorial image (Aquinas, Contra Gentiles II.46). The species in the mind is a similitude of the res extra animam because it participates in its nature. At its most radical the similitude between thing and image in the mind was harnessed to turn the Aristotelian model of intellection to mystical theology with crucial consequences for the theory of the dictio:

Nam ex memoria oritur intelligentia ut ipsius proles, quia nunc intelligimus, cum similitudo, quae est in memoria, resultat in acie intellectus, quae nihil aliud est quam verbum; ex memoria et intelligentia spiratur amor tamquam nexus amborum. (Bonaventure, Itinerarium III.5 [V.68])

Participation is a universal: everything that is participates in being and is something individual by participating in something else. The superior member of a participating dyad leaves a trace in its inferior (Boethius,

De hebdomadibus 42.41–44). Scottus Eriugena treated an exemplar as a being per se and its image as a being per participationem (Moran 1989:170). Thierry of Chartres (De trin. 11.50 [170.55–58]) explains that forms were constituted through participation in forms which could be dematerialised, that is in ideas whose being participated in the first of all forms, which was being itself. All being, therefore, is necessarily from form.

This orientation the Scholastics rejected on the grounds that every thing participating in something else is composed of matter and form. Three types of participation rest on similitude: accepting a property from something else, receiving something through cognition, and making use of the particular powers of something for a set purpose, for example, a doctor prescribing a medicine for an illness (Aquinas, Super ad Colossenses 1.4). Each of these rests on the principle that similitude depends on participation in the one nature,<sup>3</sup> and on the strict interpretation of participare as partem capere, non totum. As the element participated in is a being in act, it fulfils an appropriate potency in the element participating (Aquinas, STheol. 1 75.5 ad 4). All three of Aquinas's types of participation are therefore formal effects of causality, and apply to the genesis of dictio and pars.

An image, while existing in something else, participates in its original (de Muralt 1995:70–76). Dialecticians turned this reformulation of the Scottus Eriugena analysis of the image to the theory of first imposition: commentators on the *Elenchi* made it into an argument for the formal identity of res, ratio intelligendi and ratio significandi. Because the res and ratio intelligendi are formally identical with ratio significandi, terms participate in the being of thing signified and in the understanding (Incerti auctores, 39:6–9). But the form exists differently in word, mind understanding, and res extra animam, given that the intellect merely participates in the form of the thing outside the mind, and the word in the species mentalis through secunda participatio. The action of fire is an excellent analogy for this assimilative participation indulged in by the res. As fire passes on its formal characteristic, heat, to anything it spreads to, so the form of the res becomes a form in the mind, and that form in turn is the form of the dictio.<sup>4</sup>

<sup>&</sup>lt;sup>3</sup> Cf. Siger of Brabant, *In Metaph*. III:161.20–25: "Omne quod est ens est ens per suam rationem: homo enim est animal per participationem animalitatis, quia est aliquid in ipso quod differt a natura animalitatis; non tamen est ens per participationem entis, quia nihil est in ipso quod sit differens ab ente vel a ratione entis."

<sup>&</sup>lt;sup>4</sup>Cf. Boethius Dacus 123.35: "Entia enim diversarum specierum videmus producere effectum univocum sive unius specie, ut potentia naturalis solis et calor, qui formaliter est in igne, licet differant in specie, producunt tamen effectum unius est eiusdem specie sive univocum, ut calorem, qui est in ligno vel in lapide."

Gilbert of Poitiers had brought similitudo and participatio together in the word, proportio (Nielsen 1982:134). Things have similitude in two ways: similitude of proportion is participation in one nature, similitude of proportionality is likeness secundum unius formae comparationem. The scholastics saw the second as proper to signification. At its simplest a dicibile proceeds directly to a nomen impositionis completely under the control of the impositor. Things are normally dicibilia through at least one of their properties, the vox being in proportion to one's understanding of the thing as signifier to signified (Innocent V, 1 Sent. 22.1.3 & ad 3 [184ab]). From this came the nomen naturae, for example Emmanuel (God with us), the nomen naturae for Jesus Christ who participated in the two natures of God and Man (Albertus Magnus, Postilla super Isaiam IV.14 [77–90]).

The compensation mechanisms of Anselm's rectitudo were essential to proportio. Proportion between word, understanding and thing was an a quo often resting on operations and effects proper to the thing signified. For example, angelus as a nomen officii meaning 'messenger'; certain angels are archangeli because while their colleagues bear routine messages, they bring the important ones (Gregory the Great, Homily 34.8 [PL 76 1250]). Such a quos were an important tool of etymology which guaranteed the rectitudo of a word, but was not its signification. The etymology of lapis is an excellent illustration. If laedens pedem (a thing that wounds the foot) were the meaning of lapis instead of id a quo imponitur, lapis would be synonymous with a piece of iron on which one can also cut one's foot. But the quid est of lapis is the essence of the stone (Aquinas, STheol. 2a2æ 92.1 ad 2).

As dicere est intelligere, God is dicibilis or fabilis because he can be spoken about; but he is ineffabilis because he can be signified only partially or approximately (Henry of Ghent 73. ad 1 [f267rR]). But in gaining the understanding necessary to name God fittingly, the mind had to set itself to considering his virtues, for from this consideration the mind rose to some knowledge, however imperfect, of his power and divinity (Richard Middleton, 1 Sent. 22.4 ad 4). Consequently his names rose from numerous quo ests like wisdom, goodness and understanding. Properly speaking, these dispositions are proper to God, and the like attributes in human beings are similitudes of the divine qualities. God was also 'understood' through his effects, which bore some similitude to him through participating in his nature, and these gave rise to nomina operationis like Creator. And finally God is called Father through a ratio intelligendi derived from his relatio with the Son (Richard Middleton, 1 Sent. 28.1 resp.). Similarly the Son and the Holy Spirit have various names according to the various attributes at the root of convenient rationes intelligendi (Aquinas, 1 Sent. 18.1.2 ad 4).

Proportion between God and his names could also be achieved by naming him through contradictories, and this tactic from Ps.Dionysius figures prominently in Alain de Lille's Regulae theologiae. Alexander of Hales (STheol. 1 §333 [I.493b]) rests the case on St John Damascene, who had taught that God's characteristics (notae) are best visualised as negatives, e.g. immensus (unmeasured), infinitus. One can also see Anselm's hand in the principle that in a res indicibilis like God, rationes intelligendi could not but be contrary to its nature, if it was to be signified at all. Dicibile therefore fits well with Anselm's rectitudo. Both concepts accord the intellect an active role in shaping perception and signification, allowing for interpretable compromises between the powers of the mind and reality, and between Platonist and Aristotelian principles.

Such demonstrations of how the unsignifiable was signified shaped theories of normal signification. Augustinians kept to the Platonist position held by Thierry of Chartres that normally word, understanding and thing were all related by similitude. But in the case of God, who could not be visualised, any word signifying him was not congruent with his reality (Henry of Ghent 73.3 [f272v L]). But Thomas Aquinas develops the Aristotelian view that while words are related to understanding as signs, understanding is related to object by similitude. His discussion of the relationship between natural things, intellect and artefacts applies to words and their meanings as to any artefact. A thing relates to the *intellectus speculativus* as cause to caused and measure to measured. The *intellectus practicus* relates to an artefact as cause to caused, therefore as mensura to mensuratum. An artefact is therefore 'true' to the extent that it meets the requirements of its art as envisaged by the artisan (Aquinas, PeriH. I.3 [16.133–135]).

Hence in the art of language, significations and words are 'true' insofar as there is demonstrable conformity between word, understanding and thing. This relationship between res extra animam, thing understood and signification, depends on balancing mensura with participatio. The res impresses its form on the intellect by participation, so that the form produced in the mind is the passive mensuratum which pertains to the res according to the modalities of perception and understanding. This mental form then acts as the mensura of the ratio significandi. Thus Aquinas's definition of dictio as interpretatio interioris apprehensionis operates within the triad of res, ratio intelligendi and ratio significandi which are materially the same (Aquinas, De anima 3.3). Whether deliberately or not, the triad of res, ratio intelligendi and ratio significandi is presented as a microcosm of the Platonist  $\pi$ 0  $\sigma$ 0  $\sigma$ 0  $\sigma$ 0  $\sigma$ 0  $\sigma$ 0  $\sigma$ 0 (the One, Intelligence, and Word), the ultimate model of participation. For just as Plato's Intelligence and Word

participate in the One, mental image and vox significativa participate in the res significata.

Even though their model of dictio assumes the traditional philosophical and theological ideas about similitude and participation, participatio does not appear in the summary treatment the modistae accord the dictio, and it receives scant mention in their discussion of pars, even though Simon Dacus (Domus 8.6–8) does argue that etymology is essential to the word. For the function of both word and etymology is to present the properties of the vox as similitudes between word and thing. The basic process model for the generation of the dictio came from De anima II.8. While accepting the reaction between Aristotle's possible and agent intellect as the basic mechanism through which the Augustinian and Boethian triads worked (Joannes Dacus 178–179), grammarians left speculation on res vel rationes essendi, intelligendi et significandi to logicians and theologians.

Ratio essendi is rare in application to language: among the modistae, it is found only in Michel de Marbais (Summa 17.47). Even though it was clear that understanding and signification imply a motus with active and passive aspects, Siger de Brabant is one of the few university grammarians to divide ratio intelligendi into active and passive (Thurot 1868:157). However Ebbesen's Elenchus commentary postulates active and passive rationes significandi. The only early modista to discuss this dichotomy is Digby 55, who opens his discussion of the identity and difference of the modi essendi, intelligendi et significandi by defining the rationes significandi in much the same terms as the anonymous commentators on the Elenchi:

Ratio autem significandi activa est ratio qua vox significat rem ipsam esse active. Quia enim vox ipsa per se et suam substantiam non sit significativa, oportet quod per aliud accidens sibi significativa efficiatur. Et hoc accidens non est aliud quam ratio significandi activa concessa voci ab imponente. Ratio autem significandi passiva non est aliud quam forma vel proprietas alicuius rei qua res intelligitur vel significatur passive. (Digby 55 f135r2)

Though the *dictio* did not directly concern the *modistae*, the scientific status they claimed for grammar depended on drawing attention to the recursiveness of its generation. As *vox*, *dictio* and *pars* were separately generated by one simple recursive process, *dictio* set the pattern for the *pars* in that the *ratio* which had arrived as an accidental form became a substantial form. For only in this way could they present the part of speech as an autonomous object worthy of scientific analysis.

<sup>&</sup>lt;sup>5</sup> Incerti auctores, 122.39 –42: "Duplex est ratio significandi — et modus significandi — scilicet activa quae est ratio concessa voci ab imponente qua formaliter vox est significativa; alia est passiva et est ratio mediante qua natura rei vel forma passive significatur."

#### 2.2. The Boethian Triad and the Pars

The proper operation of the *pars* was signifying the properties the mind assigned the significate: the *pars* made the *dictio* signify in a certain manner (*modus*). Thus unlike the *rationes* which are necessary, the modes at the root of the part of speech are contingent and subject to choice, because they rise out of accidents *in re*. Because *significare* includes *consignificare*, the *pars* exhibits the same interplay between *dicibile*, similitude and participation as does the *dictio*.

Modus essendi, modus intelligendi and modi significandi occur in the twelfth century as members of a coherent generative triad, without however implying that dictio and pars had separate existences:

Res autem, quae seipsam, prout est, intellectui subiicit, vera est; quae aliter, vana est falsa. Ergo a modo percipiendi (scilicet quo percipiuntur, aut percipiunt), convincitur veritas aut falsitas tam opinionum, quam rerum: Sermonum vero, a modo significandi. (John of Salisbury, *Metalogicus* IV.36 [207.29–208.4])

Modus essendi has its competitors in the writings of Abelard and the school of Gilbert of Poitiers. Abelard (Logica 25.29–32) opposes modus subsistendi to modus intelligendi. Modus subsistendi refers to permanence of existence, subsistere being second act appropriate to a substance. Modus existendi has a fruitful life in theology through the highly controverted principle that essence and existence are two different things: while being is absolute, existence signifies being according to some property. The persons of the Trinity have the same modus essendi, but owing to their different origins, different modi existendi (Richard of St Victor 182:18). Albertus Magnus (1 Sent. 1.23 B.2. resp. [I.585b]) puts it another way: the unity of the Trinity is due to its modus essendi, while the individuality and plurality of its three persons is due to their various modi existendi. Modus se habendi signifies the ways things behave and manifest their being, particularly through relation. Se habere is collocated with modus by Gilbert of Poitiers (De trin. 140.65–71) in relation to external accidents other than relatio. And by the thirteenth century modus se habendi is at the root of the relations predicated of Father and Son in the Trinity.<sup>6</sup>

Esse as a term is equivocal: it is the copula of a proposition by which something is predicated of something else, or the act of being by which something enjoys some sort of defining difference. Because modi significandi rest on the modus essendi in which refers to form in matter, they can be

 $<sup>^6</sup>$  Jean Quidort I Sent. 2.2 (34.36–38): "Alia distinctio est ibi secundum varium modum se habendi, quia unum habet se relative et aliud absolute, sicut Pater et Deus; quia Pater se habet relative, Deus vero absolute."

subdivided into substantial and accidental.<sup>7</sup> Of the four above terms only modus essendi is suitable as the ultimate mensura of understanding and signification. For it denotes actus primus, while existere, subsistere and se habere are actus secundus, which are all validated by modus essendi.

William of Conches had taught that when the intellect assigns meaning, it does not signify the *actuale* but the *intelligibile* (Galonnier 1987:357). At first only the referents of the declinable parts of speech were accorded *modus intelligendi*, as their referents could be imagined:

De imaginatione quae est unus modus intelligendi — quo scilicet res etiam suae proprietatis nota sed sine assensione percipitur — et de perfecto intellectu, qui et proprietate et assensione constituitur, tacet explanatio. (Gilbert of Poitiers, CEut. I.35 [249.89–90)

Modus intelligendi is autonomous in that it takes the thing perceived and signified as it will. Because the will directs the understanding towards the essence of the object, a conveniens modus intelligendi is the result of negotiations between mind and reality.<sup>8</sup> This term too had its competitors.

Abelard (Logica 308.31) picks up Boethius's discussions of the role played by various modus concipiendi in imposing parts of speech. A noun like cursus and a verb like currit, for example, signify the same thing by reason of various modi concipiendi. Cursus signifies running as an 'essence'. while *currit* signifies running as in adiacentia and as subject to time. John of Salisbury too uses modus percipiendi, and Albertus Magnus at times uses modus accipiendi. The most evocative term however, comes from Clarembald (De trin. 113 §16), who makes imposition participate in scientific thinking so that abstract nouns are derived from the modus essendi through a modus speculandi. With an eye to the accepted etymology from speculum (a mirror) — seeing something per speculum is seeing a cause through its effect, in quo eius similitudo relucet (Aquinas, STheol. 2a2æ 180.3 ad 2) — Clarembald's modus speculandi presents perception and analysis by the mind as a precondition of imposition. However as his term implies that the impositor establishes the adequacy of the word as signifier by rational analvsis of the similitude of thing and mental image, it would seem that he is taking speculari back to the stronger etymology of specula (the act of close observation and analysis).

A modus essendi manifests itself to the mind as a category, and some

 $<sup>^{7}</sup>$ Lambert of Auxerre 67: "Quintus modus essendi in est sicut forma in materia, et iste quintus subdividitur quia quaedam est forma substantialis, ut anima in corpore, alia est forma accidentalis, ut album homini."

 $<sup>^8</sup>$  Cf. Hamesse (1974.195 #268): "Intellectus non movet sine voluntate." (Cf. Averroes, De~an.~350.)

made it into a *dicibile* which could act as a predicate. Like the *dicibile* the *modus intelligendi* was the intermediary between known and knower:

Idea enim est similitudo rei cognitae, quae quamvis in Deo sit absolutum, tamen secundum modum intelligendi sit respectum medium inter cognoscens et cognitum. (Bonaventure,  $1\ Sent.\ 35.1.4$ )

Because the modi intelligendi in question functioned as forms of the intellect, they were balanced against a very rigorous view of truth. 10 However they were also subject to the needs and capacities of the intellect, and the necessary negotiations of the mind with reality radically shaped Clarembald's modus speculandi. The ghost of Anselm stands behind Aegidius Romanus's explanation of the mathematical convention that a line has no width. One begins with a sense impression of a 'natural line' whose modus intelligendi includes both the requisite dimension (quantum) and the physical shape (quale). But because our minds can separate the perceivable from the imaginable, we derive the theoretical modus intelligendi of a mathematical line by separating the quantum of a physical line from its quale, which we then ignore (Aegidius Romanus, 1 Sent. 1.2.1.3.2). Aquinas (Q.D. de Veritate 2.3 ad 7) re-expresses Stephen Langton's distinction between Deus and Deitas as a choice of modus intelligendi: in God abstract and concrete are the same, but the human mind fixes on a dicibile within its limitations but suitable to the thing signified in order to develop a fit modus intelligendi.

Given this sort of discussion elsewhere grammarians could hardly not agree that modi intelligendi had a certain principled independence from the modi essendi. One inevitably named God with a part of speech which raised the question of the propriety of signifying God, whose being was simple, by words signifying composition. Once reduced to a series of rules by Alain de Lille, the solutions to the problem were put on an Aristotelian footing by later commentators on 1 Sentences 22. Nouns were justified on the grounds that the substance signified was not the category of substance, but the significatum, and the quality was illud idem in quantum capabile est ab intellectu. For though God is not demonstrable to the senses, he is demonstrable to the intellect (Alexander of Hales, STheol. 1 §333 [I.493b]).

The problem of signifying God by verbs and participles is dealt with

<sup>9</sup> Albertus Magnus, Cat 154B: "Quod autem hic dicimus quod aequivoca dicuntur, et non dicimus quod aequivocum dicitur in singulari, ratio est quia hic intendimus de praedicabile sive de dicibili incomplexo secundum quod est ordinabile in genus vel commune univocum, vel per denominationem de uno praedicato."

<sup>&</sup>lt;sup>10</sup>Henry of Ghent, *STheol* 34.4 (f215v D): "Quae quidem notitia in intelligentia creata est forma eius inhaerens ei, dans ei esse tale quodam modo, quale habet res extra, ut per hoc sint idem quodam modo intelligens et intellectum, et eadem veritate vera."

in two ways. The mind cannot reason about something without visualising it in the present, past or future through 'co-understanding time'. <sup>11</sup> God can therefore be properly signified by the verb, because that is the only way the intellect can understand him, even though he does not fall under time and is not susceptible to motus (Alexander of Hales, STheol. 1 §333 [I.494a]). Albertus Magnus, however, adduces a distinctio in order to justify understanding God through time while minimising process. 'Person', while a necessary concept in Trinitarian theology, implies that Son and Holy Spirit are substances, which in its turn implies they had come into being by composition which implied motus, which does not exist in God. But while motus is easier to conceive, it is at the centre of succession and change, which cannot exist in God. On the other hand the actus by which God the Father engendered the Son, and by which the Holy Spirit proceeded from them, denotes both permanence and action:

Sed persona in divinis secundum modum intelligendi plus accedit ad rationem compositionis, quia significatur ut habens essentiam et plus etiam ad motum; licet enim in divinis non sit motus, est tamen in eis actus, quo una persona producitur ex altera. (Albertus Magnus, *De div. nom.* 45.63)

Cointelligere first appears in theology during the sixth century. In theology cointelligere is used to define doctrine through delineating relations between God and Man: the word, dominus, is said of God by reason of the relation which cointelligitur through the subjection of the creature to God (Aquinas, STheol. 3.35.5 resp.). The discussion of the two natures of Jesus Christ which follows points out that his status as son of God is 'counderstood' with his position as son of Mary, and this entails understanding the eternal together with the temporal. It was left to Roger Bacon to define the place of cointelligere as prior to consignificare. But Martinus Dacus was the only one of the early modistae to take the term up:

Ipse intellectus intelligit rem cointelligendo eius proprietates, et ips re sic intellecta dicitur res intellecta, concepta sive apprehensa, et eius proprietates quae prius dicebantur modi essendi rei extra dicuntur modi intelligendi rei intellectae. (Martinus Dacus 5.6-9)

It does not matter whether his gerund is read as temporal or instrumental: *intelligere* is not prior in time to *cointelligere*, as the nature of an essence is inferred through its properties, and a thing is presented to the mind through its accidents. However nowhere is *modus cointelligendi* found.

<sup>&</sup>lt;sup>11</sup> Aquinas, Contra Gentiles 2.96: "Componit autem aut dividit applicando intelligibilia prius abstracta ad res: et in hac applicatione necesse est cointelligi tempus."

<sup>&</sup>lt;sup>12</sup>Bacon, Grammar 32: "Grammaticus non considerat principaliter significata vel cointellecta per dictiones, sed ipsa consignificata."

Until this time, modus intelligendi is in the active voice, the corresponding passive being species intelligibilis. But John of Salisbury's modo percipiendi, scilicet quo percipiuntur aut percipiunt shows he is happy to exploit the active and passive resonances of the gerundive. A century later, the modus intelligendi of the object is explicitly distinguished from that proper to the mind, an interplay between active and passive in the modus intelligendi. Henry of Ghent presents God's modus intelligendi as always in act as it is identical with his essence. But in discussing created things their modus intelligendi is their potency to be understood, a passive potency to which the human intellect is in active potency.<sup>13</sup>

But because free will plays a role in the institution and interpretation of signs the *intellectus agens* could form *modi intelligendi* from the properties of the significate or not as it pleased. Though the *modistae* would have preferred a model with no loose ends, they adopted the theologian's balance between theory and reality. Parts of speech are the product of understanding and arbitrary representation. <sup>14</sup> But even so, things in act imprint their form on the mind, so that it is impossible to visualise mentally or to signify things *extra animam* in a manner completely inconsonant with their nature (Boethius Dacus 72.37–38). Neither *modus essendi* nor *modus intelligendi* were sufficient cause of the *modus significandi*; both of them came together at the behest of the impositor's will (Michel de Marbais, *Summa* 36.61–63).

The distinction between active and passive *modi intelligendi* begins to filter into grammar some time in the 1270s. Ps.Albertus is one who uses *modus intelligendi* in a passive rather than an active sense while not talking about *modi intelligendi active et passive*:

Et secundum quod proprietas percipitur ab intellectu, vocatur modus intelligendi, et secundum quod per vocem significatur, est modus significandi passivus. (Ps.Albertus 28. resp. propria)

Martinus Dacus (5.6–9) is similarly coy about a double modus intelligendi. His modus intelligendi rei intellectae cited above, suggests that he would prefer to read modi intelligendi as active. But his statement that the modi intelligendi rei intellectae are the modi essendi extra strongly suggests that

 $<sup>\</sup>overline{\ }^{13}$ Henry of Ghent,  $STheol.\ 40.12$  ad 1 (f256v V): "Unus [modus intelligendi] ad quem intellectus quantum est de se est in potentia tantum, et non in actu, nisi per agens quod est obiectum intelligibile, quod non est penitus idem sibi, nec semper est intellectum ei coniunctum in ratione moventis aut motivi: sed quandoque sic et quandoque non. Alius vero est modus intelligendi, secundum quod intellectus intelligentis semper est in actu intelligendi, et hoc per agens intelligibile penitus idem sibi, et ideo semper praesens ei in ratione moventis sive motivi."

<sup>&</sup>lt;sup>14</sup>Matheus Bononiensis Sol. ad 1: "Modi significandi, qui sunt in dictione, aeque fundantur supra modos intelligendi, qui sunt in anima, et eis correspondent."

in this context *modi intelligendi* is passive. Siger de Brabant, however, makes no bones about the issue:

Modus autem intelligendi activus est modus quo intellectus comprehendit modum essendi seu proprietatem ipsius rei. Modus autem intelligendi passivus est ipse modus essendi ab ipso intellectu apprehensus seu modus intelligendi relatus ad modum essendi. (Siger de Brabant, in Thurot 1868:157)

The dichotomy between modus significandi active and modus significandi passive is one of the most significant of the Aristotelian innovations proper to the 1270s: it converts the Boethian triad into a process by which word is derived from thing through exploiting the orthodox proportion between active and passive potencies. At this stage, terminology is fluid. Michel de Marbais, (Summa 16.10–20) prefers modi significandi active et passive dicti, in which the adverbs modify the participle, dictus. But Joannes Dacus, Boethius Dacus, and Digby 55 use modus significandi active et passive, in which the adverbs modify the gerund, significandi; and Digby 55 defines them through rationes consignificandi activa et passiva. 15

None of the speculative grammarians who exploit this distinction do more than hint at its philosophical precedents. Pinborg surmised that this model of signification was first put forward in about 1275 by Peter of Auvergne (Siger de Courtrai xxvi). His commentary on the *Perihermeneias* places modus significandi passive in the object and modus significandi active in the word (Ebbesen 1993:167). And certainly these adverbial terms match the usage of this first generation. However according to Ebbesen 1980:58–59, the model appears for the first time in earlier commentaries on the *Sophistici Elenchi*, which use the adjectival formulae familiar from the third-generation modistae:

Similiter duplex est modus significandi, quorum unus est activus ab imponente voci concessus, et est in voce ut in subiecto, quia ratio est haec qua mediante formaliter dictio consignificat proprietatem rei; alius est modus significandi passivus qua mediante passive rei proprietas significatur, et iste modus est in re. (*Incerti auctores*, 122.52–58)

But the two versions are not quite equivalent. In Peter of Auvergne's definition active and passive clearly modify significandi the first time they appear, so that it appears that active modes and passive modes are different. But in the modus significandi passive est in re of the next sentence one could argue that active and passive modify est, thus implying that there

<sup>&</sup>lt;sup>15</sup>Digby 55 f135 r2: "Ratio autem consignificandi activa est ratio qua formaliter vox dicitur consignificativa alicuius proprietatis circa rem significatam. Ratio autem consignificandi passiva non est aliud quam proprietas circa hanc passive designatam. Et haec ratio consignificandi dicitur modus significandi passive; ratio autem consignificandi activa dicitur modus significandi active."

is one modus significandi which has active and passive aspects. The *Incerti Auctores* use the unambiguous adjectival construction: their modus significandi activus is clearly a property of the dictio, by which it consignifies the properties of its referent as modi significandi passivus.

Conceptually these active and passive modes of signifying fit seamlessly into theological discussions of process, though the terms themselves are peculiar to grammar and dialectic. Theologians worked with two basic principles in exploiting the *relatio* between active and passive: things in act are in potency to being known and signified, and actives bring about a type of being in corresponding passives. Thierry of Chartres (192.25–27) saw this dichotomy in terms of Porphyry's proportion between categories in reality and in the word: because Latin-speakers can take significatio both passively and actively, significatio can mean either the significate or the act of signifying. The florilegia taught later generations a simpler version based on Aristotle, (Topica VI 139b 21–22): post-verbals of verbs denoting a process implied either active or passive entities, or active or passive voice according to context (Hamesse 1974. 328 #384). Thus in its passive sense creatio is the result of God's creative act, in its active sense it is the act itself. Sacramentum (a postverbal from sacrare) as an 'active noun' means a act signifying something sacred, as a 'passive noun' it is its effect on the worshipper (Hugh of Saint Cher, 4 Sent. Prologus).

Modus with a following gerund implies a relatio between act and result. In the phrase modus generandi, generandi can be the gerund of the verb used impersonally or of the transitive verb in the active or passive voice (Aquinas, 1 Sent. 7.2.1 resp.). In the Trinitarian context of this question if generandi is the active gerund, it means the potency by which the Father generated the Son. If it is the passive gerundive, it means the potency by which the Son was generated. Some contexts focus on the passive sense as the cause of the active: others present the passive as the effect of the active. The boundary between semantics and grammar is very thin: many nouns that are not post-verbals can be understood both actively and passively. Origo, which signifies ut via quaedam a re ad rem, likewise signifies the act of generating the Son and Holy Spirit, and in its passive sense, the via ad personam subsistentem (Aquinas, STheol. 1.40.2.resp.).

Modus significandi is a standard term in all the relevant sciences, and significare active and significare passive occur frequently. However modus significandi passive and modus significandi active are peculiar to grammar. As significare and significari are reciprocal voluntary processes depending on the proportion between the active and passive elements in word and thing (Incerti auctores 123.65–69), it follows quite simply that modus significandi

passive in the thing triggers modus significandi active in the speaker, and that brings a modus significandi passive into being in the minds of both speaker and hearer.

This first generation of modistae is testing the water. Modi significandi active et passive in Michel de Marbais are essentially Thomas of Erfurt's modi significandi activi et passivi. Joannes Dacus does not mention the pars, and takes modi significandi as features of the dictio. In debating whether it was in word, thing, or soul, he presents modus significandi as one thing with the double role as beginning and end of the process of signification. If taken as proprietas rei significatae per vocem, modus significandi is passively in the thing signified as in a subject (Joannes Dacus 236.14–27). But if considered quantum ad esse quod habet in significatione and not according to the essence of the property signified, modus significandi is in the soul as in its efficient cause, and actively in the word as in a sign:

Cum dicitur primo, quod modus significandi consistit in significatione, verum est passive, quia consignificatur per vocem, et active est in significante. Et tu dicis quod modus significandi est in eo, cuius est significare, dicendum, quod est in eo sicut in signo, non autem est in eo sicut in subiecto. (Joannes Dacus 237.1-4)

Later he uses more up-to-date terminology: modi significandi passive are the modi essendi or the properties consignified by the word, and the modi significandi active the rationes consignificandi of the word by which it is referred to its consignificata (Joannes Dacus 382.20). Modus significandi is not the sign of modus essendi. A sign cannot be the same as its significate, and modus significandi and modus essendi were identical. If modus intelligendi is taken in a passive sense, the identity in essence between modus significandi passivus, modus intelligendi and modus essendi can be easily defended (Ps.Albertus 28 resp. propria).

At this stage Martinus Dacus seems to be the only *modista* who introduces the modes of signifying through *participatio*. Unlike the *Porretani* he does not use it to relate *modus significandi* to *modus essendi*. Accidental modes of signifying participate in the essential on principle that an inferior participates in its superior. His 'immediate' modes of signifying participate as much as possible in the nature of an essential mode of signifying and 'mediate' modes participate somewhat less (Martinus Dacus 20.3–12).

Like so many important medieval technical terms, *modus* was formed by a tradition that valued the absence of rigid definition. In most contexts it means simply a way of doing something, a wide meaning that does not square with the care the *modistae* took in specifying the proportion between thing, mind and word. It had originally meant a land or commodity measure,

and by the classical period it had developed the senses of a limit and the proper way of doing something. <sup>16</sup> It is this second meaning that is proper to the *modus significandi* of the thirteenth-century theologian, philosopher and grammarian. Thus Alexander of Hales reads *modus* as *dispositio rei in esse terminatae* referring it back to an efficient cause designed to bring about a being bounded and measured (Alexander of Hales, *STheol.* 2.1 §33 [III.49a]). It is only a short step from this to characterise *modus* itself as a measure which impels the will towards virtue:

Modus enim dicit mensuram, mensura autem dicitur esse voluntatis in eo quod conformat voluntatem suam voluntati divinae. (Alexander of Hales,  $STheol.\ 2.1\ \S 33\ [III.50b])$ 

Like virtue, language is controlled by the will, so that *modus significandi* is not just a way of signifying, but the appropriate way of representing a *significatio secundaria*. This enabled the *modistae* to think of the accidents of a word as necessary entities and build the science of grammar around them.

## 2.3. Models of the Double Triad

As early as the *Porretani* Arab influence had fused Augustine's science of signs and Boethius's science of signification into the process model of imposition just discussed: the theory of first imposition drew on Avicenna's principle that a nature or essence can be viewed absolutely, as realised in singulars, and as present in the intellect. This seems to have influenced second imposition through Anselm's *rectitudo* and his 'necessary reasons'. Some *modistae* argued on these grounds that *modi significandi*, *intelligendi* et essendi were fundamentally the same thing, while differing accidentally.

Boethius (De Trin. 4.45) had illustrated that a predicate was not identical with its subject by pointing out that a person is the same person whether he be in his room, in choir, or in the market place. Martinus Dacus (6.19) uses this as an analogy to illustrate that the modes of being, understanding and signifying differ solely the category of ubi, in re, in anima and in voce (Martinus Dacus 6.19). Other modistae disagreed: Boethius Dacus (81.25–31) argues that the modi significandi, modi intelligendi, and modi essendi cannot be exactly the same, because then the presence of one of them would entail the presence of the others. They cohere through similitude, and similitude implies difference. However these modes are the same realiter while differing in cause and principle. Modes of understanding and signifying are derived from the modus essendi through the types of participation listed by Aquinas in his commentary on the Colossians 1.4; they

 $<sup>\</sup>overline{^{16}}$  Cf. Cicero, Orator xxii.73: "In omnibus rebus videndum est quatenus: etsi suus cuique modus est, tamen magis offendit nimium quam parum."

come into being by acts of cognition, and they accept some of their essential properties from the nature of the *modus essendi* through the acts of understanding and representation entailed in imposition. By virtue of the recursive thirteenth-century model of signification and consignification, the *mensura* model of lexical signification Aquinas outlines in *Perihermeneias* I.3 is equally applicable to grammatical meaning: *dictio* becomes *pars* on Cicero's principle, *Ut incipiendi ratio fuerit, ita modus desinendi (De officiis* I.135). Consequently where a single triad of *rationes* fitted Aquinas's needs, most *modistae* hypothesised a double triad of *rationes* and *modi*:

	dictio	pars
mensura	res (ratio essendi)	modus essendi
mensuratus 1 (mensura 2) mensuratus 2	$\downarrow \downarrow$ r. intelligendi $\downarrow \downarrow$ r. significandi	m. intelligendi [m. cointelligendi] m. significandi (r. consignificandi)

Figure 2.1: Double Triad (after Aquinas, PeriH. I.3)

There is every indication that most modistae were satisfied with the parallelism of this triad as a working model. However, this linear schema of the movement of the soul which produced speech does not account for the fact that modus essendi and modus significandi passive, like ratio essendi and ratio significandi passiva, were materially the same and formally different. The normal explanation is probably that the form was the principle of knowing and being known. Voluntary movements of the soul were circular by reason of the interplay between perception, imagination and appetite (Aristotle, De an. III.x 433b), which would suggest that in defining the vox as percussio aeris ab anima cum imaginatione significandi, one see it as generated through an imagination controlled by appetite. And as a passive can act as both principium and terminus of an active, one could argue that the recursive imposition of accidental forms resulting in the dictio and pars is actually cyclical.

As far as is known at present, the one *modista* to imply cyclical imposition was Joannes Dacus. In strict doctrine imposition could take place only before one speaks; but he claims that imposition can take place before, while and after a word is uttered, which is consonant with his view that sound has two generations, in the mouth and in the ear. But the *vox signi*-

ficativa has being in the soul as in an efficient cause, because it is generated per appetitum et ymaginationem (Joannes Dacus 179.28–180.7).

Appetitus seems to have been coined by Cicero as a gloss of the Greek,  $\dot{o}$  pu $\dot{\eta}$ . He saw it as the impulse to actively seek and chose something attractive or useful. The Middle Ages crossed Cicero with Aristotle, defining appetitus as an inclination towards something perceived to be good, and incorporated it into a theory of purposeful animal movement. The Aristotle source seems to have been Michael Scotus's Latin Averroes (Commentarium magnum 524.43), which defines appetitus as motus prompted by the desirable thing sought at the behest of the practical intellect, which in its turn is under the control of the will (Aquinas, De an. 3.ix [245.85]).

The medieval student found the prerequisites for such voluntary movement curtly listed in the florilegia:

Tria requiruntur ad motum animalis, scilicet movens, motum et organum motus.

Duplex est movens, scilicet immovens mobile quod est appetibile, et movens motum quod est potentia appetiva in homine. Motum autem est organum animalis, puta ipsum cor. (Hamesse 1974.188 # #171 & 172)

The movens is a res extra animam which the speculative intellect judges to be a good worth the effort of seeking (Aquinas, De an. 3.9 [246.125]). In its new role as appetibile, the res intellecta then stirs the appetite, which then impels the organism to seek it by appropriate action. Michael Scotus calls this process which begins and ends in the thing sought, a motus gyrativus. This term is further elaborated by Albertus Magnus (De an. 3.4.7–8 [237.13–37]). The act of walking begins and ends in the legs, which are bodily organs moved by the appetite to go from one place to another: each leg moves away from a point of rest which is principium of the movement by expulsio, and by retractio then comes back to the same point of rest, the finis of walking.

This sequence of outward and inward movements was described as a cyclical movement:

Movens utique movens est organice, ubi principium et finis idem est; et hic quidem finis, illud vero principium est. Unde aliud quidem quiescit, aliud vero movetur; ratione autem altera sunt, magnitudine vero inseparabilia. Omnia enim depulsu et attractu movetur; ex quo oportet sicut in circulo manere aliquid et hinc incipere motum. Omnino ergo, sicut dictum, in quantum appetitivum est animal. Sic ipsius motivum est; motivum autem non sine phantasia est, phantasia autem omnis aut rationalis est aut sensibilis. (Aristotle, *De an.* 3.x. 433b 22–29)

 $<sup>^{17}\</sup>mathrm{Cicero},\ De\ natura\ deorum\ 2.48.122:$  "Dedit autem eadem natura beluis et sensum et appetitum, ut altero conatum haberent ad naturales pastus capessendos, altero secernerent pestifera a salutaribus."

Aristotle had also shown that matter desires form and form matter (*Phys.* I.ix 192a20). Many medievals read this potency of matter to further act as appetite for its proper end placed in it by God. Form is activated in matter by the appetites inherent in both of them. But though appetite to change is rooted in the essential principles of things (Alexander of Hales, *STheol.* 2.1 §482 [III.666b]), matter has appetite only if it is moved by a mover (Albertus Magnus, *Phys.* 1.3.17 [74.10–19]).

Not all human motus is local motion. Aquinas's model of truth in judgement and perception in Q.D. de Veritate (1.2) starts from the premise that the mind is directed by the appetitus rationalis to seek good. The fulfilment of any operation is in its terminus. In coming to know something, the res extra animam moves intellect, mental image moves appetite, appetite then seeks to know the res extra animam by making the mind participate in its form (Aquinas, Q.D. de Veritate 1.2. resp [9.62–70]). The next step is signification through language. Aquinas likens the speaker to a skilled artificer who sets in train a perfect motus, an operation with both goal and result (Aquinas, Q.D. de Veritate 4.1 ad 1 [120.228–232]). The speaker's purpose, i.e. the good he seeks, is to signify what is in his mind; he works from quoddam exemplar exterioris verbi as his pattern; and he finally produces the verbum vocis (Q.D. de Veritate 4.1 resp. [120.195–202]).

Though Aguinas's later account in the *Perihermeneias* is straight Aristotle (I.3 [14.22–28]), his discussion in the Q.D. de Veritate is heavily influenced by Augustine. Though he is more closely concerned with the meaning of the verbum vocis, Aquinas's phrase, imago vocis, would suggest that his exemplar exterioris verbi is made up of both dicibile and species verbi. He brings these two together in the excogitatio formae artificiati, following on the artificer's *intentio finis*. We impose names according to our knowledge of things: the thing in re occasions the inner word (verbum interius): this in its turn is the cause of the spoken word (verbum exterius). Though the spoken word takes priority in our experience, its final cause is to make the inner word known, and its efficient cause is the will to make the inner word known. Words can be imposed because vox is subject to an 'appetite' for realisation through the intellect, a not untoward reading of Aristotle's percussio aeris inspirati cum imagine significandi. Through its appetite for meaning the vox seeks out a ratio significandi as accidental form. The resulting dictio has its appetite for communicative function satisfied when it is actualised as a part of speech by the modus significandi.

Joannes Dacus's language suggests he may have been aware of these discussions of language and truth. Through communication one seeks *maior* perfectio et sufficientia vitae (Joannes Dacus 178.26), a social good that

indicates he is not discussing a formal model of imposition, but a linguistics of parole. His brief unacknowledged reference to Augustine's Confessions I.6 on how a child learns how to speak is not helpful. He begins by reminding his reader that the confused animal imagination and appetite result in a limited repertoire of sounds characteristic of its species, and not amenable to thought (Joannes Dacus 180.11–17). But a vox has meaning only when it rises out of a person's cognitive powers and terminates in an appetite to express what he thinks:

Nam cum apud animam fit praecogitatio vocis, qua talem rem oporteat significare, tunc *postmodum* illi voci applicatur intentio significabilis sicut finis eius, quod est ad finem, et sic etiam bene fit vox significativa, cum profertur. (Joannes Dacus 180.21–34) [my italics])

Intentio significabilis may be an echo of Albertus Magnus (De anima 2.3.4 [102.31–36]). If so, it implies that the word expresses more that the concept of the thing. From this point on his argumentation follows Aquinas. Because signifying constitutes understanding, the vox significativa, which signifies ad placitum, comes about by imagination and deliberation of the will, which separates human speech from animal communication. The intellectual appetite then, which follows the concept in order to express it, is a cognitive power which seeks after (appetit) and controls the power of the senses on which the concept is based (Joannes Dacus 182.6–26).

Hypothesising a cyclical model for imposition raises questions about Rosier's modus significandi ut. From a rigorist standpoint, modus significandi ut is usus, and it would seem, not of concern. The wide-ranging controversy over the significate and its figurative layers in theology and dialectic hardly touched the modistae, to whom modus significandi ut being a largely semantic concept was hardly relevant. However Roger Bacon may also have been one of Joannes Dacus' authorities. His barrel stave hanging outside the inn can be taken to signify through a modus significandi ut. It is a clear example of a sign whose intentio rei demands translatio: it is not merely a sign for wine, but a sign of wine for sale (Bacon, De signis §132–133 [125]). This issue swings on the material and formal relations between thing, mode of understanding and mode of signifying. Priscian had said that a word signified mentis conceptum. If conceptum is taken as the accusative of *conceptus* (which seems the obvious reading of the Latin), a word signifies a mental concept. But Bacon (Compendium theologiae §61 [70.11-13]) reads it as a neuter singular participle, and glosses it as res concepta a mente. It is only to be expected that he take a strict view of imposition: a word imposed on something outside the mind signifies only that thing (Bacon, Compendium theologiae §59 [70.1–5]).

However in actual use words are equivocal, and Bacon is quite willing to solve his problem by exploiting the sense of *conceptus* he rejects as well as that he accepts. He takes up Aristotle's discussion of the ambiguity of *domus* in *Metaph*. 7.7 1032b12–14. Circumstances determined whether the word, *domus*, is imposed on the form of the house (as represented in the plan) or on the *aggregatum* (the completed house) (Bacon, *De signis* §126 [123]). Because word usage is filtered through intent and purpose of communication, it is far from unusual to impose a word on the form of an object outside the mind, and then to reimpose it elsewhere as one wills that is to 'renew imposition' for efficiency in communication and understanding:

Hoc dico facta una impositione a principali significato, sed si renovetur impositio et fiat nova secundario significato, vox tunc significabit ad placitum secundum significatum. (Bacon, *De signis* §133 [125])

Speakers renew imposition according to *intentiones significabiles* different from those governing the expert impositor's primary imposition. The renewed imposition therefore exists alongside the first, as in the builder's mind when he is looking at his completed house, or in the mind of the drinker looking for the barrel-stave hanging above a medieval street.

Bacon moves easily from the examples of the barrel-stave and the house to translatio, the technique from which come the figurae hidden under the literal meaning. The reader becomes Aristotle's house builder who reads the plan and uses it to penetrate to the meaning of the figurae in the text: he links a word's primary meaning with its secondary by inferences (Bacon, Compendium theologiae §66–67 [74.5–25]). Just as the nature of a thing hides under its accidents, so veritas figurata, which is often the main message of Scripture, hides under similitudes and figures (Aquinas, STheol. 2a2æ 8.1 resp.). It is not difficult to see figurae in Scripture as examples of renewal of imposition, that is as resulting from an appetite prompting the imagination of the speaker to distil a complex of dicibilia from the original ratio significandi passiva. Understandably Aquinas defines figurae through Augustine's dicibile:

Ad aliquid significandum spiritualiter, inducuntur sensibiles figurae in Sacra Scriptura secundum Dionysium. Et ille erit sensus litteralis: sicut in lectionibus metaphoricis, non illud quod significatur per verba, sed quod loquens per verba vult significare. (Aquinas,  $In\ Isaiam\ 6\ [47.40])$ 

Any follower of Thierry of Chartres would argue that these figurative meanings were in God's mind waiting to be discovered under the primary meaning of the words. The development of these *modi significandi ut* under the aegis of the *modi intelligendi* is subsequent to the imposition of the *modus significandi sic* by which the *pars* was created. This would suggest that double

imposition too could be regarded as a *renovatio impositionis*: like *translatio*, the *pars* set the *vox significativa* on the way to perfection of sense.

It would seem that for some theologians imposition had three phases: imposition of ratio significandi; actualisation of the dictio as pars through the imposition of modus significandi sic; and renewal of imposition through Rosier's modus significandi ut. This view of imposition as a productive cycle from vox to pars through various levels of modus significandi has a certain affinity with the alchemist's ouroboros, the snake which continually renews and perfects its being, efficacy and power by eating its own tail:

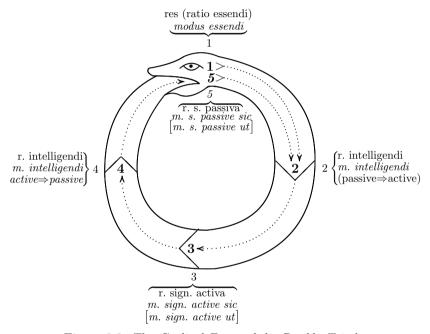


Figure 2.2: The Cyclical Form of the Double Triad

The contention by Joannes Dacus (94.9–16) that sound is generated in both speaker and hearer would suggest that the *ouroboros* is also a diagram of communication: both speaker and hearer create mental images of words and their meanings by progressing from *rationes et modi significandi activi* to *rationes et modi passivi*. Yet, though intellection is clearly regarded as a cyclical process, nobody says directly that imposition is cyclical. The evidence for cyclical imposition from Albertus Magnus and Aquinas is persuasive, but the only *modista* to show any trace of it is Joannes Dacus. Until further evidence then, this model then must remain a conjecture.

## 2.4. Parts of Speech: Number and Order

Number and order were of crucial importance in medieval sciences. Albertus Magnus (*De natura boni* I.2 [1.43–52]) defines number through Boethius, *Consolatio philosophiae* 3 metrum 9:

Tu numeris elementa ligas, ut frigora flammis, Arida conveniant liquidis, ne purior ignis Evolet aut mersas deducant pondere terras.

Number regulated the proportions according to which God constituted the elements of the world, made things from them, and set the balance of nature. But as one numbered elements according to the object of one's science, dialectic had not transformed grammar without leaving inconvenient baggage behind. Dialecticians traditionally compared noun and verb to the timbers of a ship, because subject and predicate were necessary elements in a proposition. The other types of word were like the nails and caulking that fastened them together, and were not proper parts of speech:

Adverbia autem et pronomina et participia et coniunctiones et id genus cetera, quae grammatici numerant, non magis partes orationis quam navium aplustria et hominum pilos aut certe in universa compage orationis vice clavorum et picis et glutinis deputanda. (Apuleius (ascr.), *Liber Peri ermeneias* [in Aquinas, *PeriH*. 7fn])

This disagreement between grammarian and dialectician defined the objects of the two sciences: the dialectician examined the truth-values inherent in predication and the grammarian the resources for expressing ideas.

The two sciences found themselves defining their positions from much the same authorities. Abelard reports that some of his contemporaries interpreted Priscian (2.15 [GL II 54.7]) as saying that prepositions and conjunctions  $per\ se$  had undefined significations, and were therefore not parts of speech. Others argued that, if they were not parts of speech with meaning, they could not be replaced by nouns, as quare for cur. In his opinion they are parts of speech in the same sense that consonants are speech-sounds (Priscian 11.7 [GL I 552.1–9]): as consonants can only be articulated with vowels, so the indeclinables have definite meaning only in the company of declinables (Abelard,  $Logica\ 337.11-40$ ). It is at about this time that the indeclinables are said to signify  $quasi\ circumstantias\ rei\ through\ the\ four\ extrinsic categories (Clarembald, <math>De\ trin.\ 175\ \S 91$ ).

There is a flavour of Abelard about Petrus Helias's discussion of this question. He quotes Priscian that according to dialecticians only noun and verb signify, and prepositions and conjunctions consignify. For their purposes pronoun and adverb are included under the noun, and participles under the verb. Noun and verb are said to be parts of speech *absolute*, the

rest non absolute (Petrus Helias, Summa 183.64–74). However he measures the whole argument against two principles: that any part of speech is a word indicating a concept of the mind, and that the consignificare is a sub-species of significare. Therefore the indeclinables are parts of speech.

Though there is some hint of what is to come in the late twelfth century, there is no evidence of integration of the indeclinables into a formalised model of part of speech until Jordanus, Kilwardby and others. Jordanus (52) was still defending grammar against dialectic. Discussing prepositions he subjects Apuleius's nails and muscles quote to a typically medieval distinctio. Joining devices can be of different material to what they join together, or of the same material. A ship's nails and caulking are obviously not made of wood, but sinews (nerva) and muscles are made of the same material as other parts of the body. Likewise prepositions are of the same matter as the declinable parts of speech they integrate into the sentence; therefore they, and indeed any of the indeclinables, are parts of speech.

By the mid-thirteenth century forward-looking dialecticians and the modistae agreed over the place of the indeclinables in language. After quoting Alfarabi that any signifier signifies substance or accident of a substance, Nicholas of Paris (2.10–11) quotes Priscian (11.7 [GL III:552.1–4]) that indeclinables being dictiones necessarily signify mental concepts. Like Aristotle's transparent objects which are perceptible only by virtue of the colour of something else (De an. II.7 418b 4-9), the 'confused' significata of the indeclinables can only be clarified through their relatio with the declinables. They define (terminant, a grammarian's word) and diversify their signification within the possibilities of the word or structure they are annexed to (Nicholas of Paris 3.2–12). Nicholas puts forward Priscian's variety of consignificatio, the less sophisticated consignificatio cum, as their formal principle. As significare included consignificare, the way lay open to assign formal modes of signifying to the indeclinables, which probably happened about 1240. But the grammatical tradition was split: Donatus had recognised eight parts of speech, but as Priscian took the interjection as a type of adverb, he recognised only seven. The *modistae* eventually accepted the interjection as autonomous, and with some qualms over taking sides with Donatus against Priscian, argued for eight parts of speech.

Number entails order, order is system, and system demands a model. Besides, order was inherent in modes of signifying because they were natural phenomena. <sup>18</sup> Among the many principles of order only three appear in

 $<sup>^{18}</sup>$  Cf. Albertus Magnus, Phys.~8.1.8~(563.22): "Si autem dicatur, quod nulla est ratio ordinibus in talibus, hoc non erit opus naturae."

discussions of grammar: origin, 'nobility' and final cause. There was some sense, probably suggested by flexional morphology, that the other parts of speech were derived from noun and verb (cf.Vincent de Beauvais 93E). This was quickly scotched. As each part of speech was independently imposed, no one of them was prior to another in order of natural origin or time.

However the ancient terminology of the parts of speech had suggested an ordo nobilitatis according to category. The mark of substance was modus essendi in se, modus essendi in alio was proper to absolute accidents, and modus essendi vel se habendi ad aliud to relations (Jean Quidort Sent. I.26.1). An absolute accident is a reality distinct from the substance on which its being depends, while a modal accident is not an entity, but rather a state of being of its subject. Though the modistae raised the question of a comprehensive model for the parts of speech only obliquely, in practice they operated with a framework built on Jean Quidort's three modi essendi:

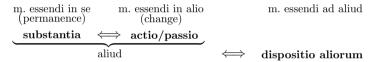


Figure 2.3: Framework of System of Partes

An essence enjoying a modus essendi in se is by definition stable. On the model of the Greek  $\tilde{\epsilon} \approx \rho \nu$ , aliud had become a term meaning 'of distinct identity', 'of independent existence': it therefore denotes substance:

Alius semper significat diversitatem substantiae: sed substantia dicitur dupliciter, quandoque enim sumitur pro essentia, sicut est in usu Latinorum, quandoque pro supposito essentiae vel pro re naturae primi praedicamenti, quae dicitur hypostasis apud Graecos. (Aquinas, Sent. 1.9.1.1 ad 1)

Hence the triple role of aliud in the above schema: as Aquinas's 'thing of the nature of the first category' aliud is an individual per se stans, the source or goal of an act, which can only be signified by a noun or pronoun. But aliud also pertains to the diverse substances of nominal and verbal parts of speech and renders them capable of being disposed in various ways: est etiam 'aliud esse' idem quod 'differre speciem'" (Abelard, Logica 68.5). The absolute accidents of actio and passio are alia in their own right because they have a certain permanence and stability. But they are in alio in the sense that they need a subject in which to inhere: agere et pati proprium est substantiae (Priscian 17.14 [GL III 116.25]). Thus modus essendi in alio is not appropriate for an adjective, because an adjective shares the substance of the noun, while differing in quality. These two modi essendi and their modi significandi were later summed up as modus rei.

Modus essendi ad aliud, which disposed substance and act to particular relations and interactions, became modus dispositionis rei: the indeclinables dispose the declinable parts of speech to more complete syntactic relations. <sup>19</sup> Aliud is the equivalent of habitus, and it was habitus and its contraries, actus and fieri, which the declinables signified in Boethius's instrumental sense; the indeclinables consignifying in Priscian's associative sense set certain relations between them. Consequently the declinables preceded the indeclinables secundum rationem et perfectionem.

In practice the *ordo nobilitatis* never abstracted from syntactic function: thirteenth-century discussion of *ordo* often gives final cause priority:

Ordo vero est dispositio rei prout refertur ad finem; unde in relatione ad causam finalem designatur. (Alexander of Hales,  $STheol.\ 2.1\ \S 33\ [III.49a]$ 

Priscian (17.12–13 [GL III 116.7]) had argued that noun comes before verb because the verb signifies acting and being acted on, and the noun signifies the substance acting and being acted on. Pronoun naturally follows noun, as its sentential function is the same as that of the noun, and its res dictionis lacks quality, participle follows verb as it signifies act informing its significate. During the first half of the twelfth century these functional norms became the *causae inventionis* of the declinable parts of speech. By reason of their doubtful status, this dignity was denied the indeclinables. The causae inventionis of noun and verb were interdependent: in every perfect utterance something is said about something else (William of Conches in Fredborg 1981 30.6–8; Cf. Grammatica Porr. 27). In other words one part of speech was invented to serve as subjectum or suppositum and another as praedicatum or appositum. 20 The substance of the noun is its significate, and the substance of the verb is what is said about the noun subject (Grammatica Porr. 30), or the composition signified by the verb (Logica Porr. 9.78–80). It would seem that Jean de Wolve (BN MS Lat 15037) followed this reasoning later in the twelfth century: the noun signifies substantia absoluta, the pronoun substantia ad aliam relata, the verb inhaerentia cum inclinatione and the participle inhaerentia sine inclinatione. And of the indeclinables. the adverb determinat terminum, the conjunction determinatur and the preposition determinat aut determinatur (Brousseau-Beuermann 1987:96).

Though there was almost unanimity about the order of the declinables, there was little about that of the indeclinables. The *modus essendi* of an indeclinable being a mental operation, it was the same as its *modus intel*-

<sup>&</sup>lt;sup>19</sup> Cf. Aquinas STheol. 3.9.3.ad 2: "Dispositio se habet ad perfectionem dupliciter, uno modo sicut via ducens ad perfectionem, alio modo sicut effectus a perfectione procedens." <sup>20</sup> Logica Porr. I.7 (5.35): "Nomen vero inventum est ad significandum id de quo fit sermo, id est subiectum; verbum ad id quod de subiecto dicitur, id est praedicatum."

ligendi. Its modus significandi then becomes the relation between words in context. Indeed it was often argued that indeclinables in signifying syntactic and logical relations also established them. There was a strong temptation to order them according to the rank of the declinable they were constructed with. Donatus had put the adverb first, treating it immediately after the verb, because it functioned as the adiectivum verbi. But Petrus Helias (Summa 765:2–5) pleads this very reason to rank the adverb below the preposition: the preposition was invented to precede certain cases of the noun, which was nobler than the verb. Because it links substance to act, Jordanus, Ps.Grosseteste and Simon Dacus also rank the preposition first among the indeclinables, a lead the modistae do not take up.

However ordo nobilitatis and ordo finalis entered into conflict. In the face of Priscian's clear ranking of noun before verb on philosophical grounds, William of Conches had honoured the verb as king of the parts of speech, because it governed the noun. This functionalist view of things was taken up by Petrus Helias as essential in the theory of governance. A number of other twelfth-century authorities muddy the waters by noting that the verb governs, the pronoun is always governed, and the noun can either govern or be governed (Brousseau-Beuermann 1987: 96).

Boethius Dacus (97.60–63) criticised Priscian roundly for accepting an order based on the categories, because they lie outside the grammarian's competence. Though he would prefer to rank the verb first on the grounds that it is necessary for construction (Boethius 96.32–35), in the end he bows to the weight of ancient authority, and accepts that the noun is prior. Other *modistae*, for example Joannes Dacus and Michel de Marbais, recognise different principles for different types of order:

Et intellige, quod illud, quod dictum est, scilicet quod nomen vel habens vim nominis prius est verbo, hoc est verum via generationis: ordine autem perfectionis verbum est prius nomine vel habente vim nominis, et hoc totum verum est per comparationem ad orationem perfectam, quae finis est partium orationis. Nomen igitur est prima pars orationis eo modo, quo dictum est. (Joannes Dacus 263.4–90)

He provides two typologies of the parts of speech (Joannes Dacus 254.16–256.26). His formal ranking *ex parte modorum significandi* lists the parts of speech according to the order of categories. His *modi rei* are *modus habitus vel essentiae* proper to noun and pronoun, and *modus fieri vel esse* proper to

 $<sup>\</sup>overline{^{21}}$ Petrus Helias, Summa 1050.98–101: "Cum enim dico, 'currit', actum quidem per verbum significo, sed actus non potest esse nisi alicui insit. Ideoque non potest illius verbi significatio determinari nisi ostendatur de quo dicitur. Assumit ergo sibi hoc verbum nominativum ad determinandum suam significationem cum dico 'Socrates currit'. Ideoque verbum regit nominativum."

verb and participle. The indeclinables signify by modi dispositionis rei: the preposition disposes something existing in habitu; adverb and interjection dispose things existing in fieri, and the conjunction disposes both. Michel de Marbais amplifies this argument by measuring the thirteenth century against Priscian, and Priscian against Aristotle:

Per substantiam vero [Priscianus dicit] modus significandi substantiae vel permanentis qui est modus significandi essentialis generalis nominis. Iste enim modus significandi agere et pati, per quem intelligit modum fluxus et fieri verbi, aliquid proprium est substantiae nominis propter quam intelligit modum substantiae vel permanentis. Et sic rationabiliter sequitur ipsum. Et per consequens, verbum sequitur nomen, cum ordo in causis vel principoiis ordinem arguit in effectibus et causatis. (Michel de Marbais, *Tractatus* f81r1)

However if the parts of speech are classed *secundum finem*, that is according to their function in the perfect utterance, noun and pronoun are the subject of the sentence through their *modus habitus*, and the verb is the predicate through its *modus fieri distantis*. The participle disposes the subject, in order to remove any confusion or unclarity in it. Likewise the adverb, or if there is affect the interjection, disposes the verbal predicate to clear up any unclarity it may have. Conjunction and preposition are ordered by what they join: the conjunction joins two things that normally cannot be joined, and the preposition disposes the noun in relation to the verb.

To be counted as sufficiens, a medieval scientific explanation had to observe the Golden Mean: it tried to strike the balance between otiose detail and inadequate specification. Hence the importance accorded numerus and ordo. Number, as we have seen, the separate identity and distinctiveness of the things numbered. While there was a strong kinship between modus and mensura, classical usage had established ordo as a natural concomitant of modus, particularly in relation to moral and social behaviour. Medieval usage, however, bears the marks of Augustine, who describes the fundamental structure of Creation by one of his favourite verses in Scripture: Sed omnia in mensura, in numero et in pondere posuisti (Wisdom 11.21). Near the end of his life he proposes modus, species and ordo as the bona generalia of things, both spiritual and corporeal, made by God (De natura boni 3 [PL 42.553]). Both triads also encompass the activities of the virtuous mind as it is drawn to wisdom (Augustine, De genesi ad litteram 4.4.8). The way-station between them is De Genesi ad litteram 4.3.7:

Secundum id vero quod mensura omni rei modum praefigit, et numerus omni rei speciem praebet, et pondus omnem rem ad quietem et stabilitatem trahit,

 $<sup>^{22}</sup>$  Cf. Cicero,  $De\ officiis$  I.57: "His enim rebus, quae tractantur in vita, modum quendam adhibentes et ordinem, honestatem et decus conservabimus

ille primitus et veraciter et et singulariter ista est, qui terminat et format omnia, et ordinat omnia.

The thirteenth century formalised Augustine's parallelism between the two triads: modus and mensura denote the proper limits of a thing, species and numerus its individual form, and ordo and pondus its natural inclination towards its proper place or function (Albertus Magnus, De natura boni I.2 [1.35–56]). But if regarded as habitudines ad bonum, modus pertains to efficient cause, species to formal, and ordo to final (Alexander of Hales, STheol. 2.1 §33 [III.49ab]). Thus as a mark of virtue, modus is the measure by which a human will pertains to the divine will, species the conformity of the will to its 'natural rectitude', and ordo the direction of the will towards a purpose (Alexander of Hales, STheol. 2.1 §33 [III.50a]).

Language too is a natural activity rising from intellection under the aegis of the will, and grammar was only one of the three sciences devoted to it. The independence and integrity of grammar depended on its object, which was to analyse how meaningful utterances were properly constructed, and to show how one expresses mental concepts through congruent speech (Boethius Dacus 31.82-85). But its status as a science demanded it give some semblance of respecting ancient tradition, and that while drawing techniques and concepts from other sciences, it contribute to their development. The coherence of the basic generative model sketched in these two chapters was guaranteed by two things. First, the processes by which dictio was derived from vox, and pars from dictio had been fully described in other sciences; second, the model was simple and recursive. Each stage, vox, dictio and pars orationis, evolves from that before it through adding a new formal principle to its matter (Figure 1.6 above). The nature of these new forms and their communicative purpose were perceived through their propria operatio.

Like their colleagues in other sciences who investigated the good things of nature, the *modistae* built the operational framework for the individual partes orationis on the habitudines of modus, species and ordo. But it was their extensive use of modus, that struck their colleagues and rivals, and which prompted the derision of their nickname. Because the declinables signify the res vocis through the modus essendi in se and modus essendi in alio, they have Boethius's consignificatio as their task. The discretion this type of consignificatio offers the intellect can only be exercised through explicit general and specific modes of signification as material and formal principles. Modus significandi is then the measure by which the word conforms to the proper modus essendi in its referent, and the modus intelligendi selected by the will; and its semantic and syntactic roles place it in genere

causae efficientis (Joannes Dacus 224.9). Priscian's consignificatio is not a measure in the same sense, because it signifies the external accident of relation through the modus essendi ad aliud. However it too is in genere causae efficientis, assigning the indeclinables a single essential mode of signifying which is largely a material principle, with the context perfecting, perhaps even supplying, their formal principle.

Species in the sense of the formal identity is a commonplace in medieval science. In the parts of speech, however it is an accident defined through the modalities of second imposition. Of the two types of ordo the modistae recognise, they take more interest in ordo finalis, because it is this which controls not only communicative function but to some extent the modalities of imposition itself. Figure 2.4 completes the process of imposition given in Figure 1.6 by relating the individual parts of speech to their propriae operationes and their material and formal principles:

Principium	Principium	Partes
materiale	formale	oration is
1. Consignificare (sensu Boethii) m. generalis m. speciales P. declinabiles		
m. generalis	m. speciales	P. declinabiles
modus habitus	determinati	$\Rightarrow$ nomen
	determinabilis	$\Rightarrow$ pronomen
modus fluxus	de alio dicibilis	$\Rightarrow  ext{verbum}$
inoual name	informantis	$\Rightarrow$ participium
2. Consignificare		
modus essentialis		P. indeclinabiles
fmodus fluxus in alio		$\Rightarrow$ adverbium
m. affectus disp. actum		$\Rightarrow$ interiectio
modus retorquentis substantiam ad actum		$\Rightarrow$ praepositio
modus unientis vel coniungentis		$\Rightarrow$ coniunctio
	materiale  m. generalis  modus habitus  modus fluxus  modus ess  modus fluxus  modus retor substantia modus unie	materiale formale  m. generalis m. speciales  modus habitus {     determinati determinabilis formantis      modus fluxus {         lalio dicibilis informantis          modus essentialis          modus fluxus in alio fun. affectus disp. actum modus retorquentis substantiam ad actum modus unientis

Figure 2.4: Imposition of the Partes

# CHAPTER THREE NOUN AND PRONOUN

These next two chapters deal with 'Boethius's consignificatio' as the categorial measure through which a dictio becomes a declinable part of speech. Consignificare in this instrumental sense picks up Porphyry's secunda positio through two ideas current since the Porretani. Taken functionally, consignificare means to hint at a meaning secondary to the principle signification (Ammonius 92.86); taken formally, diversity in consignification is a consequence of diverse ways of understanding the same thing (Aquinas, Quodlibeta 4.2.9 resp.). Substance and movement being contrary measures, the theory of noun and verb developed in tandem, dragging the pronoun and the participle with them.

## 3.1. Essential modes of signifying

Twelfth-century grammarians recognised two interlinked causae inventionis for the noun: it signified both Priscian's substantia et qualitas, and something spoken about in a proposition. The Tractatus glosarum quotes a Magister Albericus (the logician, Alberic of Paris?) on Priscian's intended meaning: substantiam vocat materiale esse, qualitatem formale, quod nomen habet significare (Fredborg 1977:41.7–9). Then comes a Magister Gulielmus, probably William of Conches, who gave the name, substantia, to what could be perceived by the senses, while qualitas was a mental image derived from collectio ipsa proprietatum proper to an individual or a group (Fredborg 1977:42.8-43.2). With an eye to the everyday behaviour of nouns William of Conches writes that a noun signified substances, entities in substances, figments or turns of speech (modi loquendi) (Fredborg 1981:30.19–21). Elsewhere he adds, perhaps with Augustine's dicibile in mind, that the specific function of nouns is to signify the *intelligibile* rather than the *actuale* (Galonnier 1987:357). Certain nouns which have no referent, like omnis, aliquid and nihil substituted modi loquendi for substance and quality (Fredborg 1988:185). The *Tractatus* also quotes a Magister Thedricus (!) (probably Thierry of Chartres) who says that substantia et qualitas is the suppositum spoken about as either proper to one individual or common to several.

The common variant, nomen significat substantiam cum qualitate, appears about this time with an explanation:

Proprium est nominis substantiam cum qualitate significare tantum secundum hoc quod est nomen, id est secundum suam inventionem. (Glosulae in Hunt 1941:213)

The gloss, Promisimus, defines significare substantiam cum qualitate, idest supposita locutioni sive significat rem per se existentem sive non, and then adds that the substance in question can be a thing existing per se, the suppositum of an utterance, or the act of subsisting (de Rijk 1967 II.1.259). Alexander of Hales confirms that cum is not a synonym of et but introduces an ablative of manner or instrument dependent on the verb, significare:

Licet nomen significet substantiam cum qualitate, nihilominus contingit simplex nomine significari. Non enim substantia et qualitas, cum dicitur 'nomen significet substantiam etc.', distinguuntur sicut in praedicamentis, sed substantia dicitur ipsum significatum nominis, qualitas illud idem in quantum capabile est ab intellectu.\(^1\) (Alexander of Hales,  $Summa\ 1\ \S 333\ [I.493b]$ )

This argumentation is closely allied to Albertus Magnus (*PeriH*. 1.3.2) on consignification: *qualitas* is the *esse formale* underlying the manner in which the noun fulfils the purpose of its 'invention'.

But Anselm's discussion in *De grammatico* (162.3–14) of whether *grammaticus* signified both substance and quality or just quality had highlighted the problems of taking the term, *substantia*, literally. Galonnier (1987:358) traces the genesis of the problem to the clash between Priscian's view and a strict reading of Aristotle, *Categories* V 3b 15-18, who takes 'man' and 'animal' to be qualities of substance, rather than substances. Hence the opinion of Thierry of Chartres: being in the category of substance means *esse praedicabile solum in quid*. But being in the category of *qualitas* is *esse praedicabile in eo quod quale est* (Thierry, *De trin*. 97.71–73). *Quale* as an essential quality is directly related to the nature of the thing:

Uno enim et primo modo dicitur 'quale', quod est in definitione substantiae et quidditatis rei. Et hoc est quale quid, quod vocatur qualitas essentialis, quae est differentia substantialiter rem constituens. (Albertus Magnus Metaph. 5.3.6 [264.53–57])

Given that many important scholastics were French-speakers, it is not impossible that *quale* was influenced by Old French, *quel*, which was becoming the equivalent of *qui* by adding 'who' and 'which' to 'what sort of'.<sup>2</sup>

Setting off from a radical variant of Priscian, *substantia vel qualitas*, Abelard (*Logica* 115.30–116.7) discusses three views of nominal signification. He begins with the most unlikely, which has some kinship with Anselm's

<sup>&</sup>lt;sup>1</sup>Cf. Cicero, De finibus III.8.29: "Beate vivere, honeste, id est cum virtute vivere."

<sup>&</sup>lt;sup>2</sup> Cf. *Livre des Rois*, I Samuel 17.18 (12th century): "Enquer cument tes freres le facent e ad *quels* il seient en cumpaigne en l'ost." (Et fratres tuos visitabis, si recte agant; et cum *quibus* ordinati sunt, disce.)

grammarian. If album is taken to signify substance per nominationem (as neuter adjectives can do) and *homo* determines the quality of a substance. therefore album signifies substance and homo quality, which contradicts the common sense that nouns signify substance and quality, and adjectives quality only. His second alternative is categorising words according to their type of predication, though Priscian (2.22 [GL II 57:3-4]) tended towards the view that nouns were principally imposed through qualitas (Abelard, Logica 116.1-3). Thus nouns predicate substances, and adjectives inherence. If the principle signification is a mensura through which word is related to category, then both albedo and album predicate whiteness in the same way. But if the secondary signification is the mensura, then the principal signification is filtered through the significatio intellectus. Albedo predicates whiteness as a free-standing essence, album as a quality inhering in an essence. It follows then that one should interpret esse in praedicamento by looking at the meaning of words rather than the nature of things, for it is by making things into words that we class them in the ten categories (ibid. 116.35– 117.7). From this sort of reasoning came the conclusion that significatio intellectus and modus significandi are the same thing.

Vital as the dichotomy between *substantia* and *qualitas* was, it was its development by Gilbert of Poitiers and his followers that was pivotal in the speculative theories of the noun. Imposition depended on three things: id cui imponitur, id quod est and id quo est. Id quod est is the neoplatonist term for the object itself, the subsistens in quo est subsistentia; the forms or species residing in the id quod est were neoplatonist id quo est from which something can be 'caught by the mind' (CEut. 4.48 [297.57–60]). In Gilbert's terms the total form of an individual, its collecta proprietas, is made up of general, special, differential, substantial and accidental quo ests. Thus nouns are not imposed because of the things themselves, but because of the *impositor*'s understanding of them (*Grammatica Porr.* 27). The *Porretani* were, it seems, the first to claim that the distinction between substance and quality was borrowed from physics: substantia nominis supports (substat) the sentence, just as substance in re supports accidents and function; the qualitas nominis is drawn from the properties by which the different natures of things are perceived (*ibid*. 28).

At its simplest, the noun signifies a real substance (aliud) with real qualities in order that it be visualised by the mind. This provides a model by which the Porretan grammarians develop the principle that nouns signify the intelligibile rather than the actuale. Nouns being imposed on things from their properties, they signify res cui imponitur and the property ex qua imponitur at one and the same time (Grammatica Porr. 28). But 'properties'

could be created by the mind as *quo ests* through which to signify things that could not be perceived. As its substance *aliquid* signifies both what is and what is imagined but is not. *Nihil*, on the other hand, signifies *non-esse* as its substance. They both signify the same *qualitas*: which is a vague possibility of existence or non-existence (Gilbert of Poitiers, *CEut*. 249:1–250:15).

Petrus Helias is a valuable witness for the opinions held early in the twelfth century, even if he tends to be sceptical about them. He begins by considering those like the *Porretani* who resolve the perceived conflict between Priscian and Aristotle by postulating that for Aristotle substance was the primary genus of things with independent existence. The noun therefore, signifies a substantial form subsisting in a matter, and also the combination (aggregatum) of matter and form. *Homo*, then, is the substance which is a man and humanitas is the form; albedo is the substance of whiteness, and albedinitas (sic) is the form (Petrus Helias, Summa 190.12–21). This dichotomy he identifies with the id quod est and id quo est of the Porretani: homo signifies id quod est, the thing which is a man, and id quo est, the humanitas by which one is a man.

His next target is those who like William of Conches accept that a noun signifies substances (homo), or what is in a substance (albedo), or chimeras (hircocervus), or ways of speaking about things, like omnis or nullus. But words that signify substance also signify qualities, whether proper to an individual (e.g. Boethius's Platonitas) or common to a class (e.g. humanitas) (Petrus Helias, Summa 191.38–58). This is unsatisfactory because a noun signifying a substance (like homo) signifies a universal but names a particular; nouns signifying what is in a substance (e.g. albus), signify the quality in adiacentia, but name the substance in which they inhere; nouns signifying figments of the imagination signify neither substance nor quality, but both signify and name the particular creation of the imagination.

His third option is that the noun signifies substantia cum qualitate, not that all nouns have the power of signifying substances. He adopts the Stoic distinction between being and relative being. Though every noun signifies substance and quality, not every noun will signify a substance because a noun can signify either something that is a substance or something through the 'mode of substance'. (Petrus Helias, Summa 196.36–39). Modo substantiae significare means using words with cases to signify a being as either unique or as a member of a class, as independent of time (Petrus Helias, Summa 195.13–15). He later subsumes the syntactic causa inventionis he inherited from William of Conches in his modus significandi:

Omne nomen dicitur significare modo substantiae, id est significat rem ut de ea aliquid dicitur et sine tempore. (Petrus Helias, Summa~861.95)

The first part of this definition comes from Priscian (17.14 [GL III 116.25]), and sine tempore from Aristotle Perihermeneias. 3 16a20. Then comes an unfindable reference to Boethius's commentary on the Perihermeneias: Omne nomen aut significat substantiam aut tamquam substantiam.

God had long been a test-case demonstrating the creativity of the human mind in the face of a difficult reality. His being was so simple that he was not a substance, and did not have accidental qualities: yet he was signified by a noun or the equivalent. Sum qui sum (Exodus 3.13) was an appropriate name, because God gave it to himself secundum essentiam.<sup>3</sup> Likewise when used of God, the adjective, iustus, denotes an essential quality not an accident (Thierry of Chartres, De trin. 199.50–51). Though God's quod est and quo est are identical, Gilbert of Poitiers found himself coming to terms with him as if these two parametres were separate, and arguing that this was due to a human modus intelligendi, not a modus essendi.

From the beginning the pronoun gave the impression that it was a part of speech referring to something real through a species mentalis created by slimming mental images down to the lowest common denominator. Donatus and Priscian agreed that the pronoun stood in for the noun and signified person. Though Priscian had said that pronouns replace proper nouns, the twelfth century explains away the observable fact that pronouns are used in the place of common nouns by saying that although a pronoun refers to a common noun, it is not used in its place (Petrus Helias, Summa 626.2–3). Signifying substance being sufficient qualification for the vicarius nominis (Grammatica Porr. 32), the pronoun shares the noun's function of signifying a subiectus terminus of act or predication. But by reason of its lack of quality it cannot be a predicate (Logica Porr. §I.9 [5.57–58]).

The twelfth-century reading of Donatus's phrase, pronomen tantundem paene significat (Donatus 379.23) is illustrated by Abelard, (Logica 221.4–6): Pronomen nulla ex vi sua formam determinat, sed meram substantiam significat. Mera substantia is obviously a common term, which Abelard immediately classes as secondary signification, not primary. Another common formulation is substantia sine qualitate, quam antiqui substantiam meram nominant (Petrus Helias, Summa 622.31). Petrus finds both parts of this phrase an embarrassment. He avoids mera substantia altogether, and points out that substantia sine qualitate is the materia primordialis of creation, which the pronoun clearly does not signify. The substantia sine qualitate

<sup>&</sup>lt;sup>3</sup> William of Lucca, 188: "Dicit ergo Sanctus Dionysius quod omnis divinitatis nominatio dicitur de Deo absolute, quia ipsa nominatione nihil aliud [dicitur], sed absolute Deus intelligitur. Vel omnis divinitatis nominatio dicitur de Deo absolute, id est secundum substantiam et non secundum accidens."

or substantia exuta a proprietate signified by the pronoun is a mental construct of substance sine respectu proprietatis (Petrus Helias, Summa 917.3) or sine respectu qualitatis (Petrus Helias, Tolson 31). Substantia mera does not figure in the Porretani either, who use much the same terms as Petrus Helias. Some later writers, Jean de Wolve for instance, have the pronoun signify substantia absoluta (Brousseau-Beuermann 1987:96).

In the wake of twelfth-century argument the central issue to the speculative grammarian was no longer what noun and pronoun signify, but how:

Ad hoc enim ut nomen dicatur dici secundum substantiam duo concernunt, scilicet ut significet substantiam vel circumstantium, et modum significandi substantialem habeat, id est substantive significet. (Alain de Lille, Regulae theologiae XXIII)

While the *Porretani* had cast no doubt on the relationship between *substantia* and *qualitas*, they left a sense that the operative *modus significandi* of the noun is *modus qualitatis* to which the pronoun is in potency:

Dicendum quod est nomen nominans et nomen nominabile, id est ipsa qualitas. Nomen nominabile intelligitur in pronomine ex vi demonstrationis, ut dixit superius, et non nomen nominans. (Jordanus 55)

It was standard doctrine that words are imposed on things by reason of the quality which made them known, so that nominal and verbal parts of speech were often contrasted through the *modus qualitatis* proper to the noun (cf. Innocent V, 1 Sent. 18.2.1. resp. [145a]). By abstracting from time the noun can refer to something existing at any time at all (Hugh of St Cher, 3 Sent. 5 [186.472]). With an eye to the verbum mentis Bacon (Compendium theologiae §99 [90.35]) notes that a noun signifying essence signifies it as present in practice (in esse actuali), a type of demonstratio.

Most early thirteenth-century terminological experiments focus on the permanence which substance must have if act is to come out of it. As time and motion were divisible, substance is marked by a modus indivisibilis which places the noun outside time and enables noun and pronoun to act as subject or complement of a verb as the terminus of its motus (Bacon, Grammar 148). Noun and pronoun, therefore, signify per modum fixi (Bacon, Grammar 53) or per modum fixi et per se stantis (Magister Jordanus 72), or per modum quietis,<sup>4</sup> all of them characteristics of habitus, the first species of qualitas, what Simon of Tournai calls substantialis proprietas.

Modus habitus was in competition with modus substantiae by the

 $<sup>^4</sup>$ Bonaventure, 1 Sent. 22.1.1 [I.391b]: "Ad illud quod obiicitur quod nomen significat substantiam et qualitatem, dicendum quod substantia et qualitas non accipiuntur proprie sed communiter, prout substantia dicitur quod cognoscitur, qualitas quo cognoscitur, et hoc per modum quietis."

1250s. It seems to have been the *Porretani* who introduced *habitus* into the discussion of the noun:

Cum autem sint duo genera rerum quibus nomina imponuntur, scilicet substantiae et earum proprietates, facta sunt similiter duo genera nominum, ut alia sint concretiva, quae scilicet imponuntur substantiis ex *habitu* earum, alia abstractiva, quae in proprietatibus. (*Grammatica Porr.* 29)

Its effect on grammar was sharpened by the riddle proposed by Peter Lombard (I Sententiae 18) in relation to James 1.17:<sup>5</sup> is donum or datum the more suitable word to refer to the Holy Spirit? Peter Lombard himself argues from St Augustine that donum is the more fitting. For being a noun, it states that the gift of the Spirit is permanent. But datum being a participle, is tied to time and cannot fittingly refer to something which proceeded from the Father and the Son in eternity.

Thirteenth-century commentators on this passage differentiate donum from datum by contrasting the habitus of nouns with the actus of verbs. Donum is the more fitting word for the gift of divine quality because in signifying through *habitus*, it presents its referent as permanent, stable and resistant to change (difficile mobilis), all pre-eminent attributes of the Holy Spirit. Datum is less fitting because it signifies through actus, so that its referent is bounded by time.<sup>6</sup> Habitus also disposes its substance to act within its potencies, and is the principle by which something is known. Thus where the twelfth century had argued that *iustus* was a noun signifying God's essence, the thirteenth read it as a noun signifying a habitus foregrounding God's habitudo ad actum (e.g. William of Auxerre, Summa VIII r2) and related it to the definition of habitus in the florilegia. Habitus est secundum quem habens ipsum potest agere quando vult (Hamesse 1972:190 #190). Thus Hugh of St Cher (3 Sent. 38) distinguishes between nouns which connote God's effect on creation in habitu, like iustus, misericors, and verbal nouns and verbs like miserator, iustificans, miseretur which connote effect in actu.

In a revealing experiment that had little outcome, Alexander of Hales links the eternity of God with his *habitus* through the Ciceronian term, *otium* (leisure), which had been adopted by translators of Averroes. Until the beginning of the Book of Genesis God had enjoyed a truly Roman *otium*,

 $<sup>^5</sup>$  "Omne datum optimum et omne donum perfectum desursum est, descendens a Patre luminum, apud quem non est transmutatio, nec vicissitudinis obumbratio."

<sup>&</sup>lt;sup>6</sup>Bonaventure, 1 Sent. 18.1.4 resp. (I.328b): "Hoc modo donum et datum aequivalent; differunt tamen, quia datum dicit communicationem in actu, sed donum in habitu. Et ita concedendum est, quod donum proprie dicitur in divinis de Spiritu Sancto"

<sup>&</sup>lt;sup>7</sup> Aquinas 2 Sent. 24.1.1.c: "Habitus secundum proprietatem sui nominis significat qualitatem quandam, quae est principium actus, informantem et perficientem potentiam."

in that his leisure left him ready to act in his proper capacity at the proper time. Thus in creating the world he was exiens ab otio in actum (Alexander of Hales, Summa I §28 [1.46a]). Otium is the characteristic of substantia habens aliquid in habitu, quando educit illud ad actum (Glosa admirantes f93 in Thurot 307): the sophisma, O magister, from MS BN lat.16135 implies that otium is the characteristic of a suppositum (Rosier 1988:78). It would seem then that those who insisted that the noun significat substantiam cum qualitate played a part in the rise of modus habitus: for their habitus disposed both substance and noun to their proper being and action.

Modus habitus had begun drifting into grammar as a substitute for modus substantiae at the time of Roger Bacon. Having noun and pronoun signify in habitu et quiete (Ps.Kilwardby 134) was an obvious legacy of the commentaries on the Sentences. Inevitably modus substantiae, modus habitus, modus quietis and modus permanentiae are synonymous (Rosier 1993:130 fn.l), the most technical (secretior) term of these three being modus permanentis (Matheus Bononiensis, 130b). Modus habitus may have suggested the idea that qualitas is an essential property underlying the accidents of quality and number, because nouns have aptitudo ad multa vel ad unum, which is a type of habitus (Matheus Bononiensis, 131b).

Because the pronoun signifies mere substance, it is of infinite reference. God being a simple being, he was substantia mera, so that, according to Alain de Lille's rules of theology, a noun naming him 'fell from its proper form', and 'became' a pronoun. It was usual by now to follow the Porretani in reading the lack of qualitas in the pronoun as a potency, not a mere privation. Sacramental theology depended on treating substantia mera as substantia demonstrabilis (Alexander of Hales, Summa 1 §333 [I.492b]). Significare materiam sine qualitate pertains to the modus significandi not to the significate (Roger Bacon, Grammar 5), a principle reflected in privatio qualitatis in Simon Dacus (Domus 47.4). Ps.Kilwardby (206) picks up Petrus Helias by defining per modum substantiae merae as signifying in the manner of prima materia which is capable of supporting all forms, so that pronouns can signify any suppositum dicibile per formas sive qualitates nominum (Peterhouse MS 191 f84r1). In short noun and pronoun differ by signifying substance informata vel determinata qualitate aut non (Ps.Kilwardby, 206).

It was this theoretical package with its mixed grammatical, philosophical and theological origins that was accepted by the *modistae*. It was not unusual to take one's cue from Aristotle (*Metaph*. 8.3 1043a29–31) and class the noun, as indeed any *dictio*, as an *aggregatum* of matter and form. And in this way, the noun being an *aggregatum* of *vox* and *modus significandi* matched the *aggregatum* of matter and form it signified (Boethius

Dacus 94.52–56). Noun and pronoun signify substantia a qua actus potest egredi, because they signify substance through a habitus supporting the actio and passio of the verb (cf. Ps.Albertus 72:arg. 4): they do not signify res praedicamentales (Joannes Dacus 273.24). Modus habitus et quietis was already standard as the essential or material mode of signifying of noun and pronoun. Neither modus essentiae, favoured by Joannes Dacus, nor modus fixi (Ps.Albertus 128.resp.), nor Bacon's modus indivisibilis, which is mentioned by Matheus and discussed at some length by theologians, are frequent. William of Conches's dictum that the noun signified the intelligibile lived on vigorously: abstractions, privations and imaginary beings were denoted by nouns through a habitus that the mind could apprehend.

Qualitas substantialis comes about in the noun per differentiam substantiae, so that qualitas is a determinate principle of being or understanding (Joannes Dacus 285.9–21). Thus the modus qualitatis determinate commutes easily with modus determinate apprehensionis as the formal mode of the noun in all the *modistae*. Vincentius Heremitus (14) is one of the few to be satisfied with Petrus Helias's negative modus sine qualitate for the pronoun. Michel de Marbais (Summa 60.65-71) and MS Clm 19868 argue that modus indeterminati can be understood either at face value (positive). or privatively. Michel reads the term as privative: the pronoun deliberately lays aside a determinate meaning. While the material component of the pronoun's special significate is ens indeterminatum, its formal component is habile sive habilitas ab actu determinari mediante demonstratione vel relatione (Michel de Marbais, Summa 68.30–35). This leads him to prefer modus determinabilis to modus indeterminati as the formal principle differentiating the pronoun from the noun. Clm 19868 (f166v) however, notes that the pronoun is determinabilis per ens positum et terminatum ut aliquid aliud, and then interestingly differs from 'beatus Thomas' (Aquinas?), who in his Modi significandi (!) defines the pronoun as the part of speech significans per modum habitus et quietis et per modum indeterminatae qualitatis.

## 3.2. Accidental modes of Signifying

Grammar, philosophy and theology approached the accidental modes with different aims in view. For theology it was vital to examine how noun and pronoun functioned through their accidental modes, and to exploit the repercussions on meaning, its expression and exegesis. Philosophers examined how the noun in particular efficiently designated an idea. To grammarians, the modistae in particular, modi significandi were akin to mensurae, and therefore modi essendi and modi intelligendi had to be found for them to complete the chain of generation and to dispose the substance

of the vox significativa to its functions. It was not unusual to distinguish between accidents gratia vocis, gratia significationis and gratia utriusque (Ps.Kilwardby 125), but the modistae tried to find modi essendi for all of them, using tools developed in other disciplines.

## 3.2.1. Qualitas: Property or Accident?

Though qualitas was the category through which the noun marked its referent as a member of a class or as an individual (Hunt 1941.212n), its status was ambiguous from the beginning. Priscian had not listed it among the accidents of noun and pronoun, while Donatus had assigned it to the noun, and accorded pronouns qualitas finita as in the personal pronouns, or qualitas infinita, that is with reference defined only in context, thus laying the ground for later disputes. There was in consequence considerable doubt among twelfth and thirteenth-century authorities about whether quality was an accident or not. The definition of qualitas in the florilegia gave room for both essential and accidental uses: Qualitas est secundum quam quales esse dicimur (Hamesse 1974.304 #31). When homo is used to signify man in general it signifies essential quality, a quality that many participate in; when it signifies an individual it signifies accidental quality proper to one person (Petrus Hispanus, Summulae 132.19). Was this another reason why modus habitus was competing with modus substantiae?

The adjective too came under *qualitas*, and Martinus Dacus (27.6) had his own opinion on where it fitted in the system of the noun:

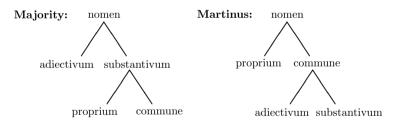


Figure 3.1: Two Views of Qualitas

The gloss *Promisimus* places proper, common and abstract nouns on a cline: the proper noun, *Socrates*, both *nominat* and *appellat* (calls to mind) the person signified, and does not specify quality; the common noun, *homo*, *nominat* human substance, but *appellat* any man at all; and the abstract noun, *humanitas*, signifies a quality only without calling any particular man to mind. In short, the noun made a determination of quality about their substance (*Glossa Promisimus* [de Rijk:II.i.258]). This receives extremely

summary mention in Petrus Helias, who does not admit *qualitas* as an accident of noun or pronoun. He has the noun signify substance *in natura communi vel propria*: if that substance is unique, it is signified by a *nomen proprium*, if not by a *nomen appellativum* (Petrus Helias, *Summa* 194.99–3).

The Porretani assigned the noun the task of manifesting (demonstrare) the effects of qualitas. The common noun demonstrates that objects participating in a common quality are alike in at least one respect, while a proper noun signals that its referent is quite distinct from anything else (Grammatica Porr. 33): the causa inventionis of the proper noun is to signify hoc aliquid, which does not have a plural, that of the common, to signify quale aliquid, which does (Logica Porr. I.11 [6.73–75]). The basic principle comes out of Gilbert's application of the Platonist quo est to Christology. A man has subsistentia specialis which though the same in every man, expresses itself through the singleness of individuals (Gilbert of Poitiers, CEut. 2.24). Vir is a common noun, because any man participates in the nature shared by all male human beings. On the other hand any person has his unique collecta proprietas which can only be signified by a proper name.

Because qualitas propria is incommunicabilis (cannot be shared), it distinguished one individual from another. Thus Plato is distinguished by propria qualitas et individua, by which he is seen to be different from anybody else, and which gives rise to a proper name (Simon of Tournai, Sent. 61.24–26). These are the terms of the constant play between nomen (part of speech) and nomen (name) in twelfth-century grammar, theology and logic. At a purely grammatical level names were arbitrary: significare pertains to signification and nominare or appellare to reference (Fredborg 1988.183). Adjectives, particularly when they are the head of a phrase, name the substances in which are the accidents they signify. Thus the word albus principally signifies whiteness as the accident inhering in a substance; secondarily it signifies the subject of whiteness and names it (de Rijk 1967:II.i.259). For the author of the Glosulae, a noun like homo signifies the special substance and quality of a man, but names an individual. William of Conches agrees, and also points out that homo can also name a specific form, (homo est species quaedam), and can name itself (homo est nomen).

At the other extreme of the continuum between Plato and Aristotle was Thierry of Chartres and his *nomina essentiant res* (Thierry of Chartres, *De trin.* 170.§53), a principle drawn from the popular belief that names

 $<sup>^8</sup>$  Gilbert of Poitiers CEut. 4.57: "Nomen quippe ipsum quod est 'Christus' unum quiddam significat. i.e. ipsum qui dicitur 'Christus', et ex multis collectam proprietatem qua dicitur 'Christus'. Et ex hoc intelligitur ex singularitate huius vocabuli, 'Christus'."

match the power of their owners. According to the glosses, *Ecce nomen Domini venit de longinquo*, ardens furor eius, et gravis ad portandum (Isaiah 30.27), God's name is God's active presence, because his deeds are so striking that they can only be commemorated by special names.<sup>9</sup> On the less mystical principle of operatio arguit formam these names were different ways of signifying his nature (Aquinas, *Q.D. de potentia* 8.3 ad 14).

In an exegesis of *in nomine Patris, et Filii et Spiritus Sancti*, Bonaventure justifies the singular, *nomine*, from its medieval etymology, *noscere*:

Ad illud quod obicitur quod deberet dici 'in nominibus', dicendum quod 'nomen' dicitur tripliciter: uno modo, vox imposita ad significandum aliquem, ut Petrus. Alio modo 'nomen' dicitur 'notitia', ut cum dicitur 'Deus in nomine tuo salvum me fac' [Ps.53 (54)], quia sic esset vox tantum, iam non esset salus muto. Tertio modo nomen dicitur notitia voce expressa, ut in Psalmo, 'Notus in Iudaea Deus, in Israel magnum nomen eius' [Ps. 75(76)]. Ille enim dicitur magni nominis, cuius nominis fama percrebuit. (Bonaventure, 4 Sent. 3.1.1.2 ad 3 [IV.67b])

He accords a proper name three functions. His first function is simple naming; his second implies that God's name is his active presence; and the third signifies the believer's knowledge and experience of God's works.

But the ghost of Thierry of Chartres can sometimes be sensed when thirteenth-century theologians discuss Biblical name-giving. According to Albertus Magnus on Isaiah 7.14, Ecce virgo concipiet et pariet filium. Et vocabitur nomen eius Emmanuel, 'Emmanuel', which Matthew 1.23 glosses as Nobiscum Deus, is a signum per propriam nominationem. In such signs, name and nature are indissolubly linked, so that Christ is both God and Man, that is he participates in both divine and human natures (Postilla in Isaiam 111.83). This reasoning also applies to human names. Aquinas, (Super Matthaeum 16.18) explains that when Christ renamed Simon bar Jonah as Petrus, 10 he gave him the name and the power that went with it. The ratio nominis is Christ's pun on petra, which refers to the parable of a man who built his house on rock (Matthew 7.24).

Ps.Kilwardby (123–124) attempted to resolve the disagreement between Donatus and Priscian over qualitas by distinguishing between qualitas originis, the accidental species of the noun, and qualitas significationis which pertains to its substance. He argues that Donatus was concerned with the quality of origin. If interpreted materialiter it gives rise to proper and common nouns; if formaliter to primitive and derivative species. Kilwardby

<sup>&</sup>lt;sup>9</sup> Cf. Fishacre, Sent. f24 r1: "Cetera autem nomina significant agnominationes debitas ab operibus, et ideo multa sunt. Haec autem significant substantiam Dei."

 $<sup>^{10}</sup>$  Matthew 16.18: "You are Peter, the Rock; and on this rock I will build my church, and the powers of death shall never conquer it."

postulates that qualitas is a modus significandi which depends on a modus intelligendi qualitatem proprie et communiter and the requisite modus essendi. But having given a satisfactory explanation for Donatus's argument, he thinks that Priscian put forward the better hypothesis. Simon Dacus (Domus 23–25) argues in the same way: qualitas rises out of an imposition which differentiates between the unique and the non-unique and creates a terminus discretus which designates the singularity of the thing signified, or a terminus communis which designates a universal or a thing belonging to a class. But Ps.Grosseteste (36.23) takes certainty of reference to be a mark of the proper noun so that accidental qualitas is modus significandi, qui significat certitudinaliter aut cum haesitatione.

Matheus Bononiensis (132a) condemns Grosseteste's opinion that an accidental qualitas communis rises out of a modus indeterminati resulting from hesitation or doubt about the quality of the significate, while the accidental qualitas propria is consequent on certainty about the modus determinati of the significate. In his view certitude or lack of it about the status of the significate is always an essential quality of the noun. His own opinion is that qualitas propria et communis are essential modes when the nouns in question are in disjunction, but accidental modes in terms not in disjunction (Matheus Bononiensis 132b).

Such ideas did not make much headway among the early modistae. The theory that qualitas essentialis was aptitudo ad multa vel unum, while qualitas accidentalis was the realisation of their potency, actualitas ad multa vel unum, is very close to the position of Petrus Hispanus. This opinion Matheus Bononiensis (131b) rejects on the grounds that in this case every common noun would signify a multitude of suppositions. It was common doctrine among grammarians that aptitude could not be opposed to actuality because of the properties of the term in construction are the same as those it receives from imposition.

In the main this first generation takes qualitas as a modus essentialis: Michel de Marbais and MS Clm 19868 seem to be the only ones to unequivocally follow Donatus and accept that the noun does have qualitas accidentalis. MS Clm 19868 (f152r) distinguishes three types of accidental qualitas: it can signify its res as a real accident of a real substance, it can signify the accidens intentionis by which a noun is either proper or com-

<sup>&</sup>lt;sup>11</sup> Petrus Hispanus, Summulae logicales 132.19: "Homo, secundum quod dicit qualitatem aptam natam participari a pluribus, sic significat qualitatem essentialem. Secundum autem quod homo iam est in actu in hoc et in illo, sic significat qualitatem accidentalem. Accidit enim nomini esse actu in pluribus, sed non accidit ei esse habitu in pluribus vel aptitudine, immo est ei essentiale."

mon, and it can be a formal significate of the noun which determines the noun as the form (i.e. an abstract noun) from which the imposition rises. For Joannes Dacus the common noun is prompted by a *modus essendi rei* unde res est, which allows for its object to be one or many (Joannes Dacus 329.20–23); the proper noun rises out of a modus rei depending on a proprietas individui which precludes the res significata being many or being considered as many (Joannes Dacus 339.20–24).

The adjectives of possibility in Michel de Marbais, Boethius Dacus and Martinus Dacus would indicate an inclination to accept the condemned opinion that qualitas is aptitudo for number or lack of it. They assign the referent of a proper noun a modus essendi immultiplicabilis; common nouns on the other hand, rise out of a modus essendi multiplicabilis. But Martinus Dacus focusses on the arbitrariness of quality: the common noun signifies per modum communis sive per modum applicabilis pluribus (Martinus Dacus 21.8). A proper noun, on the other hand, signifies an object marked out as an individual by its modus appropriati (Martinus Dacus 22.28).

They are somewhat embarrassed by Donatus's ascription of quality to the pronoun, and agree with Priscian that qualitas comes to the pronoun through demonstratio et relatio, which makes it a posterior mode. MS Clm 19868 (f167r) voices the general consensus: qualitas est quaedam qualitas data pronomini per demonstrationem et relationem. He then saves Donatus's reputation by showing how this applies to the definite and indefinite quality he postulated of the pronoun.

There does seem to have been some influence on the concept of accidental quality from people like Petrus Hispanus, but the issue of quality was so overshadowed by the theories relating to person and naming that it would be unwise to postulate much outside influence.

## 3.2.2. Adjectives

The theory of the adjective begins in a dilemma. It was clear that an adjective signified a quality accidental to a substance. Yet an adjective signified substance and quality. The gloss *Promisimus* and the *Notae dunelmenses* (f3v1) show that many thought that its principal signification was qualitas sola adjacent to substance or inhering in it (in Fredborg 1977.36n. Cf. De Rijk 1967:I.ii 258). Thus while the substantive, albedo, signified whiteness in the category of substance, the adjective, album, signified whiteness de forma adiacente, that is in the category of quality (Abelard, Logica 116.3). This is also, it seems, the opinion of William of Conches (Fredborg 1977.36n). However, because adjectives could be constructed absolutely, these two positions were reconciled through the concept of participation:

Albus vero: hoc nomen habet substantiam omne quod participat albedine quod nominat ponendo in eam albedinem et qualitatem. Et licet infinita corpora nominetur hoc nomine, albus, unde videtur multas habere substantias et sic esse infinitum nomen, tamen propter qualitatem quam notat ab eis participari finitum est, sive una substantia iudicetur sive multae. (Tractatus qlosarum, in Fredborg 1977.28)

Thus albus when used absolutely is infinite but presumably defined by its context. This may have been in John of Salisbury's mind when he wrote that albedo signified whiteness simpliciter, and the significate of album was whiteness mixed with a subject. The adjective was assigned a two-pronged causa inventionis: signifying qualitas as accidental to substance, and signifying substance as informed by a qualitas (Petrus Helias, Summa 219.55–59).

All of these themes came into the thirteenth century as emphasis moved from what the adjective signified to how it signified. Occasionally one postulated a modus accidentis by which the adjective signified a res adiacens (e.g. Aquinas, Q.D. de pot. 9.6. resp.). Modus informantis developed in theology, it seems, as the modus significandi critical to the adjective. An adjective puts bounds to its noun through its own semantic content (Albertus Magnus, 1 Sent. 25.C.1 [I.627]), which acts as a proprietas informantis through a certain union and lack of distance (Bonaventure, 1 Sent. 27 dub. 3 [1.480a]). Thus the adjectival locution, habentes deitatem, does not indicate that the persons of the Trinity are three Gods, for the adjectival mode of signifying signifies a common accidental form, not a multiplication of substantial forms (Aquinas, STheol. 1.39.3. ad 1). This is enough for Gosvin de Marbais (18.18–20) to class both adiectivum and substantivum as accidental modes of signifying, for while substance is material to an adjective, it is not its formal principle (Simon Dacus, Domus 55.16).

The modistae seem to be aware of these discussions. Adjectives derive their peculiar quality from diverse modi rei: while modus entis in se or modus per se stantis are proper to substantive nouns, the modus entis in alio or modus adiacentis give rise to adjective nouns (Joannes Dacus 352.20–23). MS Clm 19868 f152r therefore classes qualitas as an accidens reale. Thus substantives and adjectives were in alio in different ways: abstract nouns denoted the quality in alio as a distinct entity, as albedo in Socrates. Adjectives were in alio as something distinct but contingently unified with the aliud by a modus concretionis:

Unde dicit actor sex principiorum [§1], quod forma est compositioni contingens, id est inhaerens, ex quo accidit, quod tam formae substantiali quam accidentali contingit modus essendi in alio sive modus dependentis ad aliud. Unde ab eius proprietate accipitur modus adiectivi, cui contingit modus essendi in alio. (Joannes Dacus 434.5)

This is Jean Quidort's 'absolute accident': animal sanum signifies an animal as the subject of health; its urina sana is a sign of good health; and the efficient cause of this health is diaeta sana (Boethius Dacus 127.59–81).

For Donatus (374.15) gradus comparationis pertained to both quantity and quality. Priscian (3.1 [GL II 83.1–20) subsumed them under the adverb, magis. Gradus was an accident of the adjective, because substances are not susceptible to magis et minus while quality and quantity are (Anselm, De grammatico 146.24). The twelfth century kept explanation simple: the comparative signifies magis, id est augmentum indeterminatum (Petrus Helias, Summa 258.66-67), and contrasts either like with like or different with different. The superlative, however, can only be used of like: it is placed above everything in the same genus and can be used absolutely (Petrus Helias. Summa 268.99). For Kilwardby (In Donatum III 63.1021–1031) the positive signifies its res absolutely, the comparative places the res on the near side (citra) of a limit, and the superlative at the limit. Simon Dacus (Domus 25.18-19) defines comparatio as rei ad rem collatio inter similia qualitate vel quantitate, vel modus excedendi voce vel re. Gosvin de Marbais (36.9–12) argues from the construction, fortior Platone, that the comparative signifies per modum motus, because the ablative is the principium of movement. The positive is used absolutely, the comparative respectively in fieri, and the superlative respectively in facto. Commenting on Nunc autem manent, fides, spes, caritas; tria haec; maior autem horum est caritas (1 Cor. 13.13), William de la Mare (204.47–50) notes that St Paul used a comparative where one would expect a superlative. For the superlative is used of the ultimate in the one genus, and charity is the greatest in the genus of virtues.

Among our modistae, Martinus Dacus (33.5–12), as one would expect from his attitude to qualitas, denies that comparatio is an accident. No matter its degree, comparatio is still modus significandi per modum adiacentis alteri comparando ipsum alteri secundum magis et minus, and therefore a mode of signifying more essential than the accidents. Degrees of comparison, then, are mere variations of a mode of signifying. His modistae colleagues develop Gosvin's in fieri and in facto into a progression towards the natural limits of quality and quantity. Comparative and superlative are derived from the positive, the comparative entails the concept of magis, and the superlative emphasises the unique excellence of its referent (Boethius Dacus QQ.54–58). But there is a touch of Gosvin's idea that motus is involved: albior is a comparative because it signifies rem intensibilem vel remissibilem ut est prope terminum excessus, and albissimus is a superlative which signifies rem intensibilem vel remissibilem ut est in fine, vel in termino excessus (Michel de Marbais, Summa 34.49–50).

#### 3.2.3. Demonstratio et Relatio

In treating substantia mera as substantia demonstrabilis, Alexander of Hales and Roger Bacon were looking back to Priscian: pronouns 'acquire quality' through demonstrating something present, and relating to something absent. <sup>12</sup> Only first and second-person pronouns were pronomina demonstrativa, because speaker and addressee are necessarily present; most third-person pronouns were relative because they are necessarily anaphoric, but some of them, like ille and ipse, were both (Priscian 17.64–66 [GL III 146.15–147.41]). Petrus Helias (Summa 632.52–60) adds an important rider: a pronomen demonstrativum presents something to the eyes or the intellect, while a pronomen relativum signified something already mentioned. This becomes an explanation of why Priscian said that the pronoun substitutes for the proper noun which designates a person as unique: the pronoun distinguishes one suppositum from all others through demonstratio et relatio (Grammatica Porr. 33) which emphasises its individuality.

Though *hoc* points to something present, theologians disagreed over what was meant by 'present'. Some suggested that after the words of consecration the eucharistic host included the substances of both Christ and bread, a view later to be called 'impanation'. Alternatively the pronoun was proleptic: *hoc est corpus meum* was in reality *hoc erit (fiet) corpus meum*. But though one can represent a near future as present, 'one cannot alter the words spoken by Christ'. Or transubstantiation took place when Christ blessed the bread, so that it was already his body when he showed it to the apostles. All of them Petrus Cantor rejects in favour of the orthodox view that transubstantiation occurred when the words were spoken (Dumoutet 240). At the end of the century Alain de Lille (*Regulae fidei* 36 [*PL* 210.639]) developed Petrus Cantor's view that the Eucharistic formulas constitute a *demonstratio exercita* not a *demonstratio concepta: hoc* brings about a *demonstratio ad fidem*, which is a demonstration to the intellect.

The thirteenth century shifted the focus of the argument towards the nature of demonstratio. Jordanus (33) assigns the pronoun an indexical function: it acquires a form through demonstratio or relatio. By demonstratio the pronoun singles out an individual defined by the imposed accident of person, a function Magister Jordanus (19) calls officium discernentis. This had various realisations. Those theologians who argued that hoc was a demonstratio ad sensum adapted the second of Petrus Cantor's arguments: just as

 $<sup>\</sup>overline{^{12}}$  Priscian 13.31 [GL III 20.22–26]: "Hoc tamen interest inter substantiam illam, quam pronomina significant, quod illa pro speciali et propria uniuscuiusque accipiunter substantia, quae demonstratione praesentium vel relatione absentium personarum intelligitur."

'now I am quiet' refers to the immediate future, so does *Hoc est enim corpus meum*. Others took up Petrus Helias's principle that this was a *demonstratio ad intellectum*. The first theory was rejected as tautologous; the second because it reduced the sacrament to a sign (Bonaventure 4 Sent. 8.2.1.1 resp. [I.191a]). Alexander of Hales, (Antequam esset frater 953.13–16) resolves the slight contradiction involved in the orthodox solution by characterising the words of consecration as verba operativa. They bring about transubstantiation, which happens instantaneously, by a ratio conficiendi et demonstrandi. In the more formal restatement of Petrus Cantor in Bonaventure (4 Sent. 8.2.1.1.2 [I.190b]), hoc pronomen importat demonstrationem non ut conceptam, sed exercitam. The orthodox solution makes demonstratio ad sensum irrelevant, for in the Eucharist the pronoun hoc does not demonstrate Christ's accidents but his substance (Aquinas, STheol. 3.73.5 ad 2).

The theologians' model of the use of pronouns by God, to God and about God comes straight from Petrus Helias: demonstratio is a proper function for first- and second-person pronouns, because their significates are always present and demonstrated by the act of speech (Bonaventure, 1 Sent. 2.6.1 dub. 4 [I.60]). In Iste Deus meus et glorificabo eum (Exod. 15.2) both pronouns demonstrate God to the intellect (Alexander of Hales. Summa 1 §333 [I.49]). Strictly speaking in referring to God they become adjectival, and therefore refer to essence. But at the same time such pronouns, as Priscian had said, stand for proper names like *Deus* because they imply a distinct and unique substance, and therefore refer to a person. While the roles entered into by interlocutors makes ego and tu demonstrative pronouns, theologians take third-person pronouns as anaphoric on the principle that relatio est rei antelatae recordatio. This is most obvious in the possessive pronoun, which sets up a relation between possessor and possession, e.g. Mea est enim omnis terra (Exodus 19.5), whose force depends on the presence of the earth to the eye or the mind.

One cannot be sure whether theology influenced the parallel developments in the *modistae* or not. Because *demonstratio* and *relatio* were not accidents of the pronoun for Priscian but features of its substance, our *modistae* deny that *demonstratio* and *relatio* are accidents properly speaking. The anonymous argumentation quoted in Thurot (175) and adopted by Boethius Dacus (245–246) implies that other parts of speech have *demonstratio* and *relatio*. <sup>13</sup> On these grounds Michel de Marbais (*Summa* 70.39–

<sup>&</sup>lt;sup>13</sup> Thurot 1869:175: "Utrum pronomini accidat demonstratio et relatio? Sic, quia non sunt modi significandi accidentales: non generalis, quia sic omne pronomen essent relativum et demonstrativum; nec specialis, quia tunc omnis pars orationis habens demonstrationem et relationem esset pronomen." (My italics)

48) argues that demonstratio and relatio are accidental features rising out of the modus significandi demonstrantis et referentis in the pronoun in order to match the modus significandi demonstrabilis et referibilis in the referent or antecedent. Prompted by Priscian's Pronomina certiora sunt in prolatione quam in scripto, he seems to assume that a gesture like a nod accompanies demonstrative pronouns which 'strengthens them and gives them certainty, so that they acquire qualitas' (Michel de Marbais, Summa 76.48–50).

Neither Michel de Marbais (Summa 70.44–46) nor Martinus Dacus accept that the pronoun can ever acquire quality, which puts Michel in contradiction with himself. Martinus Dacus (45.27–28) avoids the risky business of inferring modes of signifying not in the ancients by emphasising that demonstratio demands the presence of the referent and relatio its absence. <sup>14</sup> As one would expect he relates this principle to modalities of knowledge: demonstratio, as in ego and tu, which are present, points to something sub primo actu sive sub prima notitia, and relatio, as in the absent ille, works sub secundo actu sive sub secunda notitia (Martinus Dacus 47.17–21).

#### 3.2.4. Number and the Other

Number as accident of the noun was traditionally approached through the category of quantity, or derived from numerare (to count). Priscian however specifically involves the dictio in his definition: Numerus est dictionis forma, quae discretionem quantitatis facere potest (Priscian V.9 [GL II 172.2–3]). Aristotle's Numerus est multitudo unitate mensurata (Metaph. X.vi 1056b33) yielded two meanings for numerus: the numbers by which we count; and a number as a collection of countable entities distinct one from another (Boethius, De trin. 3.10–13). Strictly speaking then, one is not a number. From the principle that countability demands distinctiveness and difference comes Boethius's most powerful contribution to the theory of number, the term, alteritas:

Principium enim pluralitatis est alterita<br/>s; praeter alteritatem enim nec pluralitas quid sit intelligi potest. (Boethius,<br/>  $De\ Trin.\ 1:13)$ 

The word dates back to at least Augustine as a gloss on the Greek,  $\dot{\epsilon} \approx \not\!\! p \pmod {\mathfrak{M}_S}$ , which meant both difference and definite identity.

Both dialectician and grammarian begin from Aristotle's principle that number is plurality measured by unity. Because the many is divisible into non-continuous parts (Aristotle, *Metaph*. V.xiii 1020a1), grammarian and

 $<sup>^{14}\,\</sup>mathrm{Martinus}$  Dacus 45.27–28: "Demonstratio est modus notificantis sive demonstrantis rem sub maxima certitudine, scilicet ut praesens est. Relatio est modus notificantis rem semper ut absens est."

logician recognise three ways of signifying plurality: a morphological plural, e.g. homines, nouns signifying an aggregation, for instance populus (Abelard, Logica 171:4–6), the grammarian's collective noun (Petrus Helias, Summa 367.56), or nouns signifying a composition: thus two singular nouns joined by et or the equivalent signify a plural (Abelard, Logica 171:19–20). Numerus secundum rem is normally signified by numerus secundum vocem, which is forma dictionis ex qua discernitur utrum ad unum vel ad plura pertineat locutio (Petrus Helias, Summa 366.35–36).

A singular denotes something that is obviously one, and not divisible into viable parts. A proper noun is singular by nature because it signifies aliquis unus endowed with a qualitas incommunicabilis. The singular of a common noun can signify a number of objects with a common quality (qualitas communicabilis) or one member of that group (Petrus Helias, Summa 367.71–74). Thus one can number in two ways: by dividing a whole according to the differences of its parts; or by grouping diverse things according to their similarities (Gilbert of Poitiers, De trin. 104.80). But morphology did not always reflect reality. The singular, omnis, can be plural in reference, and Ovid constructed turba with the plural ruunt (Heroides xii.143). Likewise, Athenae though plural in form signifies a single city. 15

The plural of common nouns signifies the qualitas communicabilis, in which the things signified participate, and secondarily the plurality participating in it (Petrus Helias, Summa 367.75–76). A proper noun in the plural signifies no common quality apart from the plurality of those participating in the same name (Petrus Helias, Summa 367.71–78). This strict view is not shared by the logicians: proper nouns like 'Plato' can be pluralised nuncupative (nominally) to signify people with qualities not unlike his. And theologians are divided. In the face of Psalm 81.6, Ego dixi, dii estis, and the Hebrew Elohim the normal argument is that the expression is ungrammatical, because it does not reflect reality: God is a unique being, and therefore has a proper name which cannot be pluralised (Alexander of Hales, Summa 1 §357 [I.533a]). Those who accept plures dei as grammatical argue that if Deus is used naturaliter it is a proper noun with no plural; but if used nuncupative or adoptive it becomes a common noun that can take a plural as it does in many Biblical passages (Bonaventure 1 Sent. 4.1.3 resp. [I.102]).

Aristotle's definition of number turned on seeing Boethius's *alteritas* as the principle of plurality, with unity as its measure:

 $<sup>\</sup>overline{^{15}}$  Abelard, Theologia christiana IV (PL 178.1270): "Non enim semper pluralitas vel singularitas vocis ad significationem respicit. Sed quandoque ad terminationem vocis vel constructionem, velut cum dicimus 'numerus est', hoc est 'unitates sunt', et 'Athenae sunt', hoc est 'haec civitas est'."

Diceremus ergo quia alteritas ab unitate ut a suo immobili descendit principio, sed principium pluralitatis alteritatem. (Clarembald, De Trin. 98 §34).

The accidents giving rise to plurality do not bring about a multiplicity of forms, but of subjects or *supposita* with something in common. Thus number by counting is repeating unities that are discrete; but countable things are discrete things numbered by means of the repetition of their common nature (Thierry of Chartres, *De trin.* 178:35–43). This principle was crucial in the theology of the Trinity, as Father, Son and Holy Spirit all possessed *alteritas* as rational beings.

Aristotle's definition, Numerus est multitudo unitate mensurata once enshrined in the florilegia (Hamesse 1974:136 #246), was drummed into every grammarian. Although one is a measure of many, singular is not the cause of plural: grammatical number is the result of a modus intelligendi based on a discrete modus essendi. But because plural can be measured by singular, plurals like arma that do not correspond to a singular have number but no measure (Ps.Grosseteste 40.25–26). Though few grammarians mention alteritas, they emphasised that number is in the noun according to its differentiae (Ps.Kilwardby 124). Simon Dacus (Domus 29.31–33) dealt with words like Athenae, turba and populus by distinguishing numerus secundum vocem (numerus vocalis) from numerus secundum rem (numerus realis). Numerus vocalis is a modus exprimendi, while numerus realis belongs to the significate. In collective nouns like turba and populus then, a plural numerus realis is reconciled with the singular numerus vocalis through the modus colligendi (Simon Dacus, Domus 30.11).

Through its essential unity a thing has special or specific being arising from the uniqueness of its form. Accidental unity however is the principle of number because the ability to be counted is an accidental category (Petrus Hispanus, *Syncategoreumata* III.12). Among the *modistae* essential singularity or plurality rises out of formal number, which signifies a genus through *numerus in communi*: for instance *homo* and *asinus* specify the qualities proper to men and donkeys (Martinus Dacus 40.5–8).

Material number or number pertaining to individuals is accidental. It signifies singularity or plurality of substances or *supposita*, like *hic homo* and *hi asini* (Martinus Dacus 40.15–18). The singular can signify either essential or accidental unity, for instance *homo* can mean either the human race or an individual man (Boethius Dacus 163.32–36). Not every singular can be pluralised (Boethius Dacus 164.29): persons and certain objects like the Sun have natures which in the medieval eyes could not be multiplied, and therefore the words designating them could not take a plural. There were three types of plural: those which designate the *res nominis* 

as multiplicata simpliciter, specifying individuals or species indifferently; those designating their significate as multiplicata per plures species (as in homines et asinus sunt animalia) signifies both res termini and the genus, animal, as multiplied; and those designating the res termini as multiplicata per plura individua, as in Socrates et Plato sunt homines (Boethius Dacus 167.54–59).

### 3.2.5. Persona and Persons

However number and person are inseparable (Priscian 12.32 [GL II 599.20]). Though Varro, (De lingua latina 8 §20) had denied person to the noun, Priscian (17.22 [GL III 149.24–150.5]) assigns the noun third person, except in the vocative. There was never any doubt that person was an accident of the pronoun. A good part of the power behind the medieval theory of person lay in etymology. Persona meant both the mask worn by a Roman actor and the character he was playing. Hence the folk-etymology of persona was personare (to resound). Not unexpectedly, personare came to mean 'to play a part'. Persona also means a party to a lawsuit: which is reflected by the etymology preferred by some ancient commentators per se sonare (to speak for oneself). In either case persona dicit substantia ratione suppositorum (Augustine, De trin. 7.6.11). During the eleventh century a third etymology was put forward, per se una (one by nature), which emphasised the individuality inherent in a person, thus providing a direct link with alteritas.

Petrus Helias (Summa 656.70–74) cites personando in the sense of 'to play a part' as the etymon of persona. But he replaces the classical actor's mask with an actor's costume which was a sign of the dignity and role of the character portrayed. By analogy, person speaking, person spoken to and person spoken about were roles in a discourse represented by first, second and third persons (Petrus Helias, Summa 657. 84). However the Porretan grammarians suggest that the classical usage of persona as the parties to a law-suit was the causa inventionis of the noun. Person then, becomes the substance from which rises the action of the sentence:

Et est persona quia de ipso agitur, prima quia a se fit sermo, qui primus est in loquendo. Secunda est id de quo et ad se agitur, idest de quo sic agitur, ut ad ipsum sermo dirigatur. Tertia est id de quo agitur ab alio et ad aliud. Et est persona quia de ipso agitur, tertia quia hoc modo de ipso agitur. (Grammatica Porr. 34)

To accommodate facts of syntax dialecticians and grammarians accepted that *persona* could refer to any singular substance, rational or irrational (*De proprietatibus sermonum* [de Rijk 1967 II.ii 713.19–21]).

The noun did not signify third person by imposition (Petrus Helias, Summa 949.85), although nouns were third person by default, and vocatives

were in the second person (*ibid*. 452.3). Nouns in apposition could have any of the three persons. First and second-person pronouns were invented as a matter of necessity, third-person for the convenience of not repeating nouns (*ibid*. 622.18). Speaker and interlocutor are necessarily present, so that each is signified by a single pronoun with a proper *modus significandi*, and *ego* and *tu* were fittingly called *pronomina demonstrativa* (*ibid*. 663.58).

First and second person can evoke the third. For if first person does not exist, neither does the second, and the third person exists only because first person speaks about him to the second (Glossa Admirantes, in Thurot 1868:257). All nouns are third person by imposition, but a noun in construction is third person only if it signifies the subject of conversation between first and second persons (Roger Bacon (Grammar 7–8). Ps.Kilwardby (124) also seems persuaded by the functional arguments that assign the third person to the noun, and he accepts the vocative as second person because every vocative entails demonstratio. In contrast the multitude of third person pronouns signify varie, praesens, absens, prope, longe, which leads to a certain confusion (Sponcius Provincialis 74.n2). Sponcius himself follows the Graecismus in assigning a single mode to first and second-person pronouns, but he reads praesens, absens, prope, longe, demonstrative et relative as modes of signifying.

To a certain extent theologians' discussions of names have some echoes of Thierry of Chartres. In argumentation identical with the Porretan exegesis of proper and common nouns, Peter of Poitiers assigns two components to the substantial form of a person: the general property of substance by which a person is quid and the individual property which makes the person quis (de Rijk 1967 I.169). The humanitas in Plato is the neuter, quid, and through his Platonitas he is a person to be distinctively signified by the masculine quis. Richard of St Victor (De trin. 170.33–34), who had a major influence on the theory of person, begins from the idea of separate identity ab omnibus aliis singulari proprietate discretus. The proper noun is the most fitting way of signifying the individuality and rationality of this being: the name, Daniel, signifies Danielitas, a subsistentia giving rise to a substantial form in which nobody else can participate (Richard of S. Victor, De trin. 119.24–25):

Ut ergo existens per se solum persona esse possit, singularem aliquem rationalis existentiae modum habere oportebit. (Richard of St Victor, *De trin*. 189.18–20)

Because *alteritas* entails a *relatio* between things distinguished by their diversity, both Gilbert of Poitiers and Thierry of Chartres treat it as a direct line between number and person in the fraught matter of the Trinity

of persons in the one God.<sup>16</sup> The persons of the Trinity were in relation to each other because the Son proceeded from the Father, and the Holy Spirit from them both. In relation to the divine then, *persona* consignifies substance (*upostasis*), while signifying person (*usia*) (BL MS Royal 9 E xii f180r2), an unexpectedly neat way of accommodating both Boethius's definition of *persona* and its medieval variant.

Simon of Tournai takes this further: per se una is common in signification, but in reference to an individual, the pronomen relativum, se, consignifies diversity and therefore distinctiveness (Simon of Tournai, Disp. 83. sol. [241.17]). He situates person by distinguishing individuus from singularis. All individual forms are singular, but not all singular forms are individual (Simon of Tournai, Sent. 60.11–13). A forma individua has two aspects: forma similitudinis and forma dissimilitudinis. Through a forma similitudinis a thing participates in a particular class, while being excluded from others: thus album will include things as diverse as paper or snow, but excludes things like coal which are niger. Hence for the logician these nouns were dividua. A forma dissimilitudinis distinguishes its possessor from everything else, creating the nomina individua (Simon of Tournai, Sent. 61.25–35).

It is no surprise then, that Boethius's standard definition, persona est naturae rationalis individua substantia (CEut. iv.8) often becomes persona est naturae rationalis individua essentia (BL MS Royal 9E xii f178r2). This version was probably prompted by the Roman Preface for Trinity Sunday, whose summary of the doctrine of the Trinity is a short philosophical statement first contrasting substance and persons in the Trinity, and then persons and divine essence:

Qui cum unigenito Filio tuo et Spiritu Sancto, unus est Deus Unus est Dominus: non in unius singularitas personae sed in unius Trinitate substantiae, ut in confessione verae sempiternaeque Deitatis, et in personis proprietas, et in essentia unitas, et in maiestate adoretur aequalitas.

In personis proprietas is surely a statement of the alteritas of the divine persons, for it casts a spotlight on their individuality.

At its most elementary level, masculine gender (and presumably feminine) consignified the rationality and distinctiveness of a person (William of Auxerre, *Summa* fVII v), which in its turn inevitably entailed uniqueness, 'incommunicability' and dignity (Hugh of St Cher 3 *Sent.* 216.60–62). For Albertus Magnus (1 *Sent.* 25.1.sc [I.624]) person is an *accidens proprium* 

<sup>&</sup>lt;sup>16</sup> Thierry of Chartres, *De trin.* 265.§30: "Quare cum alteritatem sequatur pluralitas et prius in Deo alteritatem ponerent vere reputati sunt illas personas esse plura. Sed si alteritas et differentia in Deo est propter personas, necesse est quod personae diversae sint et different substantialiter vel accidentaliter."

vel commune or, on the authority of Boethius and Ps.Dionysius, a substantia supposita. In the Trinity persona directly signifies an individual person (una) directly, but the relation between the persons obliquely. This is also true of human persons who share humanitas, but their personalitas makes them individuals while setting them in relation to each other. It is, however, person as suppositum that brings all the threads of theory together, and name and identity commute almost in the spirit of Thierry of Chartres:

In personis autem dicuntur per modum identitatis, non quidem secundum rem tantum, sed quantum ad modum significandi, sicut forma in supposito. (Aquinas,  $STheol.\ 1.40.1$  ad 2)

The modistae define person in traditional terms: it is a modus loquendi about oneself, to an interlocutor or about somebody else. They take up the position held by Bacon and Kilwardby, that pronouns are in all three persons, but that nouns are normally in the third person, except for the vocative which is in the second. Although a first-person noun is not impossible, Martinus Dacus uses the argument from presence and absence used by the Graecismus and Sponcius to show that it cannot rise out of the causa inventionis of the noun. The first person as the most 'certain' modus loquendi, because the speaker is always present to the speaker, the third person is the least certain because its significate can be present or absent. The second person as interlocutor falls between these two: he is present when one talks to him, and if absent he can always be 'spoken to' by letter (Martinus Dacus 44.6–45.10). These modi loquendi concord satisfactorily with the causa finalis of the personal pronoun.

For both person and number the *modistae* obviously preferred to follow the safe route laid out by the *Porretani*. However, *persona* and *numerus* are relevant to gender and *qualitas propria et communis*, but there seems little enthusiasm to explore what was happening in other disciplines.

### 3.2.6. Casus and the Other

It is no surprise that designating the cases through the *alterum* from Aristotle's definition of the verb (*PeriH*. 3 16b6) is the most overt manifestation of *alteritas* in the thirteenth-century noun:

nominativus designat rem genitivus designat rem dativus designat rem accusativus designat rem vocativus designat ablativus designat rem ut quid est alterum
ut cuius est alterum
ut cui acquiritur alterum
ad quam terminatur alterum
terminum excitationis
ut a qua fit alterum

(Michel de Marbais, Summa 47.29–48.65)

This schema shows that the nominative is considered to be the case from which all other cases are derived, a good Aristotelian stance (*PeriH*. 3 16b1–2) (cf. Abelard, *De dial*. 122.2–6). Because *alterum* referred directly to accidental form,<sup>17</sup> it was the proper label for the nominative, which was the citation form of the noun.

Priscian 5.20 [GL II 183.20]) had defined case as declinatio nominis vel aliarum casualium dictionum, quae fit maxime in fine. Of all the accidents of the noun, case is most heavily tied to syntax (Abelard, De dial. 124.36–125.5). Varro (8. §§21–23) had seen declinatio as a type of derivation, which gives rise to linguistic forms besides cases, and one wonders whether Abelard had read him and applied his ideas to the formation of adverbs:

Casus autem vocantur adverbium inflexum a nomine sive ipsum primitivum nomen. Ut sit 'casus' nomen tam eius quod cadit et alio per derivationem quam illius a quo cadit. Sive ergo 'iuste' adverbium a 'iustitia', sive a 'iusto' derivari dicatur, casus invicem dicuntur primitivum nomen et adverbium ab ipso derivatum (Abelard, *De dial*. 446.2–6)

Such characterisations of nominal flexion may have resulted in the commonplace that the directional accusative, as in *Romam eo*, is an adverb.

The grammarians assigned loquendi diversitas as the causa inventionis of the cases of the noun: the subject of a sentence is signified by the nominative, possessor by the genitive, recipient by the dative, goal by the accusative, addressee by the vocative, and the point from which a movement starts by the ablative (Petrus Helias, Summa 386:85–95). Petrus accepts the metaphor of case as a falling-off from the vertical to the horizontal, and the terms, casus rectus, for the nominative and casus obliqui for the others lie behind his definition.<sup>18</sup>

The 1240s on the other hand, see a crop of Aristotelian definitions. Ps.Grosseteste (41.10) gives Priscian a functional flavour: Casus est inflexio terminalis dictionis diversos rerum determinans respectus. For Ps.Kilwardby (125) and Gosvin de Marbais (19.35–36) case is dispositio relatae substantiae ad aliud ut principium aut terminus vel subiectum, a definition Simon Dacus (Domus, 32.16–17) wrongly ascribes to Petrus Helias. He himself (ibid. 33.32–34) distinguishes between casus vocis et habitudinis. Casus vocis (flexions) are signs of casus habitudinis which dispose the substance signified in comparatione ad aliquid, quod se habet in ratione principii vel termini. The clearest reference to syntax comes in Siger de Brabant:

 $<sup>\</sup>overline{}^{17}$  Aquinas, *Physics* I.12.b: "Cum in quolibet fieri aliud dicitur fieri ex alio quantum ad fieri secundum esse substantiale vel alterum ex altero secundum esse accidentale."

<sup>&</sup>lt;sup>18</sup> Petrus Helias, Summa 387:6–7: "Casus est declinatio nominis, id est, haec variatio quod una vox nominis cadit in aliam vel ab alia."

Est enim casus modus significandi accidentalis respectivus designans circa rem proprietatem per quam unum constructibile determinat dependentiam alterius. (Thurot 1868:320)

This function was almost universally said to rest on a *habitudo casualis* proper to each case (cf. William of Sherwood 79).

Grammar was vulnerable to the dialectician's sense that the nominative was the only authentic noun-form. Even Petrus Helias (Summa 368.95) said it was not a case properly speaking. However it is not unlikely that Aristotle's alterum began taking on the aura of Boethius's alteritas during the twelfth century. The Porretani argued that the noun was imposed in the nominative on Priscian's principle that the functions of the verb rose out of substance of the noun.<sup>19</sup> The nominative preceding sets the person of the substantive verb, while the nominative following states the quality the verb links to the person of the subject (Grammatica Porr. 63). Others rephrased this in terms of governance and sentence linkage:

Nam si verbum significat ut quod de altero, ergo quod terminabit eius respectum ex parte ante significabit ut de quo alterum. (MS Digby  $24~{\rm f}104{\rm r}1$  in de Rijk II.i.75)

Respectus here obviously implies that the nominative acts as a vehicle for the other accidents of person and number. And early in the thirteenth century Jordanus (68) specifically links the *Porretani* and Digby 24 by defining alterum as an individual disposed to act as the suppositum which was demanded (exactum) by the finite verb.

Yet mainstream thirteenth-century case-theory revolved round the concepts of principium and terminus. The task of the nominative as suppositum meant it signified the principium of actio or passio. Priscian (17.14 [GL III 116.25]) therefore was deemed to have said that as principium actus, only the nominative truly signified per modum fixi et stantis (Bonaventure, In Hexaemeron 1V.19 [V.352b]). Kilwardby ascribes such formulations to Aristotle PeriH. 3 16b6–8, and on the way calls Peter Helias to witness (Rosier 1983:153). He clearly believed the nominative being alterum embodied the full habitus of the noun, a very powerful reason for amplifying modus substantiae by an essential mode drawn from habitus as a quality.

Nominative was distinguished from vocative through sentential function: the nominative signified substance engaging in act, the vocative, substance conceiving an act, but not an act conceived (Jordanus 59). Ps.Grosseteste (41.33–35) has a flavour of Thierry of Chartres on names and essence.

<sup>&</sup>lt;sup>19</sup> Grammatica Porr. 31–32: "Quare significatio nominativi, idest substantia nominis, intelligitur in actione in passione, quae est significatio verbi." (My italics)

Nominative and vocative signify a relation with truth: a soul must be named to be perfect, and cannot be moved to attain perfection unless it is called.

The second of the cases was the genitive, so called according to some grammarians, because it defined the family (genus) as in genus Priami, and the other oblique cases were generated from it (Petrus Helias, Summa 388.43). Because of its explanatory, partitive, and even possessive, uses, twelfth-century logicians classed the genitive as a means of restriction of reference (de Rijk 1967 II.i.464), which lies behind Ps.Grosseteste (41.35–36): genitivus et ablativus dicunt respectus prout exit res per decisionem aut per corruptionem, that is through exact specification or corruption. The generative sense was formalised during the early thirteenth century: the genitive signified substance sub ratione generationis (Glossa Admirantes in Thurot 301). This was generalised to signification in ratione principii substantiae (Gosvin de Marbais, 32.16–17). It seems to have been the theologians who situated the many uses of the genitive in a habitudo flexible enough to cover all four Aristotelian causes, and grammarians rapidly picked the idea up:

Genitivus enim significat generalem habitudinem, scilicet ut est aliquid principium substantiae. Habet tamen plures speciales, scilicet ut significet aliquid ut est possessor vel possessio vel actus vel huiusmodi. (Kilwardby, In  $III \ Donati \ 51.590–594)$ 

The early modistae prefer the safe and neutral ut cuius est alterum but define it as in ratione principii or often, in ratione causae: it does not seem to be until the third generation that the genitive was accorded a ratio termini as well.

The accusative was dogged by its traditional label: Quartus dicitur 'accusativus', quia ad accusationis verbum pertinet (Petrus Helias, Summa 389.49). Its propria operatio is to terminate the transitio verbi (Glossa Admirantes in Thurot 292). It marks the end of a generative process, which by its nature sets up a relationship between the starting-point of generation and its purpose and result.<sup>20</sup> In created things, this becomes fulfilment of potency (cf. Ps.Grosseteste 41.36), or a terminus of an act (Bonaventure, Hexaemeron IV.12 [V.352b]). But the accusative did not necessarily function as a noun. The accusative in vado Romam was not subject to government (Petrus Helias Summa, 1044.69). In a very uncomfortable section, the Oxford Questions treat Romam as an indeclinable noun that has given up its substance and quality to modify the verb (Kneepkens 1985:113). Kilwardby's analysis of why the accusative in Romam vado was traditionally taken as an adverb shows some awareness of the ancient theory that the

 $<sup>\</sup>overline{^{20}}$  Aquinas, 1 Sent. 7.1 ad 2: "Sed verum est quod posse generare est posse ad aliquid accusativi casus."

accusative was a local case. When constructed with vado the accusative, Romam, includes the habitudo of place characteristic of the preposition, ad. It therefore becomes an adverb signifying place sub ratione termini ad quem (Kilwardby, In Donati III 73.1368–81). To sum up, the accusative is imposed according to material cause and designates a matter receiving an act (Simon Dacus, Domus 33.14).

Few grammarians or theologians have anything but passing remarks about the dative. For Petrus Helias (Summa 950.5) it signifies a thing ut ei aliquid attribuitur. Ps.Grosseteste (41.36) lumps accusative and dative together: Dativus et accusativus [dicunt respectus] prout perficitur res indigens aut res superfluens. But where the accusative signifies terminus actus, the dative is terminativus substantiae (Gosvin de Marbais 32.15), and this distinction remains valid for the modistae. For Simon Dacus (Domus 33.12) it signifies the terminus quietis, as it is imposed by the final cause.

The thirteenth century dimly sensed the ancient syncretism between ablative, instrumental and locative cases. Though this made the ablative difficult to analyse neatly, theologians found its range of meaning a most satisfying exegetical playground, even when they read an ablative absolute in a sociative sense:

'Esau, subtracta gratia, est reprobatus.' Per hunc ablativum, 'subtracta gratia', non notatur causa, sed concomitantia. (Alexander of Hales, Glossa I.414.6–10)

In the sentence, Pater et Filius diligunt se Spiritu Sancto, Simon of Tournai takes the ablative, Spiritu Sancto, as showing that the Holy Spirit is a sign of union between the members of the Trinity; for William of Auvergne the Spirit is formal cause of the union. Alexander of Hales (Glossa I.135) and Bonaventure (1 Sent. 32.2.1 resp. [I.560ab]) reject both as extreme. If the ablative is interpreted as a sign, the Holy Spirit is a product of the Father and the Son; but if interpreted as a form the ablative indicates causality. Both are partially correct, so that the Holy Spirit is a formal effect of the love between Father and Son. Aquinas (1 Sent. 4.2.2.ex.), discussing whether person can be predicated of essence in the Trinity proposes the sentence, Pater alterum se genuit. If se is taken as an ablative with the separative sense (alterum a se), which is simpliciter verum or as an accusative meaning 'another himself'. If the accusative refers to someone identical in nature it is false, but if glossed similis sibi it is correct.

All this prompted grammarians to treat the ablative as an instrumental: Kilwardby (*In III Donati* 51.593–600), Jordanus (76) and the *Glossa Admirantes* (Thurot 317) all place heavy emphasis on its role as the starting-point of *motus* or *actus*. Jordan makes the point that a significate in the

ablative case is rem ut a qua est alterum et ab efficiente, and so the ablative is best constructed with passives. Simon Dacus combines philosophy and a relatively accurate etymology, a singular achievement:

Ablativus est quidam casus dicens principium motus vel rei habens se per modum mobilis, et dicitur ab 'auferendo', eo quo dicit principium, et quanto quid recedit a principio, magis aufertur ab eo. (Simon Dacus, *Domus* 39.21–22)

The modistae reject Petrus Helias's emphasis on flexion (Summa 387:6–7) in favour of a mentalist habitudo ad actum focussing on case-roles aimed at relations and other external accidents at the base of syntax. They subsumed the various permutations of alterum under dispositio substantiae ad actum. They were well aware that case-roles of principium actus and terminus actus, that they took from their predecessors, came from the motus model, which set the cases up as the beginning and end of the processes by which noun and pronoun enter into construction. The concept of case as a habitudo is essential to this evocation of motus, and the habitudines casuales cover both nature and function (Boethius Dacus (182.17–184.78). He himself and Martinus Dacus (42.12–43.3) class the cases according to their role as principium or terminus. Nominative, genitive and ablative denote principium, accusative and dative terminus, and vocative ratio excitantis, that is a thing in ratione termini (Boethius Dacus 188.51) or in ratione terminantis actum (Martinus Dacus 42.25)

There are few idiosyncracies in their descriptions. The nominative, for example, nominat rem suam ut de quo aliquid est enuntiabile, but the Paris manuscript reads alterum for aliquid (Boethius Dacus (182.29). The Glossa Admirantes follows Petrus Helias's lead in calling the dative the acquisitive case, as do Boethius Dacus (183.47) and Ps.Albert (146. ad arg.9i). The other modistae use variants on ut cui acquiritur alterum (Michel de Marbais, Summa 48.43), and they read principium in the ablative as cause: material cause is album in corpore, efficient cause is the instrumental fessus labore, formal cause is albus albedine, and his final cause is somewhat strained, iste est virtuosus beatitudine — est enim beatitudo causa finalis virtuosi (Boethius Dacus 183.54–63).

Michel de Marbais's discussion of the relationship between case and person in the pronoun would suggest that he was well aware of the link between *alteritas* and case:

Finis essentialis: ut ipsum pronomen, mediantibus talibus modis significandi, designet proprietates sive modos essendi mediantibus verum modis intelligendi a quibus capiuntur. Sicut enim vox finaliter imponitur ad significandum rem, sic etiam aliquis modus significandi finaliter attribuitur voci ad designandum rei proprietatem. Et de isto fine hoc essentiali non facit hanc

partis intentionem. Finis accidentalis est qui satis tangitur in littera: quod pronomina finaliter habent omnes casus ut ponantur loco omnium nominum in omnibus eorum casibus (Priscian 17.179 [GL] III.199.11–19). Finaliter etiam omnes habent casus ut illud quod deest nominibus, scilicet persona ipsa, pronomina locos illorum prolatorum compleant. (Michel de Marbais, Tractatus f116r2)

It would seem that he regards the nominative case as a catalyst for the proper functioning of person and number in construction.

#### 3.2.7. Genus and Other Accidents

Grammar handed these nominal accidents on to the other disciplines and got little in return: the *antiqui* had described them adequately enough. Both ancient and medieval grammar distingished *genus secundum rem* from *genus secundum vocem* in the noun:

Genus vero secundum rem est sexus masculinus et femininus, quia hii duo sexus possunt generare. (Petrus Helias, Summa~323.32)

Genus vero secundum vocem est alterius sexus discretio vel neutri. (ibid.~324.68)

Masculine and feminine words refer *proprie* to animals, but are used *impro-prie* of things by similitude, because the ancients thought that things like the sun and the moon were animate (Petrus Helias, *Summa* 324.59–62). Naturally masculine and feminine gender were associated with *propria qualitas*, rationality and status as a person. The neuter refers *proprie* to things, and cannot be used of people as such (William of Auxerre, *Summa* fVII v2).

However the earliest discussions of the Trinity deemed the masculine gender was deemed appropriate to the three persons and used the neuter for the divine substance ( $u\pi \acute{o} \sigma \pi \sigma \iota \varsigma$ ), which had no sex:

Non est aliud Pater, aliud Filius, aliud Spiritus Sanctus, licet personaliter sit alius Pater, alius Filius, alius Spiritus Sanctus. (Ps.Augustine, *De fide ad Petrum PL* 65.674, cf. Alain de Lille, *Regula XXVI*)

Philosophically aliud esse as differre specie (Abelard, Logica 68:5–8), and applies to Creation as well as to God: while Socrates and Plato are similar in substance, they are different (alius) in person. Thirteenth-century logicians rephrased this in terms of nature and mode: in nature animals are masculine or feminine, and gender as a modus generis found in words, which allows for sex to be ignored (Petrus Hispanus, Syncategoreumata VI.7). They remembered Peter Helias's proper and improper use of gender, and commonly justified grammatical gender by analogy. Thus the masculine gender of vir is dispositio rei acceptae, a verbal accident taken from reality; however lapis is masculine by an arbitrary modus intelligendi drawn from the etymology, laedens pedem, which implies an active potency (Bonaventure 1 Sent.

8 dub. 7 [I.163]). Likewise though God is clearly not male, masculinity is an analogy consonant with his role in initiating generation, so that the masculine gender was accepted as a mode of signifying adequate to his nature.

The modistae say little that had not been said before about gender in the noun, pronoun and participle, and they seem to ignore what was happening in other disciplines into the bargain. None of them reflect Bonaventure's distinction between natural and arbitrary assignment of gender. They acknowledge the similitude between grammatical gender and sex, preferring to characterise masculine as reflecting an active principle in the significate and feminine a passive. 21 In contrast to their colleagues in theology, they adhere somewhat rigidly to the idea that masculine and feminine signify active and passive principles which exist secundum rem. Lapis is masculine, because the etymology from which it was imposed is the act of wounding the foot (laedens pedem). On the other hand, the etymology of its feminine synonym, petra, is the passive pede trita (Martinus Dacus 35.20–25). Martinus (37.18) is one of the few *modistae* to retain common gender as a grammatical category, arguing that a generic masculine noun like homo includes the feminine. All of them present the neuter (as in *lignum*), as a mode of signifying by which gender, or the active and passive principles on which it depends, are deliberately not signified. In consequence, all three genders are positive entities.

Declinatio was not listed as an accident except by Martinus Dacus.<sup>22</sup> Both species and figura are Kilwardby's accidentia gratia vocis. Figura is the physical shape of the word, which later grammarians and logicians define as proprietas constandi vel ex solis litteris, vel sillabis vel ex dictionibus (Cf. Petrus Helias, Summa 375.51; Ps.Kilwardby 122). Nomen simplicis figurae is a noun which signifies a simple idea, nomen compositae figurae is one signifying a complex idea, including one derived from a simple idea. And Priscian's nomen decompositae figurae covers derivation.

Donatus does not use the term, species nominis. But for Priscian species was the difference between proper and common nouns. Petrus Helias (Summa 213.27) and Ps.Kilwardby (125) consider species a positio vocabuli primaria vel secundaria. Primitive species is then proprietas derivandi a nullo while derivative species is proprietas derivandi ab aliquo (Petrus Helias, Summa 213.22–24): a primitive word has no similitude to any other word, while a derivative does (Ps.Kilwardby 125).

 $<sup>^{21}</sup>$  Cf. Michel de Marbais, Summa~38.11-12: "Genus est quidam modus significandi datus nomini ad designandum rem sub modo essendi virtutis activae, passivae vel indifferentis ad utrumque."

<sup>&</sup>lt;sup>22</sup>Martinus Dacus 64.3: "Declinatio in nomine est modus intelligendi rem ut cadit sub diversis inflexionibus casuum."

Most theologians merely use derivative species as a resource: thus significatio is both the thing signified and the meaning of the signifier (Thierry of Chartres (De trin. 192.25–27). The argumentation on donum and datum discussed above is valid because post-verbals imply time, while not consignifying it. By the same principle nomina operationis given to God, like creator, auctor, denote relationes addictae usiae rising from his substance (Alain de Lille, Regula XXIII). However, in contradistinction to related participles, agent post-verbals connote an effect rising from a quality. God is an agent (miserator), because he is misericors (Alain de Lille, Regula XXVI). Further, the transparent derivation of such post-verbals from primitives connoted God's effect in actu (Hugh of St Cher, 3 Sent. 38), or to put it more technically: any nomen operationis necessarily focussed on the particular habitudo ad effectum ascribed the referent: sol lucens was also sol illuminator (Alexander of Hales, STheol 1.§356 [I.532]). The basic principle naturally figured in the florilegia:

Ductio et commensuratio sunt aequivoca, ex quo habetur communiter quod omne verbale in *-tio* est aequivocum, videlicet quod tria consignificat, scilicet agentis actionem, rei passae passionem, et ipsa rem passam, sive actum intermedium. (Hamesse 1974. 328 # 384)

Arguments drawn from this feature of Latin are legion in other sciences, and they also are useful in grammar to refute the *antiqui*. In a tactic common in theology Michel de Marbais (*Summa 8.42–45*) argues that the post-verbal, *significatio*, cannot be the form of the *dictio*, as it means the act of signification and is its operation.

No type of figura or species presupposes another, as modus significandi is based on modus essendi. Therefore albedo, which signifies the res as an accident of distinct being is the primitive, while albus, which signifies the same accident as inhering in a substance, is of derivative species (Martinus Dacus, 34.7–35.5). However acceptance of figura decomposita normally precludes species derivativa. Figura composita entails the composition resulting in words like luciferus which signify a compound modus intelligendi (Boethius Dacus 171.30). Joannes Dacus (311.26–29) looks back to Petrus Helias: species primitiva is modus significandi rem sub esse priori, and species derivativa is modus significandi rem sub esse posteriori. On the priority of species, Joannes distinguishes between the natural order, the order of cognition and the order of modes of signifying. In nature, primitive being modus essendi in se, is prior to derivative, which is in alio. But in cognition, derivative is prior to primitive, because essence is what we first know, and we first know it in alio (Joannes Dacus 316.30–317.8).

Species is a principle of construction because the part of speech can be

changed by derivation. The florilegia gave the university grammarians and the *modistae* the pattern for a relatively abstract description of the postverbal which eliminates the semantic tone of the theologians, the prime example of a derivative part of speech: it is an act signified *per modum habitus* either as agent or act (Gosvin de Marbais 30.12–22). In the light of words like *amandum*, which is both gerund and verbal noun, the *modistae* were at pains to distinguish the *nomen verbale* from *participium*. Where the participle signifies actum unitum substantiae, the verbal noun signifies actum coniunctum substantiae sub modo habitus. Operatio signifies act secundum se, while operator signifies act secundum quod essentia eius coniuncta est substantia sub modo habitus (Joannes Dacus 418.4–27).

## 3.3. Formalising Noun and Pronoun

The early twelfth-century grammarians had affirmed the role of the mind in creating qualitas. Consequently the variant, substantia cum qualitate, played its part in the formalisation of noun and pronoun, as it presented qualitas as both a part of the significate and the instrument through which substance was signified. Though Abelard and Petrus Helias play an important part, the watershed was Gilbert of Poitiers, who rigorously explored qualitas extra et intra animam, and related the workings of the noun and pronoun to the nature and functions of the verb, despite the logicians' habit of identifying the term with the noun. His thirteenth-century equivalent was probably Roger Bacon. The work of both guided later developments, even if they were never acknowledged. Albertus Magnus was also an important source of basic principles.

Clearly theology influenced the development of the essential modes of signifying in grammar: take the idea that the noun was imposed through qualitas, and the specific mode of the pronoun was a potency for quality rather than a lack of it. The position is not so clear with the accidental modes. It is quite clear that the sophisticated use of person and number by theologians clarified grammarians' ideas on the matter, but for the rest of the accidental modes influence from philosophy is all one can safely postulate. The modistic search for modi essendi for the accidents of the noun seems to be a consequence of double imposition.

The principles of the more mature speculative sciences bore in on the grammarians the necessity of a coherent model matching the rigour of the sciences which they fed and on which they were feeding. Therefore noun and pronoun developed within a system of binary oppositions with full regard to verb and participle.

# CHAPTER FOUR VERB AND PARTICIPLE

## 4.1. Essential Modes of Signifying

Thirteenth-century theories of verb and participle depended on balancing Priscian and Donatus against Boethius. Both grammarians highlight time in their definitions of the verb, and defined the participle as being part verb and part noun. The participle however, was a poor relation, and it is ignored by Boethius. It is the one part of speech Priscian does not discuss in terms of proprium. In the nominative case the participle was invented for the convenience (commoditas) of not having to overload the sentence with finite verbs, i.e. one can say legens doceo instead of lego et doceo. In the oblique cases its invention was a matter of necessity: it provided a direct relation between a noun and an action, as in docentem hominem audio (Priscian XI.12 [GL II 555.10]).

Though Priscian was quoted more often on the role of *actio* and *passio* in the verb, it was Boethius's paraphrase of Aristotle's definition that set the scene for medieval discussion:

Omne verbum significat aliquod accidens, quod accidens semper de altero praedicatur. Nam si omne verbum aut actionem aut passionem designat, actio vero et passio in accidentibus numerantur, omne verbum vim significat accidentis; sed accidens semper de eo praedicatur quod sibi subiectum est. (Boethius, PeriH. I [PL 64:306D])

Though Boethius does not say anything revolutionary here, he clarified Aristotle's crucial nexus between acting and being acted on as accidents and as predication. His reminder that noun and verb signify time differently is cited throughout the Middle Ages: the substantive noun signifies the stasis proper to a substance, the adjective noun the stasis of an accident, while a verb signifies kinesis in a subject. So one could say that the verb did not signify pura actio et passio while the nouns, actio and passio, did. Thus the noun, cursus, signifies running simpliciter, while the verb, currit, signifies

 $<sup>^1\</sup>mathrm{E.g}$  Donatus 381.14: "Verbum est pars orationis cum tempore et persona sine casu aut agere aut pati aut neutrum significans."

 $<sup>^2</sup>$ E.g Priscian 11.8 (GL II 552.18–20): "Participium est igitur pars orationis, quae pro verbo accipitur, ex quo et derivatur naturaliter, genus et casum habens ad similitudinem nominis et accidentia verbo absque discretione personarum et modorum."

running as being in the person running (Hunt 1941:218), so that every verb signifies person according as action is in it (Fredborg 1977:36.2–5).

The difference between adjective, vocative and substantive verbs rested on the distinction between substantia and habitus: examples of the verbum substantiale (substantivum) were est, existit, permanet, constat, which all signify purum existere; a verb like ridere was habituale, id est accidentale, because laughter was in man accidentally (Garlandus Compotista 50.15). According to a gloss on the Graecismus, substantive verbs join substantial forms, vocative verbs qualitates propriae, and adjective verbs accidental forms (in Thurot 1869:186).

The Glosulae attempts to clarify the difference between adjective and verb by distinguishing between the ways in which they manifest adjacency and inherence. The adjective, album, signifies whiteness as affixed to something, while the verb, albet, signifies that whiteness inheres in a subject (Hunt 1941:219n). Verbs signify composition with their subject, while an adjective like album can also signify a body insofar as that body participates in whiteness (Fredborg 1977:37.1–7). But the argumentation is far from clear, and the author closes the matter by the lame statement that verbs signify through moods and tenses and nouns do not.

Abelard handles this aspect of verbal signification far better. Adjective verbs signify acts as adiacentes (Abelard, Logica 346.17–24). Actio and passio adhere to a robust other non quidem in essentia sua, sed magis secundum id quod alteri adhaerent (Abelard, De dial. 130.3–7). Predicating accidental qualities of such an other was the pattern for the resolution of the finite verb into est and a participle: Petrus currit does not differ from Petrus est currens, because currens is predicated of Petrus on the pattern of Petrus est homo (Abelard, De dial. 134.20). Both Garlandus Compotista (25.20) and Abelard see verbal consignification in terms of actiones et passiones dimetiri, acting and being acted on being measured by time:

Verbum enim principalem suam significationem sive actio sit sive passio, subiectis rebus eas secundum tempora dimetiendo distribuit, ut 'curro' cursum circa personam tamquam ei praesentialiter inhaerentem demonstrat. (Abelard,  $De\ dial.\ 122.14$ )

Finally the major function of the verb is creating 'perfection of sense' by means of the copula, *est*, understood in finite verbs.<sup>3</sup> The participle was 'born of the verb', in Abelard's phrase (Abelard, *Logica* 354.40), so that

 $<sup>^3</sup>$  Abelard,  $De\ dial.$  148.26–30: "Adhuc enim praemissa oratione prolata suspensus audientis animus aliquid amplius audire desiderat, ut ad perfectionem sensus perveniat, velutiest,aut aliquod aliud competens verbum. Praeter verbum namque nulla est sensus perfectio."

amans while designating the action of loving, is participle or noun depending on whether it consignifies time or not (Abelard, *Logica* 346.32–347.8).

As with the noun, the *Porretani* were pivotal in the development of the verb. Their logic takes actio in three senses. The first, the effect of the property of the verb on the subject of the sentence, is ascribed to Priscian (8.7) [GL II 373.15?]) who is credited on unsure grounds with saying that every verb except the passive signifies action. The second sense, actio genere, belongs to the category of action, while the third is the transitio verbi whereby the action of the verb passes from one substance to another (Logica Porr. §I.21–22 [10.91]). The major Porretan discussion of Aristotle's de alio dicitur follows immediately on a short discussion of qualitas as a nominal mode of signifying. The substance of the verb is what is said about the subject of the sentence, or the property it ascribes to it (Grammatica Porr. 30). The verb signifies composition, which in spite of the opinion of their grammarian colleagues, the Porretan Logic (§I.21–22 [9.78–80]) takes as the substance of the verb. Their grammar mentions the participle and then passes on to other matters, and their logic is satisfied with pointing out that the participle retains the signification of its verb, while being somewhat preoccupied with distinguishing participle from verbal noun (Logica Porr. §I.21–22 [10.5]).

Petrus Helias has at least two formulations for the causa invention is of the verb. In the first instance, a verb will signify acting or being acted on or a semantic prime in the manner of acting or being acted on, that is with time expressed by a verbal flexion and as if it was de altero (Petrus Helias, Summa 196.39–43). Later he quotes the common principle that the noun says something, and the verb something about it (ibid. 448.8–11). In either case the verb signifies composition of act with subject:

Cum dico currit,actum quidem per verbum significo, sed actus non potest esse nisi alicui insit. Ideoque non potest illius verbi significatio determinari nisi ostendatis de quo dicitur. (ibid. 1050.97–99)

As the verb principally signifies agere et pati (not actio et passio) at a given point in past, present or future, signification through tense (cum temporibus) is the feature differentiating the verb from all the other parts of speech except the participle (ibid. 449.31–3), because it shares the res verbi. Nevertheless while the verb signifies by modus significandi actionem vel passionem, the participle signifies by modus significandi agentem vel patientem, and thus participates in nominal signification (ibid. 881.65–70).

In stating that verb and participle signify by inherence with and without inclination respectively Jean de Wolve emphasises the role of composition in verbal function of saying something about something else. Composition is necessary to understanding (Aquinas, *PeriH*. I.3 ad 3 [17.201–210), and location in time is inherent in any composition performed by the intellect (Aquinas, *Metaph.* 10.3 §1982), so that *modus actus* seems to be appropriate for both parts of speech. It was not unusual to point out that the participle was instituted to signify *actum uniti substantiae*, and to further remark that the participle did not signify a simple concept but an aggregate of concepts (Ps.Kilwardby, MS Peterhouse 191 f75v2).

The theologians' debate over *donum* and *datum* normally opposed movement to stasis through *actus* and *habitus*: the noun, *donum*, signifies the *habitus* of a gift by its *modus qualitatis*, while the participle, *datum*, signifies act by its *modus actus* (Innocent V, 1 *Sent.* 18.2.1 resp. [153b]). *Actus* can be either successive or permanent, that is, either *motus* or *esse*:

Actus vero qui mensuratur tempore, differt ab eo cuius est actus secundum rem et secundum rationem continuae successionis, quia mobile est de genere permanentium, motus de genere successivorum et continuorum. (Innocent V, 1 Sent. 19.2 resp. [167b])

Thus God could be properly signified by verb or participle because they both signify act, and God is pure act (William de la Mare, 1 Sent. 22.1). Actus taken as permanent was a term more relevant to a timeless God than motus, because motus is measured by time, and actus by eternity (Robert of Orford, In Aegidium 92). However Alexander of Hales (Glossa 1.183) writes that datum signifies per modum motus because a participle signifies substance cum agere et pati, et sic cum tempore.

Successive act is actus ut egrediens de substantia. When signified by the verb, act is signified at a certain distance, and brings to the verb a certain inclination towards the subject. By the nature of things the suppositum must be added externally, unless it is in the first or second person. In that case the immediacy of first and second person to the speaker acts as a suppletion closing the distance (Bonaventure, 1 Sent. 27. dub. 3 [I.479b]). The verb therefore is to be sharply distinguished from the adjective, which signifies the same thing as a proprietas informans, and therefore through a certain union and lack of distance. Not unexpectedly, Robert of Orford (In Aegidium 100) claims that the verb signifies actus purus, and the participle actus unus cum substantia. For modus actus was appropriate to contexts in which light was shed on God's actions: it was fitting that the verb, generare, signify per modum actus when it refers to the generation of Son and Holy Spirit, and that the noun, generatio, signify the habitus resulting from this act per modum cuiusdam formae (Richard Middleton, 1 Sent. 23.2 resp.).

Ps.Kilwardby approaches *modus significandi actus* through the conundrum that action can be signified by both nouns and verbs. But the verb has another site in the sentence. Everything which delimits a site differ-

ent from the noun is different part of speech: the category, situs, is not merely position, but also disposition in a place, and by extension the functions appropriate to that disposition and the forms from which spring the functions. On these criteria the verb is different from other parts of speech (Ps.Kilwardby 132). The formula, actus qui egreditur de substantia, seems to have given rise to modus actus, which is one term Kilwardby uses for the mode of signifying general to verb and participle. In the 1250s modus habitus and modus actus appear in logic as the specific differences of nouns and verbs with the same semantic content:

'Agere' et 'actio' idem significant, tamen diversimode, quia 'actio' significat per modum habitus, 'agere' vero per modum actus; et per actum cognosci habet habitus. (Lambert of Auxerre 90)

The opposition between  $modus\ habitus$  and  $modus\ actus$  remains useful into the  $1280s.^4$ 

Ps.Kilwardby also develops the modi speciales of the verb through a very Aristotelian interpretation of Petrus Helias, verbum est repertum ad significandum id quod de altero dicitur. For him composition is illud quo mediante verbum est dicibile de altero (Ps.Kilwardby 135). Dicibile has some overtones of Augustine, and de altero emphasises that the nominative is the proper suppositum. Clearly the Porretan actio genere is the forerunner of the essential mode of the verb, and the Porretan 'effect on the subject' the forerunner of its specific mode. The crux of the difference between verb and participle is composition. If act is conceived as having inclination towards its subject, it is distant from it and predicated of it. But if conceived as 'deprived' of that inclination, it lacks the distance necessary for predication. In the first case we have a verb, in the second a participle (Petrus Hispanus, Syncategoreumata I.11). Nicholas of Paris (14.13) has another version: the verb signifies actio and passio as unibilem non unitam substantiae, and in the participle actio and passio are unita substantiae.

However, during the early part of the thirteenth century, the concept of *motus* rises in the grammarians as the essential mode of verb and participle. Not only did the verb signify *motus*, it also created the *motus* of a sentence by the process of linking the *quies* of subject and object. The participle likewise set up a *motus* towards a terminus. The competition between *actus* and *motus* seems to be a legacy of the appeal to physics by the *Porretani* in their discussion of the noun. *Exitus ab otio in actum* was specialised in the narrower sense of *alteratio*:

 $<sup>\</sup>overline{^4}$  Nicholas of Ockham 248.46–48: "Sunt aliqua eadem in re, sed tamen eadem intentionem dicunt sub alio modo, ut unum et ens: quia quaedam dicunt per modum habitus, sed alia dicunt eandem intentionem per modum actus."

Quae exit ab otio in actum, ut fit in substantia habente aliquid in habitu, quando educit illud ad actum; et hoc proprie non est motus, sed est quasi mutatio. Cum ergo omne illud quod contingit intelligere, contingit significare, oportet quod per sermonem significetur exitus ab otio in actum. (Glosa admirantes f93, in Thurot 1869:307)

For Kilwardby exitus ab otio in actum is the province of est (Sirridge 1990:128); therefore it is not expounded through the matter of the verb and its fieri (Gosvin de Marbais 72.29–30)

Motus is presented late in the twelfth century as a metaphor by the Notae Dunelmenses (III 94v2):

Nam per simile dicam, lectio significat lectionem quasi extra domum positam, legit significat eandem intrare domum, idest secundum hoc quod est in motu. (Hunt 1941:219n)

Motus definitively took hold in grammar once it was developed as a physical concept by Robert Grosseteste and Albertus Magnus from Aristotle and the Pseudo-Aristotelian De causis. Grosseteste (49) took his definition, Motus est endilechia existentis in potentia secundum quod huiusmodi from (Averroes Phys. III.6) and bequeathed it verbatim to the florilegia (Hamesse 1974:148 #99). Endilechia (Aristotle's ἐνκελέ χει α from ἐνκέ λει α [perfection]) is the proper realisation of a particular potency. Motus was the continuous passage from potency to act.<sup>5</sup>

Albertus Magnus drew three interlocking definitions of motus from the tradition: formally motus is the coming to perfection of the potential as potential (Phys.~3.1.4~[156.87]); materially it is the act of the moveable as moveable (Phys.~3.1.8~[163.13]); finally it is the perfection of both mover and mobile (ibid.~[168.1-2]). In essence it is the transition from one state of equilibrium to another:  $^6$  motus is passively in the mobile, the fixed point from which it begins, and actively in the mover. Undoubtedly all this came to grammar through the florilegia. The major lesson was that motus was the contradictory of quies (Hamesse, 1972 153 #161), and the six varieties of motus place it in the categories of qualitas, quantitas, and ubi.

The major competitors with *motus* in the grammarians were *fieri* and *fluxus*. *Fieri* had the advantage of being an ancient term that was both universal and abstract and whose meaning was basic enough not to have

 $<sup>^5</sup>$  Avicenna, Sufficientia I.2, in Albertus Magnus, Phys. 3.1.8 [163.45]): "Motus est exitus de potentia ad actum in tempore continuo, non subito.'

<sup>&</sup>lt;sup>6</sup> Averroes, Phys. com. 12: "Motus est translatio rerum existentium de forma quiescenti in formam quiescentem." (in Albertus Magnus, De causis 96.42)

<sup>&</sup>lt;sup>7</sup> Hamesse, 1972 152 #156: "Motus in qualitate dicitur alteratio, in quantitate dicitur augmentatio vel diminutio, in ubi dicitur locutio vel secundum locum mutatio." (cf. Albertus Magnus, *Phys.* 5.1.8 [417–419])

evolved. It was the metaphysician's equivalent of *motus*, covering both coming to be and change:

Fieri dicitur dupliciter: uno modo moveri ad esse, et sic illud, quod generatur, in toto tempore alterationis praecedentis dicitur fieri. Alio modo dicitur fieri res, quando introducitur forma, et sic fieri non est moveri, sed terminari motum; unde sicut simul motus terminatur et terminatus est, ita simul aliquid fit et factum est. (Aquinas, *Quodlibeta* VII.iv. ad 2 (9) [Vol 25.I 22.118])

Like *motus*, *fieri* is the realisation of potentiality of what is subjected to it (Albertus Magnus, *Phys.* 1.3.8 [52.60]), and is measured by time. Further, all *fluxus* is always *in fieri* (Albertus Magnus, *De causis* 43.37).

Where fieri played up productive process, fluxus emphasised time and succession. Although fluere is an ancient philosophical metaphor meaning to flow from, thirteenth-century physics and grammar formalised fluxus and fluere from twelfth-century versions of Avicenna and Averroes as equivalents of  $f\bar{a}da$  (flow) or  $inbi'\bar{a}th$  (emanate). They reappear in William of Moerbeke's Latin version of Alexander of Aphrodisias's commentary on the Meteorologica (ca 1260–70): fluo is the normal equivalent of  $\rho\epsilon$   $\omega$ (to flow), while fluxus does duty for  $\rho\omega$  (the act of flowing). More to our immediate problem, Moerbeke's version of Simplicius on the category of time (ca 1260) sets fluxus (translating  $\rho\omega$ ) at the very centre of tempus and motus. In spite of this lineage, fluxus does not figure in Hamesse's edition of the florilegia, and seems to be rare outside the Arab physicists.

Albertus Magnus is the only major scholastic philosopher to use fluxus as an essential concept. From Avicenna comes the definition of motus as forma fluens (Albertus Magnus, Phys. I.3.3 [42.73–75]), and from Averroes a view of fluxus as the constitutive principle of motus: Motus est forma post formam vel ubi post ubi in fluxu continuo (ibid. I.3.3 & De causis 96.42). Fluxus itself is a generative principle by which a form emanates (inbi'āth) from a formal principle (Albertus Magnus, De causis 42.61). Motus and fluxus are separate from their starting point (ibid. 44.30). Not being eternal, fluxus has finishing points as well as beginnings, and the finishing points are realisation of act (ibid. 43.38). Finally fluxus is subject to potency, so that nothing flows beyond its proper terminus (ibid. 46.58). With an eye to the theology of the Trinity Albertus (De causis 43.14) makes the revealing remark that the Peripatetics used processio where moderns use fluxus.

As the *postpraedicamentum* common to *actio* and *passio*, *motus* is on the threshold of verb and participle by the end of the twelfth century:

<sup>&</sup>lt;sup>8</sup> Simplicius, 467.15–18: "Videtur autem locus quidem secundum statum magis considerari, tempus autem secundum motum, quia quamvis tempus mensuret quietem, tamen secundum protensionem et fluxum ipsius esse quies mensuratur a tempore."

Hoc enim verbum [est] notat substantiam, et apud philosophos naturales carens temporali motu dicitur. Non enim sicut alia verba, quae actiones successivas significant, in motu habet significationem, sed potius significat essentiam. (Alan of Lille, Regula 39)

It is probable that motus and fieri came into the theory of the verb together, probably as a means of distinguishing its modus inhaerentis et adiacentis from that of the adjective, and from there they spread to the participle. Jordanus (13) begins with the traditional view that the verb signifies agere et pati per modum proprii et inhaerentis substantiae, and adds that this action is born out of the substance signified by the noun. He later assigns the verb modus fieri et motus (ibid. 20) and modus fieri vel agere (Jordanus 42), and remarks in passing that the participle has the same modus significandi (ibid. 86). The verb signifies ut in motu because it signifies motus itself, or modo motus, id est in tempore, quod est mensura motus (Jordanus 87). The participle, however, takes substance as material principle from the noun, and action as formal principle from the verb, which is why one can say the participle is born of the verb (Jordanus 29). It signifies in concretione, and therefore has all the powers of an adjective (Jordanus 45).

Perhaps with an eye to Jean de Wolve, Roger Bacon (*Grammar* 83) presents the verb in terms of *motus*, adjacency and inclination:

Verbum, quia significat motum et rem adiacentem, propter hoc necessario inclinatur ad substantiam a parte ante vel a parte post.

Bacon, a grammarian who was also a physicist, bounds motus by termini a quo et ad quem (Bacon Grammar 78). He is one of the first to use fluxus in grammar: verb and participle signify their referents as (entia) fluentia et successiva, that is per modum motus et fluentis (Bacon, Grammar 33). The verb is res fluens et egrediens ab aliquo (Bacon, Grammar 131), a term which may reflect actus egrediens de substantia, the formulation favoured by his friend, Bonaventure (1 Sent. 27 dub. 3 [I.479b]).

Kilwardby and his followers take modus motus as well as modus actus as modus significandi generalis of verb and participle. The esse specificum of the verb Ps. Kilwardby (107) formulates at first as per modum actus distantis a substantia. He then distinguishes between essential and accidental senses of modus motus:

Unus essentialis verbo qui est in comparatione ad substantiam, cui inest motus, ut a qua est. Alius in comparatione ad terminum motus, et hoc est accidentalis et est idem quod genus, et ille non dat verbo esse specificum. Illud quod dat verbo esse specificum in genere partium orationis est modus motus inclinabilis ad substantiam intra vel extra mediante compositione faciente distare extrema. (Ps.Kilwardby 135)

Transitive verbs signify per modum motus inclinabilis ad substantiam extra

and intransitive verbs per modum ad substantiam intra. As a part of speech with features drawn from both noun and verb, the participle signifies an amalgam (aggregatum) of substance and act per modum actus vel motus uniti subiecto et substantiae (Ps.Kilwardby:107). His term, unitus, draws on contemporary philosophy and theology: unitum significatur secundum quod iam factum est unum (Aquinas, Sent. 3.5.1.1c. resp.).

As usual, Ps. Grosseteste is philosophically succinct and controversial. The verb is a part of speech signifying acting and being acted on, measured by mood and time (Ps.Grosseteste 45.30–32). While avoiding modus motus, he assigns three elements to the verb: its substance, a form specifying motus and composition. It signifies substantiam in motu ad perfectionem through an inclination moulded by certain modalities of knowledge consequent on composition (Ps.Grosseteste 46.8–19). He presents Bacon's aggregatum in another guise: Participium est pars orationis significans substantiam in dispositione per motum acquisita, in qualitatem tendens. The participle does not signify composition, because it does not seek perfection through the person acting (Ps.Grosseteste 53.29–28). While Simon Dacus (41.10–20) assigns modus motus distantis a substantia as the general mode of the verb, his specific mode recalls Ps.Kilwardby: transitive verbs signify per modum motus extrafiniti and intransitive verbs per modum motus intrafiniti. While the general mode of the participle is modus motus indistantis, its formal mode (modus intrafiniti vel extrafiniendi) likewise allows for transitivity and intransitivity in the parent verb (Simon Dacus, Domus 46.17–20).

Both theologians and grammarians discussed how a participle could pass to a noun. In Peter Lombard's phrase, Non tres omnipotentes sed unus omnipotens, omnipotens is an adjective, because there is no verb corresponding to it. Such composition is the first of the nominalisation processes cited by Priscian: the others are comparison (as potentior, potentissimus), construction (as factum eius), and the loss of time reference as in amandus in the sense, amari dignus (Bonaventure, 1 Sent. 22 dub. 3 [I.400b]; cf. Sponcius 156–7). The participle cannot become a noun formally through its modus significandi, but only materially through its signification. The whole signification of a participle can be expressed by the noun but not by the verb, because the noun can signify action per modum habitus, but the verb cannot signify substance (Jordanus 48). Ps.Grosseteste (53.20–22) too works through the motus model: because it signifies substance disposed by motus, the participle can become a noun signifying cum quiete.

By now *motus* had become an exegetical term taking the grammarian into the processes signified by the terms, *successio*, *transitio*, *mutatio*, all of them measurable by time. Given that the mind chooses its *modus intelli-*

gendi, it can 'consider' a res manens (normally signified by a noun) through the modus fluentis or modus motus and a res fluens sub modo permanentis (Matheus Bononiensis 137a). Modus motus appears in the pioneers like Vincentius Heremitus, and is sometimes coupled with modus fluentis and sometimes with modus actus, which is found as late as Ps.Albertus. Modus fluentis suggests the unacknowledged presence of Albertus Magnus: for him agere belongs to the agent as it flows from him, while pati is the property of the recipient as it flows into him.

The Danes, with their track record in philosophy, prefer *modus fieri*, while Michel de Marbais, Ps.Albert and Munich MS Clm 19868, who seem to be specialist grammarians, prefer *modus fluxus et fieri*. This last term drifts into theology near the end of the century. Digby 55 (f142r2) manages to pile most of the traditional terms into one sentence:

Verbum significat motum vel fieri quia significat conceptum aliquem sub proprietate motus vel fieri, et sicut motui vel fieri accidit modus significandi actus vel passionis, ita significatio verbi accidit agere vel pati.

Aristotle's image of time as a continuum (*Phys.* VI.i 232a22), and perhaps Abelard, also prompted Digby 55 to postulate a philosophically rigorous *modus temporis* in the verb:

Tempus secundum propriam rationem suam est mensura fieri divisibilis solum, tamen convenit extendere tempus ad mensuram motus. Et ideo verbum significat per modum fieri absolute et per modum temporis. (Digby  $55 \, \mathrm{f} 142 \mathrm{v} 1$ )

While the modus distantis a substantia of Vincentius Heremitus and Matheus Bononiensis looks to motus, the almost universally used modus dicibilis [enuntiabilis] de altero, which is redolent of Augustine's dicibile, implies composition. De altero underlines the fact that the res verbi, though dependent on the substance of the noun, reacts with its habitus. Depending on the modista, the modus dicibilis de alio as the modus significandi specific to the verb entails modus distantis a substantia or modus inclinabilis / inclinationis ad aliud, or even both. Further, if logicians had their qualms about a motus model of the verb, theologians certainly did not, and palpably influenced grammarians. Ps.Albertus's actus qui egreditur de substantia (Ps.Albertus, 36 arg. 11) and Gauthier d'Ailly's modus egredientis et fluentis owe much to Albertus Magnus and Bonaventure, even though Gauthier glosses his term through the modus distantis. 10

 $<sup>^9</sup>$  E.g. Jean Quidort 147.34–37: "Significare rem suam in fieri semper competit et verbis et participiis, quae semper rem suam significant in quodam fluxu et fieri."

<sup>&</sup>lt;sup>10</sup> Gauthier d'Ailly: "Est enim consignificare ipsum fieri ut egrediens est ab ipsa substantia, et sic significatur per modum distantis." (in Rosier 1989: 215–216)

In spite of Petrus Helias's distinction between per modum actionis and per modum agentis, some grammarians denied that the participle signified act and the substance acting (Priscian 17.180 [GL 199.24–25]) on the grounds that it would therefore signify per modum manentis et fluentis, which is self-contradictory. But the participle does not signify actus purus because the accidents it shares with the noun must rest on a suitable form; nor is it a type of noun because it can take an object. Both Matheus Bononiensis (147ab) and Vincentius Heremitus regard modus significandi fluentis sine distantia as the significate of the participle, because this is both proportional to the modus per se stantis and opposed to the modus motus cum distantia, and constitutes the participle as a separate part of speech. <sup>11</sup>

Modus uniti substantiae and modus informantis substantiae were the normal contradictories of modus dicibilis de alio, because in the participle motus and its congeners became one with substance and were signified sub modo uniti (Gauthier d'Ailly [Rosier 1989.215–216]). The modus uniti vel inhaerentis of Digby 55 (f147r2) looks back a century or so. Modus informantis is possibly due to the discussion of adjectives in Bonaventure and other commentators on the Sentences: and the participle could, of course, act like an adjective. The transition of participle to noun does not seem to have been an issue among the modistae: Michel de Marbais (Summa 103.47–104.52) dismisses the issue in a couple of lines: the participle signifies substance because it signifies act under the modus essendi uniti substantiae which depends on substance and makes it understood.

Michel de Marbais is one of the few who contested modus distantis and modus indistantis as the essential modes of verb and participle. He proceeds through Ps.Kilwardby's argumentation about situs meaning disposition to act when occupying a certain position (Michel de Marbais, Summa XXXVII). The verb does not have the same site as its substance, while the participle operates at the same site as its substance. Therefore modus dicibilis de alio and modus uniti substantiae are the proper modes of signifying, while the common terms, modus distantis and modus indistantis, are merely specifications of sites in the sentence consequent on the differing functions of noun and participle (Michel de Marbais, Summa 80.55; 105.86).

Tradition assigned the substantive verb the crucial role of 'closing the distance' between subject and predicate. The twelfth-century established that est combined the powers of substantive and verb: it signified existence

<sup>&</sup>lt;sup>11</sup> Cf. Compendium Barcinoniae (MS Ripoll 109): "Participium dicit actum unitum substantiae. Actum dico ut est in fieri; per hoc enim separatur a nomine. Item ratione qua dicit substantiam, separatur a verbo." (in Rosier 1992:146)

and took the role of copula. Substantive verbs have their basis in the substances of their subjects, and time is the only feature of verbal consignification they exercise. Because *esse* denotes substance, it acts as a copula and as an instrument of substantial or accidental predication and requires the nominative before and after, as in *Petrus est homo* (Abelard, *De dial.* 135.18).

Petrus Helias is at pains to justify the oxymoron that a verb can be substantive, and takes his argument from Abelard and the *Porretani*. Substantia, the most general of the categories, is derived from substare, and is therefore a force uniting its accidents as well as giving them a place to reside in. The substantive verb is the instrument of predication because substantia and ens are paronyms: although substantia is precise and ens needs further definition. Ens does not distinguish a substance from its accidents, because they are one in act (Petrus Helias, Summa 200.29–30). He avoids defining substance as something that exists, though Abelard had done so. In his view then, the verb, esse, signifies substance as it is aliud, informed by accidents, and in potency to act (ibid. 200.34–40).

Esse retained both its usages: it designates changes of time just as any other verb does, but like a noun it can also designate stable substances of independent existence (Alexander of Hales, STheol. I §333 [I.494b]). It is this categorematic sense of esse that underlies the long-lasting arguments over  $Ego\ sum\ qui\ sum$ , the enigmatic title God gives himself. God can call himself  $Sum\ qui\ sum$  without violating the rules of theology because sum is a categorematic word signifying his essence, no matter the tense. Significant stable substances of time just as any other part of the substances of time just as an

Est signifies substance only because it is capable of uniting substances and accidents of substance. The copula, est, establishes a substantial relation by stating that the two extremes, (i.e. subject and complement) are the same (Ps.Kilwardby 138); and est itself can act as one of the extremes by denoting substance, <sup>14</sup> as in God's Sum qui sum. Theologians slide past the theological awkwardness of this present tense by having sum signify per modum actus (Albertus Magnus, De div. nom. 51.3), which can pertain to actus primus as it is not bound to time. Any temporal measure is then

<sup>&</sup>lt;sup>12</sup> Exodus 3.13–14: "'Ecce ego vadam ad filios Israel, et dicam eis: 'Deus patrum vestrorum misit me ad vos.' Si dixerint mihi: 'Quod est nomen eius?' quid dicam eis?" Dixit Deus ad Moysen: 'Ego sum qui sum.' Ait: 'Sic dices filiis Israel, "Qui est, misit me ad vos".'"

 $<sup>^{13}</sup>$  William of Lucca, In 3 Ierarchiam Dionisii 191: "Nam cum dicitur 'Omnipotens qui est', debet intelligi qui est ipsa essendi essentia; 'et qui erat' ipsa essendi essentia; 'et qui venturus est' ipsa essendi essentia."

<sup>&</sup>lt;sup>14</sup> Ps.Kilwardby 139: "Hoc verbum, 'est', dupliciter potest accipi: uno modo merae copulae, et sic sine extremis nihil est actu; alio modo ratione extremi, et sic est aliquid gratia significati."

indirect, as befits God. The logicians' concern with predication naturally moved the discussion of *compositio* towards the composition of matter with form: the verb, *est*, consignifies composition. Because *est* signifies *in actu esse*, it signifies *per modum verbi*. For this reason, the verb, *est*, is used when one wishes to signify some form or act which is actually in a subject in the present or any other time (Aquinas, *PeriH*. I.5[31.397–406]).

It was this solution to the nature of the substantive verb that the *modistae* adopted. As a syncategorematic word *esse* was a copula, syntactically supporting the specification proper to predication. As a categorematic word it signified substance. Though not specifying by *modus per se stantis* as nouns do, it can syntactically support a specification made by a sentence element whose task is specifying (Martinus Dacus 105.10–12): it signifies *primus actus*. This prompted some to deny that *esse* signified acting and being acted on (Digby 55 f141v2). But most drew away from this position:

Ipsa verba substantiva non dicuntur significare substantiam quia substantiam significant, nec etiam quia per modum substantiae significant — iam enim essent nomina vel pronomina — sed pro tanto quia significant actum in natura substantiae primo repertum (Michel de Marbais, Summa 83.45).

Others seem to be influenced by the Priscian commentary ascribed to Kilwardby. Ps.Albertus (66. obj. et sol.) explains that *est* signifies any *esse* substantiale. Though grammarians call this 'substance' *esse*, it is not substance itself but that from which *oritur vel defluit esse substantiale*.<sup>15</sup>

According to the *Glosulae*, vocative verbs like *vocor*, link acting and being acted on to an essence by virtue of being verbs; but in performing the act of calling they link essence to essence (Fredborg 1977: 38.20–22). Hence a vocative verb normally takes a proper name for its complement because *qualitates propriae* can only be signified by a proper noun. These verbs also have the property of 'calling a noun' from third person into first or second. Most *modistae* who cast a glance at vocative verbs like *nuncupor* and *vocor* have little new to say. However Martinus Dacus distinguishes between a special *modus significandi fieri cum distantia* proper to the adjective verb, and a two-fold general mode. The substantive verb, *esse*, signifies in respect to a general mode specifiable by any category, while a vocative verb specifies in respect to a proper name only (Martinus Dacus 54.13–21).

The essential modes of signifying the *modistae* inherited for verb and participle evolved by playing off Priscian against Boethius. In Priscian the categories of *actio* and *passio* were uppermost, while Boethius foregrounded

 $<sup>\</sup>overline{^{15}}$  Cf. Albertus Magnus, *De causis* 4.1 (43.13): "Dici potest quod forma fluit, secundum quod est actus ab actu, 'domus a domo et sanitas a sanitate', ut dicit Aristoteles [*Metaph*. 7.7 1032b8–12]."

time and predication. By the time of Abelard, a crucial forerunner of the *modistae*, the *logica vetus* had discussed the role of *tempus* as a measure of *actio* and *passio*, and had developed the concepts of adjacency and inherence. Because the verb enjoyed *consignificatio* and the noun *modi significandi* they were discussed separately.

Following on from Abelard, the *Porretani* set in train the evolution of hiss secondary signification from a 'meaning' parallel to the principle signification to the instrument by which the principle signification was manifested in a context; and their syntactic discussions made it obvious that noun and verb could not be discussed in isolation from each other if they were to be serious about borrowing templates from the *Physics*.

The growth of modus motus early in the thirteenth century is only partially due to Robert Grosseteste. The exegeses of donum and datum (Sentences I.18) in terms of habitus and actus set up the parametres for the binary opposition of noun and verb, although the problem in question involved a participle. Modus actus seems to have fallen before modus motus and modus fluxus because of its slight air of equivocation. Though Bacon uses modus fluxus quite comfortably, one can see the hand of Albertus Magnus and his thorough exegesis of fluxus in physical and non-physical terms. Modus fieri is a testimony to the modistic taste for abstraction.

The grammarians are obviously looking for a description that sees their constitution through function: hence the argument over *modus distantis* / *indistantis* and site in the sentence. On the other hand, the *modus informantis* of the theologians looks to the constitution of persons and things essential to doctrine rather than to sentential function. They do reach common ground with *modus motus uniti substantiae* for the participle: for this emphasises that in the participle substance and act are one, which neatly opposed participle to verb in which they are not.

# 4.2. Accidental Modes of Signifying

#### 4.2.1. Time and Tense

At times the ancients felt a tension between mentalist and realist views of tense. Augustine (*Confessiones XI.xxiii*) had made a powerful case for the importance of perception in a theory of time, while the fourth-century *Decem categoriae* treats time as quantity, measuring it by number, and hints at tense divisions.<sup>16</sup> It implies the category, *quando*, was the basis for

<sup>&</sup>lt;sup>16</sup> Decem categoriae §79 (149.18–21): "Tempus quoque mensurae subicitur. Nam, cum movetur aliquid, ipso motu necesse est et temporis habere mensuram cum dicimus 'primo' vel 'secundo' vel 'tertio anno pervenit' vel 'die' vel 'hora' vel 'momento'."

a theory of tense. The present was the reference point for past and future (Aristotle, *Phys.* IV.xiii 222a24). Boethius places it at both the end of the past, and the beginning of the future in an almost verbatim quote:

Nam cum sint partes temporis praeteritum et futurum, horum praesens tempus communis est terminus, huius namque finis est, illius initium. (Boethius, Cat. II PL 64.205C)

It was convenient that *tempus* meant both 'time' and 'tense'; but distinctions had to be made. Absolutely speaking, time was a measure of the age of the universe, and it had come into existence at the moment of creation. But this had nothing to do with the verb. The twelfth-century gloss, *Tria sunt*, is quite explicit on how verb and participle relate to time:

Aliter accipitur tempus cum dicitur tempus accidere verbo, et aliter cum dicitur verbum consignificare tempus. Cum dicitur verbum consignificat tempus, i.e. talem morulam, ut in verbo manifestius dicetur; cum dicitur tempus accidit verbo non est sensus 'talis proprietas accidit verbo.' (in Hunt 1950 35n. Cf. *Logica Porr.* 45.74–79)

The verb consignifies time by signifying it together with something else: amat principally signifies me vel alium amantem as the thing on which the verb is imposed, and secondarily signifies the action in the thing as in the present (Garlandus Compotista 71.15–21). The diversity of tradition enabled Petrus Helias to define time in three ways; general, total and partial. His general definition is not unlike Garlandus's; his total definition specifies time as beginning and ending with creation, and his partial definition deals with countable units of time:

Tempus est dimensio morae et motus mutabilium rerum dicta generalis quia omni tempori convenit. Totalis vero definitio est talis. Tempus est spatium quod cum mundo incepit et cum mundo desinet. Dicitur vero totalis quia huic toti, scilicet tempori, convenit, ita quod nulli parti illius. Partialis vero quam ponit Tullius: 'Pars aeternitatis cum alicuius annui, mensurni, diurni, nocturnive spatii certa significatione' [Cicero, *De inventione* I.39]. (Petrus Helias, *Summa* 45–51)

Inevitably then, the verb does not signify time quantitative: it consignifies time as it pertains to the category, quando.

For the grammarian the crucial medieval source is the Liber sex principiorum, which like Avicenna's Sufficientia (II.10), takes time as a cluster of moments in a serial order. L. VI princ. §12 defines the category, quando, as quod ex temporis adiacentia reliquitur: in essence quando is a moment in the flow of time perceived in terms of the relationship Boethius places between present, past and future. It is in everything that begins to be, and marks changes in time and in bodily states (L. VI princ. §16). Quando cannot be measured, it can only be visualised as past, present or future.

Whether Petrus Helias took the principle that the verb signifies time under the category of quando from the Liber sex principiorum or vice versa we do not know. This part of the tradition was discussed into the thirteenth century. Time is not quando, although the two are inseparable. Quando is having been, being or about to be (Lambert of Auxerre 91), so that past, present and future are not quando in the strict sense, but its effects.

*Tempus* appears in thirteenth-century physics in the dress designed for it by Robert Grosseteste (87):

Cum non sit separabile tempus a motu in intelligentia, sequitur quod tempus sit aliquid ipsius motus, utpote mensura motus vel aliquid tale.

It was presented to the medieval undergraduate through the essential successivity of prius and posterius. Tempus cannot be visualised without motus, and indeed they were reciprocal measures (Hamesse 151.#139). Time and motion being continuous are divisible, so that a period of time can be seen as a succession of nunc: it was not number considered in isolation from the numbered object, but numerus ad materiam determinatus, which is motus secundum prius et posterius. Time being countable is therefore objective; and Augustine's dilemma over its subjective face was settled by distinguishing between time itself and our perception of it:

Tempus est numerus motus secundum prius et posterius, id est prius et posterius sunt in motu prout nata sunt comprehendi in anima. (Hamesse 151.#137; cf. Aristotle *Phys.* IV.xi 219a20)

Albertus Magnus, the logician, explains that *nunc* is at the centre of the tense system because only the present tense can give rise to an interpretation that is true. But the present being the fulcrum of experienced time goes out into the past and extends into the future. Therefore past and future signify what is folded around the present (Albertus Magnus *PeriH*. 1.3.2). He follows this poetic image with the rather cold Aristotelian image of boundaries: the present plays the role of end or purpose with regard to the past, and is the starting-point of the future.

Albertus Magnus, the physicist, then examines the repercussions of Aristotle's excursion into quando as presented by his Latin translators. In association with the proper tenses the adverbs, iam, modo, olim and repente, signal two things, degrees of propinquity, and direction towards past or future. Thus iam signals reference to immediate past or future depending on its verb; modo refers to the immediate past, olim to the remote past, and repente to a period of time so short that it cannot be felt (Albertus

<sup>&</sup>lt;sup>17</sup> Siger de Brabant (ascr.) *Phys.* 83.26: "Forma enim prioris et posterioris in motu secundum quod numerata sive numerabilia ab anima est ipsa essentia temporis."

Magnus, Phys. 4.3.14 [286.14–32]). This is the quando which is measurable; a quando that is not measurable comes from imperceptible time. However he distinguishes between quando signatum communiter and quando signatum secundum distinctionem praeteriti. The first is signified by nunc vulgariter acceptum, the second by a nunc which is a continuation and division of time, a concept close to the modern 'aspect', which is fully exemplified in the past by the contrast between a durative imperfect and a perfective perfect.

While the essence of time is duration by succession, eternity, which has no beginning and no end, and *aevum*, which has a beginning and no end, are duration static and indivisible. Albertus, the theologian, plays this theme out in an evolving comment on Boethius, *De consolatione philosophiae* 3. metron 9 1–3, a passage positing the contrast between the stability of the Creator and the flux of time:

O qui perpetua mundum ratione gubernas Terrarum caelique sator qui tempus ab aevo Ire iubes stabilisque manens das cuncta moveri.

The crux is Qui tempus ab aevo ire iubes, in which Boethius has linked the presents of tempus and aevum. Nunc temporis can be separated from the before and after to become substantia stans in se through the principles discussed in Perihermeneias (1.3.2). Because nunc temporis and nunc aeternitatis are both substantia stans in se, time is an image of eternity. However because nunc temporis can also be considered as the passage between before and after, it is proper to creation (Albertus, 1 Sent. 8.B.13.sol. [25:239b]). Fluxus enters the exposition of this Boethius quote in Albertus's commentary on Pseudo-Dionysius, De divinis nominibus (311.57–62). Eternity stat in esse suo, and time continue fluit a priori in posteriori. Finally, in his Summa theologica (5.22.2 [120.35–56]) Albertus reads nunc aeternitatis, nunc aeviternitatis and nunc temporis as nominal expressions signifying the substance constituting aeternitas, aevum and tempus. In the first two words this substance is permanence, in tempus it is flux.

Nunc aeternitatis makes it difficult to use past, present, or future tenses of God, and Albertus Magnus deals with the question through what a modern linguist would interpret as durative and perfective aspect. Deus est is the most suitable expression, because his duration is uninterrupted. Deus fuit can also be used because it signifies a thing in act, perfect, necessary and not moveable. Deus erit is the least suitable, eo quod hoc totum in privatione et potentia est. But Albertus saves this expression by a quibble taken from St Augustine (Enarratio in psalmos 9.11): because God never 'not-existed', he will exist for ever. The imperfect tense, erat, is totally unsuitable because it signifies an act that is incomplete and imperfect. But

St John was right to use the imperfect tense in the opening of his Gospel (In principio erat Verbum) denotes a situation with no end: it extends into the present and will go on into the future (Albertus Magnus, 1 Sent. 8.B.14 [25.241b]). Bonaventure's approach is simpler, and likewise depends on verbal aspect. In God's case time or tense is not dispositio rei acceptae vel intellectae, but only a mode of understanding which focusses on duration. Deus est, Deus fuit and Deus erit are acceptable because his duration had no beginning and will not end (Bonaventure 1 Sent. 8.1 dub. vii [I.163b]).

The position becomes more complex in Eucharistic theology. The words of consecration were a signum efficiens demanding the present tense. The future, erit, would not be right because 'suddenly fieri and factum esse occur at the same time'. Bonaventure (4 Sent. 8.2.1.2.resp. [IV.191b]) finishes with the traditional solution: est denotes neither simultaneity nor identity, but the immediate occurrence of a sacramental transformation. This verb is therefore the operant of an actus exercitus.

If theology was not to be a confusing presence in grammar's intellectual background, careful definition was needed. In normal usage the verb consignifies time *in communi* as the measure of composition, and all composition effected by the verb, *est*, is divisible time (Nicholas of Paris 28.20). Nicholas (29.17–20) discusses two types of present not unlike Albertus Magnus's two types of *quando*. The *praesens temporis* or *instans* is discrete and indivisible, and through its continuation time flows into time. The *praesens actionis*, which is *tempus in communi*, however, receives its quantity from action. Only the second has anything to do with *quando* and it is *in motu*.

The nature of tense is at its most poetic in Ps.Grosseteste. As an accident tempus is mora successivi (Ps.Grosseteste 48.11), and its image is one of continual flux: Tempus non consideratur in talibus nisi sic totus fluxus simul ut rota figuli (Ps.Grosseteste 48.17). The past is quod in aeternitate scribitur and is measured by the primitive movements of the heavens, as Cicero had said. The present is subject to measure because it offers itself to demonstration, and the future ad demonstrationem festinat (Ps.Grosseteste 48.12–15). Like Boethius, Simon Dacus presents the present as the root of past and future, but notes that the past comes first in certitude:

Omnis actio in motu et motus in contempore confirmatur secundum auctorem sex principiorum,  $^{18}$  et praecedit praesens tamquam radicale et alia

<sup>&</sup>lt;sup>18</sup> L. VI princ. §13: "Distat autem quando quod ex praeterito est, ab eo quod ex futuro procedit, quoniam quando quod ex praeterito est, posterius est; quod vero ex futuro est, prius praeterito est. Quando autem unum et idem, primum quidem ex futuro est, secundum ex praesenti, posterius vero ex praeterito, quemadmodum et tempus primum nunc quidem futurum est, postea vero praesens, deinde praeteritum."

sequuntur, prius tamen praeteritum quam futurum, quia certius. (Simon Dacus,  $Domus\ 45.15–18)$ 

In all disciplines the verb holds by far the predominant place in discussions of tense, though exemplification from participles has some odd features. In normal language use a perfect participle referred to both past and present, a strong hint of aspect. But in the case of Christ, who was predestined to become man, the perfect participle, praedestinatus, includes a past participle, praevisus, and a future, habiturus (Hugh of St Cher, Super III Sent. 207.95–97). Though this analysis rises from a normal confusion of the grammatical and semantic levels, it too, like Bonaventure's argument for Deus fuit, is an acknowledgement of aspect. This does not seem to come into grammarians' ideas on the tense of participles:

Nunc autem eadem est ratio in participio praeteriti temporis vel futuri, sicut enim *amans* de suo significato habet substantiam cum actu praesente, sic *amatus* habet passionem praeteritam cum substantia, vel substantia cum passione praeterita. (Brousseau-Beuermann 1991:173)

Being concerned with tempus in communi, the modistae mention tempus as a continuous quantity, the measure of motus, only to dismiss it as none of their concern. They tend to exemplify tense from the verb and take tense in the participle for granted. The traditional definitions of the tenses themselves were coloured by the principle that time is principlum motus secundum prius et posterius. The implication is that tense reflects real time. The theologian's sense that tenses could represent actions in various stages of completion becomes a play of potency and act: the future is a potential act not yet begun, the present a potentiality moving to completion, the perfect, a potentiality having reached act not long ago, the imperfect a potentiality in the past which is still incomplete, and the pluperfect a completed act remote from the present (Boethius Dacus 198.36–199.63).

Martinus Dacus (59.15–16), however, puts forward a subjective view of tense coloured by the exposition of time in Albertus Magnus: Tempus in verbo est modus intelligendi fieri sub instanti vel sub continuo tempore. The present tense is modus intelligendi rem sub instanti tempore, while modus intelligendi rem sub continuo tempore constitutes past or future depending on how movement to and from the present is conceived. Tense is a direct consequence of the modus fieri, which allows him to draw a parallel between tense in verb and participle (Martinus Dacus 74.28–75.7). Three ways of looking at the order of the tenses were developed from the difficult exposition in the Liber sex principiorum cited by Simon Dacus. The order of generation is future, present, past; of perfection, past, present, future; and of cognition, present, past, future (Michel de Marbais, Summa 97.18–31).

True to form the *modistae* argue from principles rather than from data that the verb can be deprived of tense. As a *modus significandi*, *tempus* as an accident is posterior to the essence of the verb. And as a prior is understood in anything posterior to it, the verb can be deprived of tense by the intellect (Boethius Dacus Q84, cf. Martinus 59.10–15).

#### 4.2.2. Number, Person and Inclination

Numerus and persona are the two major instruments of the composition joining verb to suppositum, for they are in the verb by attribution from its subject, and match its alteritas. Priscian's observation that they always occur together becomes persona et numerus sunt accidentia syniuga (Boethius Dacus 212.14).

Aristotle (*Phys.* V.iv 227b3) had numbered act according to its subject, time and terminus. The subject with which the action is compounded is person (*Logica Porr.* §I.21–22 [9.80–83]). Their grammarian colleagues take a slightly different tack. In the sentence, *Socrates est albus*, it is the noun, *Socrates*, that signifies the person of the verb, otherwise noun and verb would not be joined together (*Grammatica Porr.* 21). Verbs attribute to a person either a property with or without respect to somebody else or the reception of an act. In either case, number is in step with person. Because nominal substance is essential to acting and being acted on, the nominative is always understood in a finite verb (*ibid.* 31–32).

Petrus Helias does not discuss number in verb or participle, as what he had already said about the noun and pronoun was enough. The causa inventionis of person in the verb was diversitas loquendi de re (Petrus Helias, Summa 553.94–95) in contradistinction to person in the pronoun which signified presence or absence of its referent. The imperative is second-person — a first-person singular imperative is impossible, the jussive subjunctive acts as a first-person plural imperative, and we issue orders to a third person through a second. This being said, he draws his examples of first and third-person imperatives from the jussive subjunctive.

Theologians and logicians take it for granted that person and number in the verb are a sure index of whether a sentence refers to one or many subjects. Generations of theologians from Augustine to Aquinas read the plural verb of *Faciamus hominem ad imaginem et similitudinem nostram* (Genesis 1.26) as firm evidence that the one God was made up of three persons. The scholastics argued the case directly from Aristotle (*Phys.* V.iv):

Sicut vult Philosophus, actus tripliciter habet numerari, videlicet subiecto et tempore et specie sive termino. (Bonaventure, 3 Sent. 8.2.1 resp. [IV.190b])

At the same time grammarians were rethinking number and person as at-

tributes of motus. Number is an accident of the verb by reason of the substance from which motus rises (Ps.Grosseteste 52.36), but person is the accident of the verb which sets the direction of its motus.<sup>19</sup>

Michel de Marbais (Tractatus f121r2) remarks that person in noun. pronoun and verb are essentially the same. Given the derivative nature of verbal number and person, few modistae discuss them separately in the verb: there is a clear assumption that number can be discussed as the inseparable partner of person. Ps. Albertus (96 resp. ad 14) is satisfied with defining person as inclinatio actus ad substantiam a parte ante, which concords easily with the *modus distantis* proper to the verb. Others conjure up the ghost of Gilbert of Poitiers. Boethius Dacus (Q. 93) puts forward a clearly Porretan view of person and number in the verb. The modes of signifying relating to who speaks, who is spoken to, or who is spoken about and how many there are, are identical in noun and verb because the verb takes them from properties of the thing signified by its subject noun or pronoun (Boethius Dacus 214.27–29). Others bearing Aristotle's definition of the verb in mind, take the view that the finite verb is in a specific person which matches the alteritas proper to a noun or pronoun in the nominative case, when it is constructed as a *suppositum*:

Modus significandi qui facit personam in verbo, est modus intelligendi rem verbi prout attribuitur *alteri secundum quod habet modum loquendi*, et secundum hanc variam attributionem variatur verbum per varias personas scilicet per primam, secundam et tertiam. (Martinus Dacus 62.15–20 [my italics])

He is emphatic that the verb does not have person merely because it is attributed to the *suppositum*, but because it is attributed to the *suppositum* in a particular person.

Infinitives, gerundives, impersonal verbs and participles naturally lack person (Petrus Helias, Summa 555.41–45). The simplest explanation is that the signification of the verb can be considered in two ways: if considered secundum se, person is not a relevant accident, but if considered in relation to its inclination to a suppositum, person is relevant (Jordanus 34). Ps.Grosseteste (52.20–34) deals with the question through concretio. An impersonal verb signifies non concretive in three ways: it can signify motus as actio or passio without specifying a subject, for example cenatum est; it can signify motus as lying between the two, as accidit or contingit, or it can signify an intransitive act that does not pass to an object, as itur ad Romam.

The *modistae* argue that any substance can be deprived of certain of its accidents. In the case of the impersonal verb it is deprived of person and

 $<sup>\</sup>overline{^{19}}$  Ps. Grosseteste 52.15: "Persona verbo accidit, quia cum motus sit, via nihil certum nominat."

number as they are the accidents disposing it to enter into the construction of *suppositum* and *appositum* (Michel de Marbais, *Summa* 84.68–73). Boethius Dacus (210.48) looks to the final cause of such a construction: it is one designating an act without any certitude of the identity of the agent, while Ps.Albertus (142 resp.) sees this as a matter of communicative intent:

Nunc est ita quod convenit intelligere actionem determinatam, non intelligendo substantiam determinatam a qua egreditur.

#### 4.2.3. Modus and Inclination

Modus for Donatus was a variety of qualitas verbi in that it signified quale sit unumquodque verbum. Qualitas included forms like perfective, frequentative and the like. For Priscian (VIII.63) indicative, imperative, optative, subjunctive and infinitive were diversi inclinationes animi, varios animi affectus demonstrantes (GL II 421.17), all of them signifying an affectus animi which modified the relationship between verb and subject. This view of things lasted into the Middle Ages. Ralph of Beauvais quotes a Magister Gulielmus, who Reilly's footnotes imply could be either William of Champeaux or William of Conches (Petrus Helias, Summa 523n):

Modus autem [verbi] alius realis alius vocalis. Realis modus est affectus animi circa actionem et passionem, et quattuor sunt affectus — indicandi rem vel imperandi vel optandi vel dubitandi. Vocalis etiam modus est collectio vocum in diversis personis, numeris, temporibus eundem animi affectum assignantium. (Ralph of Beauvais [Hunt 1950:21])

This is all taken over by Petrus Helias, (Summa 523.23–526.94) who notes that because the indicative is tied to reality it has a full range of tenses, the imperative lacks both first person and past, the optative requires utinam for its full sense, the subjunctive — the only mood named from its mode of construction — signifies subordination, and the infinitive can only be accepted as a mood on sufferance.

By the early thirteenth century mood ranked with person and number as a disposition of the inclination of the verb, in that together with person and number it shaped the composition of verb with subject. Roger Bacon seems to entertain the idea of what modern linguists call the 'topic' of a sentence: the finite verb can incline towards a substantive that is not necessarily the subject, an ablative for example, which acts as a *principium* rather than a *suppositum*:

Modus dicit inclinationem rei verbi ad substantiam, sed haec substantia non exigitur necessario a parte ante, nec in recto, sed sumi potest indifferenter a parte ante et a parte post in obliquo et in recto. (Bacon, *Grammar* 80.15–18)

It is not clear whether Jordanus has a systematic framework for the modes: he deals only with the indicative and the infinitive. Through its definite inclination the indicative signifies that its *suppositum* actually exists (Jordanus 85); the infinitive on the other hand, determines the *alterum* through an indefinite inclination independent of its signification, and being a nominal part of the verb, it can act as a *suppositum* (Jordanus 82).

Ps.Grosseteste places verbal moods in a framework rising from Priscian's view that modus was an inclinatio animi. Being is the first level of composition of matter and form through motus. Therefore when the mind is dealing with signification through motus, it is also dealing with being, and with inclination towards being or non-being. And this inclination is modus (Ps.Grosseteste 48.28–37). Modus is differentiated according to scire, velle, posse, the three principles of being insofar as it is a cause. Thus the first mode is indicativus sive scientificus, the second, imperativus sive potestativus, and the third optativus sive desiderativus (Ps.Grosseteste 48.39–49.1). These three verbal moods rise out of the effect of the true, being and the good on the mind. The mind inclines towards the true in order to achieve it through right judgement, towards being to bring it about by commanding somebody's powers of action, and towards the good because one wishes to 'join oneself to a desired good'. The subjunctive is not a simple inclination but one which takes place secundum quid, that is by consideration of other moods. Infinitive, gerund and gerundive have no determined inclination to a subject, but are open to all types of inclination (Ps.Grosseteste 49.1–10).

The logicians' account of the subjunctive is clearer than Ps.Grosseteste's. It was the only mood that signified the matter of its verb in respect of something else. In clauses introduced by *nisi* and *quin*, for instance, the clauses followed on one from the other, so that the respective negations entailed respective verbs, a *consecutio* which could only be signalled by the subjunctive (Petrus Hispanus, *Syncategoreumata* VIII.61 & 91).

Moral and sacramental theology assumed much the same linkage as did grammar between mood, mental state and communicative intent. Though modus enuntiationis was a not uncommon term for the indicative, the relationship between truth and the indicative mood went beyond the simple detailing of fact. The imperative does not signify a wish — that is the province of the optative —, but a command directed to somebody else (Alexander of Hales, 1 Summa. §274 [I.377a]). Though rising from the will, a command is an act of the reason by which one disposes (ordinat) somebody to act by intimating something to be done. If absolute, this intimation is in the indicative: Hoc est tibi faciendum. Other theologians approached this question through contrasting the rational and irrational (i.e. irascible and concupiscible) powers of the soul. Through the soul's rational and imaginative powers we are capable of perceiving forms both present and absent

and designating them by the modus conceptus. By the irascible powers, we seek or avoid, love or hate something (Jean de la Rochelle 191.5–9). The indicative rises from the rational powers, the imperative and optative from the irascible and concupiscible respectively, and the subjunctive from both (Bonaventure, Hexaemeron IV.19 [V.532b]). This lies behind Aquinas's question, Utrum liceat maledicere aliquem (STheol. 2a2æ. 76.1), in which he contrasts indicative, imperative and optative. A simple statement of evil is in the indicative, a command that evil be done in the imperative, and a desire that evil be done in the optative. Whether maledicere in the imperative or optative is morally right or wrong depends on the speaker's intent: if he envisages the good of his interlocutor, maledicere is licit, if not it is illicit.

Similarly the words accompanying the administration of most of the sacraments are speech acts, or in medieval terms, actus exerciti.<sup>20</sup> These formulas are in the indicative except in the sacrament of Holy Orders.<sup>21</sup> Because this sacrament confers an ecclesiastical mandate on those who receive it, the traductio potestatis involved is expressed by an imperative (Aquinas, STheol. Supp. 34.4 resp.). The indicative in sacramental formulas where one might expect an optative has Biblical precedent. Though the Apostles were not given power to heal by their own authority, they did administer the sacraments instrumentaliter sive ministerialiter, and therefore they could better express what they were doing in administering the sacraments than in healing the sick. However this still left them the latitude to choose the mood of their verb in the performance of their duties:

Tamen non semper modo deprecativo utebantur, sed quandoque modo indicativo et imperativo: sicut Act. 3.6 legitur quod Petrus dixit claudo: 'Quod habeo, hoc tibi do. In nomine Iesu Christi, surge et ambula'. (Aquinas,  $STheol.\ 3.84.3$  ad 4)

In spite of Bonaventure, imperative and optative signify per modum conceptus, because command and desire are acts of the reason. This approach is refined by Simon Dacus, who, if he had indeed worked at Paris, may have been influenced by Bonaventure. In his view both indicative and subjunctive rose from the rational powers — the indicative absolutely and the subjunctive (or conjunctive) relatively. The imperative was strongly tinged by the irascible powers, the optative by the concupiscible, and the infinitive by the imaginative (Simon Dacus, Domus 42.9–25).

 $<sup>\</sup>overline{^{20}}$  Aquinas, *STheol.* 3.84.3. ad 5: "Sacramenta enim novae legis non solum significant, sed etiam faciunt quod significant."

 $<sup>^{21}</sup>$  "Accipe potestatem offerre sacrificium Deo, Missasque celebrare tam pro vivis quam pro defunctis, in nomine Domini. Amen"

Most modistic definitions of mood itself go back to Priscian. Ps. Albertus (96 resp. ad 14) takes mood as an inclination of act to substance both a parte ante and a parte post. Martinus Dacus (61.3-6) defines modus as a quality of the inclination of the verb towards the suppositum, not the inclination itself. This correction was probably directed at Roger Bacon. And he further explains that *indicatio*, *imperatio* and other functions of speech as qualities affecting the inclination of the verb, give rise to the five moods. The definitions of the moods in our early modistae are in the main quite circular, with an undercurrent from theology, cf. Boethius Dacus (205.28–30): Et indicativus circa rem designat affectum indicantis, et imperativus affectum imperantis, et optativus affectum optantis. The subjunctive seems to cause a certain amount of difficulty: both Michel de Marbais and Martinus Dacus adopt Priscian's modus dubitativus to characterise it, but Martinus (61.1) notes that it signifies sub conjunctione vel sub dubitatione. There is unanimity that the infinitive cannot be considered as a part of the verb deprived of mood: the consensus is the traditional one that it signifies affectum incertum et indeterminatum (Boethius Dacus 208.30).

### 4.2.4. Significatio

While the verb is linked to its *terminus a quo* by composition, it progresses to its *terminus ad quem* through *significatio*, also termed *qenus*:

Significatio vel genus, quod Graeci effectum vocant verbi, in actu est proprie, ut dictum est, vel in passione, et omnia verba perfectam habentia declinationem et aequalem vel in -o desinunt vel in -or. (Priscian, 8.7 [GL II 373.10-12])

The term, genus, is taken back to the verb, generare: act was accepted as proper to the male principle, and receiving act to the female. Significatio, however, looks directly at the ways in which the motus of the verb or participle can be terminated – in other words at questions of transitivity and intransitivity. Active, passive, and neuter verbs exist by common consent; Priscian also refers to a 'common voice' in which active and passive are combined, for example vapulo (to be flogged), and takes deponent verbs as constituting a separate voice.

Abelard's exegesis of *significatio* turns on the active meaning of postverbals in *-tio*. *Significatio* is the capacity of the verb to signify its principal meaning through the categories of *actio* and *passio* and to require a certain type of *terminus* for the act signified:

De 'habere', autem, quod actionem quamcumque aliquando significet, ex hoc fortasse videbitur quod 'haberi' passivum facit quodque accusativum regat casum secundum significationem actionis passionem in alium inferentis. (Abelard,  $De\ dial.\ 133.23-26$ )

Active verbs actively govern the accusative and can be passivised. The *Porretani* develop Abelard through the concept of the transitivity inherent in active verbs. Transitive verbs attribute a property to the person of their subject with respect to somebody or something else through the *transitio* of the act, as in *puellam amo*. Intransitive verbs (also called neuter verbs) attribute the property or act to their person without respect to anything else, as in *hic sedet senator*. Passive verbs on the other hand, attribute the reception of this act to the person of their subject, as in (*puella amatur*) (*Grammatica Porr*. 30). This applies to the participle as well: for although the participle lacks mood and composition, it completes its phrase through a *significatio* inclining it to an object or precluding an object according to the *genus* of the parent verb.

As a pendant to this the Porretan logicians were concerned with distinguishing between the substance of the verb, which was the same in active and passive, and the acting and being acted on it signified. When the verb signifies that an action inheres in the subject with respect to another subject, that respectus is called transitio verbi (Logica Porr. §I.21–22 [10.91]). Neither a verb in the passive nor a neuter verb can be transitive. But participles 'retain the signification of the verb', so that a participle like urens can take an object.

Petrus Helias (Summa 455.86) sees genus as consequent on significatio: Est igitur genus verbi qualitas verborum contracta ex terminatione et significatione. Reilly's footnote to this passage implies that he took this from William of Champeaux. While word-endings pertain to the vox, verbal significations are acts crossing from subject to terminus (video Socratem), 'passions' brought to the subject by something else (videor a Socrate), acts that do not pass outside the subject (vivo), or passions within the subject (rubeo) (Petrus Helias, Summa 455.91–96). Verbs like noceo, which signify transition to a complement that is not accusative, are neuter verbs because they do not have a passive.

Thought on the *genus verbi* was focused by the *L. VI princ*. (13.6–8), which emphasises the relationship of action to *motus*. *Actio* and *passio* belong to a single *motus* which exists equally in agent and recipient, just as the distance from Athens to Thebes is the same as that between Thebes and Athens (Aristotle, *Phys.* III.iii 202b13–14). Action is a generative force whose natural property is to bring a like *passio* into the terminus of its *motus*. A source of heat will make something else hot, because *passio* is the effect of *actio* (*Liber VI princ*. 16.10–14).

By the thirteenth century *moveri* had become *transire*, and *genus* a balance to composition. The *Liber sex principiorum* remains influential:

Quamvis igitur omnis actio sit illatio passionis, tamen non significat omne verbum active vel passive.<sup>22</sup> (Ps.Grosseteste 47.6)

At this point *significatio* in the verb seems to involve *compositio*. If considered *secundum se* the *significatio* of the verb has nothing to do with person, but if considered in relation to the substance to which it inclines *a parte ante*, *significatio* implies person and therefore composition (Jordanus 34).

Yet most grammarians restricted composition to the beginning of the verbal motus, genus or significatio was concerned with its end. Verbal significatio guides a substance in motion towards its perfection. The active voice secundum se is directed towards the passio it induces in its terminus (Ps.Grosseteste 47.2), while neuter verbs like curro signify an act that does not transit to a separate terminus, but finishes in the doer of the act. While the verb has action as its significatio essentialis, its significatio accidentalis is a mode of signifying act and being acted on in relation to a substance assigned as the principium or terminus of a sentence (Jordanus 86). The notions of transitivity and in transitivity significatio entailed concerned case. Thus when the verb signifies cum transitu ad alterum, it requires the accusative, when it signifies transitus ab altero it requires the ablative, and a verb signifying without grammatical transition lacks a complement.

Significatio was invented as an accident of the participle so that an act united with a substance which supports or terminates the transition of its verb could be signified in oblique cases as well as in the nominative (Jordanus 20). In both verb and participle significatio and tense are inseparable, and the significatio of a participle follows that of the parent verb (Ps.Kilwardby, Peterhouse 121 f81v1). Matheus Bononiensis (Q4.§1.2.4 a2 [145b]) shapes the discussion according to Albertus Magnus. Modus fluentis and modus motus are essential to the notions of active and passive as they specify different ways in which motus or res fluens are bounded (terminantur) by their subject and object.

The modistae are at pains to differentiate genus in the noun from genus in the verb, which in spite of Ps.Grosseteste they take as synonymous with significatio. The genus activum denotes an act passing from an agent into a terminus outside it; the genus passivum signifies an act received in an internal terminus. Stative verbs like stare are neuter because they do not designate an act passing outside the doer. There is mention of the other voices, common and omne, which most modistae subsume in active,

<sup>&</sup>lt;sup>22</sup> Cf. L. VI princ. 15.10: "Passio autem est effectus illatioque actionis."

 $<sup>^{23}</sup>$  Albertus Magnus, Phys. 3.1.8 (166.11–39): "Sed quod diximus supra fluxum esse a termino in terminum, hoc dicimus hic fluxum a movente in id quod movetur."

passive and neuter. Significatio or genus as the act of meaning rather than meaning itself (Michel de Marbais, Summa 8.38–47). Part of the background to modistic ideas about significatio may be Abelard's careful reminder that the function of the verb is creating perfection of sense (Abelard, De dial. 148.26–30). The modistae show a stiffening of attitude towards the question of transitio verbi. Where grammatici antiqui like Petrus Helias accepted that a verb could transit to any case representing a terminus, the modistae made the proprietas transeuntis in accusativum a parte post a necessary definition of significatio activa:

Significatio accidentalis est modus transeuntis in accusativum solum a parte post, et sic solum competit verbo et participio. (Martinus Dacus 74.23–25; cf. Boethius Dacus 188.48–51)

The task of the accusative is to signify the terminus of an act as its perfection, not just as its finishing point.

#### 4.2.5. Figura, Species and Other matters

As accidents pertaining primarily to the *vox*, *figura* and *species* were not of absorbing interest. Having discussed *species* and *figura* in the noun, a number of *modistae* merely refer to previous discussion in their sections on verb and participle. From the beginning it was accepted that participles were derived from verbs.

There are some differences of a opinion on whether species and figura were two different accidents. Donatus separated them, while Priscian included figura under his discussion of species. As one might expect, Petrus Helias (Summa 538.52–56) follows Priscian: cupio is of simple figure, concupio of composite figure, and the intensitive, concupisco, of decomposite figure. He points out that many composite verbs are of different conjugation from the simple verb, the first-conjugation verb, do, for instance, becomes the third-conjugation verb, reddo. He then discusses the difference between prefixation and suffixation in the derivation of verbs from a primitive. Petrus Helias's ideas are accepted by Ps.Grosseteste (53.8–14), who adds that verbs are at times derived from nouns, because the res nominis is prior to the res verbi, as semino and armo from semen and arma. He also claims that verbs can be derived from adverbs, as superare from super.

Ps.Kilwardby (143) takes figura and species as relative accidents that refer to the word's shape. Species is the principium a quo by which is produced a form different from that of the origin. Thus frequentative or desiderative verbs like rogito and esurio are of derivative species because they are different in meaning from the simple verbs, rogo and edo. Figura, however, is a principium ex quo, so that a verb of composite figure like consignificare

retains the sense and normally the form of its composing units. In the participle the matter is more complicated: Donatus accepts figura simplex et decomposita but not figura composita because participles are derivative.

Modistic treatment of this issue is very patchy. As far as the verb is concerned, Michel de Marbais merely refers his reader to his section on the noun, and Boethius Dacus (175.40–50) quotes the transitive verb, *invado*, formed from the intransitive, *vado*, to show that composite figure can have an influence on its syntax, and is therefore a mode of signifying. Martinus Dacus (64.9–14) seems to take *figura* and *species* as synonyms which merely refer to meditative and frequentative verbs and the like. Michel de Marbais (*Summa* 88.6–89.26) calls such verbs *formae verborum* while stating that they are of derivative species. The treatment of the participle is even more summary: Michel de Marbais (*Summa* 119.1–9) defines *figura decomposita* as a certain species or a certain mode of derivation, and castigates Donatus for assigning *figura simplex et decomposita* to the participle, pointing out that *composita* is the proper contrary of *simplex*. Like the verb *perlego*, the participle *perlegons* is of composite figure even though it is of derivative species.

At this stage Martinus Dacus (54.7) is the only one to recognise *compositio* as an accident of the verb. There is some difference of opinion over conjugation. As with *declinatio* the point at issue is whether *coniugatio* is a mode of signifying or not. Michel de Marbais (Summa~88.2) takes it as a variation in the matter of the vox, while for Martinus Dacus (64.5–6) conjugation is a modus intelligendi rem ut cadit sub diversis inflexionibus temporum.

#### **4.3.** System and the Declinables

Priscian's pairing of substance and acting as propria of noun and verb had laid the ground for a system of binary opposition in which to place the declinable parts of speech. The crux of the issue is Boethius's instrumental consignificatio and the gradual realisation that consignificatio and modus significandi are synonymous. At the heart of the question lies the concept of imposition through mensura which develops slowly over the period between Abelard and the short discussion of time as the measure of the verb in Albertus Magnus (PeriH. 1.3.2). This is balanced against the freedom of the mind to choose the modalities of imposition. In consequence both essential and accidental modes of signifying are assigned by a measure chosen as freely as is consonant with the norms of expression.

From the *Porretani* onwards, the terminology of the declinables begins to evolve into a map of the theory, a model of language as a process governed by principles taken from the natural sciences. Its horizontal axis is the opposition between stasis and kinesis exemplified by noun and verb,

and its vertical two oppositions; that between the defined substance of the noun and the undefined of the pronoun, and that between the verb's functions of predication and the participle's powers to make kinesis into a form. The Porretan commentaries on Boethius *Opuscula sacra* refined the ancient ideas on noun and verb, their imposition and the accidents of number and person, and highlighted the independence of the intellect in the face of reality, because Gilbert's strict Aristotelian methodology placed the ancient grammatical concepts under the severest of all tests, and his example was followed into the thirteenth century. Theology as an applied linguistics tested the laboratory models of the grammarians to the point of workable compromise. Under these conditions the designation of the *dictio* as a part of speech and the genesis of its accidents are an integral part of imposition.

The *Porretani* had shown that noun and verb must be treated together, if one was to produce an explanatory model. This position was strengthened by the work of Robert Grosseteste on *motus*, the Roger Bacon's grammar and the early uses of the idea of *motus* in commentaries on Peter Lombard's *Sentences*. It would seem that *Sentences* I.18 was crucial in creating a process model of imposition, and ultimately of the sentence by underlining the substance of the noun as a *habitus* that set up a passive potency fulfilled by the *actus* of the verb. *Modus habitus* survived, but *modus motus* and *modus fluxus* seem to have already been well rooted by the time Bacon was writing his grammar, the prominence of *modus fluxus* in Albertus Magnus's writings on physics and theology sealed the fate of *modus actus*. And *modus fieri* was the highest common factor in all of them. It seems to have been sacramental theology that set up the *substantia mera* of the pronoun as a potency for quality rather than an absence of it, and that assigned *modus informantis* to the participle.

Because of the advent of *impositio ad consignificandum* as a separate imposition, the declinable parts of speech were now deemed to have substantial form. The accidents through which they operated were now endowed with *modi essendi*. But this did not change the terms of the map; but it did entail highlighting the dynamic aspects of the declinables. For this reason the pronoun signified *per modum determinabilis* to match the *modus determinati* in the noun, and the *modus distantis et indistantis* of verb and participle were interpreted in terms of *situs* in the sense of their proper sphere of operation.

# CHAPTER FIVE THE INDECLINABLE PARTS OF SPEECH

Development of an Aristotelian model of the indeclinable parts of speech lags some generations behind the first formalisations of the declinables, if only because they signified through 'Priscian's consignificatio', which required completion from the context. But where Priscian had emphasised the sociative aspect of his consignificatio, the Middle Ages developed the concept through the category of relatio. The indeclinables signified neither res nor modi rei, but quasi circumstantias rei (Clarembald, De trin. 175 §91), and set up syntactic and logical relations through the modus essendi ad aliud. The indeclinables put four tasks before the modistae: establishing a believable triad of modus essendi, modus intelligendi and modus significandi for each of them; showing that significatum, modus significandi and officium were as distinct in the indeclinables as in the declinables; coming to terms with the short and heterogeneous list of accidents the logical and grammatical tradition had assigned them; and finally, allowing for the modus affectus of the interjection within a system based on the modus conceptus.

## 5.1. Dispositio actus: Adverb and Interjection

# 5.1.1. Essential Modes of Signifying

As its name shows, the classical grammarians saw the adverb as primarily an adjunct to the verb:

Adverbium est pars orationis, quae adiecta verbo significationem eius explanat atque implet. (Donatus, 386.17) Adverbium est pars orationis indeclinabilis, cuius significatio verbis adicitur. (Priscian  $15.1\ [GL\ III\ 60.1])$ 

In dialectic adverbs were not parts of speech, but they had some of the functions of nouns. To resolve this contradiction twelfth-century dialecticians distinguished primitive adverbs from derivative. As primitive adverbs (e.g. *ita*, *num*) signify nothing completely defined and therefore merely consignify, they were not counted as parts of speech. But derivative adverbs have the meaning of their primitive (normally an adjective) and are parts

 $<sup>^1</sup>$  Abelard,  $Logic~334.31\colon$  "Adverbia quoque quaedam, quia definitae significationis non sunt, sicut non, falso, nomina esse non possunt nec pars orationis secundum dialecticam."

of speech. This was taken up by grammarians: primitive adverbs consignify something ill-defined, while derivative adverbs take a definite signification from their primitive (Petrus Helias, *Summa* 707.14–18). However any adverb, whether primitive or derivative, completes its signification in context, so that its signification hangs on the meaning of its verb (*ibid*. 768:84).

William of Conches and Petrus Helias are among the few to entertain the possibility of a *causa inventionis* for the adverb:

Si quaeras quae fuerit causa inventionis adverbiorum, dicimus quod eorum et quae per verba significantur determinatio. (Petrus Helias, Summa 765.10–11)

This formulation persists: the adverb is annexed to the verb ad explanandum eius significationem (Hugh of St Victor, 285.27–28). Petrus classes it later as modus significandi and purpose of the adverb:

Est alius modus significandi vel consignificandi determinare qualitatem actionis vel passionis quae per verbum significatur, propter quem est repertum adverbium. (*ibid.* 882:85–87)

Petrus warns his readers against interpreting Priscian's adiectivum verbi too literally. Participles, being verbs with cases (verba casualia), can be modified by adverbs (ibid. 769:99–03). Petrus scotched the idea that adverbs were a type of verb in the sense that the adjective was a noun by pointing out that the adverb has none of the accidents of the verb and therefore cannot be constructed with the verb through parity of accidents (ibid. 766:14–25). This becomes the common thirteenth-century argument against the notion that the adverb is a verbal part of speech like the participle (Jordanus 29).

The mode of signifying of the adverb was not fully related to a modus essendi until almost a century later. Mid-thirteenth-century dialecticians took Priscian's point that adverbs are dictiones, which signify mental concepts through modi significandi however incomplete (Nicholas of Paris 6.8–9). His modus significandi qualitates actionis vel passionis, one of the more explicit modes of signifying for the adverb from the thirteenth century, comes out of Petrus Helias. Dialecticians see the adverbs which modify ratione actus as determining their verb: currit velociter posits speed as the determination of running in contradistinction to currit cum velocitate, which posits a relation between act and speed (Petrus Hispanus, Syncategoreumata IV.38). On the other hand, logical operators like necessario and contingenter determine the verb ratione alicuius comparationis debitae ipsi actui. Modal adverbs like necessario pertain to the inherence of an act in its substance by composition. And in modifying the composition, they produce a modal proposition (ibid. VII.9–11).

Grammarians prefer the simpler statement that some adverbs modify the res verbi and others modify the verb gratia compositionis (Magister Jordanus 22). Adverbs of time and place modify the verb according to the categories of *quando* and *ubi*. Adverbs of place, time and mood signify an accident not inherent in the action and are a measure external to what is being measured. Ps.Grosseteste (58.36–59.9) discusses such adverbs in general terms that take in both logical operators and mental inclinations giving rise to questioning, doubting and admiring. But the adverb was functionally the adjective of the verb because it signified *per modum adiacentis*:

Adverbium est verbo adiacens pars orationis indeclinabilis existens. Adiacet quidem verbo aut alicui ratione alicuius eorum quae verbi sunt. (Ps.Grosseteste 58.20)

Determinatio and explanatio were subsumed in the more general dispositio in relation to both parts of speech. Dispositio being an inclination towards a particular effect (Albertus Magnus, Phys. 2.3.1 [132.74–76]) and a principle directing a being towards its purpose (Aquinas STheol. 1.22.1 resp.), adverb and adjective disposed verb and noun, or act and substance to functions appropriate to them:

'Torvum' enim, cum sit nomen, significat dispositionem substantiae, quia est adiectivum; 'torve', quia est adverbium, significat dispositionem actus. (Kilwardby, *In III Donati* 46.420)

Dispositio verbi, a common term for the operation of the adverb among theologians (Bonaventure, 1 Sent. 22.1.1 ad 6–7 [I.391b]), found its way into the theory of modes of signifying, and confusion between officium and modus significandi remains endemic in discussions of the indeclinables.

Simon Dacus (*Domus* 48.1–3) accords modus significandi to the indeclinables, but he does not define it beyond saying that in all indeclinables modus significandi and significatio are the same thing. His definition of the adverb is traditional enough: the adverb is the part of speech which 'explains and completes the signification of the verb' (*ibid*. 48.26–27). Its significatio per se is the universal which places it in the category of adverb (*ibid*. 48.30–32); modus disponendi verbum respectu loci vel temporis is the significatio per accidens of the adverb (*ibid*. 49.4–5).

The marked kinship the *modistae* accord adverb and interjection is Priscian's legacy. Priscian (15.40 [GL III 90.5]) classed interjections as adverbs because his Greek authorities believed that they either were adjuncts to the verb, or implied a verb. But the Roman tradition had separated the two on the grounds that the interjection signified emotion, and lay outside the structure of the sentence: *Interiectio est pars orationis interiecta aliis partibus orationis ad exprimendos animi affectus* (Donatus 391.26). In Quintilian's usage *interiectio* was a figure of rhetoric which interrupted the flow of the sentence by thrusting a word or phrase into it:

Etiam interiectione, qua et oratores et historici frequenter utuntur, ut medium sensum aliquem inserant sensum, impediri solet intellectus, nisi qui interponitur breve est. (Quintilian, *Institutes* 8.2.15)

The assumed etymology is clearly the third-conjugation verb, interiacĕre (to throw between), and it is this one that appears in Donatus and his commentators.<sup>2</sup> On the other hand, the etymology favoured by Priscian (11.6 [GL II 551.16]) is the second-conjugation verb, interiacēre: interiectio, quae his [partibus] interiacet. Interjections being products of affect are voces inconditae (words without order) (Donatus 392.2), whose production and pragmatics are marked by violent intonation (accentus). In the hands of later copyists Donatus's voces inconditae became the revealing voces incognitae or voces absconditae, both equally damning.

The negative senses of affectus were more influential than the positive in the development of the interjection. For that zealous Stoic, Seneca the Younger (*Epistolae morales*. 75.12), emotions are irrational movements of the mind that suddenly appear, which if frequent and not promptly dealt with lead to illness. The Stoic view of emotion as a reprehensible departure from reason lies behind Augustine's exposition of the interjections, *racha* and *fatue* in the Sermon on the Mount (Matthew 5.22):

But I say to you: anyone who nurses anger against his brother will be brought to judgement. If he says, 'Stupid!' (racha) to his brother, he will appear before the court. If he says 'You fool!' (fatue) to his brother, he will answer for it in the fires of Hell.

In De sermone Domini in monte I.24 Augustine grades the sins entailed in these words according to three levels of punishment which he relates to intent and loss of control. Anger felt and openly expressed, is punished least severely. But the anger which gives rise to the eruption of the word, racha, is more severely punished, because the word does not signify anything, but merely gives vent to anger. Fatue on the other hand, attracts the most severe punishment by reason of its certae vituperationis expressio through a deliberate element of imposition with intent to wound.

Medieval discussion of the interjection combined Seneca's Stoic moralism, the Christian disapproval of loosing self-control voiced by Augustine himself, the Ps.Augustine *De spiritu et anima* and John Damascene's *De fide orthodoxa*, Aristotle's distinction between the rational and irrational elements in the soul (*Nicomachean Ethics* I.13 1102a35) and Avicenna's exegesis in his *De anima*. The Priscian commentary in Vienna MS VPL 2486

 $<sup>^2</sup>$  E.g. Sedulius Scottus 268:  $\S941$ : "Interiectio ab interiaciendo dicitur, quia de aliis partibus erumpimus interiectivam vocem acti gaudio vel tristitia, vel metu vel dolore. Interiecta, id est interposita."

defines it as 'a part of speech whose proper function is to lie between other parts of speech and to signify various emotions'. The author notes that while in the Latin tradition adverb and interjection are different parts of speech, the Greeks class interjections as adverbs. But whether the Greeks are right or wrong, the author does not know. Petrus Helias (Summa, 882.96) had already quoted Donatus and Priscian on this matter without taking sides. But MS VPL 2486 (de Rijk 1972 II.i.251) argues that they are disparate parts of speech. The proper characteristic of the interjection is semper abscondita voce proferri. In construction interjections signify the affectivity of the verb, while adverbs signify modalities of acting or being acted on. Finally, adverbs must be constructed with verb or participle, while interjections can be constructed absolutely.

Practically all of the twelfth-century concerns about the interjection figure in Hugh of St Victor ( $Grammar\ 288.23-26$ ):

Interiectio est pars orationis quae interiecta aliis partibus orationis animi tantum exprimit affectus voce incondita, quae ex natura magis quam institutione profecta videtur; unde communis fere omnibus gentibus invenitur.

Interjections run the gamut of emotions from sorrow to joy, which were accidents of the soul itself and not mental concepts (Tractatus de proprietatibus sermonis [de Rijk II i.708.29]). Following Augustine's example, some twelfth-century authorities distinguished the 'natural' interjections (for example, vah, ah) from those 'imposed' to signify ad placitum (for example, papae, proh): the second group could stand in the place of a noun (Abelard, De dial. 121.8–16). Others recognised three types of interjection: those signifying ad placitum, natural interjections which could be written, and interjections imitating animal sounds. It had long been suggested that the liturgical responses, Benedicamus Domino and Deo gratias, were interjections. This Petrus Helias (Summa, 808.37–40) denies, although he does say that sometimes they are thrust into a sentence, as in Prospere, Deo gratias, mihi accidit, which in Quintilian's terms does make them interjections which interrupt the flow of the sentence.

The *Graecismus* (XXIV.1–3) classes interjections as adverbs on the grounds that they are either constructed with verbs, or make verbs understood. It adopts *interiacēre* as the correct etymology on psychological grounds, for the interjection lies between mind and voice:

Sed cur dicatur, cum non interiaciatur, Interiectiva, non a paucis dubitatur. Ad quod re vera sic respondere valeamus Nam menti et voci medians interiacet ipsa. *Graecismus* XXIV.4–8. In the face of the moralist tradition, one could hardly deny that the some interjections signified *ad placitum*, and others raw emotion (*Graecismus* XXIV.51–52). The first type were imposed, while the natural interjections making up the second class were *soni litterati et imitationis* (Vincent de Beauvais 200E).

With the acceptance in the 1240s that indeclinables had modes of signifying in the full sense, there were diverse efforts to resolve the paradox of the interjection. Though Bacon seems to take cognisance of the *Graecismus*, he begins from the principle that interjections are signs and places them halfway between natural sounds proper to animals which signify neither affect nor concept, and fully-fledged words produced by proper deliberation (Bacon, *De signis* §11 [84]). But though they have some element of deliberation in them, they signify *per modum affectus*:

Interiectio vero non significat ex perfecta deliberatione, quia significat conceptum ex aliqua deliberatione, sed tamen per modum affectus, non per modum conceptus, sicut etiam voces interiectionum imperfectae sunt et absconditae. (Bacon, *Compendium studii theologiae* §42 [62.19–23])

Others thought that the speaker did not utter an interjection as a part of speech but as a natural sign of affect: but by exercising bonitas intelligentis, the hearer made it a part of speech signifying ad placitum (Jordanus 22). This theory was dismissed on the grounds that a part of speech is imposed by the impositor, and that the hearer received it as imposed, whether per modum conceptus or per modum affectus.<sup>3</sup>

Rising out of this opinion was the most frequent theory: interjections subordinated reason to affect (Rosier 1994:61), and were therefore akin to animal sounds.<sup>4</sup> The human soul shared the irrational powers of the animal soul, to wit the irascible and the concupiscible, by which we seek or avoid, love or hate something (Jean de la Rochelle 191.5–9). But Man differs vastly from animals through the rational powers of the soul, by which it perceives forms both present and absent and designates them by the modus conceptus. Ascribing the interjection to the irrational parts of the mind probably drew on Albertus Magnus's analysis of consignification in

<sup>&</sup>lt;sup>3</sup> Kilwardby, Super Priscianum minorem ad XVII.21: "Vel dicendum quod omnis pars, et interiectio et aliae, significant mentis conceptum, sed aliae exprimunt ipsum per modum conceptus, sola autem interiectio per modum affectum. Et ideo dicitur affectum significare et aliae partes conceptum — per modum autem significandi distinguunter partes." (in Rosier 1994 59 fn 10).

<sup>&</sup>lt;sup>4</sup> Cf. Aquinas, Sent. Politicorum I.1b: "Et ideo vox datur animalibus quorum natura usque ad hoc pervenit, quod sentiant suas delectationes et tristitias, et haec sibi invicem significent per aliquas naturales voces, sicut leo per rugitum et canis per latratum; loco quorum nos habemus interiectiones."

his *Perihermeneias* (1.3.2): just as *doleo* signified the *res verbi quo cum tempore*, *heu* signified concept *quo cum affectu*. Because it was mediated through affect and not concept, an interjection was a sign that that the irrational soul of the speaker had prevailed over his rational.

Albertus Magnus and Thomas Aguinas reinterpreted Augustine's exegesis of the interjection in the light of the speaker's abdication of rationality through the imbalance it shows between the rational and irrational powers of the soul. Albertus classes unexpressed anger as the first grade of sin, because it is *deliberata commotio animi* consenting in harm to one's brother. He remarks drily that even if one does not have the means to harm him, the will to do so is not completely absent. He cites Augustine that the interjection, racha, is the second grade of sin because it is an uncontrolled venting of anger. Because the word is meaningless, haec est indiquatio canis latrantis, qui latrando non facit nisi suam iram ostendere (Albertus, Super Matthaeum 134.29–30). But he does note that according to some authorities (actually the Glossa ordinaria on this passage) racha means 'empty', 'which is a serious slander of your brother who is filled with the Holy Spirit' (Albertus, ibid. 134.30–35). Fatue rises out of a third grade of anger, which like Bacon's interjection rests on both affectivity and reason. Albertus takes his explanation of its gravity from the Glossa ordinaria:

Fatuus enim dicitur, qui ex destituit regimine rationis sapore caret bonorum morum. (Albertus, ibid. 134.78)

Thus, apart from venting anger, the sin committed consists in denigration of one's brother's morals combined with an affront to God by calumniating and imputing criminality to somebody whom God has 'seasoned with the salt of wisdom' (Albertus, *ibid.* 134.76–77).

Aquinas reshapes these themes in his Quaestio disputata de malo 12.5. Anger is one of the seven deadly sins, because, according to the Glossa ordinaria, 'it is the door to every vice. When it is closed, virtue develops in tranquillity, when it is open, the spirit arms itself for any crime' (De malo 12.5 Sed contra [244.29–33]). Anger is in the heart, in the mouth, and finally proceeds to action. Anger in the heart is a sin only when one broods on it and dreams of revenge (ibid. resp. [244.29–51]). Anger in the mouth can be a simple 'interjection of an angry man' like racha, 'and thus out of anger come raised voices, that is disordered and confused speech indicating the emotion of anger'. Or it can progress to the more serious sin of calumny with words like fatue, which can become the occasion of physical violence, which adds to the gravity of the offence, not only because of its religious overtones, but because uncontrolled anger is the opposite of charity, justice and forbearance (ibid. ad 2 [245.72–80]).

The grammarian who gives the most comprehensive account of the issues is Ps.Grosseteste, who begins from the powers of the mind. Because interjections signify affect as an accident of the mind which rises out of its irrational powers (Sicut dicit Remigius f49r [in Rosier 1994.62]), Ps.Grosseteste (59.23–26) defines the interjection as the part of speech signifying emotion by disordered language (voce indisposita). He then classes interjections according to the emotion they express. Joy over present good and anticipation (cupiditas) of good to come, expressed by euge and hay (sic), are in the anima concupiscibilis; sorrow and fear (atat and heu) come from the anima irascibilis. But admiration and indignation, expressed by papae and vah, come from the rational soul: one admires or impugns something as the result of a considered judgement (Ps.Grosseteste 60.4–5).

Perhaps it is for this reason that once again some writers revived interiaceo as the etymology of the interjection quia interiacet menti et voci (Simon Dacus, Domus 49.14–16). This generation also argued that adverb and interjection dispose act differently because of the predominant role of affect: the adverb signifies dispositionem actus communiter; the interjection signifies dispositionem actus determinati because affect makes a verb understood: heu, for instance, implies doleo. And finally it was patently clear that interjections were constructed in ways unknown to adverbs.

Practically all the themes found in their predecessors reappear in a somewhat diluted form in the *modistae*. Though the adverb was *adiectivum verbi*, the relationship between verb and adverb did not parallel that between adjective and substantive noun. They accepted the lack of specifically verbal accidents in the adverb as clearly demonstrating that adverbs are not types of verb or participle. Like substantive nouns, adjective nouns signify by *modus* habitus and *modus* qualitatis determinatae. Adverbs, on the other hand, do not share the *modus* specificus of either verb or participle: they signify neither per modum enuntiabilis de alio as verbs do, nor per modum uniti substantiae like participles (Boethius Dacus, 279.66–67). For most of this first generation the adverb signifies per modum significandi fluxus vel fieri in alio, which gives it its parallellism with the adjective.

The kinship Priscian postulated between adverb and interjection was always a problem to grammatica speculativa, and a unanimous line never emerged. For Simon Dacus (Domus 18–25) and Vincentius Heremitus (14) the modus significandi of the adverb is determinare verbum absolute and of the interjection determinare verbum respective, because the interjection implies a specific verb and the adverb does not. According to Joannes and Martinus both of them signify respectu rei existentis in fieri, though the affect proper to the interjection makes them separate parts of speech:

Si autem est dispositio praedicati hoc est simpliciter, vel per modum adiacentis alicui significati per modum fieri et ut plurimum respectu fieri distantis, et sic est adverbium; vel significat per modum adiacentis alicui significati afficiendo suum subiectum in quo est, et sic est interiectio. (Joannes Dacus, 256.16–18)

But for Digby 55, Boethius Dacus and the early manuscripts of Michel de Marbais, the *modus adiacentis* remains paramount in the adverb, which always signifies accidents of things outside the mind, and is always constructed with a verb or something equivalent. On the other hand, *modus affectus* is paramount in the interjection and the *modus adiacentis* secondary, for it can be used absolutely or constructed with any part of speech (Michel de Marbais, *Summa* 183.20–30), though some thought that interjections modify a verb understood in the context *de bonitate intellectus*.

The modistae are aware that some of their predecessors had distinguished between interjections that were natural signs, and those imposed (Martinus Dacus 84.9–15). Martinus himself classifies interjections according to a cline between the conveniens et inconveniens. Evax is a sign of happiness rising from something fitting. If present, something unfitting causes sorrow (heu); if in the future it causes fear (attat). In between these two extremes is admiration (papae). By definition a part of speech signified a concept, so that Clm 19868 (f190r) puts forward the old hypothesis that the speaker produces an interjection per modum affectus, but the hearer interprets it per modum conceptus. Others argued that the interjection signifies concept through affect:

Oportet quod isti affectus primo concipiantur, et deinde imponantur. Notandum tamen quod interiectiones mentis istum conceptum per modum affectus significant, et aliae partes per modum conceptus. (Digby 55 149v)

The interjection, however, signifies accidents of the mind itself (Boethius Dacus 295.28), and this entails all the dire effects described by the Stoics: one feels weak, tears spring to the eyes, there is temporary loss of sight, and speech becomes indistinct (Michel de Marbais, *Summa* 184.8–9). Modistic description seems to owe much to Seneca's enraged Medea:

Proclamat: oculos uberi fletu rigat. Renidet. Omnis specimen affectus capit; Haeret, minatur, aestuat, queritur, gemit. Seneca the Younger, Medea 388–390.

It must be said that the *modistae* aim at a tidy model without loose ends. The most glaring omission is the relationship between adverbs and noun: they do not follow up the implication in Abelard and Petrus Helias that derivative adverbs could conceivably be *categoremata*. Likewise there is little trace of the common sense that there may be some *modus conceptus* in the interjection. Despite the large body of interesting material in other disciplines, disagreement between Donatus and Priscian on the autonomy of the interjection and its grammatical functions haunts their discussions.

## 5.1.2. Accidental Modes of Signifying

Between them Donatus and Priscian had assigned significatio, gradus or comparatio, species and figura as accidents to the adverb. The adverb clearly shares the accident of gradus or comparatio with both adjective and participle. Some Low Latin grammarians had implied that the interjection included the signification of an appropriate verb. Simon Dacus (Domus 49.5–9) seems to be the only grammarian of the 1260s to formally systematise the three accidents of the adverb: significatio relates to the content of the adverb (sumitur penes intrinsecum) and has reference to real things: comparatio is also intrinsic, but sumitur penes vocalia; and figura sumitur penes extrinsecum as it relates to the shape of the word. Michel de Marbais and Martinus Dacus accept Donatus's list of accidents for the adverb, significatio, comparatio and figura, and mention Priscian's species. Boethius Dacus contests significatio and prefers species to figura. Whether the interjection had any accidents at all remained a moot point, though there is considerable willingness to entertain significatio.

Where its nature and role as an accident of verb and participle was relatively clear, medieval discussions of significatio in adverb and interjection show constant slippage between lexical and grammatical meaning. It is for this reason that Petrus Helias (Summa 792.61–62) wondered whether Priscian took significatio as significatum or significandi modum. Having defined significatio as diversitas significationum, he claims it as an accident more appropriate for the adverb than for other parts of speech, because the accidents of a part of speech govern the modalities of construction. Adverbs of time, for example, can only be constructed with appropriate tenses (*ibid*. 792.66–70). He then gives Priscian's typology of the adverb, his diversitas significationum, classing adverbs by their semantics and their pragmatics. As Priscian had done, he includes interjections with these other adverbs. Where the adjective is adjective by both flexions and signification, the adverb is the adjective of the verb through its signification only. For, unlike the adjective of the noun, the adverb is not constructed with its headword through agreement of flexion, but solely through function: it 'determines the quality of acting and being acted on which is signified by the verb' (Petrus Helias, Tolson 30.70–73).

The Oxford questions give some tantalising indications of how the

twelfth-century experimented with *significatio*. Ecce was a demonstrative adverb which had a reference to the *res verbi*, as in Ecce ego lego. Therefore Ecce Palaemon was a contraction of the Ecce adest Palaemon, because this adverb made a demonstration towards the essence of the verb. The Quaestiones make no difference between discourse operations and categories:

Omne adverbium demonstrativum solum demonstrationem consignificat, sicut vocativum vocationem et locale locum et temporale tempus. (Quaestiones oxonienses XVa [123])

Being in proportion with the modes of signifying of verb and participle, significatio is the proximate cause of the syntactic propria operatio of the adverb. There was always the temptation to assimilate significatio in the various parts of speech, so that the adverb was seen to determine the verb in the same way as the verb determined the word preceding it (Robert Blund, Ars grammatica f72r2). Both after all, signified per modum adiacentis.

The twelfth-century theologian quoted Boethius ( $De\ Trin.\ IV\ [22.75]$ ) to show that the nunc of God is eternal:

Nostrum 'nunc' quasi currens tempus facit, et sempiternitatem: divinum vero 'nunc' permanens, neque movens sese sed consistens, aeternitatem facit. (in Alain de Lille, *Regula XLIII*)

The physics of *nunc* was widely discussed during the thirteenth century. The substance of the *nunc aeternitatis*, which is the cause of the *nunc aevi*, is different from its permanence, which is the essence of *aevum*. In the same way *nunc temporis* is different from its *fluxus* which is the essence of time (Innocent V, 1 *Sent.* 19.2.resp. [167b]). *Nunc temporis* is distinguished from the two types of eternal *nunc* because the present as a fleeting interface between past and future.

Adverbs in general relate to categories: temporal adverbs have relationships with verb-tenses because verbs consignify the category, quando, and adverbs signify it. Certain temporal adverbs, nunc and olim, for instance, are present or past, and are constructed accordingly. Iam, however, can refer to either a past or a future which is 'left over from a time contiguous to an indivisible now' (Albertus Magnus, Phys. 4.3.14 [286.15–16]). Thus in relation to God, the temporal adverb, semper, makes its verb signify an eternal present confusedly, an echo of the Porretani (William of Auxerre, Summa fXXXXIIv1). Local adverbs relate to the category of situs which has nothing to do with the nature of the act or object concerned (Albertus Magnus, Phys. 3.2.9 [186.81–83]).

This seems to have had an effect on grammarians. For the possible adverbial *significationes* conform to the accidental categories. Ps.Grosseteste recognises six classes of adverb that determine the *res verbi* through cate-

gories: quantity, quality, similitude, number, time and place. The first four signify intrinsic accidents, that is those inhering in the verb or participle as qualities of the action itself; the others signify extrinsic accidents like place and time which do not inhere in the head-word as in a subject but merely determine the verbal action as mensurae extrinsic to what is measured (Jordanus 29). As the verb is motus in three ways: by motus itself, by its composition, and by its inclination, there are three types of adverb determining the verb ratione actus. Every motus being cum tempore et resistentia, some adverbs determine the verb according to the categories of qualitas, which includes similitude, and quantitas, which includes number. Adverbs disposing composition take in both logical operators and mental inclinations giving rise to questioning, doubting and admiring (Ps.Grosseteste, 58.36–59.9). Ps.Grosseteste takes inclinatio directly from Priscian's diversae inclinationes animi which give rise to mood in the verb. Both he and Simon Dacus (Domus 48.30–32) hold on to the old-fashioned idea that modus significandi and significatio are the same thing. Significatio relates to the content of the adverb (sumitur penes intrinsecum), as it has reference to things extra animam (ibid. 49.6-7). Significatio generalis is the universal which places the adverb in the category of adverb: significatio specialis is the modus disponendi verbum respectu loci vel temporis.

It did not serve the purposes of theology to distinguish semantic signification from grammatical in the adverb. But differentiation of the categories into extrinsic and intrinsic had its place in exegesis of doctrine. One of the consequences of the incarnation was that Christ was born twice: having once preceded from the Father in eternity as divine, he was born again on earth as human (Peter Lombard, Sentences 3.8). His commentators interpreted Peter Lombard's adverb, bis, with all the rigour pertaining to number: bis entailled a measure based on individuality, similitude and difference. Being engendered in eternity and time are different because time and eternity are different measures. The two acts of generation, similar though they are, are different because they are separated in time, that is, the first generative act was complete before the second took place. Measures of time are appropriate to divine acts only if they mark both their arrival at perfection ex completione and its cessation ex desitione (Bonaventure, 3 Sent. 8.2.1. resp. [111.192b]), and the Father's generation of the Son did not.

Because of the nature of intrinsic categories like quality the proposition that God could make something better than he does (*Deus potest aliquid facere melius quam facit*), was subject to the inevitable distinction. *Aliquid melius facere* was acceptable if *melius* was a noun: for God could have indeed made a better world. But if however, *melius* is an adverb, the proposition

was false, for it postulates an intrinsic measure at variance with God's acts. In this case its *significatio* implies a mode *ex parte facientis*, and God always acts with the utmost wisdom and goodness. Therefore *melius facere* in the sense that God could do better than he did is absurd as it is against his natural way of acting (Aquinas *STheol.* 1.25.6. 1 & ad 1).

Because Priscian and his followers took the interjection as a type of adverb, the tradition shows considerable diversity of opinion over taking significatio as one of its accidents. It is generally accepted that interjections signify joy, admiration, sorrow and fear, which at least partially originate in the anima sensibilis. The resulting uncertainty over whether the interjection was imposed or not puts its accidental signification in doubt. Yet Hugh of St Victor (288.27) takes significatio as the only accident of the interjection. Jordanus (22), followed by Simon Dacus, (Domus 49.12–20) and Digby 55 (f149v2) argues that the state of mind from which an interjection rises implies a verb — euge, for instance, corresponds to gaudeo — so that the interjection signifies disposition of an act delimited in some way, while the adverb signifies such a disposition communiter.

The *modistae* betray a certain unease, as well they might, over the rather subtle distinction between *significatio* as *significatum* and as operation in both parts of speech. The way round the problem was a typically medieval *distinctio* between the passive and active sense of the word:

Nam per huiusmodi significationem non possimus nisi duo intelligere. Primo quid significatum; secundo vero actum vel operationem procedentem ab ipsa dictione significatum designante. (Michel de Marbais, *Summa* 8.39–42)

Accidental *significatio* in adverb and interjection was then read as a process: it became the capacity to create or modify meaning by annexing a category to the headword with which they were constructed. *Significatio* becomes a *habitudo* peculiar to both parts of speech. As such, it is the instrument of construction, as it signifies the manner of a particular *motus* or act:

Iste modus significandi qui dicitur significatio accidentalis adverbii sic definitur: Modus significandi determinantis est quidam modus significandi datus adverbio ad designandum rem sub modo essendi determinantis actum vel fieri. (Michel de Marbais, *Summa* 142.2–4)

It was this that made the adverb an adjunct to verb, participle or other adverbs per se, and to adjectives per accidens. But there was still some reluctance to accept significatio as an accident of the interjection. The difficulty was accepting modus affectus as an instrument of imposition, for the imposition by which signification came about, was an act of reason. Michel de Marbais (Summa 188.36) does not accept it as an accident of the interjection by reason of its affective modes of being and signifying, but per speciales

rationes et modos contractus. It rises from the modus afficientis alteri which varies according to the emotion of the moment (Martinus Dacus 84.16–25).

Boethius Dacus's Quaestio 126 takes strong exception to seeing significatio as an accident of the adverb, arguing that an adverb's significatio makes it a vox significativa and is therefore essential to it (Boethius Dacus 290.39), and the individualisation of meaning necessary for accidental signification is not possible in the adverb. Likewise in the interjection significatio is res significata specialis, and significata cannot be accidents (Boethius Dacus 298.24–34). He ignores the principle of propria operatio altogether, arguing that in both adverb and interjection significationes per accidens cannot be accidental modes of signifying, as they are actual significates, which are not consequences of the essential modes of signifying as they are independently imposed. Priscian's attitude had still left the nagging question over whether the interjection had accidents by which it could be constructed. Both Michel de Marbais (Summa 190.1-3) and MS Clm 19868 are more than tempted to assign a modus significandi acquisibilis to balance the modus acquisitivus of the dative to handle constructions like heu mihi and vae victis, but few others rise to this bait.

The modistae accepted the two traditional classes of adverb. Adverbs signifying ratione rei significatae determine the act of the verb through a category. However those signifying ratione modorum significandi relate directly to compositio, the propria operatio of the verb in syntax, in three ways. The six logical operators, possibiliter and impossibiliter, necessario and contingenter, vero and falso delimit the way in which the predicate inheres in the subject, or the modus informantis of the participle. Adverbs of affirmation (e.g. sane) and negation (non) also express a type of composition (Martinus Dacus 69.13–70.3). Other adverbs modify particular moods of the verb, utrum expressing doubt introduces a question, and utinam expressing wish introduces an optative (i.e. imperfect subjunctive), for instance (Martinus Dacus 70.4–71.5). There were some who believed that adverbs signifying ratione modorum significandi modified the composition in its entirety, a position completely consonant with the role dialecticians postulated for them (Michel de Marbais, Summa 137:73-75). He refutes this dangerous error, which implies that adverbs were sentence modifiers, by pointing out that the modi significandi of the adverb could interact with compositio only if it was an accident of the verb, not the form of the sentence.

Grammarians say little about gradus or comparatio in the adverb specifically: indeed they often refer the reader back to the adjective, as the adverb is the adjectivum verbi. Ps.Grosseteste is an exception. He begins from the nature of motus. Every motus being cum tempore et resistentia,

some adverbs determine the res verbi according to the categories of qualitas, which includes similitude, and quantitas, which includes number. Because both similitude and number are subject to augmentation and diminution, gradus is an accident of the adverb (Ps.Grosseteste 58.27). Outside grammar it was more usual to remark that verbs, participles and adjective nouns signified per modum inhaerentiae. Intensio and remissio in verbs can only be signified by gradus in the modifying adverb. Therefore magis et minus currens is as possible a locution as magis et minus album. As adverbs determine or 'dispose' per modum inhaerentiae, they therefore have gradus (Jean Quidort, 1 Sent. [207.121–126]). In what remains of his discussion of comparatio Joannes Dacus (510.30) claims that interjections can be compared when they signify things that can be increased and diminished. Unfortunately his reasoning for this has been lost.

The tradition gives full treatment to figura and species as accidents of the adverb, and our modistae give them rather cavalier treatment. There is little comment on species and figura, except for criticism of Donatus for leaving out figura and of Priscian for omitting species. Very little is made of the fact that Priscian assigns species as an accident and Donatus does not. Docte and indocte are clearly of simple and composite figura; and there is good reason why Priscian assigns species to the adverb (Michel de Marbais, Summa 144.1–145.15). Given that adverbs derived from adjectives are of derivative species, it is strange that the modistae say very little about the way such adverbs come into being. It had been long assumed that derivative adverbs can be categoremata, and that they signify the same semantic prime as the noun from which they were derived. Garlandus Compotista (82.1–3) quotes Boethius (De differentiis topicis II [1192 18B–19]) that the adverb is a mode which follows its noun, ut si quid iuste est bene est, et iustitia bene est. This became part of normal doctrine, particularly in theology:

Quid enim per hoc adverbium 'sapienter' nisi ipsa sapientia et per hoc adverbium 'recte' nisi rectitudo designari potest? His igitur exemplis de modo et modis palam videtur esse. (William of Auvergne *De Trin.* 192:34–36)

The only trace of this argumentation in our *modistae* is the hackneyed example of *saepe* as a primitive adverb and *saepius* as derivative. Where they were happy to recognise that participles were derived from verbs, the *modistae* hardly mention that many of these adverbs were derived from adjectives. Ps.Albertus (58 ad arg. 4) comments inadequately that although *similiter* and *simile* differ in their special mode of signifying, they have some general mode which is compatible and allows them to take the same construction. However the sophisma, *O magister* (ad 2.4.4 [95]), presents the issue in the terms of William of Auvergne and Magister Jordanus: the

adjective, simile, and the adverb, similiter, both signify the same quality, but the noun is a presence behind the adverb. Consequently simile signifies per modum habitus et dispositionis substantiae, while similiter signifies per modum habitus (!) et dispositionis actus.

#### 5.2. Dispositio substantiae: Preposition

#### 5.2.1. Essential Modes of Signifying

From the vantage point of the speculative grammarian, Donatus's definition of the preposition is functionally promising but extremely general, while Priscian's definition is somewhat bland:

Praepositio est pars orationis quae praeposita aliis partibus orationis significationem earum aut complet aut mutat aut minuit. (Donatus 389.19) Est praepositio pars orationis indeclinabilis, quae praeponitur aliis partibus vel appositione vel compositione. (Priscian XIV.1 [GL III 24.13–14])

During the twelfth century dialecticians recognised that prepositions denote a relatio between the word they take and the rest of the context. Prepositions never act as a simple link between two essences: they are always transitive as they designate the property in the noun as one of the four causes. Petrus Cantor, condemns the sentence, Corpus Christi fit ex pane, on the grounds that it can imply two heretical propositions: that the body of Christ is made out of bread on the model of statua fit ex aere, or that the substance of bread remains when it becomes the body of Christ, just as straw remains straw when it does duty for a window. Ex does not imply a complete transformation (Dumoutet 1943.237). As yet theologians did not advert to the case of the noun governed by the preposition as part of the argument over meaning.

Even if others did not assign a modus significandi to the preposition, grammarians did: its modus significandi is significare circumstantias rerum (Petrus Helias, Summa 882.86). Petrus Helias's annotated list of prepositions was one of the many valued parts of his legacy. Unlike conjunctions prepositions never act as a simple link between two substances (ibid. 710.85–89) But because Priscian had defined the preposition secundum vim vocis et secundum causam inventionis rather than secundum rationem significationis, its causa inventionis is to 'serve' (deservire) accusative and ablative cases rather than govern them, and to compound with verbs (ibid. 708.12–25). In the sentence, a te amor, the preposition, ab, 'serves' the ablative, because unless there is a preposition interposed between noun and verb, the passive verb does not demand an ablative a parte post (ibid. 461.31–32). Words like pone are both prepositions and local adverbs (ibid. 720.29–40).

Petrus is puzzled by doubled prepositions — as in *de ultra mare venit Pompeius* — one of the legacies of Vulgar Latin. He is far from satisfied by attempts to explain them away as instances of suppletion, for instance *de existente ultra mare venit Pompeius*, and equally uneasy over suggestions that *de sub* and *de supra* be treated as compound words, or that phrases like *supra pontem* be understood as ablatives (*ibid*. 720.41–55).

The wide range of senses Petrus Helias's list accords in becomes a fruitful source of doctrine in Alain de Lille's Regula XLV, without violating any norms of traditional grammar. Filius est in Patre underlines both the diversity of persons and the identity of the Divine essence in the Trinity. Quod factum est, in eo vita erat (sic) (John 1.3–4), he calls 'eternal predication'. In also denotes efficient and formal causes, as in In Filio facta sunt omnia and Qui cum esset in forma Dei (Phil 2.6).

It seems that integration of the preposition into the *motus* model begins with Jean de Wolve: *Praepositio adiuncta dictioni per appositionem refert semper substantiam ad actum* (in Brousseau-Beuermann 1987:98). Jean takes 'referring substance to act' actively and passively: *determinatur* implies a prepositional phrase with an ablative as head, while *determinat* demands an accusative as head. From the early thirteenth century his *referre* becomes *retorquere*:

Praepositio retorquet casuale ad actum alium a parte ante, et alium a parte post, et alium nominat intransitivam habitudinem secundum se. (Kilwardby, MS Peterhouse 191 f96 r2)

Others of his time developed the transitivity inherent in the preposition through the sense that the preposition designates the substance related to a certain act. Retorquere is used unselfconsciously in Magister Jordanus's proof that the preposition is a part of speech. They signify the mental concept of constraining (retorquens) a case-form to act and are prior to the case-form per se but posterior to the verb (Jordanus 52). Every indeclinable signifies per modum circumstantiae rei, and under it the preposition operates per modum substantiae (Ps.Kilwardby 108). The term comparatio was also used to show that the preposition established a relatio between act and substance. While the adverb in currit velociter denotes a determination of the act, currit cum velocitate because of the preposition, cum, dicit comparationem velocitatis ad actum (Petrus Hispanus, Syncategoreumata IV.38).

However it was habitudo that became the standard way of relating case to the preposition: Praepositio inventa est ut dicat definite habitudinem quem significat casuale aliquod indefinite (William of Sherwood 79). Just as oblique cases were constructed transitively with verbs, so they were with prepositions, so that prepositions important aliquam habitudinem et respec-

tum ad extrema (Bonaventure, 1 Sent. 5.1.2 resp. [I.115b]). Grammarians too felt the influence of this sort of thinking. Ps.Grosseteste leans towards a motus theory for the preposition: '[Praepositio] dicit rationem determinationis casualis ad motum in quantum unum et causa alterius' (Ps.Grosseteste 54.13–15). Simon Dacus regards the modus significandi and significatio of the preposition as equivalent. Because terminus and principium are inherent in accusative and ablative respectively, he argues that the preposition supplies neither a form nor a bond for its noun, but binds it firmly into the act of the preceding verb. He reads the modus retorquentis casuale ad actum into Priscian's definition, and remarks that retorquere est servire (Simon Dacus, Domus 48.17–21). With an eye to Donatus's aut complet aut mutat aut minuit he distinguishes four types of modus significandi, retorsivus, completivus, diminutivus, and augmentativus.

As prepositions were compounded with verbs or nouns through their *significata*, Augustine (*Enarrationes in psalmos* 77.31) could in all good conscience accuse the early Bible translators (including Jerome) of carelessness:

Nam sanctos cum peccatoribus non ob aliam forsitan causam etiam captivos ductos esse didicimus, quoniam in graecis non  $\dot{\epsilon} \kappa \pi \delta$   $\delta \sigma \epsilon \nu$  quod est impedivit; sed  $\sigma \kappa \pi \delta$   $\delta \sigma \epsilon \nu$  legimus, quod est potius compedivit.

Priscian's definition of the compounded preposition prompted everybody to class all prefixes as prepositions in composition, whether they were originally prepositions or not. Like many of his predecessors Petrus Helias treated the semantic effects of composition and apposition together. When compounded de can signify intensification (deprimo) and privation (demens) (Petrus Helias Summa, 752.51–53). Compounded with adjectives, as in coaeterni, coaequales, the preposition, cum, denotes correlations between the persons of the Trinity (Albertus Magnus, 1 Sent. 9.D.7 [25: 284a]). Likewise influere adds the idea of containment, already present in the preposition, in, to the verb fluere, but within the possibilities of the thing receiving the influx (Albertus Magnus, De causis 44.37–38). At times this gives rise to a productive confusion in both philosophy and theology. If one took the prefix, in-, in individuum as a negative, the word means something that cannot be considered as a group that can be divided; if, on the other hand, the prefix is taken as an intensitive, it means something that is completely separate from anything else:

Platonis autem est propria qualitas et individua, qua discernitur ab omni alio, a quo Plato dicitur 'individuum', id est valde dividuum, quia ab omni alia re divisum. (Simon of Tournai, Sent.~61.24-26)

The preposition in composition habet significationem completivam, diminutivam, augmentativam, but while it loses the strictly grammatical function of twisting substance to act, it keeps its semantic characteristics (Simon Domus 48.5). On the 'inseparable prepositions', Ps.Grosseteste 56.26–29 notes that dis- means separation (cf. disiungere), con- the opposite (cf. coniungere), re- iteration (cf. reiterare), se- privation (cf. semovere) and anfinality (cf. annuere (to approve)). 'Separable' prepositions in composition place a relationship between cause and consequence which matches their meanings in apposition. Per places a relationship between agent and effect: perficere means perfecte facere. Ad indicates direction towards a goal, as in afficere and adducere (ibid. 56.33–39).

Trinitarian theology took Donatus's claim that the preposition changes and fills out words very far indeed. Is the verb *existere* appropriate to the persons in the Trinity? *Sistere*, the primitive of *existentia*, has reference only to existence itself. But as *ex* signifies something external, *existere* implies that one's being was caused by an outside agency,<sup>5</sup> and so it is the proper word to apply to the Son and the Holy Spirit. They have the same nature, but different origins, as the Son proceeded from the Father, and the Holy Spirit from them both.

The modi significandi put forward by the modistae reflect all the currents of previous discussion. Beside the standard modus retorquentis substantiae (casualis) ad actum, one also finds modus inclinantis casum ad actum (Digby 55 f184v1), modus circumstantiae casualis se habentis in ratione principii vel termini in Vincentius Heremitus (14) and Martinus Dacus (79.26), which echoes Petrus Helias, and modus termini initiantis vel terminantis actum (cf. Martinus Dacus 78.17; Michel de Marbais, Summa 161.33). Joannes Dacus derives both conjunction and preposition from the function of dispositio by updating Petrus Helias on the suppletion peculiar to the preposition. On the grounds that the preposition lacks respective modes of signifying, his typology ad finem partium orationis has the preposition facilitate the transition between verb and a reluctant terminus ad quem by suppletion of a defect in the verb:

Si autem est dispositio utriusque supplens tamen defectum magis a parte appositi seu praedicati, sic est praepositio, quae retorquent casuale ad actum. (Joannes Dacus 256.23-25)

The relevant explanation later in Joannes's *Summa* has been lost. Martinus however develops the theme of suppletion by taking the violence of *modus* retorquentis ad actum literally. He distinguishes between transitive verbs — which because of the vehement transition proper to them pass immedi-

 $<sup>\</sup>overline{^5}$  Richard of St Victor,  $De\ trin.$  175.25–27: "Quid est enim existere, nisi ex aliquo sistere, hoc est substantialiter ex aliquo esse."

ately to the object noun or pronoun — and intransitive verbs, which lack such violent transition. To link them with any eventual complement this second class of verb needs the preposition, ut per eius adiutorium tamquam per medium casuale retorqueatur ad actum quemadmodum aliquis trahit sibi aliquid per hamum (Martin 17.25–18.2). As retorquere ad actum can mean both actus primus and actus secundus, it is arguable that it implies fulfilment of potency in the noun thus constrained.

It seems to have been standard doctrine that prepositions were constructed with nouns through their modus significandi, and entered into composition through their significate (Michel de Marbais, Summa 167:75–77). A preposition compounded loses its autonomy, and is absorbed in the dictio it is compounded with. By strictly applying the etymology of praepositio, the modistae followed tradition in reading certain prefixes, which are never found as autonomous dictiones (for example, dis-, re-), as 'inseparable prepositions'. Though compounded prepositions do not retain their construction, as with adsum whose complement is in the dative, they still discharge the semantic functions set out in Donatus's definition: per- brings the nuance of completion, as in perficere from facere; deficere (to be wanting) changes the sense of facere; and subridere is a diminution of ridere (cf. Boethius Dacus 251.32-41; Michael de Marbais, Summa 170.69-171.80). The double meaning of the particle, in-, is noted by the modistae with a strange example: impius is taken to mean both 'lacking piety' and 'pious to perfection' (cf. Boethius Dacus 251.45–50; Michael 171.84 – 86). It may be that the medievals had in mind words like insaeptus which is either the past participle of *insaepire* (to hedge in) or the negative of *saeptus* (enclosed).

#### 5.2.2. Case and the Preposition

Donatus and Priscian rarely use the term, accidens in relation to a part of speech: their preferred usage is casus accidit prepositioni. In most medieval occurrences one can read accidit as meaning 'is an accident of' without a problem. However, etymologically accidere is 'to fall to or beside' (ad + cadere): it often means 'to happen to'. As the preposition has no cases, case is something that falls beside it or happens to it.

Twelfth-century dialectic and theology concerned themselves with the meaning of prepositions. At first, as in the Petrus Cantor example (page 148 above), case is ignored. Some believed that in phrases like *de homine* the preposition signified the man himself insofar as something was said of him (Abelard, *De dial*. 119.19–20); others denied it any meaning except structural. Despite the grammatical tradition Abelard seems to favour *significatio* as its operative accident:

Sed in eo significationem earum esse dicamus, quod quasdam proprietates circa res eorum vocabulorum quibus apponuntur praepositiones, quodammodo determinent; ut cum dico 'de homine' vel 'pro homine', quasdam proprietates quae homini insunt, praepositiones designant, in eo scilicet quod vel de eo aliquid vel pro eo est, tamquam inde causa sit. (Abelard, *De dial*. 120.5–10)

It would seem that the prepositional relationship is one of Abelard's quaedam proprietates circa res. Thus in factum de ferro the preposition, de, assigns to iron the property of being a material In domo denotes the continentiae proprietatem of a house, and ad domum access or proximity (Abelard, Logica 338.32–33). He implies that these meanings depend on recognised properties of ablative and accusative: ita prepositiones casibus quos regunt, etiam consignificare volunt (ibid. 338.29).

Though there was some sense of kinship between adverb and preposition, preposition was distinguished from adverb because it 'serves' cases (Petrus Helias, Summa~722.99): indeed servitium~ to accusative and ablative was assigned to the preposition as its causa~inventionis. Transitivity of the preposition matched transitivity of the accusative and ablative cases (Cf. ibid.~727.10). In an important discussion of how the preposition ab~functions, Petrus Helias writes that certain people say that it deservit~ab-lativo:~deservire~means to complete the meaning of the ablative in context by suppletion (ibid.~970.3). A~and ab~denote efficient cause while ex~and de~denote material cause, both senses well within the possibilities of the ablative.  $^6~Ad~$  with the accusative signifies proximity in time and place, cause and direction (ibid.~734.10-20).

The recognition that the colour of the preposition rises out of the basic thrust of its case provides Jean de Wolve with a startling doctrinal point in the liturgical cliché, in saeculum saeculi: the preposition, in, 'serves' the accusative, saeculum, because the worshipper is moving to eternity from this world, not because there will be eternal movement in eternity (in Brousseau-Beuermann 1993:98). While he pivots his argument on the accusative as the terminus of a motus, his authority would seem to be Petrus Helias:

Rursus quando 'in' subauditur 'usque' tunc iam iungitur accusativo ut 'Qui odit animam in hoc saeculo in vitam aeternam custodit eam' [John 12.25], id est 'in vitam aeternam'. (Petrus Helias, Summa~756.69-71)

This habitual relationship with ablative or accusative, Kilwardby reads as casualis habitudo, whose function is dispositio rei casualiter designantis

<sup>&</sup>lt;sup>6</sup> ibid. 752.48–50: "'De' vero quandoque significat  $\varpi$  α $\pi$ o, id est hoc quod 'apo', et tunc est materialis ut si dicas 'Hic anulus est de auro'; quandoque significat  $\varpi$   $\pi \epsilon \rho$ , id est, hoc quod  $\pi \epsilon \rho$  et tunc memorativa est ut 'de partibus orationis'."

(In III Donati 75.1452). The general habitudo talis causae vel talis is essential to the preposition: it is the individual habitudo talis causae per se vel per accidens signifying near or remote causes, accidental or potential, which is accidental (Kilwardby, In III Donati 75.1432–1440). He then asks why Donatus saw this as accidental while Priscian did not. He suggests Priscian considered that the habitudo of preposition and case-form to be the same thing. As the relationship with cases, habitudo was signified by the preposition, and as the relationship with the preposition habitudo was consignified by the case. He seems to be looking forward to the suppletion theory of Joannes Dacus. The habitudo of a preposition which governs both ablative and accusative varies according to significatum. With the ablative in and sub signify Abelard's habitudo continentiae as an actuality (Kilwardby, In III Donati 78.1595–6, 76.1504): thus currit in silvis is congruent and currit silvis is not. But with the accusative in signifies continentia potentialis rei, and sub an object per modum recipientis et terminantis.

For Ps.Grosseteste 54–56 it is not casus which is the accident of the preposition but casualitas; and he reads it in terms of significatio: [Praepositioni] sola casualitas accidit, quia hic modus suae significationis est (ibid. 54.15–17). He gives a pithy rereading of Petrus Helias's list of prepositions in terms of motus, which brings him into line with Kilwardby. Most of those with the accusative denote finis; those taking the ablative are principia establishing the relationships of form to matter. However servire implies some sort of interaction between master and servant, so that the semantics of the noun shape the consignification of the preposition:

Sed specialem significationem non habent nisi possibiliter, et possibilitatem in actum reducunt per adiuncta, in quibus terminant et perficiunt suas significationes, ut cum dicitur 'de ecclesia' et 'de lana', cum haec dictio 'de' importet habitudinem substantiae ad actum, ex una parte est localis, ex altera parte materialis. (Nicholas of Paris 4.14–18)

Thus the preposition, ad, designates its accusative either as a finis per se, as in Facianus hominem ad imaginem nostram, or as a finis per accidens, as in Eamus ad ecclesiam (Ps.Grosseteste 54.28–29).

Prepositions with the ablative received the most attention from the ologians. While it is unusual for them to mention the ablative itself, they were well aware that it supplied the basic sense of *principium*. The preposition, ab, identifies its ablative as a *principium per se* of something of a different substance (William of Auvergne, *De trin*. 183.52–56). Therefore when a theologian states that *Filius a Patre processit*, he is naming the Father as the principle by which the Son is, in other words he is the Son's

terminus a quo.<sup>7</sup> The thirteenth century returned to Petrus Cantor's ideas on the Eucharist: one cannot say ex pane fit Corpus Christi because ex implies a habitudo causae materialis which has no place when talking about the divine (Aquinas, STheol. 1.39.8 resp.). But de pane fit Corpus Christi is acceptable because the preposition, de, identifies bread as the materia conversionis, non conversi of the sacrament, and bread is the principium and not the terminus of transubstantiation (Alexander of Hales, Antequam esset frater, 931.5).

Thus one can say Filius generatus est de substantia Patris without risk of heresy. The 'material' sense of de (cultellus de ferro), and its sense denoting origin (radius de sole) are both familiar from Nicholas of Paris. But de also signifies ordinaliter (de mane fit meridies), and substantialiter (filius de substantia patris) (Bonaventure 1 Sent. 5.1.2.1 resp. [I.115a]). Because de signifies the material of conversion, not the converted material, it has the property of signifying both identity and difference: iron is iron whether in the shape of a knife or not, but morning is not midday. Seeing that the Son is the substance of the Father just as the substance of a knife is iron — for 'de' dicit habitudinem consubstantialem cum habitudine originis — de substantia Patris is correct. But Filius generatus est a substantia Patris is not correct, for, as William of Auvergne points out, the generation signified by a results in the production of a completely distinctive substance, and the Son is of the same substance as the Father (Bonaventure, 1 Sent. 5.1.2 ad 4 [I.116b]).

Theologians do not draw as much attention to the accusative in prepositional phrases as they do to the ablative. They treated the accusative as a terminus with various layers of meaning and implication. Thus in the phrase from the Nicene Creed, sedet ad dexteram patris, ad being transitive underlines the distinctive natures and origins of Father and Son. Because ad is collocated with sedet it designates position (Aquinas, STheol. 3.58.2 resp.), but it also implies the movement by which one got there:

Haec autem praepositio, 'ad', quendam ad dexteram accessum designat, in quo designatur convenientia cum quadam distinctione. (Aquinas, STheol. 3.58.3 resp.).

This last point is particularly relevant to Genesis 1.26, Facianus hominem ad imaginem nostram. Jean de la Rochelle's analysis, dating from about 1235, begins by defining imaginem as respectus imitationis. Ad is then the nota habitudinis by which respective entities are in relation to each other

 $<sup>\</sup>overline{\phantom{a}}$  William of Auvergne, 190.75–76: "Non negamus tamen hanc praepositionem, ab, designare utcumque rem ablativi sui rem sequentis principium. Cum enim filius a patre esse dicitur, pater ostenditur esse indubitanter filio essendi principium."

(Jean de la Rochelle 100.10). Ad marks out the image of God as the exemplar of Man and therefore as a type of cause. In second place the preposition being the sign of the terminus and the completion of the act of creation, is also a sign of final cause (Jean de la Rochelle 100.17). Aquinas's short discussion of this text points out that ad is to be taken in two senses. First it designates the extent and limit of the act of creation; second, it designates God's image as the exemplar and final cause.<sup>8</sup>

However the facts of language often required casuistry: viewed from certain angles per could be considered to denote instrumentality, and therefore efficient cause, yet it was constructed with the accusative. Building on the view that per denotes instrument while establishing a relationship between cause and result (Ps.Grosseteste 55.14), Aquinas (STheol 1.36.3.resp.) begins his exeges of the principle Spiritus sanctus procedit per Filium by relating per to various types of cause. Per designates the cause of an action which passes out of the agent and terminates at a fixed point; it also specifies the cause which prompts an agent to act. Money is a normal final cause for a craftsman: artifex operatur per cupiditatem lucri; the formal cause of his work is his skill per artem suam; its motive is a commission per imperium alterius; and its instrumental cause is some tool per martellum. In Aquinas's phrase, this last is a causa media or a principium de principio which exactly fits the role of the Son in the generation of the Holy Spirit. Later writers like William de la Mare (161.20–23) mined this further. Latin Christianity was often satisfied with the formulation that the Spirit proceeds from de Patre et Filio, but in Greek the Holy Spirit proceeds de Patre per Filium. Because 'de' dicit habitudinem principii tantum and 'per' dicit habitudinem principii de principio, Greek Trinitarian theology is richer than the Latin.

Though the modistae say little that was not already said by Ps.Grosseteste and Simon Dacus, they do seem to have taken notice of the analysis of prepositions by dialecticians and theologians. There are three classes of prepositions: those taking the accusative, those taking the ablative and those taking both, which, according to Martinus Dacus (79.2–3) signify in ratione termini, principii vel utriusque indifferenter. Boethius Dacus (267.14–24) and (MS Clm 18686 f188r) have these rationes designate the habitudo casualis ad actum proper to each preposition. Michel de Marbais (Summa 163.14–17) is quite insistent that this habitudo on the part of the preposition is matched by a modus essendi vel proprietas retorquentis substantiae ad actum, and the interpretation of this property as either principium or

<sup>&</sup>lt;sup>8</sup> Aquinas, STheol. 1.93.5 ad 4: "Uno modo, quoad haec praepositio, 'ad', designet terminum factionis: ut sit sensus, 'faciamus hominem taliter ut sit in eo imago'."

terminus gives rise to a modus intelligendi. In the case of double prepositions Michel ascribes a case to the second of the prepositions, a solution Petrus of Helias had rejected:

Propter quod ipsi posuerunt istas constructiones esse congruas, 'venio de supra pontem', 'vado ad supra pontem', excessum quod non facerent nisi 'supra' esset ablativi casus in constructione prima, et accusativi in secunda. Aliter enim ly de et ly ad non construentur ei in ratione initiantis vel termini terminantis. (Michel de Marbais, Summa 176.61–66)

The suppletion hypothesised by Joannes Dacus rises directly out of the habitudo of both preposition and case-form, and I would suspect that he had his eye on Kilwardby's analysis of the double meaning of casualitas. But it was not accepted by everybody. Many preferred to create a potency-act model through a terminology denoting a double habitudo: the preposition is retorquens ad actum and its noun retorquibilis ad actum, in other words the case-form is in passive potency to the active potency of the preposition (Michel de Marbais, Summa 169.22–25).

It seems that Donatus's casus accidit prepositioni caused no difficulty until the advent of Aristotelian attitudes demanding that terminology be univocal. It is not difficult to see why Ps.Grosseteste would have preferred significatio to casus as an accident. In many ways the solution to this problem parallelled the settlement of the adverb: the relationship of case in the preposition to its propria operatio was the same as that of significatio in the adverb to its syntactic role.

## 5.3. Dispositio utriusque: Conjunction

## 5.3.1. Essential Modes of Signifying

The ancient definitions of the conjunction as a part of speech look past the mere joining of sentence units to the ordering of ideas. Donatus (388.28) defines it as the pars orationis adnectens ordinansque sententiam, while for Priscian, it is pars orationis indeclinabilis, conjunctiva aliarum partium orationis, quibus consignificant, vim et ordinationem demonstrans (Priscian XVI.1 [GL III: 93.1]). As a term of first imposition conjunction means the act of joining, the conjunction of stars and planets, processes like the alchemist's mysterium conjunctionis and the linking of ideas. As a mystical term conjunction also denotes states, the union between the persons of the Trinity, for instance. As a term of second imposition signifying a

 $<sup>\</sup>overline{\ }^9$  Aquinas, 3 Sent. 5.1.1c. resp.: "Sed unio dicitur per comparationem ad terminum vel effectum coniunctionis, qui est esse unum. Et inde sumitur tertia differentia, quod uniens est unitum; quia unitum significatur secundum quod iam factum est unum."

part of speech, the conjunction holds an ambiguous place: while signifying coniunctio rerum, it also performs coniunctiones verborum.

Abelard reports his contemporaries held two opinions on the meaning of conjunctions. Some working from Priscian's dictum that parts of speech indicated a mental concept, believed conjunctions per se had undefined significations, which were fully defined only in construction. Those who held this view reinterpreted Apuleius's image of the fastenings between ship's timbers: unless conjunctions had some meaning, they could not act as joints, and they could not be replaced by nouns, as quare for cur (Abelard, Logica 337.27–28). This opinion he rejects outright, on the grounds that if this is true for prepositions and conjunctions, it is also true for nouns and verbs (ibid. 338.3-7). Others, presumably following Boethius, claimed that conjunctions did not signify, but consignified because they were invented to join other parts of speech. This position Abelard takes up. In saying homo et equus currunt, the speaker unites them in the act of running through the conjunction, et, and also makes that union known. Conjunctions therefore, denoted some sort of property about the words they joined (Abelard, De dial. 120.10–13). They also denote the logical operations of joining and separating: quia denotes cause, and ergo proof through a prior relation between the things joined (Abelard, Logica 338.35 et seqq.).

Petrus Helias's commentary on Priscian Minor twists Apuleius to his own purposes: just as muscular tissue is good only for joining the major parts of the body to each other, conjunctions are only good for linking words (Petrus Helias, Tolson 30.83-87). Vienna MS VPL 2486 amplifies Priscian's definition by short explanations of vis and ordo:

Coniunctio est pars orationis indeclinabilis coniunctiva aliarum partium orationis, vim vel ordinem demonstrans: vim ut copulative et adversative; ordinem, ut continuative et subcontinuative (in de Rijk 1967 II.i.252).

Vis was simple linkage effected through the semantics of et and nec. These conjunctions join two substances with one accident, or diverse accidents with diverse substances; conjunctiones continuativae et subcontinuativae like quia, quoniam and ergo give rise to sequence and to consequence, which are not reversible (cf. Petrus Helias, Summa 810.22–811.32).

While the *Graecismus* merely paraphrases Priscian (16.1 [GL III 93.1– 5), 10 Vincent de Beauvais is a little uneasy about the detail of Priscian's

<sup>&</sup>lt;sup>10</sup> A *iungo*, *iungi* coniunctio dicitur esse, Nam iungit partes, nomina verba simul, Res simul esse notans coniunctio vim notat, ordo Significatur ab hac, cum notat ipsa sequi. Graecismus XXII.3-4.

definition, and as much as accuses him of the logical fault of specifying accidents in a definition. Having said that the conjunction is an indeclinable part of speech which joins or distinguishes others through their sense, he then takes issue with Priscian's *vim vel ordinem demonstrans*. In his view this is not a central part of the definition but a division of the conjunction:

Vim ergo intelligit auctor copulationem. Ordinem vocat consequentiam quando scilicet coniunctio demonstrat, quod una res naturali necessitate consequitur aliam. (Vincent de Beauvais 201A)

However logical analysis had long drawn on Priscian's vis and ordo: whether it signifies the vis of simple linkage or the ordo of prius and posterius, a conjunction joins one entity to another through substance or effect. Jordanus (11) takes issue with Petrus Helias's view that conjunctions are mere linkwords from this sort of position: conjunctions are indeclinable dictiones even if their meanings are incertae et infinitae. Even though they have no respective accidents, their semi-defined significata once understood are the means by which they enter into construction (Jordanus 50): the conjunction brings about (exercet) a a specific type of union between signifiers. The closest unity is that between cause and effect, the most tenuous between contraries.

Because Priscian's *ordinatio* could be read as a process not a state. Ps.Grosseteste (57.1–2) used it to place the conjunction in a motus frame, as he did the adverb: Conjunctio est pars orationis indeclinabilis sententiarum ordinationem significans. Through his classification of conjunctions which order sentences according to diversitatem unification unitorum, he links the logicians' typology of modal propositions with Priscian's inclinationes animae (Ps.Grosseteste 57.7-16). Habitudo probably came to the conjunction from the dialectician, who emphasised that conjunctions overcame habitudines that normally would not have been linked: Conjunction autem coniunqit aliqua quorum neutrum ad aliud habet habitudinem, nec finite nec infinite significatam dico nec consignificatam (William of Sherwood 79). But Ps.Grosseteste (57.3-4) endowed the conjunction with a habitudo qua diversae sententiae coniunquntur sub ratione aliqua. Clearly Apuleius's nails and caulking varied in habitudo according to their function: they signified the act of joining words, and the various kinds of union and disjunction resulting from it. Simon Dacus too defines the conjunction through function: Coniunctio est quaedam pars orationis coniungens dictionem dictioni et ordinem ordini (Simon Dacus, Domus 50.3-4). He and Ps.Grosseteste seem to be the only grammarian to think that conjunctions could join units other than words: his *modus unitus* seems to be the first formalised mode of signifying general to all conjunctions (*ibid*. 50.9).

It was not lost on the modistae that coniunctio was a word of both

first and second imposition bringing about coniunctio in re, coniunctio in anima and coniunctio in sermone:

Rem autem sic non potest significare ipsa coniunctio sub tali proprietate coniungentis, nisi per modum significandi coniungentis, qui ab ista eadem proprietate est acceptus, mediante tamen modo intelligendi a quo immediate accipitur. (Michel de Marbais, *Summa* 147.16–21)

Yet few of them discuss other than coordinating conjunctions. There were problems in identifying a suitable modus essendi. Michel (Summa 147.15) finally settled on modus essendi vel proprietas coniungentis from which he derived modus significandi unientis vel coniungentis, a term prompted by dialectic and at least coloured by theology. The other modistae posit modus dispositionis habitus vel fieri or nominis vel verborum. The most experimental of this early generation is Vincentius Heremitus (14) with his dicere modum vel circumstantiam extremorum as a mode of signifying. But while they recast the relationship between coniungere and unire in linguistic terms, one of the key terms absent from most discussion is habitudo. In general they have little to add to Ps.Grosseteste's sophisticated analysis of the conjunction.

## 5.3.2. Accidental Modes of Signifying

Here too there are two traditions: while Donatus gives potestas, figura and ordo as accidents of the conjunction, Priscian has figura, species and ordo. Simon's classification of the three accidents is patterned on those of the adverb: potestas falls to the conjunction intrinsically; figura extrinsically, and ordo in both ways. Grammarians including the modistae give figura short shrift, as it is common to all parts of speech: most conjunctions are simple in figura, like at, enim and nam, and a few like atque, etenim and namque are composite.

At first ordo is taken in the simplest of senses: the majority of conjunctions are preposed; enclitics and quidem, quoque, autem and enim are postposed, and a few like et and namque can be either. Peter Helias took Priscian's ordo at face value: coniunctiones continuativae et subcontinuativae like quia, quoniam and ergo give rise to sequence and to consequence (Petrus Helias, Summa 811.27–32). Thus placing autem at the beginning of its clause instead of after the first word was a soloecismus penes ordinem because the accident of ordo requires this conjunction to follow the word it foregrounds (Kilwardby, In III Donati 81.1650–1656).

In general however, *ordo* entails signifying more than just *situs*: it is a *habitudo* relating the conjunction to the *prius* and *posterius* of sequence, cause, effect, reason and importance. The *quia* of Christ's rebuke to Thomas

after the Resurrection<sup>11</sup>, would indicate that Thomas's seeing Christ was not a cause of his belief but confirmed a prior wish on his part to believe:

Cum dicitur, 'quia vidisti me, credidisti', haec coniunctio, 'quia', non notat causam vel rationem, sed notat quandam dispositionem vel excitationem animi praeparatoriam ad credendum. (Alexander of Hales, *Summa* III.§650 [IV.1033b])

The coordinating conjunction, enim, demonstrates a more straightforward habitudo. Hoc est corpus meum, the reading of the Gospels and I Corinthians 11.24, is the form of the sacrament of the Eucharist, but the Institution Narrative of the Roman Rite Mass has Hoc est enim corpus meum. Albertus Magnus (De sacramentis 5.1.3 ad 3 [58.35–37]) argues that the liturgical enim is a cause of the preceding sentence ('Take this and eat it') and therefore is not part of the form of the sacrament. While in broad agreement, Aquinas notes that at this point the priest abandons the narrator's third person and adopts the first person to play the part of Christ: enim bridges the transition by marking the words of consecration as the consequence of the preceding narrative.<sup>12</sup>

Boethius Dacus and Martinus Dacus reflect this sort of reasoning: Et iste modus significandi accidentalis qui est in coniunctione, qui vocatur 'ordo', ex suo officio nomen habet, ut aliis dictionibus praeponatur vel postponatur vel communiter se habeat. (Boethius Dacus 309.66–69)

In Martin's hands pre-position and post-position of the conjunction become instruments of logical function through uniting two extremes which have inclination one to the other. *Ordo* rises from a *modus essendi*, which is a relation viewed in a certain functional order. Causal conjunctions, like the St John's *quia* have greater reference a parte antecedentis, because antecedent is the cause of the consequence; rational conjunctions like enim have greater reference a parte consequents (Martinus Dacus 78.4–14).

However according to Boethius Dacus (309.73–76), ordo also implies the category of situs in its strict sense of an ordering of its parts to act. But Michel de Marbais (Summa 158.17–23) takes the implication of situs as a case for rejecting ordo as a mode of signifying: ordo is not a modus essendi, but the physical site assigned the conjunction in the sentence by reason of its modus coniungentis. Michel draws a parallel between ordo in the conjunction and his analysis of the modus distantis of the verb, which in his opinion is also the physical site of the verb distant from the noun.

<sup>&</sup>lt;sup>11</sup> John 20.29: "Quia vidisti me Thoma, credidisti: beati qui non viderunt et crediderunt."
<sup>12</sup> Aquinas, 4 Sent. 8.2.1b ra2: "Verba autem formae huius sacramenti proferuntur a ministro in persona Christi quasi recitative. Et ideo oportet apponere continuationem ad recitationem praemissam, quam facit coniunctio, enim."

The major accident of the conjunction was potestas or species, depending on whether one followed Donatus or Priscian. Species seems the more transparent of the two, being diversitates conjunctionum secundum diversitatem significationum (Petrus Helias, Summa 812.42–43). Vienna VPL 2846, Petrus Helias and the Graecismus define species in terms of significationum varietas and gloss it by potestas before embarking on classifications of conjunctions according to logical operations. <sup>13</sup>

The term significatio runs through the whole history of these two terms. Abelard remarks that both prepositions and conjunctions have confusae et ambiguae significationes, but that, difficult as these significations are to describe, they determine some property in the things joined (Abelard, De dial. 120.10–11). Kilwardby argues that the conjunction has significatio essentialis et accidentalis like the adverb: significatio essentialis is the general act of joining, significatio accidentalis is a specific type of joining or disjoining (Kilwardby, In III Donati 69.1611–1620). Simon Dacus (Domus 50.6–11) puts forward the same model, and Ps.Grosseteste 57.6 amplifies it with a typology of signification according to the diverse principles of changing the direction of statements. The special modes, like the traditional significare copulative, disjunctive etc. are signification which distinguish conjunction from conjunction as the adverbial significatio distinguishes adverb from adverb:

Significatio est modus suae significationis cuius gratia pars significativa dicitur, et dividitur in species secundum diversitatem rationum convertentium sententias. (Ps.Grosseteste 57.3-6)

He prepares the ground with the remark that the conjunction signified the habitudo by which diverse sentences are joined through some principle, and by commenting that many of his colleagues prefer the term, potestas, for significatio. But in his terms significatio is an active process: he makes it clear that his five species of significatio are prompted by inclinationes animae, a phrase that Priscian had applied to mood in the verb.

Thirteenth-century dialecticians starting from the grammarians' principle, coniunctio nata est coniungere ceteras partes orationis, quote the distinction Priscian makes between vis and ordo (Petrus Hispanus, Syncategoreumata VIII §61). However in effecting a union between words in a sentence through vis and ordo, a conjunction signifies a particular disposition of the words to each other, and the conditions surrounding it. The purpose of a conjunction is uniting other words, but it signifies because

 $<sup>\</sup>overline{^{13}}$ Petrus Helias Summa~811.33-35: "Speciem autem dicit hic quam alii 'potestatem' nominant quae est in significatione coniunctionum, id est, in eo quod significant consideratur."

it is a part of speech. As a word cannot signify its purpose, conjunctions cannot signify union between words (Petrus Hispanus, Syncategoreumata VIII §39). The implication, therefore is that potestas and significatio are not the same. Indeed a distinction between potestas and significatio was essential in theology. To the third-century heretic, Sabellius, Philippe, qui videt me videt et Patrem (John 14.9) proved that Father and Son are the same person. St Hilary, quoted by Aquinas, argued that if this were so, St John would not have used et, for only significata diverse in nature can by joined by copulative conjunctions through their potestas:

Si hoc ita esset, Dominus dixisset, 'qui videt me videt Patrem', nulla coniunctione apposita. Sed quia coniunctionem addidit, dicens 'videt et Patrem', distinctionem ostendit. (in Aquinas, *In Joannem* 14.3)

Et therefore demonstrates that Father and Son are distinct entities.

Among the modistae the matter is complicated by the apparent divergence between Donatus and Priscian on the accidents of the conjunction. Michel de Marbais follows Donatus in granting the conjunction potestas, figura and ordo, while Boethius Dacus follows Priscian (16.1 [GL III 93.9]): the conjunction has species (quam alii potestatem nominant) instead of potestas. Kilwardby seems to have left a mark. Michel de Marbais (Summa 153.5–13) reports that some modistae denied potestas was an accidental mode of signification, treating it as a potentia vel passio rising out of the modus conjungentis. He himself (Summa 155.55–58) reads potestas as Priscian's vis, and then likens it to significatio in the adverb. His five potestates, copulativa, disjunctiva, expletiva, causalis and rationalis present logical commonplaces in grammatical terms.

Martinus Dacus (76.12–15) however defines *potestas* as an essential mode of signifying:

Potestas autem est quidam modus significandi qui est modus unientis duo extrema per vim vel per ordinem.

In his view vis is either conjunction or disjunction (Martinus Dacus 76.23–25). But where it had been traditionally accepted that disjunctives joined words but not significates, Martinus Dacus (77.20) claims that disjunctives contrast significates by joining words. On the authority of Priscian (GL III.93.12–16), Boethius Dacus gives species a cursory mention as a modus significandi: he is probably one of those attacked on this score by Michel de Marbais (Summa 159.1–160.17), who remarks that by species Priscian obviously meant potestas.

While it is easier to argue that the other indeclinables are constructible parts of speech, there is controversy over the conjunction. Boethius Dacus argues from its lack of respective accidents and from its lack of transitivity

or intransitivity that it is not constructible. It functions in the sentence through the officium of joining words, through which one understands its significatum (Boethius Dacus Q.132). Those who claim that the conjunction is constructible followed two different paths. Where some fleshed out Priscian's relatively neutral image of the conjunction as a bond (Martinus Dacus 17.5–9), the typology ad finem proposed by Joannes Dacus (256.20–3) has an eye to William of Sherwood's comment on the lack of a suitable habitudo towards union in the entities it joins. Conjunctions joins subjects or predicates by a suppletion compensating for the 'defects' in the substances and acts which prevent them from being joined of themselves (Joannes Dacus 256.21–23). On the other hand some postulated that the active modus unientis of the conjunction was in proportion to a passive modus unibilis in other parts of speech (Michael 152.50–65). Others thought the conjunction joined sentence elements by compensating for the lacking principia constructionis in the autonomous substances and acts joined.

## 5.4. A System of Indeclinables?

The modistae carry over little of the richness of their sources into these discussions of the indeclinables. But, given the comparative autonomy of the intellect in creating modi intelligendi, it was not really a problem that the indeclinables signified entia rationis; and our modistae did make a convincing case for separating significatum, modus significandi and officium. At this early stage, although it had not been forgotten that the Stoic σ΄u&σμος had included both preposition and conjunction, the indeclinables were not formally grouped together by general modes of signifying, as the nominal and verbal parts of speech were. Outside grammar the modus significandi ad aliud was already being treated as an ad-hoc catch-all for the indeclinables signifying per modum conceptus. Within grammar modus disponentis (dispositionis) had the makings of a modus generalis which would eventually group the indeclinables into a unified system: MS Clm 19868 does assign formal modes of signifying to the indeclinables without saying what the material mode is, and there was already a working hypothesis that the adverb and the interjection disposed the verb, the preposition the noun, and the conjunction both of them. It is no surprise, then, that two generations later in the twilight of *grammatica speculativa* indeclinables acquired general and specific modes of signifying: Siger of Courtrai (58–64) takes dispositio as the general essential mode common to them all, and their specific differences become modi speciales.

# CHAPTER SIX CONSTRUCTION AND SYNTAX

The new speculative theology of the late eleventh century needed a coherent theory of grammar, which attended to syntax as well as morphology. Priscianus Minor and Boethius's Aristotle were the major material at hand, but the ancients had provided no theory of syntax, and not even a consistent terminology for later generations to interpret, misinterpret, and build on. The major framework for medieval developments was Priscian's definition of the sentence: oratio est ordinatio dictionum congrua perfectam sententiam demonstrans (Priscian 2.15 [GL II 53.28]), which in defiance of ancient precedent twelfth-century grammarians appropriated for constructio.<sup>1</sup>

#### 6.1. Constructio and Oratio

The modistae present constructio as the last stage of the recursive process that begins with the generation of vox from sonus and culminates in the oratio. A constructio was a group made up of two words, one of which depended on the other. Their received model of constructio was akin to that of the dictio. It had three levels: a 'construction of things' (constructio realis), a 'construction of concept' (constructio mentalis) and a 'construction of words' (constructio vocalis). By their nature constructions were transitive or intransitive. As far as the definition of transitivity was concerned the modistae have little to offer that had not been said before:

Constructio intransitiva est in qua dictiones positae pertinent ad eandem personam vel ut ad eandem. (Martinus Dacus 116.11)

Constructio enim transitiva est in qua omnes dictiones positae pertinent ad diversas personas vel ut ad diversas personas. (Martinus Dacus 116.15)

Traditionally logicians looked at the sentence from the receiver's point of view. Boethius's version of Aristotle's definition of the  $\lambda \delta \gamma S$  glosses  $\phi \omega \gamma$  as vox (sound) and  $\phi \delta \sigma S$  as dictio:

Oratio est vox significativa, cuius partium aliqua significativa est separata ut dictio, sed non ut affirmatio. (Aristotle, *PeriH*. 4 16b26–28)

 $<sup>\</sup>overline{\ }$  Cf. Cicero, 1 *De oratore* 5.17: "Est enim ipsa oratio conformanda non solum electione, sed etiam constructione verborum."

Grammarians however discussed it from the speaker's point of view. Priscian has a second definition of *oratio* turning on the recursive ordering of sounds, syllables and words (Priscian 17.3 [GL III 108.23–109.3]):

Oratio est comprehensio dictionum aptissime ordinatarum: quomodo syllaba comprehensio litterarum aptissima coniunctarum et quomodo ex syllabarum coniunctione dictio, sic etiam dictionum coniunctione perfecta oratio constat.

An oratio could be transitive, intransitive, reciprocal, or retransitiva (Priscian 17.30 [GL III 127.15–20]). Priscian's retransitive (i.e. reflexive) and reciprocal are merely complex transitive constructions. His description of transitivity rests on a crucial distinction between transitio actus and transitio personarum. Transitio actus is proper to verbs with a complement or object, as in Canis fugat felem: transitio personarum can occur in constructions without a verb as long as they establish a relationship between two persons, as in feles Socratis. Intransitive constructions show no such transition.

Of the words meaning 'sentence' or 'utterance', *propositio* and *locutio* were the concern of logicians. Grammar and dialectic shared the oft-used functional definition of *oratio* we have already met in the Porretan grammar:

Enuntiativa autem oratio est in qua enuntiatur aliquid de aliquo vel aliquid ab aliquo. (Garlandus Compotista  $42.17\!-\!18)$ 

Garlandus Compotista's discussion of Aristotle's throw-away line that a number and a sentence are discrete quantities (Cat. 6 4b23) largely follows Boethius. Socrates sedet is one oratio, but it is not one vox, or even one puff of air. Such an oratio can be measured according to time, constitution and signification. The length of the syllables is the measure of its time, and its measure according to constitution is the order of its words and syllables. But the measure according to signification is pragmatic: the utterance has a specific communicative purpose (Garlandus Compotista 29.15), which is distinguished sharply from measure secundum significatum, which looks at the questions of universal and particular.

Measuring a sentence by time may have suggested Abelard's spatial metaphor which sees its verb as sitting between two boundaries:

Partes terminos, idest metas, nominamus quae extrema compositi sui terminant ac finiunt, verbum autem medium imponitur. (Abelard,  $De\ dial.$  164.6-8)

Abelard's concern with grammar prompts him to define oratio as competens dictionum coniunctio. For unless one joins the words of a sentence according to the rules of construction, one does not build a sentence that can be understood (Abelard, De dial. 147.28). His exegesis of Aristotle's definition of the oratio proceeds by way of coniunctio constructionis and coniunctio predicationis. Coniunctio constructionis, whose goodness is measured by

whether it transmits a perfect sense or not, is the grammarian's concern. But the dialectician looks at the *coniunctio predicationis* to judge how well it pertains to the nature of things and to truth (Abelard, *Logica* 17.12–21). These two *coniunctiones* become *constructio in vocibus* and *constructio in intellectibus*, that is syntactic and semantic structure (de Libera 1990:210).

Confusion between *oratio* and *constructio* lasted for some considerable time. To grammarians in the *Glosulae* tradition *constructio* and *oratio* were synonymous to all intents and purposes, so that certain commentators implicitly equate *oratio* with *constructio*.<sup>2</sup> Others insisted the standard definition was properly applied to the *oratio*, but improperly to the *constructio*:

Oratio est congrua dictionum ordinatio, id est quiddam constans ex dictionibus congrue ordinatis: constructio est congrua dictionum ordinatio, id est proprietas quae inest dictionibus. ( $Glossa\ Promisimus\ f46\ r2$ , in Kneepkens 1990a 147n)

Dictiones could only fulfil their potency to grammatical function, semantic meaning and truth or falsehood within a coherent syntactic structure: in practical terms, constructio was an effect proper to words as causes, their constructibilium passio. While semantic change had severed any obvious connection of oratio with its parent verb, orare, constructio functioned as a post-verbal of constructe with three usages: in its active sense it is the act of construction, in its passive the binary constructio resulting from the act of construction, and finally the oratio constructa (Petrus Helias, Tolson 49.61–64), or later on modus construendi (Sponcius 177–178).

During the twelfth century one often finds Priscian's definition truncated: Constructio est dictionum congrua in oratione ordinatio (Hugh of St Victor, Grammar 289.10). Petrus Helias (Summa 835.65) argues that Priscian had meant to leave his definition open to both perfect and imperfect constructions, and its tail, perfectum generans sensum in animo auditoris, was a superfluous description added by unnamed antiqui. This is in part his motivation for distinguishing between congrua voce and congrua sensu (ibid. 832.5–12), which is parallel to the text grammarian's distinction between cohesion and coherence. Where Petrus Helias was somewhat ambivalent on the role of signification in construction, the Porretani readily accepted that both signification and consignification are implicated. In interpreting Boethius<sup>3</sup> a reader is to assess the worth of what is offered to the understanding by

 $<sup>^2</sup>$  MSS BL Burney 238 f1r1 & Orléans B.m 90 f359a (in Kneepkens 1990a 146n): "Est autem perfecta oratio sive constructio, in qua plures dictiones positae insimul faciunt perfectum sensum."

 $<sup>\</sup>bar{\ }^3$  CEut. 4.99–101: "Iam vero sequitur ut, personis manentibus, nullo modo a divinitate humanitas credatur assumpta."

what the grammarians call *locutio* and a rhetorician *electio*, he must look to the properties of things in order to gather not only the sense of the text from its words, but also the meanings of the words from the text (Gilbert of Poitiers, 309.32–34). On the other hand Robert Blund working in the 1170s clearly excludes the significate from the grammarian's consideration.

Following ancient rhetorical precedent, the twelfth-century placed compositio beside ordinatio and coniunctio as an instrument of construction. Like Abelard, William of Conches is concerned with correctness of structure: Constructio igitur est regularis in compositione orationis dictionum coniunctio (Kneepkens 1990a:146n). Compositio fitted naturally into a definition of construction as its essential element, because the sentence was constructed to be understood and composition was a basic logical operation. As one would expect, the *Porretani*, whose theology and grammar rested on the bedrock of logic, emphasised the importance of reason in construction: Constructio ergo est rationalis ordinatio dictionum ad componendam orationem (Grammatica Porr. 60). In their hands the inherence attributed to the verb becomes composition. Thus their composition model of the sentence is essentially static, as it focusses on predication within a composite made up of suppositum, appositum and the copula, esse. Because the substance of the noun has the double property of supporting its accidents and underpinning the sentence, the action which is the substance of the verb becomes a property of the nominative through the accident of person (ibid. 28). In attributing a property or act to the subject through its inherent composition, the verb signifies actio or passio rising out of the substance of the subject (*ibid*. 30). In short the verb signifies its substance as composed with the subject and as having some effect in it (Logica Porr. §I.21–22 [9.75]).

Robert Blund's three-fold typology for construction sums up the complex relationships of governance in the sentence. Constructio dictionis cum dictione was a one-way relationship: the construction of, say, an adjective with its noun was not the same as that of a noun with its adjective; constructio dictionis was the multiple relationship that exists between words constructed with each other in a sentence; constructio constructionum, which others call constructio orationis, rises out of the accidental features in the words on which congruity depends (Blund, Ars grammatica f79r1).

Whether significate and consignificate both played a role in construction was still an issue during the thirteenth century. Jordanus's remark, 'the construction of parts of speech is to be seen in their *significata* and *con-*

<sup>&</sup>lt;sup>4</sup> Cicero, Ad Herennium 4.18: "Compositio est verborum constructio, quae facit omnes partes orationis aequabiliter perpolitas."

significata' (Jordanus 3), must be a reference to Petrus Helias's congrua voce and congrua sensu. Yet later on he clearly states that Priscian (17.187 [GL III 201.11]), in laying down that all well formed constructions were to be referred to the understanding, had meant the understanding expressed by the modes of signifying and not the mental image of the res significata: the correctness of a construction is not to be assessed according to the sign functions of the word, but according to its modes of signifying (Jordanus 64–65).

There were attempts to bring Priscian further up to date while respecting his main thrust. The definition of *constructio* in Percival's fragment, which shares the preoccupations of Robert Blund (*Ars grammatica*, f79 r2) and whose *competens ordinatio* echoes Abelard (*De dial.* 147.28), is almost a complete summary of the contemporary theory of construction:

Constructio est competens dictionum ordinatio secundum congrua ipsarum accidentia, vel constructio est ordinatio dictionis cum dictione cum exigentia et determinatione. (Bursill-Hall et al. 1990:273)

This emphasis on modes of signifying as instrumental causes directed towards the sentence as the final end of *constructio* is further discussed by Simon Dacus (*Domus* 25.1–3): any accidental feature can contribute to construction as a bond disposing *dictio* to *dictio*, so most constructions are bonded by a number of modes of signifying working together. The accusative adjective, *congruam*, found in some Paris manuscripts shifts the emphasis of Priscian's definition towards the content of the sentence:

Oratio est ordinatio dictionum congruam perfectamque sententiam demonstrans. (Ps.Kilwardby 92)

It is now the content that is congruent, not the *ordinatio*. Ps.Kilwardby distinguishes between two disparate readings of this definition. The *oratio* is the 'universal' purpose of all parts of speech: Priscian's *ordinatio dictionum* is equivocal in that it pertains to *constructio* as its effective principle, and to *oratio* as its material principle (Ps.Kilwardby 91). Foremost in the mind of the logician is signification, but the grammarian's priority is the material of the sentence and its purpose. Thus the logician will read *ordinatio dictionum* in Priscian's definition as a condition of truth or falsehood, but to the grammarian *ordinatio* pertains to grammatical congruity and incongruity (Ps.Kilwardby 89). Little wonder that Sponcius's definition of *constructio* was influenced by Kilwardby's reading of *constructio*:

Constructio est congrua dictionum ordinatio, congruam sententiam perfectamque demonstrans. (Sponcius 178)

Compositio is exploited in several ways by Ps.Grosseteste. First he evokes dialectic by introducing its logical opposite, the concept of division:

Sermo igitur divisivus primus est secundum constructionem, unde cum dico animalium aliud rationale aliud irrationale, ab actu dividendi dependet tota constructio et perfectus est sermo ab inclinatione dividendi. (Ps.Grosseteste 61.3–5)

Then in a comment more typical of a grammarian, he places the verb at the centre of construction because it consignifies compositio as the device by which one determines illa super quae cadit affectus secundum quod super ipsa cadit (Ps.Grosseteste 61.24–26). He reports that besides compositio constructio is a current term for the coniunctio partium which makes up Priscian's congruent ordering of words (Ps.Grosseteste 60.16–18). Can this be the reason for the variant reading, coniunctio, for constructio in Ebbesen's anonymous Elenchi commentary (Incerti Auctores Q53.21 & 23)?<sup>5</sup>

Unio is also frequent in definitions of construction at this time. Theologians saw unio as a pragmatic term, rather than a formal: coniunctio relates subject to terminus, and makes them parts of a unit. It is probably through this sort of reasoning that unio is prominent in many early thirteenth-century definitions of constructio. Because any union depends on the match (convenientia) of one part to another, 'construction insofar as it is a passio in all the parts of speech, must come about by reason of some concordance found in the constructibles' (Glossa Admirantes f68, [Thurot 1868:219]). Construction is therefore ab arte, non a natura (Gosvin de Marbais 7.1–2) Gosvin de Marbais (7.7–9) defines construction as the 'actual ordering (ordinatio) of predicate with subject or part with part', and makes of this ordering the form of the whole oratio. Vincentius Heremitus (15) and the Glossa Admirantes (f68) proffer the same definition of construction, although it is the Glossa that defines the causes more succinctly:

Est constructio congrua constructibilium unio ex modo significandi causata, inventa ad affectum animi indicandum. Cum dicit constructibilium, tangit causam materialem. Cum dicit unio, tangit causam formalem. Cum dicit ex modo significandi causata, tangit causam efficientem intra, cum dicit inventa et cetera, tangit causam finalem. (Thurot 1868:219)

This summary was further elaborated by the *modistae* on their own terms. The material principle of construction is the *constructibilia* it contains, or according to Ps.Albertus (56 resp. propria) their *significata*; its formal has two aspects, *forma tractatus* and *forma tractandi*, to wit theory and practice of syntax; its extrinsic efficient cause is the intellect which im-

<sup>o</sup> Cf. Aquinas 3 Sent. 5.1.1 resp.: "Sed unio dicitur per comparationem ad terminum vel effectum coniunctionis, qui est esse unum."

 $<sup>^5</sup>$  "Praeterea ex constructione [V.L. coniunctione] unius dictionis cum alia non debet causari aliquis modus significandi, sed potius econverso, cum modi significandi sint causae constructionis [V.L. coniunctionis] et constructio sit effectus modorum significandi."  $^6$  Cf. Aquinas 3 Sent. 5.1.1 resp.: "Sed unio dicitur per comparationem ad terminum vel

poses words on significations, and its intrinsic principia the essential and accidental modes of signifying; and its final cause is the perfectly constructed utterance (Martinus Dacus 85.8–87.9). Martinus Dacus (88.1–3) cites an antiquus expositor Prisciani Minoris as his precedent for defining constructio as ratio exigentiae unius dictionis ad aliam. Contemporary sources identify this expositor as a certain Robertus Anglicus, whom Roos identifies as Robert Kilwardby (Martinus Dacus 88n), but whom Rosier places somewhat later (Gosvin de Marbais XIII).

As a passio of the part of speech in its relation to another one, 7 constructio is the ultimate realisation of potency and act in the chain of generation leading from the vocal sound to the utterance. The idea that a constructio is in some sense a sign raises the question of whether the modi essendi are relevant to the grammarian. Given that even though they are formally different, the categories in reality and as signified by language are materially the same. Joannes Dacus (248.23–34) argues that the grammarian has business with them. The modi essendi, being accidents by which one substance interacts with another, are the principles of the *constructio* realis. From this construction are derived the modes of understanding from which a mental construction is formed, and from these modes in mental construction, the modes of signifying which interact to form the *constructio* vocalis which hangs together by virtue of the accidents of the words. Hence constructions of language, mental images or res extra animam are in proportion: as posterior is assimilated to prior, each succeeding level is assimilated to the one above it, and is therefore in proportion to it. The integrity of the structures of words, ideas and things within each level are guaranteed by the proportion between their respective modes (Boethius Dacus 82.23–83.47). In short the patterns of mensura in the generation of words is replicated in the utterance.

Abelard's view of the arbitrariness of language and of the autonomy of grammar led him to define transitivity as a type of determination. In a transitive sentence, e.g. video lupum, the determination crosses to the determinatum; but in an intransitive expression, e.g. animale rationale mortale, the determination has no need to pass to the determinatum because it is already in it (Abelard, De dial. 589.29–590.2). Others took a realist view linking reality and its expression:

Actiones aliae transeuntes sunt aliae non; et transeuntes quidem sunt quae exercentur in aliquod, non ab aliquo solum, ut 'amo', 'doceo'. Non transeuntes sunt quae in aliquo sunt non tamen ad aliquid, ut 'sto', 'curro', 'vivo',

 $<sup>\</sup>overline{\phantom{a}}$  Michel de Marbais, Tractatus f67r2: "Eius tractatus, in quo consequitur de constructione vel de ordinatione partium quae est passio constructibilis relati ad alium."

quae nisi figurate transitionem non recipiunt. (Hugh of St Victor,  ${\it Grammar}$  289.38–290.2)

William of Conches's analysis is already that of the *modistae*: there is no transitio actus without transitio personarum, although feles Socratis shows transitio personarum without transitio actus. Intransitive verbs denote an action which does not pass to a terminus outside the verb, for example feles fugit. The transitive sentence, Canis fugat felem, contains an intransitive construction and a transitive construction signifying a transitio actus.

There was no disagreement that sentences whose verb was in the active voice and whose object was in the accusative enjoyed a transitio propria from subject to object (cf. Kneepkens 1990b:166), also called transitio recta. On the principle that the distance from Athens to Thebes was the same as from Thebes to Athens such sentences could be passivised, and the principium expressed by the nominative became a principium expressed by the ablative with or without a preposition. They once were, however, considerable discussion of the sentences with their complement in other oblique cases, as in Canis nocet feli, or whose complement was governed by a preposition, as in Feles currit in hortum: many accepted such as transitive constructions enjoying transitio impropria or transitio non recta (Petrus Helias, Tolson 93.53–55). An unknown but influential Master Robertus added a third type of transitivity to the standard transitio actuum and transitio personarum, the transition of the act of the verb towards a terminus without expressing the subject, as in the impersonal legere Vergilium and parcitur victis.

Both transitio non recta / impropria and Magister Robert's suggestion are rejected by the Oxford Questions and the Porretani. The Porretan grammarians base their more formalised analysis on the principle that only active verbs can be transitive. Transitive verbs attribute a property to a person in respect to another person: a verb like amo is transitive because it signifies one person acting on another. But the properties attributed to a person by intransitive verbs like vivo, have respect to the subject only (Grammatica Porr. 30). Transitive constructions without a verb, like cappa Socratis, imply one (ibid. 60).

The influence of the *Porretani* lasts into the thirteenth century. According to Percival's fragment for example, una persona ostenditur agere in aliam vel quasi in aliam by a transitive construction.<sup>8</sup> In Gosvin de Marbais (59.12–15) the Porretan formula that transitive verbs attribute a property to a person respectu alterius and intransitive non comparatione alterius

<sup>&</sup>lt;sup>8</sup> Cf. Grammatica Porr. 31: "Amo, quod et significat actionem substantiae verbi in personam, et actionem qua dicitur personam agere in personam aliam."

(Grammatica Porr. 30) becomes a distinction between imperfect verbs like lego that transit into something other than themselves, and perfect verbs like vivo, that transit into their own nature. Yet the thirteenth century saw several attempts to define the mechanism of transitivity in more scientific terms. The grammarians' transitio propria et impropria, which is still held by Ps.Grosseteste (63.20–23), had its counterpart in re: a thing transit proprie if it moves towards its perfection, and transit improprie if the result is in any way imperfect or out of proportion (Albertus Magnus, Phys. 3.2.6 [179.35–40]. Jordanus (77) argues that a transitive case is a medium construendi which terminates the habitudo of the word it is constructed with. Ps.Grosseteste (63.16–19) develops the old idea of determination; an action begins at a distance from its goal and it transits when that in which it causes passio is stirred by its power. The Percival fragment is notable for its failed attempt to amplify the distinction between transitio personarum and transitio actuum by adding transitio passionum, numerorum et casuum and the like (Bursill-Hall et al. 1990:273).

As far as the definition of transitivity was concerned the *modistae* have little further to offer: Martinus's definitions of transitive and intransitive at the head of this section are in no way exceptional. Transitive constructions contain a terminus so that the modus essendi of the dependent member has an aliquod alterum which signifies in ratione termini huius transitus to cross into. This terminus was normally an accusative or an infinitive, but Boethius Dacus (181.39–41) follows some important twelfth-century figures in accepting misereor tui and misereor tibi as transitive. Intransitive constructions have no need of such a terminus. This satisfied most of our generation of modistae except for Martinus Dacus. His model of transitivity and intransitivity reworks the inherence theory of verbal action. The noun is primum constructibile and the verb secundum constructibile. The construction, can latrat, is intransitive, because the secundum constructibile, latrat, depends immediately on the primum constructibile, canis (Martinus Dacus 92.3–12). A transitive construction, e.g. fugat felem, is one in which the secundum constructibile depends on the primum constructibile neither directly nor indirectly, but terminates the dependence set up by the first. But this analysis, economical as it is, was taken up by nobody else.

The rise of the *motus* theory of the verb set off the development of a *motus* model of the sentence which entered into competition with the traditional composition model. Much of the argument revolves around the correct order of the phrase, *amatus sum vel fui* (Brousseau-Beuermann, 1993:220–223). According to Gosvin de Marbais (76.4–9) and the author of the *Glossa Admirantes* who follow Ps.Kilwardby (139), if *sum* is considered

the agent of composition and amatus the substance of the verb, one says sum vel fui amatus; but if sum is construed as a substantive verb denoting the stable terminus of motion, the order is amatus sum vel fui. Some grammarians preferred to reject this copula-based view of terminus, preferring to restrict the motus model to transitive verbs in the active voice, as in video Socratem (Brousseau-Beuermann, 1993:221). The issue, of course, revolved around order as a disposition to act and pertained to the nature of the oratio.

Composition passed to predication many of the marks of *motus*, in particular its affinity with change and time. Although they never used the term, *motus*, the *Porretani* already had the makings of a process model of the sentence:

Cum proprietas verbo significatur, verbum significat eam componi subiecto, immo efficere aliquid in subiecto, qui effectus proprietatis in subiecto actio dicitur. (*Logica Porr.* I.21–22 [9.80–83])

Static as the logicians' concept of composition is, the *Porretani* already show that the term, *compositio*, can be seen as an active post-verbal denoting a process. It was therefore a *motus*, subsuming Priscian's *actio* and *passio*. The theory of composition already included the somewhat less than metaphorical use of *transitus*, and the view that predication is subject to time read as the category, *quando*. Other elements in the backdrop of the *motus* model were the discussion of *donum* and *datum* in commentaries on the *Sentences* and a physical model for the syntax of the simple sentence supplied by Arab commentators:

Posuerunt nomen cuilibet formae quiescenti et verbum cuilibet formae mobili. (Averroes, *Commentary on Physics*, V.9 [Albertus Magnus, *Phys.* 409n])

Quies and motus lead directly to noun and verb through habitus and motus. As the terminus a quo signified by the noun was disposed to act, the action denoted and brought about by the verb was a motus from that habitus to a terminus ad quem also characterised by the stability proper to habitus.

Reading the *oratio* as a *motus* from *suppositum* to *appositum* entails accepting that construction fully realises the appetite for perfection inherent in the word as a natural object performing its proper function:

Nota ergo quod in omni motu, sive ad formam sive ad situm, primum principium motus intrinsecum est appetitus: haec enim est vis a Creatore omnibus indita creaturis, per quam ad sui complementum ordinantur, et in sui complemento stant et radicantur. (Alexander of Hales, Summa II §482 [II.i 66a])

Of all the grammarian predecessors of the *modistae* Ps.Grosseteste (62.1) is the most ready to model the simple sentence as a *motus* bounded by a *terminus a quo* and a *terminus ad quod* signified by the appropriate cases,

and to see composition as subordinate to it. This is further developed by Ps.Albertus (82 arg 6) whose model of the sentence could have come out of any physics class. The *fluxus verbi* is dependent on a *terminus a quo* which being fixed and *per se stans*, is already in equilibrium, but proceeds to another point of equilibrium to which it is in potency.

One did not have to be a card-carrying *modista* to adopt the *motus* model. Indeed it appears too early in the thirteenth century to have been developed by the *modistae*. Nor did adopting the *motus* model entail abandoning the composition model. Despite causing some academic quarrels, the two are complementary — they share critical aspects of the metalanguage, and the *motus* model offers an explanation of how the traditional composition model works.

## 6.2. Congrua ordinatio dictionum

According to Vincentius Heremitus (15) congrua is derived from the orderly behaviour of a flock of cranes (qrues) in flight:

Grues enim sunt aves talis naturae, quod una volant cum aliae volant ad eius similitudinem vel convenientiam, et ita dictione ingrediente constructione iam debet sequi ad eius similitudinem seu convenientiam aliquorum existentium in constructibilibus.

Congruitas is often exemplified and described rather than defined. Petrus Helias (Summa 835.5) balances ordinatio congrua voce, the proper proportion between the accidents of the words, against ordinatio congrua sensu, by which the hearer determines whether the sentence is true or false.

Thus the stock nonsense sentence, Socrates habet sotulares hypotheticos cum categoricis corrigiis is congrua voce but incongrua sensu because the construction of adjectives of second intention with nouns of first intention does not make sense (Petrus Helias, Summa 833.26–32). Yet sentences that were congrua sensu while straining the bounds of congrua voce were not difficult to find. Ovid's turba ruunt (Heroides xii.143) was a commonly quoted crux. Petrus Helias explains that turba can take a plural verb because of its implication of plurality makes it congrua sensu (Petrus Helias, Summa 833.21–25). Where the nonsense sentence is not understandable, the Ovid example is (*ibid*. 833.29–32). Bacon's solution to the Ovid problem is to categorise turba as a linguistic form actually founded in the plural, which is ample reason for it to be constructed with a plural verb (Bacon, Grammar 33). Kilwardby (In III Donati 61.960) prefers to quote the medieval plural in Londiniae est pulchra civitas: he excuses the grammatical impropriety, because Londiniae has the implication of a singular as even then it was an urban agglomeration.

For the Roman architect, Vitruvius, *ordinatio* depended on proportion and was directed towards the proper functioning of parts:

Ordinatio est modica membrorum operis commoditas separatim, universaeque proportionis ad symmetriam comparatio. ( $De\ architectura\ I.2$ ).

Like Vitruvius's building and Vincentius's cranes a grammatical construction was an ordinatio congruitatis sive convenientiae rather than the ordination necessitatis naturalis proper to creation (Alexander of Hales Summa 3 §685 [IV.1088b]). But the two analogies part company: the cranes' behaviour was instinctive, but, like designing a building, ordination dictionum was an act of the reason producing a structure patterned on the coherent ordering of ideas:

Grammatica est sermocinalis scientia, qua docetur congrua iunctura dictionum per suos modos significandi, quae quidem iunctura orationum imitatur ordinationem intelligibilium apud intellectum per suos modos intelligendi. (Boethius Dacus 27.36–39)

It was for this reason that all *modi significandi* which act as principles of construction were in due proportion to each other (*ibid*. 202.31–33).

Though a definition of grammar itself, the above definition lavs out all the issues the modistae read into ordinatio. Like constructio, the word can be read equally well in the active sense of ordering, or in the passive of the sequential and functional arrangement of words resulting from the act of ordering. As word order did not have the dynamic possibilities of ordinatio, it was rarely mentioned in twelfth-century speculative grammar, and ordinatio does not seem to have been deemed appropriate in this context. However grammarians did distinguish four orders in the sentence: the natural order, the obligatory order accounting for habitual variations from the normal (like preposed relatives in subordinate clauses), the artificial order of the rhetoricians, and the logical order, in other words, subject-verb-object (the canonical order) (Kneepkens 1987:149). In a technique that was to look forward to the 'grammatical translation' of the seventeenth century, the analyst was supposed to extract the logical order from the others: for William of Conches, for instance, the first step in grammatical analysis was reducing everything to the natural order (Kneepkens 1987:147).

The medievals built their theories of syntax by developing the perceived Aristotelian resonances of ancient morphology, which they regarded as a philosophical terminology in search of a theory. They did not aim at producing a complete syntax — Priscian had already done that —, but a comprehensive set of principles sketching out the requirements of an ordinatio congruitatis sive convenientiae proper to language. This ordinatio congruitatis seems to have semantic relations rather than structural as its primary concern. Ordinatio dictionum then was the effective principle of

the two-word constructio. Constructiones were never treated as immediate constituents. They were, however the proximate material principle of the oratio, which is the finis universalis omnium partium orationis. The remote material principle of the oratio was its dictiones (Ps.Kilwardby 90–91).

The evolution of ordinatio dictionum turned on three concepts, exigere, regere and determinare. Exigere is Priscian's term for the central act of construction and it commutes with construic cum and referriad. William of Conches reports that his contemporaries supplanted it by regere. Yet exigere survived as an auxiliary term: according to the gloss Licet Multi in Arte the noun demands (exigit) to be governed by the word constructed with it: the verb demands a noun in an oblique case so that it govern (Kneepkens 1978:133). Consequently exigere at times appears in definitions:

Constructio est congrua ordinatio dictionis cum dictione in ratione cum exigentia et determinatione. (Robert Blund f79r2)

Some of the most significant work on regere is due to an unidentifiable Master Guido whose chosen simile for regere is giving directions to a traveller who is lost (Kneepkens 1978:123). Governance is a dependency relationship. in which the rectum is put into a particular case to conform to the demands of the regens. Constructions cannot govern constructions. For William of Conches and the gloss Licet Multi in Arte however, regens relates to rectum as master to slave. The regens, which gives an incomplete or equivocal meaning, governs the rectum, because it requires it in the construction to clarify its significatio (Kneepkens 1978:132). Both significate and modus significandi are taken to be essential elements in a proper construction on the strength of Priscian's adage that all constructions are referred to the understanding. Yet significatio as exemplified seems to focus on grammar rather than on semantics: when one says accuso, one's interlocutor expects an accusative (Kneepkens 1978:133). Hugh of St Victor (Grammar 291.10) uses both regere plus the accusative and sociari plus the dative in describing construction: constructiones propriae exploit matching accidents, such as case and number, which are morphological features congruent secundum instituta; constructiones secundum proprietatem stretch the possibilities of morphology to produce tropes and figurative language; vitia offend against the customs of the language (Hugh of St Victor, Grammar 289.10–17).

Petrus Helias largely follows William of Conches. Regere is a violent process by which one word drags another into a construction and specifies its case for the perfection of the construction, not for the disambiguation of word-meaning (Petrus Helias, Summa 1051.24–26). Thus Socrates accusat is a perfect construction because the words are in grammatical agreement; however it does not generate a perfect sense because the regens, accusat, is a

transitive verb whose need for an object is unfulfilled (Petrus Helias, Summa 835.65–77). For Petrus then, regimen has two facets: it refers one constructible to another, and where this is in the nature of the constructibles, one element requires morphological agreement from the other.

Etymologically determinare means to set boundaries, and in Boethius it meant to clarify meaning by obviating ambiguity and therefore doubt. Abelard's competens constructio dictionum means that the sentence is constructed ad placitum 'to constitute an understanding in the mind of the interlocutor' (Abelard, De dial. 147.7–11). The tool of this composition is determinationes orationum and determinationes dictionum (Abelard, ibid. 586.27). The first, which produces sentences which may or may not be ambiguous, is of interest to logicians only. But the determinationes dictionum concern words with several layers of meaning; the constructions in which these words occur filter out all but the requisite signification, which in logicians' terms is restrictio. 10

At this stage semantic and structural considerations were still intertwined in the theory of constructio. Robert Blund perfected Petrus Helias's incoate distinction between them by differentiating government from semantic determination. In his view words are in a sentence for both purposes. Thus adjectives and adverbs determine and do not govern, while verbs within a sentence govern. Blund defines regere in terms of the patronclient relationship: regere est conferre alicui dictioni poni in tali casu et esse eius patronus; and he emphasises the kinship between determinatio and the twelfth-century logician's restrictio: determinare est aliquam dictionem modificare et quodam modo restringere (Kneepkens 1978:139). In his hands regimen is a syntactic relationship between words in a construction, and determinatio partially semantic. This is certainly not a return to Master Guido: determinatio does not presuppose regimen, but regimen does presuppose determination between the two words in a construction.

The twelfth century were not unanimous on what governed what, but they did draw up a possible list of constructions. The most important are:

- 1. Verbs govern their nominative or vocative subject intransitively.
- 2. Transitive verbs and participles govern oblique cases transitively.
- $3.\ {\rm Nouns},$  adjectives and adverbs govern oblique cases transitively.
- 4. Prepositions govern only the accusative and ablative cases, and that transitively.

supponendum pro paucioribis quam sua natura exigat."

 $<sup>\</sup>overline{^9}$  Boethius, *De divisione PL* 64 889A: "Quoties enim sine determinatione dicitur vox ulla, facit in intellectu dubitationem, ut est homo, haec enim vox multa significat."  $^{10}$  Summae metenses f27r (de Rijk 1967 II.i.642): "Restrictio est coarctatio termini ad

- 5. Conjunctions and interjections neither govern nor are governed.
- 6. Adjectives determine nouns intransitively, and there is disagreement over whether the relation is one of government.
- 7. Adverbs determine verbs intransitively.

The construction of subject with predicate, or — as the twelfth century dubbed them in a very far-reaching change to syntactic theory — suppositum plus appositum was intransitive, because actio and passio were born from the substance of the noun. Thierry of Chartres (149.60) took this as sufficient reason to claim that the  $res\ verbi$  was naturally compatible with its subject on the grounds that  $res\ verbi$  inhered in the subject. As an essential part of the theory of the verb, inherence was placed at the centre of this construction by the Glosulae:

Et ideo dicimus quod nec actionem simpliciter nec personam agentem, sed actionem inesse personae agenti significat, ut 'currit'. (Hunt 1941 218n)

Hence a finite verb constructed without an expressed subject made it understood, because all action presupposes the person performing it.

The ordinatio of noun and verb to each other was an essential element in the sentence: the sentence signified id de quo agitur et id quod de alio, and showed that one is attributed to the other (Grammatica Porr. 29). The suppositum is in the nominative because this case, by Aristotelian precedent, signifies the free-standing substance of the noun (aliud), of which a quality or act could be predicated. Consequently the noun or pronoun suppositum had two functions: as the subject of the sentence the noun substat appositioni, but as referent it signifies the person the sentence is about. The verb as predicate was the pivot of the sentence and signified the proprietas qua subjectum declaratur (Logica Porr. §1.6 [4.11–12]). This property is the lexical content of the verb or its 'substance' predicated of the subject through the categories of actio and passio (ibid. §I.21–22 [9.75–77]): albet for instance, signifies the effect of whiteness in the substance of its suppositum (Grammatica Porr. 30). Petrus Helias therefore postulated that the verb dragged its noun into the sentence to complete its construction:

Cum enim dico, 'currit', actum quidem per verbum significo, sed actus non potest esse nisi alicui insit. Ideoque non potest illius verbi significatio determinari nisi ostendatur de quo dicitur. Assumit ergo sibi hoc verbum nominativum ad determinandum suam significationem cum dico 'Socrates currit'. Ideoque verbum regit nominativum. (Petrus Helias Summa 1050.98–101)

Person being the accident common to verb and noun, was the operative link between *suppositum* and *appositum*, but not everybody believed that verb governed noun. Person 'is prior to the action determined by the verb', so that noun and pronoun are *duces verbi*, (Hugh of St Victor, *Gram-*

mar 289.20). The issue seems to be flavoured by Boethius's alteritas. The first question in the third group of Kneepkens's Oxford Questions discusses the sentence Tu es dignus qui regas rempublicam. The verb, regas, signifies rem ut in altero intelligitur. Being a finite verb verbum personale, it is in re nominativi, a nod to inherence theory (Kneepkens 1989:110). The nominative upon which it ultimately depends is the antecedent of qui, dignus, which signifies the thing in which inheres the act of the verb. But the most intriguing element of this article is the commentator's reference to the nominative, dignus, as the rem ut in eo intelligitur actus verbi. In the light of the statement in MS Digby 24 (f104r1) that the element signifying ut de quo alterum terminates the respectus of the verb ex parte ante, dignus is the alterum in which regas is understood. The other aspect of alteritas is the plural. Ovid's turba ruunt has its mention in Q XIVa (2 Collection). This construction is figurative and the undefined exigentia by which turba is constructed with the plural seems to be semantic (Kneepkens 1985:122).

Adjectives and adverbs are also intransitively constructed through the principle of inherence, which in the adjective is often called *concretio*. Although Porretan logicians do take it as a feature of the adjective and participle, <sup>11</sup> concretio does not appear in either Abelard or Petrus Helias. Petrus Helias (Summa 879.33–37) sums up the construction of the adjective in a most traditional fashion: adjectives are joined to their substantives by both morphology voce et significatione, that is by their accidents and the meaning they annex to their noun, and he finishes with the metaphor that the adjective paints (depingit) the noun.

The word, regere, is not common; indeed Robert Blund sees these constructions as involving determination not governance (Fredborg 1988:194). The logicians' recognition of qualification of a noun by an adjective as a type of restrictio (Summae metenses [de Rijk 1967 II.i.463]) is probably behind Alain de Lille's Regula XXV that the agreement of adjective with noun means that per se its signification and consignification are not completely stable (Alain de Lille 633A). However in the case of a descriptive genitive (as in mulier egregiae formae), the genitive, which is transitive, is governed by the nominative 'signifying possession of a genitive signifying a laudable or disgraceful quality' (Petrus Helias Summa 1021.42–47).

Some twelfth-century authorities believed that the adverb was annexed to the verb to clarify (*explanare*) its meaning: Boethius had suggested that the relation between some adverbs and verbs was one of predication:

<sup>&</sup>lt;sup>11</sup> Logica Porr. §I.16 (7.16–18): "Adiectivum concretive significat substantiam cum qualitate, id est substantiam proprietate affectam esse ad modum fere participii."

'Quando' vero eodem praedicatur modo, ut de homine heri venit, de Deosemper est. (Boethius,  $De\ trin.\ IV.59)$ 

In the sentence, Homo heri venit, the adverb predicates time as an extrinsic measure of the man as well as of his act. However Deus semper est predicates of God an eternal present that includes both past and future, because time cannot be predicated of God (Thierry of Chartres, De trin. 208.72; Gilbert of Poitiers, De trin. 126.36–127.57). Though the adverb is the adjective of the verb, the adverb is annexed to the verb by signification only, while the adjective is annexed to the noun by both signification and shared accidents, (Petrus Helias, Tolson 30.72–73). Temporal adverbs, for instance, require certain tenses of the verb: heri legabam, hodie lego, cras legam (Petrus Helias, Summa 792.70–78). The significatio of the adverb, in doing duty for respective morphological features it does not have, is compatible with (convenit) accidents of verb, participle or other adverbs. It seems to be this difference Petrus Helias makes between the action of adjective and adverb that prompts Robert Blund to observe that Adverbium determinat verbum similiter verbum vocem antecedentem (Ars grammatica f72 r2).

Discussion of the intransitive construction of nominative with verb usually led directly to the transitive construction of verb plus complement:

De 'habere', autem, quod actionem quamcumque aliquando significet, ex hoc fortasse videbitur quod 'haberi' passivum facit quodque accusativum regat casum secundum significationem actionis passionem in alium inferentis. (Abelard, *De dial.* 133.23–26)

This applies to the participles of transitive verbs as well: for although the participle lacks mood and composition, it completes its phrase through signification activa. Two characteristics of the verb were involved in transitive constructions: the element of transitus in its signification, and the requirement exigentia of an oblique case in which to terminate the transitus. The accusative is the complement of active verbs and participles because it signifies ut in eam [personam] quis agit (Petrus Helias, Summa 950.5). Thus ego video te is a simple transition from subject to complement effected by the exigentia of video for an accusative to which to transit. But the transitivity was vulnerable in the face of confusions of logic with grammar. Q VIa of Oxford Questions 3 argues that Quis videt Socratem? is transitive in spite of the fact that in questions, negations, commands and wishes no transition from person to person actually takes place. For a construction is transitive not only if it signifies a transitus, but also if it posits some mode of speaking transitively.

However the defining *regere* as *exigere casum* seems to have stretched the definition of transitive:

Verbum transitivum actum significans exigit accusativum casum, exceptis quibusdam quae exigunt dativos, ut 'noceo tibi', 'invideo tibi', 'benedico tibi', 'maledico tibi', 'assideo tibi' et alia composita a 'sedeo' eandem servant constructionem ut 'insideo tibi'. (Petrus Helias, *Tolson* 148.31–34)

As well as this, both Petrus Helias and Hugh of St Victor (107.965–972) accept phrases like misereor tui and indigeo sapientia as transitive. For Hugh transitivity is decided secundum significationem: benedico tibi commutes with benedico te which is clearly transitive. He even goes so far as to note that paenitet me is intransitive but paenitet me illius is transitive. The fact of exigentia seems to be sufficient to guarantee the transitivity of a construction involving a transitive case.

Most twelfth-century logicians and theologians talk of the meaning of prepositions and ignore their cases. However for Petrus Helias (Tolson 155.96) a preposition governs its noun. In the sentence, averto faciem meam ab illo, averto and ab illo signify separation, but the preposition does not determine which particular thing is separate unless it drags something definite into construction, and therefore governs it. Later authorities found 'serve' a more suitable term for the relationship between preposition and noun. Though Jean de Wolve's praepositio determinat aut determinatur reflects the twelfth-century disagreement about whether the preposition was constructed with its verb or with its noun, his use of retorquere looks forward to thirteenth-century usage. Jean recognises that the colour of the preposition rises out of the basic thrust of its case. In the liturgical cliché, in saeculum saeculi, the preposition, in, 'serves' the accusative case, because the worshipper is moving to eternity from this world, not because there will be eternal movement in eternity (in Brousseau-Beuermann 1993:98). While he pivots his argument on the accusative as the terminus of a motus half signified by in, his authority would seem to be Petrus Helias:

Rursus quando 'in' subauditur 'usque' tunc iam iungitur accusativo ut 'Qui odit animam in hoc saeculo in vitam aeternam custodit eam' [John 12.25], id est 'in vitam aeternam'. (Petrus Helias, Summa 756.69–71)

The twelfth-century model of construction being a composition model, the dyad of exigens and exactum was interpreted as regens/rectum or determinans/determinatum, and the sentence was a chain of constructiones which resembled the Aristotelian enthymeme. Even so, exigere was relatively vague, and regere somewhat ambiguous. The ambiguity of what governed what in the case of nominative and verb is due to a conflict of parameters. The verb signified actio and passio which demanded a subject of which they could be predicated: on the other hand the nominative demanded its verb because it signified a substance in which actio and it passio were inherent.

The question of whether adjectives and adverbs govern or determine was never satisfactorily resolved. But in the case of the preposition this issue was skirted by postulating that they 'served' their noun by dragging it into construction and in so doing clarified their own consignifications.

Early in the thirteenth century, Jordanus (67) defines regere as putting a word in a specific case, and regimen as the assemblage (collatio) of specific cases. In Simon Dacus (Domus 53.5–7) regimen becomes a conventional (artificialis) union of a word with another according to the concord between significate and consignificate. Simon's regimen works through suppletion. One member of the constructio has a 'defect', the other an 'abundance' which supplies a form. The defect demands to be filled, and then it governs the union and form resulting. This principle he illustrates by a rather unkind view of a teacher: a teacher needs to have pupils, and once he has them he rules them. And therefore exigere and regere are synonymous, so that every dictio demanding also governs, and every dictio governing habet naturam informantis et unientis (ibid. 53.27–31).

Thirteenth-century grammarians gave *determinatio* the sense of delimitation of grammatical function, and constantly redefined *exigentia*:

Exigere est desiderare aliam dictionem ad perfectionem orationis; exigentia est tractio vel desiderium alterius dictionis ad perfectionem orationis; et dicitur exigere quasi extra se egere. (Jordanus 67)

This Jordanus later amplifies: omnis exigentia est dependentia ad aliud (Jordanus 72). His desiderium alterius dictionis as a term defining exigentia implies 'an inclination towards attaining a good' (Aquinas, 2 Sent. 1.2.1.resp.), and at the beginning of his Notulae he specifically rejects the role of convention in the ordinatio dictionum:

Ordinare enim dictionem cum dictione secundum debitum modum significandi non est effectus moris vel naturae, sed rationis. Et propter hoc supponitur rationalis Philosophia. (Jordanus 2)

On both counts then, the proper ordering of the sentence is as much a matter of the natural appetite of the words for their perfection as is the realisation of their lexical meaning. Pager Bacon (Grammar 37) clearly thinks of dependentia as essential to syntax: Hoc apparet cum omnis constructio sit gratia dependentiae propriae. Dependentia is the causa propria constructionum and regere is essential to it (Jordanus 81). The regens in a constructio becomes the dependens, which 'opens the dependency' through its potency to determination; and the rectum is then the terminans which closes the dependency through its attainment of act.

 $<sup>\</sup>overline{^{12}}$  Cf. Aquinas, Phys.~1.9. lectio  $\overline{15}$  [Grammar II.93]: "Nihil est aliud appetitus naturalis quam ordinatio aliquorum secundum propriam naturam in finem suam."

Having received a brief and minimally informative mention by Petrus Helias (Summa 826.91–95) proportio and similitudo come into the discussion of congruits early in the thirteenth century. Indeed in syntax proportio and similitudo seem to be essential to the workings of the appetitus for construction in the dictiones. Proportio is often defined as habitudo unius ad alterum (Aguinas, STheol. i.12.1 ad 4), and both of them are types of convenientia. Convenientia similitudinis is not the cause of congruity simpliciter, for that would mean that two verbs juxtaposed would make a congruent construction. The ruling principle of congruitas is convenientia proportionis in the modes of signifying (the essential modes) and convenientia similitudinis aut proportionis in the modes of consignifying (the accidental modes) (Ps.Kilwardby 94). Thus the noun which signifies per modum substantis et ut de quo alterum dicitur is in proportion to the verb which signifies per modum motus et inhaerentis alii et quod de altero dicitur. When they come to be accidental modes congruitas at times comes about through the similarity of accidents as number and person, and correlative accidents like case and mood in the verb and in its subject. At other times convenientia proportionis is indicated: the correspondence between the voice of a verb and the oblique case following it and between a preposition and its case are cases in point.

Simon Dacus approaches dependency by countering the objection that construction is impossible because out of two things in act one cannot make a third (Aristotle, *Metaph*. VII.13.1039a). In any construction the constructibile dependens, which opens the dependency, acts as matter in potency to further act, to which the terminans brings a form by closing the dependency, and by this union of matter and form the two elements become one (Simon Dacus, Quaestiones 112.30–113.1). The resulting bidirectionality in grammatical relationships Gosvin de Marbais (10.9–10) accounts for by distinguishing between the dependentia of, say, an adjective on its noun and the respectus of noun to adjective. This two-way relationship of dependentia and respectus occasions his cautious characterisation of exigere as aliam dictionem ad se trahere per naturam dependentiae (Gosvin de Marbais 26.17). Indeclinables, however are not properly speaking constructed, but united with declinables (ibid. 10.20–24) Ps. Albertus identifies regimen and exigentia through their role in dependentia:

Regere sumitur in grammatica pro eo quod est exigere, et exigere est ratione dependentiae. Et ideo quod dependet exigit illud quod non dependent. Et verbum exigit nomen, et non econtra. (Ps.Albertus 124 ad opp. 6)

The *motus* model furnished an excellent explanation for the traditional view that the combination of the intransitive construction between subject and verb and the transitive construction between verb and object was a trans-

sitive sentence. Bacon, Kilwardby and Ps.Grosseteste (63.16) see the SVO sentence in terms of a *motus*, which by nature is one movement starting off from the nominative and finishing at the accusative into which the action of the verb crosses. The fixed point at which the *motus* of a verb begins cannot be signified by an adjective, for only the noun and pronoun are characterised by the *modus per se stantis* or *modus fixi* proper to *habitus* (Bacon, *Grammar 34–35*) or the *otium* of *O Magister* (MS BN lat.16135). And by its *modus motus* the verb signifies *exitus ab otio in actum* (Rosier 1988:78).

Given that the instrument of *constructio* was the accidents of the words, for many *modistae* the central issue is the proportion between the parts of speech in a construction.<sup>13</sup> Simon Dacus (*Quaestiones* 114.28–115.2) recalls the long disquisition on the subject in Ps.Kilwardby (94) by assigning four pairs of proportionate modes and two similar modes of signifying to the ordering of a nominative with a finite verb *a parte ante*:

 $\begin{tabular}{ll} \underline{Nominativus} & \underline{Verbum} \\ modus entis vel habitus & modus fieri \end{tabular}$ 

modus per se stantis modus compositionis

casus modus finitus

casus nominativus modus enuntiabilis de altero

congruentia numeri congruentia in persona

Modus habitus and modus fieri are not the immediate instruments of construction, but they fit noun and verb for construction (Joannes Dacus 300.9–13). The verb governs the noun per modum adiacentis et fluxus (Ps.Albertus 82 arg.2), or in more thirteenth-century terms per modum dependentis which corresponds to the modus per se stantis of the noun (Ps.Albertus 86 resp. alia). The basic principle comes from Priscian: actio and passio are born of substance. <sup>14</sup> But a finite verb, though dependent, requires a nominative a parte ante by reason of its significate, but the verb governs its nominative by virtue of its person and its mood which together are its inclinatio actus ad substantiam a parte ante (Ps.Albertus 96 resp.

 $<sup>^{13}\,\</sup>rm Boethius$  Dacus 305.78–80: "Construction est ordinatio dictionum ad invicem habentium proportionem mutuam in suis modis significandi."

<sup>&</sup>lt;sup>14</sup> Michel de Marbais, Tractatus f78v2: "Illud quod mutuam vel debitam habet dependentiam ad aliquod alterum rationabiliter sequitur ipsum. Sed agere vel pati sive modus significandi fluxus vel fieri mutuam vel debitam habet dependentiam ad substantiam sive ad modum significandi substantiae ipsius nominis. Ergo verbum rationabiliter sequitur nomen. Et hoc est verum loquendo de ordinatione quae fit ratione nobilitatis vel perfectionis."

ad 14). There is some of this flavour in the argument put forward by Martinus Dacus (114.10). The *appositum* depends on the *suppositum* sometimes because of inherence, sometimes because the *suppositum* is the cause of the *appositum*, and sometimes merely because it is a terminus.

Even though the *modistae* hardly exploit the distinction between the logician's aliud and alterum in syntactic discussion, Simon's list plays between aliud signifying substance and alterum signifying accidents, <sup>15</sup> The first line of the table, which opposes the essential modes of signifying of noun and verb, has reference to the noun as aliud. The modus per se stantis marks the noun as alterum, as in the standard definition of the nominative, and modus compositionis depends on Aristotle's specification of the verb as enuntiabilis de altero. The congruence of the construction depends on the alteritas inherent in the noun and its proportion with person and number in the verb. The person of the verb is more effective than its number in requiring the nominative because number is caused by person. Mood being the inclination of verb to noun has a minor part to play because mood is an inclination both a parte ante and a parte post (Ps.Albertus 96 resp. ad 14).

Jordanus (42) bluntly states that only the accusative can signify a terminus of an act: dative and genitive are constructed with an underlying accusative, so that noceo tibi is to be paraphrased as nocumentum tibi habeo. The accusative is properly ordered with certain verba vehementis transitionis (Jordanus 43). Certain verbs like do demand an accusative by this 'vehement transition', but can also take a dative which relates to the indirect object, as in librum tibi do. It is this solution that is accepted by the modistae. Just as motus depends on both its starting point and its finishing point, the verb depends on both subject and object (Gosvin de Marbais, 79.31). Transitive verbs and participles demand a terminus by their modus transeuntis in aliud, and this must be an accusative which signifies in ratione termini huius transitus (Martinus Dacus 117.29). In terms of primum et secundum constructibile the sentence, canis fugat felem is transitive because the dependence is terminated by the cat, which is other than the primum constructibile (Martinus Dacus 93.23–26).

By the middle of the thirteenth century concretio was seen to be the task of verb, adjective and participle. Concretio fell within the semantic field of unity: unitio vel concretio est diversorum in unum reductorum (Aquinas, STheol. 1.60.3 ob. 2). Where the verb brought in concretio as a relation ex-

 $<sup>\</sup>overline{15}$  Aquinas STheol.~3.17.1 ad 7: "Alterum importat diversitatem accidentium: et ideo diversitas accidentis sufficit ad hoc quod aliquid simpliciter dicatur 'alterum'. Sed aliud importat diversitatem substantiae. Substantia autem dicitur non solum natura, sed etiam suppositum."

pressed by inclination of verb to subject, the adjective signified a *proprietas* informans which was necessarily unified with the subject as either suppositum or form (Bonaventure 1 Sent. 27 dub.3 [I:480a]). In the participle concretio is the mode of signifying by which it unifies substance and act:

Nam actum vel passionem habet tamquam suum formale significatum, substantiam autem agentis vel patientis dat intelligere ex modo significandi concretionis, per quam significat actum vel passionem ut dependentem ad substantiam agentem vel patientem (Boethius Dacus 225.61–65).

In mid-century commentaries on the Sentences, per modum adiacentis, per modum inhaerentiae or significare inhaerenter are common ways of describing adjectival function of adjective, verb and participle. But unlike the verb, the ens per accidens adjective and participle signify exists in their subject as accidental form. *Modus concretionis* and its congeners therefore apply to adjective and participle, but not the verb (Albertus Magnus, 1 Sent. 9.D.7 [25.283b]). In the phrase liberum arbitrium (free will), the noun, arbitrium, denotes an act of judgment, thus placing its material principle in the faculty of reason, and the adjective, liberum, shows that this act of judgement receives freedom as an accidental form. If the grammatical relationships are reversed as in *libertas arbitraria*, the noun, *libertas*, becomes the material principle, and the adjective presents arbitariness as its accidental formal principle. 16 But the adjective differs from both verb and participle by abstracting from time like any noun. Consequently theologians tend to fuse participle and adjective: Hugh of St Cher (177.120–125) includes nata and passa among the 'nouns' which signify per modum inhaerentiae.

While there was agreement among the *modistae* that adjectives were in alio as a distinct substance accidentally or contingently unified with the subject (Martinus Dacus 25.13–22), there were differences of opinion on how it functioned. Adjectives like albus and niger signify a concrete accident which has inclination and dependence on its subject (Gosvin de Marbais 65.6). Michel de Marbais (Summa 110.61) claimed that the adjective in construction did not signify concretio dynamically as a modus informantis but as a simple modus adiacentis et concreti. Joannes Dacus (255.1–2) seems to echo Alain de Lille by according the adjective a modus dispositionis rei existentis in habitu, which seems more proper to syncategoreumata.

Ps.Grosseteste integrates the adverb into a *motus* model, because it modifies the *exitus de potentia in actum* of the verb and participle, and

<sup>&</sup>lt;sup>16</sup> Bonaventure, 2 Sent. 25.1.1.6 resp.[II.605ab]: "Adiectivum respectu substantivi se habet per modum informantis: ideo in nominatione illius potestatis, nomen respondens ratione significatur substantive; nomen vero respondens voluntati significatur adiective: et propter hoc magis vocatur ista facultas 'liberum arbitrium', quam 'arbitraria libertas'."

accorded it three levels of modification: motus, compositio and inclinatio (Ps.Grosseteste 58.22). This usually boiled down to two: gratia rei verbi and gratia compositionis verbi, or in the words of Petrus Hispanus (Syncategoreumata IV.36), ratione actus vel ratione alicuius comparationis debitae ipsi actui. The first type of adverb sometimes modifies an act absolutely—as in bene legit. But as was often pointed out, derivative adverbs like sapienter and recte designated the matter of the nouns from which they were derived (William of Auvergne, De Trin. 192.34–37). In construction an adjective immediately implies a substantive because adjective and noun share a common mode of signifying, but as derivative adverbs do not share the mode of signifying of the verb, they determine its action through a noun as intermediary. In velociter currit, for example, the adverb, velociter, implies the noun, velocitas, as the determination of running (Petrus Hispanus, Syncategoreumata IV.38). Very little of this discussion survives in the modistae.

Constructions in which the adverb seems to modify the noun were controversial. In the sentence, tantum Socrates currit, tantum means nullus alius; and in Socrates currit tantum is nihil aliud facit. The first tantum brings about an actus exercitus, and is a categorematic word synonymous with solus: the second tantum is clearly syncategorematic (Aguinas STheol. 1. 31.3.ad 2). As a dictio exclusiva, tantum denies that any other suppositum shares the quality predicated. Indeed an exclusive word not only signifies exclusion, but also brings it about (Petrus Hispanus Syncategoreumata 3.5). Simon Dacus (Quaestiones, 117.29–34) argued that in the construction, tantum Socrates the adverb, tantum, did not open its dependency on the noun by its essential mode of signifying, but through a habitudo which brought dependency through its modus exclusionis which was proportional to the modus exclusibilis inherent in Socrates. Most of his modistae colleagues, however, taught that for the sake of congruity the participle ens was understood by suppletion: Tantum [ens] Socrates currit (Boethius Dacus 281.28–34; Michel de Marbais, Summa 137.53–64).

Adverbs like necessario, consulto and falso modify the verb gratia compositionis sui. Petrus Hispanus (Syncategoreumata VII.24–25) argues that they are not always modal. The sentence, Socrates necessario est mortalis, is interpreted modally if necessario modifies the composition; but if it modifies the predicate, it can pertain to the subject of the predicate or to the predicate itself. In the first instance Petrus is perilously close to seeing this

 $<sup>\</sup>overline{^{17}}$  Magister Jordanus 29: "Sed si adverbium haberet intellectum verbi haberet intellectum substantiae, sive definite sive indefinite; et ita iam immediate aliquod verbum quoad actionem et passionem non posset determinare. Intercideret enim substantia in ipso adverbio intellecta."

sort of adverb as a sentence modifier, which would run counter to the standard medieval principle that words could only be constructed with words, and not with sentences. But grammarians managed to avoid this inference. Ps.Grosseteste discussed adverbs disposing composition in general terms which took in both logical operators and mental inclinations giving rise to questioning, doubting and admiring (Ps.Grosseteste 58.36–59.9). The inclinations demanding certain moods in the verb are kinds of composition. It is this version that comes into the *modistae*. Boethius Dacus (279.66–72) argues they can modify participles, because they signify composition through their *modus concreti et uniti alteri*.

Construction of nouns with a dependent genitive does not result in concretio because these constructions are transitive. Because of its wide range of uses, theologians treated the genitive as a habitudo flexible enough to cover all four causes, according to the context in which it found itself. Thus forma mulieris signifies the woman as material cause, and filius Patris in the Creed signifies the Father as the efficient cause (Aquinas, 1 Sent. 34.1.2 resp.). Objective genitives, e.g. constructio dictionum, signified the terminus or final cause of a process:

Cum enim dicitur, quod mutationis est mutatio, potest in genitivo notari constructio subiecti vel termini. Et si construitur in habitudine subiecti sensus est quod motus est motus sicut eius quod movetur. Si autem construitur in habitudine finis sive termini, tunc sensus est, quod motus est motus ita quod motus essentialiter sit ad motum sicut ad terminum, sicut motus albi essentialiter et per se est ad nigrum (Albertus Magnus, *Phys.* 5.1.6 [412.40–50]).

Little of this came into grammar. Feles Platonis designates Plato as the cat's owner, so that he enjoys the modus ut cuius est alterum, while feles has the modus ut est alterius. Feles therefore depends on Platonis as its principium (Simon Dacus, Quaestiones 126.1–5). Although Simon is careful to avoid the term, regimen, Siger de Brabant claims on Priscian's authority that any noun signifying per modum possessionis governs the genitive case signifying the possessor (Thurot 1868:322). The modus ut cuius est is an extrinsic quality, because it involves consignification: the sense of feles Platonis is 'the cat which is the possession of Plato' (cf. Gosvin de Marbais (25.43–34)).

All agree that regimen is entailled in the descriptive genitive. Thomas Aquinas (STheol.1.39.2) asks whether in the Trinity tres personae sunt unius essentiae. In principle 'as far as modus significandi is concerned, the divine essence is signified as the form of the three persons.' And we do not designate a thing which has a form as 'of that form' unless we wish to determine or designate the form concerned. In that case two genitives are required: one to signify the form and the other its determination, as in mulier egregiae

formae. Among grammarians this genitive governs its noun ex vi demonstrationis essentiae (Simon Dacus, Quaestiones 127. 30-31). This is further amplified by Gosvin de Marbais (28.18–20): because the genitive is the case signifying in ratione principii essentiae, exceptional and beautiful are taken as two separate accidents pertaining to the woman's being, and therefore require two words in the genitive to be properly expressed. However if outstanding beauty is taken as the principal formal cause of the woman, the ablative form, mulier egregia forma is appropriate (Gosvin de Marbais 28.18–20; Simon Dacus, Quaestiones 128. 1-4).

The preposition sparked the versatility of its cases. In Facianus hominem ad imaginem nostram the preposition, ad designates its accusative, which of itself signifies in ratione termini as a finis per se, and in Eamus ad ecclesiam as a finis ad accidens (Ps.Grosseteste 54.28–29). The ablative was even more versatile. We have seen the doctrinal uses of the fine distinctions between ab and de in §5.2.1. But the point was being made that these distinctions rose out of the basic meaning of the ablative. 18 Likewise, when constructed with the ablative, in signifies the balance between diversity and identity in the Trinity through predication (Quod factum est in ipso vita erat [John 1.3-4]), efficient cause (In Filio facta sunt omnia), and formal cause (Qui cum esset in forma Dei [Phil. 2.6]) (Alain de Lille, Regula XLV). The more formal usage of the scholastics bears the marks of Kilwardby: in the phrase, unitas in trinitate the habitudo praepositionis draws attention to quasi continentiam naturae communis, which is the special mark of the Trinity, by signifying the existence of the three persons as supposita within the one divine nature uniting them.<sup>19</sup>

Some among this first generation of modistae take servire casui as a simple interplay between the active and passive potencies of the words, and they dream of respective 'modes of signifying not mentioned by Donatus and Priscian' (Michel de Marbais, Summa 169.22–25). Thus to the active modus retorquentis ad actum in the preposition corresponds a passive modus retorquibilis ad actum in the noun: and to the active modus ut cui acquiritur alterum of the dative the interjection had a passive modus significandi acquisibilis alteri, as in Vae victis (Michel de Marbais, Summa 190.1–3).

<sup>&</sup>lt;sup>18</sup> William of Auvergne, *De trin*. 183.52–56: "Unde inolevit usus rectissimus, ut dicamus hanc praepositionem, *ab*, designare principium — hoc est, rem ablativi esse originem sive principium —, non autem ex hoc, quod ipsa est origo sive principium aliquid in ea ponitur, sed magis in alio invenitur, in illo scilicet, cui designatur."

<sup>&</sup>lt;sup>19</sup> Albertus Magnus, *STheol.* 10.45.2 ad 1 [359.57–62]: "Et sic, cum dicitur 'unitas in trinitate' habitudo praepositionis notat quasi continentiam naturae communis, quae in forma totius, non partis, continet supposita et est in eis".

In order to come to terms with the lack of formal evidence for a disponens-disponibilis dichotomy in the words entering such constructions, Joannes Dacus (256.23–25) postulated suppletion to deal with the conundrum of preposition and conjunction. On the grounds that the preposition in common with the adverb and conjunction lacks respective modes of signifying, he has the preposition constrain noun or pronoun to act by facilitating the transition between a reluctant verb and its terminus ad quem by a suppletion correcting a defect on the part of the appositum or predicate. In terms of the verbal suppletion discussed by Gosvin de Marbais (73–75) these suppletions are necessary: they are circumlocutions which close the gap between motus and its terminus (ibid. 75.2–4) The relevant explanation later in Joannes's Summa has been lost, although Petrus Helias may be his authority. Martinus Dacus (17.24–18.2) however likens the preposition to a hook or grappling-iron forcibly dragging an unwilling noun to its verb, a violent image which seems appropriate to its task of suppletion.

Modistic treatments of construction are nowhere near a complete model of syntax — there is no attempt to analyse the complex sentence, for instance, despite a considerable amount of raw material in logicians like the *Porretani* and William of Sherwood. Yet their approach through specific problems furnishes a surprisingly complete view of Latin syntax. Guided by the maxim *res scientiae eadem apud omnes* they produced an ensemble of principles designed to deal with any syntactic process in terms of a potency-act model which continued the thrust of their morphological theories.

## 6.3. Perfectam Sententiam Demonstrans

Priscian's 'demonstrating a perfect sense' was absorbed into the issue of the perfection of the sentence itself. In the minds of the *modistae*, *perfectio orationis* presupposed *congruitas*, and rounded it off by a *finitatio mutui respectus partium orationis*, which consists of an understanding of the couple made up of *suppositum* and *appositum* (Martinus Dacus 113.17–20). And satisfied by this understanding, the soul could rest (*ibid*. 114.5–8).<sup>21</sup> The touchstone of perfection was the efficient communication of a coherent sense:

Sed sermones sunt inventi ut exprimamus aliis quod apud nos est. Finis ergo sermonis est generare intellectum in animo auditoris. Sermo ergo qui potest in illum finem dicitur perfectus. (Ps.Albertus 84 resp. prima)

An utterance then has two levels of perfection, absence of defect in its form,

 $<sup>^{20}</sup>$ Petrus Helias, Summa970.3: "Dicitur autem ]<br/>praepositio, ab] ei [ablativo] deservire quia supplet eius significationem quam ablativus per se non potest complere."

 $<sup>^{21}\,\</sup>mathrm{Cf.}$  Aristotle, PeriH. 3 16b20: "Constituit enim qui dicit intellectum, et qui audit quiescit."

or quite simply esse, and propria operatio, or bene esse (Rosier 1994:25). This pair is a common summary of a more complete list of criteria for perfection in general:

Est perfectio quae est a forma et est perfectio quae est a fine. Iterum est perfectio primi esse et secundi esse; perfectio primi esse est a forma substantiali, perfectio secundi esse est a fine, quia esse ordinis a fine perficitur ad quem est. Item est perfectio disponens, et est perfectio complens. Perfectio complens est dignior perfectibili, et non disponens. (Alexander of Hales. Summa III. §610 [IV.962b])

Martinus Dacus's rather empirical view of perfection is firmly rooted in the familiar principle that in omni perfecta oratione dicitur aliquid de aliquo (Petrus Helias, Summa 189.2). Alexander's pairing of esse and finis had already been applied to the utterance as early as Abelard: the formal cause or esse is the concordance between the accidents of the words: the final is 'to constitute a certain understanding in the mind of the hearer' (Abelard, De dial. 147.8–10). Homo currens, though congruent, is an imperfect sentence because it leaves the mind of the hearer hanging and waiting for more (ibid. 148.25–27); the equally congruent homo currit is a perfect sentence because its finite verb satisfies the hearer's expectations by predicating running as an action inherent in the man.

Petrus Helias (*Tolson*, 154.58–63) shifts the emphasis somewhat: the verb demands the nominative case which it drags into construction with it for the sake of the perfection of the construction, which in this case is also a perfect sentence. In Abelard's view the transitive verb of *video lupum* reaches its perfection through determination by its accusative (Abelard, *De dial.* 589.29–34). But for Petrus Helias (*Tolson*, 156.14–15) determination is irrelevant: the transitive verb, *video*, drags its accusative, *lupum*, into construction to perfect the construction. There is agreement however, that a perfect construction satisfies the expectations of the hearer.

Congruous constructions of words of first intention and second intention like *sotulares hypothetici* and *corrigiae categoriae*, which yielded no tolerable sense, demonstrated that congruity was not perfection. Morphological congruity yielding the wrong sense also precluded perfection:

Minus grammatice dicitur: Pater est aliud a Filio in persona, vel est alius a Filio in essentia, quia quamvis idem sit persona et essentia, quaedam tamen sunt adiectiva personae quae non essentiae. Nam neutra 'aliud' et 'idem' sunt adiectiva essentiae, masculina vero 'alius' et 'idem' sunt adiectiva personae. (Peter of Poitiers 18:175–179)

Though the expressions criticised are arguably congruent, they are not perfect because they violate custom and in the last analysis imply that in the Trinity essence and person are the same.

Controversially Abelard (*De dial.* 124.27–125.18) allowed syntax a role in determining the properties of nouns, while subordinating it to signification and original imposition. There are certain aspects of grammar however, that took this up. It was common doctrine that oblique cases could have adverbial force: the directional accusative, for instance, in *ego vado Romam* was counted as an indeclinable adverb in that context:

Nomina adverbialiter posita manent in tali positione indeclinabilia, quia in tali positione minime suscipiunt inflexionem. ( $Oxford\ Questions\ (2nd\ Set)$ , in Kneepkens 1985:113)

In keeping with this ruling, there is no sense that the locative, *Romae*, in *Consules Romae manserunt* is anything but a genitive whose position in the sentence has made it into an adverb (Petrus Helias, *Summa* 772.63–68).

Given the importance of the *motus* model, thirteenth-century models of *perfectio* developed through commentary on the relationship between *motus* and its attainment of *quies*. The *locus classicus* is Albertus Magnus *Phys.* 3.1.2 (148.15–42) which amplifies Alexander of Hales (Figure 6.1):

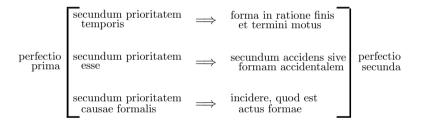


Figure 6.1: Perfection according to Albertus Magnus

Perfectio prima is directed towards the esse of the sentence: it is identical with Petrus Helias's congrua voce. Perfectio secunda ensures that the sentence achieves its purpose, that is, it signifies a correct and complete sense either explicitly or implicitly (Sicut dicit Remigius 43r2–43v1, in Rosier 1994:248–250). The thirteenth century starts off from the axiom that the material principles of a construction are the dictiones, its formal principles the accidents of the words and its final the intent to communicate. For Jordanus (44) Socrates legit is perfect if legit is an 'absolute verb' by which the speaker wishes to signify an act as coming out of a substance. Given that the verb signifies the inherence of an act in its subject, Socrates legit enjoys Alexander of Hales's perfectio disponens. However this construction is imperfect if the speaker wishes to signify the act of reading as transitting to another substance. In that case legit requires (desiderat [!]) an accusative,

Socrates legit Ovidium, and the construction has perfectio complens. However not all sentence members have the function of assuring perfection. There are five reasons why one word is added to another: necessity, discreteness, greater certainty, elegance or metre (Jordan 45). Congruitas and perfectio prima are both necessary reasons for constructing words in a sentence, But a pronoun subject is added to a first-person verb (ego vivo) for certainty, elegance or perhaps metre, which are all factors in perfectio secunda.

Ps.Kilwardby argues that through primary perfection *suppositum* and *appositum* are in correct grammatical relation to each other, and through secondary the utterance moves the intellect as it should (Sirridge 1990:328). He seems to proceed through the three levels of perfection discussed by Albertus Magnus. A sentence is definitely a *motus* from subject to predicate, and his first criterion of perfection is fulfilment of communicative purpose:

Eius autem perfectio determinatur in hoc quod perfecte quiescit intellectus audientis in ipsius apprehensione. (Ps.Kilwardby 97)

His second criterion follows Albertus's priority of being. The material and formal principles of perfectio are noun and verb, which interact through their accidental forms (Ps.Kilwardby:100). The noun must signify absolutely, it must be a substantive, and it must signify sub illa habitudine de alterum dicitur, hoc est in rectitudine; the verb must have an inclination to substance or a dependence rising from its essential modes, and a mode of consignifying sub inclinatione finita (Ps.Kilwardby 97). The third criterion is the proper interaction of similar accidents like number and person and proportional accidents like mood and case. From the point of view of the hearer secunda perfectio is actually the primus intellectus because it is drawn from the accidents of the parts of speech in the utterance; secundus intellectus is the second essential step in interpretation, scilicet qui consistit ex significatis dictionum (Ps. Kilwardby [Rosier 1988:73n]).

Both Jordanus and Kilwardby avoid the danger of equating congruitas and perfectio by emphasising intentio significabilis. Ps.Kilwardby's version harks back to Garlandus on the sentence as a quantity. An oratio is perfect first through the quantity of word and signification coupling with suppositum with appositum, and second through the quantity of signification it generates in the understanding (Ps.Kilwardby:101). If a sentence is instrumentum communiter loquentium, perfect grammatical congruity is adequate for perfection. If however, the sentence is instrumentum sapientis vel alicuius poetae finem considerantis, its perfection rests on something richer than congruitas simpliciter (Ps.Kilwardby:99). A figurative expression has a secondary meaning depending on an intellectus medius, which reinterprets the modes of signifying as 'significates of the expression' (Sirridge 1990:331).

This is, without doubt, a direct appeal, quite unacknowledged, to Augustine's dicibile and to the theologian's semantic modus significandi (Rosier's modus significandi ut), but this time the focus is not on words themselves, but on what happens to them once they are constructed in an utterance. Kilwardby's instrumentum communiter loquentium rises out of Bacon's first imposition, while his 'instrument of the wise man or of a poet' falls under Bacon's renewed imposition.

Akin to figurative language is the logician's problem of amphiboly (double meaning) as in *Hic liber est Aristotelis* which means either this book is by Aristotle or belongs to Aristotle, or even both together. Because construction is posterior to *modi significandi*, this double meaning cannot be due to modes of signifying, nor is it the result of a *modus construendi* (*Incerti auctores* 324.37-41). The best conjecture was to put this diversity of sense down to *tota complexio orationis* (*ibid.* 325.71).

Simon Dacus (Domus 51.14–20) argued from the nature of substantial and accidental solecism and fallacy that accidentia realia bring about perfection while accidentia vocalia bring about congruity. Though Simon seems to have the relationship between res significata, significatum and modi significandi in mind, his distinction is probably based on Alexander of Hales's perfectio disponens. Hence the strong sense among early modistae that while modi significandi cause congruity, it is modi intelligendi that cause perfection. Their argument rests on the proportion between res, intellectus and constructio alluded to at the beginning of this chapter. The congruous is concerned with the words and their accidents, the perfect with mental constructs and res extra animam (Vincentius Heremitus 15). The interplay between various potencies ensures that modi essendi give rise to proportional and similar modi intelligendi, which in their turn give rise to proportional and similar modi significandi.

Kilwardby's acceptance of figurative expressions as perfect and the whole issue of double meaning caused a certain amount of suspicion among the *modistae*. Martinus Dacus (112.19–22) is not at all convinced by the previous discussions of *turba ruunt*: he is especially dismissive of those who write that such a figurative expression is more perfect and congruent than one observing all the grammar rules, because it makes more demands on the mind. Nor does he accept *Catonis est* as a perfect sentence. Though it has a *suppositum per se stans et fixum* and a finite *appositum*, *Catonis est* is not a perfect sentence because it leaves a dependency open and does not have a complete sense, and therefore does not make a true or false statement (Martinus Dacus 114.4–5). In other words, it does not provide a point of rest for the mind interpreting (Martinus Dacus 115.6–7).

Given the disproportion between God and the powers of the human mind, theologians had long appealed to pragmatics as a technique in interpretation: a difficult Biblical passage was amenable to a bonitas intelligentis by which the qualified exegete reconstructed the author's communicative intent by separating function from form (cf. Marmo 1995:172–177). For example, a verb tense was often independent from strict time. In the sentence, Potuit Deus incarnari, potuit is a gnomic perfect whose consignification can include past, present and future: the possible alternative, potest, can signify future as well as present in certain contexts (Peter of Poitiers 69.14–15). In Pater et Filius et Spiritus Sanctus sunt Omnipotens the adjective, Omnipotens, is to be taken as a substantive, and even an article understood, as in the French, li Tut Puissant (Alan of Lille, Regula XXV).

There was a strong distinction between actus significatus, the act signified by a locution, and actus exercitus, the effect of an utterance on the addressee (Rosier 1994:158–193). Actus exerciti are never linguistically explicit. They are of two kinds, both dicibilia in Augustine's sense. The first is an act of signification relying on inference from the content of individual words in their context. For example, as an adjunct to the verb, cognoscere, hoc adverbium, sic, importat modum cognitionis (Aquinas, STheol. 1.14.6. ad 1). However only inference from the context can tell us whether sic cognoscere applies to how the thing known exists or presents itself, or to the manner in which the knower knows it. Kilwardby takes actus exercitus to be consignification specifically excluding accidents:

Per unam dictionem absolutam potest dupliciter haberi intellectus orationis, scilicet vel per consignificationem quae est actus exercitus, cuiusdem est demonstratio, vel per consignificationem quae non est actus exercitus, cuius est persona verbi. (Kilwardby, *In III Donati* 41.233–237)

As adverbs modifying the res verbi had the implication of nouns, adverbial constructions were always vulnerable to Kilwardby's actus exercitus aimed at interpretation of the sentence. The statement Deus me lecturum mutabiliter scit is false, if mutabiliter refers to the subject (as in the paraphrase, Deus me lecturum mutabili modo scit), as God is not mutable. But if the adverb is interpreted in relation to the predicate (as in Deus me mutabili modo lecturum scit), the sentence is correct because God knows that my reading is contingent (Alexander of Hales, Summa I.265a [I.§180]). In the sentence, tantum Socrates currit, tantum means nullus alius, and Socrates currit tantum is nihil aliud facit (Thomas Aquinas STheol. 1.31.3.ad 2). The tantum of tantum Socrates currit is a categorematic word synonymous with solus. As an exclusive word it denies that any other suppositum shares the quality predicated (cf. Simon Dacus, Quaestiones 117.29–34). Most of the

extant early *modistae* allowed for this interpretation provided that the inference could be accounted for in grammatical rather than pragmatic terms (Marmo 1995:174). Their favoured technique was suppletion:

Unde cum dicitur 'tantum Socrates currit', hoc adverbium, 'tantum', non determinat nomen sed verbum substantivum vel participium, 'ens', subintellectum de bonitate tamen intellectus — ut 'tantum ens Socrates' vel 'quod est Socrates currit'. (Michel de Marbais, Summa 137.58)

The tantum of Socrates currit tantum is clearly syncategorematic, and grammarians preferred to treat such adverbs as modifying the composition of the verb rather than its matter. Petrus Hispanus (Syncategoreumata VII.9–11) is perilously close to seeing this sort of adverb as a sentence modifier, which would run counter to the standard principle that words could only be constructed with words, and not with sentences.

The situation was often reversed: in the sentence, *Pater et Filius sunt unum principium Spiritus Sancti*, *unum* makes sense only if construed as an adverb (Aquinas, *STheol.* 1.36.4.resp.). Likewise the adjective, *solus*, in the sentence *Solus Deus est aeternus* is synonymous with *tantum* only if it is interpreted *adverbialiter* (Aquinas, 1 *Sent.* 22.1.resp.).

Actus exercitus is also an act performed by means of the utterance itself, a 'speech act' in modern parlance. This type of actus exercitus is crucial to sacramental theology, as a sacrament is a signum efficiens, made up of matter and form. Its matter is a ritual act, which is given a particular significance by the accompanying words, its form. The matter of baptism is the pouring of water on the head of the person baptised, and its form is Ego te baptizo in nomine Patris et Filii et Spiritus Sancti. On the principle that the action performed symbolises the interior effect, the pouring of water, or immersion, signifies the cleansing of the soul. The words uttered by the celebrant signify the purpose of the ritual of baptism and name the Trinity, in whose stead the celebrant is acting (Aquinas, 4 Sent. 8.2.1.resp.). In modern terms they are an illocutionary act.

The grammarian's interest in such actus exerciti begins with Priscian's account of one-word sentences like Bene! (Rosier 1994:158). This adverb places an act in context and expresses the speaker's approval or disapproval (Priscian 17.10 [GL III 114.11–15]). The simplest actus exercitus was an expression like O Henrice: the adverb, O, opens a dependency through its modum excitationis and the terminus of this stirring to action is expressed by the vocative, Henrice, the person to be set in motion (Simon Dacus, Quaestiones 117.6–13). The sophisma, O magister, calls the master, substantia excitata. The adverbium vocandi, O, rouses him to do something fitting in the circumstances (Rosier 1988:96 [SOL. 2.6]). The sophisma roundly

attacks those who taught that the construction of O works by suppletion, for example, O audi magister. In imperative constructions like O Petre lege, the modus excitationis of O terminates in the actus excitati of the imperative, lege (Michel de Marbais, Summa 137.61–64), and the vocative is its subject.

As the triad of *modi essendi, intelligendi et significandi* was developed, syntax slipped into the generative mode established by the theory of *vox*, *dictio* and *pars: constructio* became a final realisation of the potency of the *partes* to interact with each other and the utterance through following the pattern of reality was the culmination of the recursive process by which *vox* became *dictio* and *pars*. Consequently where early medieval theoreticians had regarded *constructio* and *oratio* as autonomous linguistic operations, the *modistae* treated them as compound signs of a compound reality.

The result is a dependency grammar drawn from the ancient bottomup approach through morphology to syntax: within it the consecrated terms play their part depending on workings of the bidirectional respectus of one part to another. Where the twelfth century had regarded regere and determinare as universal syntactic principles, the thirteenth places them within the frame of the self-defining dependens-terminans relationship, and uses them selectively. While a noun governs its adjective, its adjective depends on it and determines it; and adverb depends on its verb and governs it. The preposition suffers the most interesting reversal: during the twelfth century it governed its noun and during the thirteenth century it served its noun.

Where the received text of Priscian had made the setting-forth of a perfect sense a separate issue, the variant readings adopted by Kilwardby and Sponcius muddy the waters. From the time of Petrus Helias on, the grammarian tends to retreat into a grammatically justifiable view of the congruent and perfect construction, leaving the question of perfection of sense to the modes of understanding. Theologians had much to do with the bonitas intelligentis: following Boethius they judge the perfection of an utterance in terms of interpretatio, placing the onus on the reader to extract the message or messages the utterance transmits.

The *modistae* give the impression of being much happier with morphology than with syntax. Indeed where their morphology has precious few loose ends, their syntax shows considerable variation of opinion all of it supported by conventional philosophical principle. Yet because they were concentrating on basic processes, their approach does not give the impression of being impossibly inadequate.

## CONCLUSION SILVERING THE MIRROR OF LANGUAGE

In the eyes of the *modistae* their minority status was probably an excellent indication that they were the only grammarians of the late thirteenth century who had arrived at the *recta ratio scibilium* of language. Their theory had two important characteristics: its recursive model of the generation of *vox*, *dictio*, *pars orationis* and *constructio* is an elegant and simple application of universally valid principles; its terminology presents a map of the theory, and its theory an accurate map of language according to a largely Aristotelian template. In the words of Albertus Magnus (*STheol*. 1.2 ad 3), it was *sermo declarativus linguae*, which laid out its principles and purpose.

McKeon's Encyclopedia hypothesis assumes that grammar like other medieval sciences developed through a radical 'rearrangement of schemata' under the influence of new methods and evidence which produced new attitudes to language data. It is more convenient to deal with these developments through Foucault's *épistémè* and *archive*, as they provide a convenient analytical framework in which to place McKeon and see how true the claims of the *modistae* were. While Priscian and Boethius are the base on which the *modistae* built their grammar, the first development pertinent to its rise came during the late eleventh century with the rise of a university theology whose goal was not Biblical exegesis.

Twelfth-century intellectual life underwent a rupture in Foucault's sense, as Arab learning and attitudes to science came into Europe through personal contact and translation of the Arabic Aristotle into Latin. The West forged a 'ladder of sciences' on the Arab model with theology at the top and grammar at the bottom, the whole structure being devoted to explaining the ways of God to Man. We have been in part concerned with the change in the services other sciences demanded from grammar under this new dispensation, and vitally concerned with the effect of these changes of service on grammar itself. Theology in particular required analysis of the processes of language in order to cast light on its own concerns, and in return grammar borrowed the norms and methods of the analytical sciences including theology to examine the nature of language.

As far as grammar is concerned, the first traces of this type nouveau de rationalité appear in the work of Gilbert of Poitiers and his school, and

it was consolidated during the first half of the thirteenth century by people like Bacon and Kilwardby. From the 1270s on, the *modistae* developed the grammar was already in place paying particular attention to its network of relations with other sciences. Under the circumstances Foucault envisaged, such relations between sciences are synchronic — he relegates relations with the past to a *domaine de mémoire*. But under medieval conditions there is properly speaking no *domaine de mémoire*: the past is continuously present, it is dynamic, it is influential. However this vitality and power come at a price. The past influences a discipline or a society provided it is made to conform at least partially to the image and wishes of the present day. And further, some of the most important influences of the past are so obvious that they are taken for granted and not openly acknowledged.

Productive falsification of the ancient grammarians begins with reading Priscian's scientia as scientia speculativa. The thirteenth century treated his grammatical terms as an orthodox terminology without a theory. We have been examining how they made this ancient science of grammar into a true thirteenth-century science required by realising what they considered to be its embryonic theoretical statements. Augustine has appeared in this book as the most important of the hidden authorities from whom grammarians drew their 'principles and causes of grammar'. His most obvious legacy is the word as sign. Most grammarians seem to be satisfied with the three-fold structure of sonus, significatio and the articulation between them proposed by De doctrina christiana and De magistro. However the equally influential four-fold model in his De dialectica, which presents the dicibile as an intentionalist filter for the intellectual and sensory species verbi, brought the will into play in order to assist the intellect in the creation and interpretation of the sign.

Boethius's triad of esse, intelligere, significare provides a formal parallel to Augustine's pragmatic concerns. By developing a science of signification from the current science of signs, he made a generative model of the word out of the traditional behavioural one in Augustine and laid the foundations of the modistic triad of modes. This aspect of his work seems to overshadow his discussion of Porphyry's two  $\theta$   $\sigma \epsilon \iota$ , which eventually results in double imposition. However his validation of orthodox theology through refining the grammar of noun, name, number and person in the Opuscula sacra was essential to later theology and grammar.

These three authorities each sought a practical goal: doctrinal and mystical exegesis for Augustine, intellectual rigour and religious polemic for Boethius, and grammatical correctness for Priscian. There is some theory, but the medievals reproached them with hiding theory under example, with

excessive application to practical problems and, particularly in Augustine's case, unsystematic exposition. In short, the grammar belongs to an empirical text-based encyclopedia, and is thereby ripe for theoretical explanations the twelfth and thirteenth centuries were eager to provide.

It is no accident that Petrus Helias is the twelfth-century grammarian most quoted after his time. Though he was the last great grammarian working within McKeon's Early Medieval Latin Encyclopedia, he shares with Donatus and Priscian the privilege of not being cast among the antiqui, and his pre-eminence took attention away from others of his time who had some influence on following generations. It seems to be through him that Abelard's discussions of significatio and consignificatio as principle and secondary signification, came to later grammarians, even if they are the result of first and second intention rather than two separate impositions. However it seems to have been Abelard's easy use of modus essendi, modus intelligendi and modus significandi to relate to categorematic terms that smoothed their way into grammar. Modus significandi in grammar has a slight nominalist tinge consonant with Augustine's dicibile.

The grammarians' appropriation of Priscian's definition of oratio to do duty for constructio had an ambiguous legacy. While detailing the characteristics common to both of them, it made it easy to confuse them. But though syntax remained an open-ended set of problems, this period did successfully tackle the questions of congruitas and perfectio, laying the foundation for the work of the next century and a half.

Being a theologian, and one who at times was under a cloud, Gilbert of Poitiers is another hidden authority. He is the turning point between the early medieval Encyclopedia and that of the thirteenth century, because he had taken to heart the organising principle of Arab learning: the speculative sciences belong to a coherent structure of knowledge founded in the language sciences and culminating in theology. His importance to us lies in his treatment of theology as a sacred applied linguistics. Where in the past the lower sciences had unsystematically fed the others, Gilbert relied on the rationes communes et necessariae of other sciences to construct rationes propriae to structure theology. This is why a specific problem like imposing names on God entailed both drawing on the standard grammatical doctrine of the noun from the existing early medieval encyclopedia, and creating an exegesis for it by appealing to the 'common conceptions of the mind' analysed by the natural sciences. In consequence, Gilbert subjected God to Grammar by taking account of the mixture of ingenuity and limitation inherent in human understanding, and his model of imposition, though developed to deal with a theological conundrum, quickly spread from theology into grammar.

Gilbert therefore marks a rupture in Foucault's sense. His interdisciplinarity marks the beginning of the 'new type of rationality', by which his followers provided grammar with rationes propriae of its own. By the end of the twelfth century, change in grammar is keeping pace with change in the other speculative sciences. The evidence we have cited strongly implies it was commentaries on Boethius's Opuscula sacra that were making the running. One can sum up their influence on grammar in the principle that informs the Great Chain of Being: all natural things seek their own perfection, because they all relate in some way to God and to God's image. In the light of this principle speculative grammar assumed the task of investigating how language as a natural faculty sought its own perfection.

The most far-reaching innovations of the century or so between Gilbert and the *modistae* were the restructuring of grammar according to the Porretan *similitudo naturalium*, and early in the thirteenth century, the rise of the *motus* model without displacing the older composition model.

It is difficult to escape the impression that the mechanisms of imposition were more important to theology than to grammar. Gilbert's ratio significandi, though very vaguely defined, owed as much to Augustine's dicibile as to formal Aristotelian models of imposition. Albertus Magnus's intentio significabilis is merely an explicitation of what is already there, as are the thirteenth-century concepts of similitudo and proportio, which met the problem of signifying God and other things unsignifiable, because they cover both likeness in quality or image and likeness in effect. The common example of a barrel-stave outside an inn makes the point that whether the word signifies a literal, transferred or pragmatic meaning, thing signified, ratio intelligendi and ratio significandi are in proportion and they enjoy similitude one with the other. This is particularly relevant to the layering of actus significatus and actus exercitus in sacramental theology.

The assumption underlying Bacon's renewal of imposition, that the transferred senses of Scripture were intended by God and therefore imposed by him as the author of Scripture, has some kinship with the language behaviour Kilwardby ascribes his poets and with the orthodox view of *figurae* in Scripture. Even so, the Aristotelian model of imposition seems to have blocked its adoption, and indeed the evidence outside grammar for a cyclical hypothesis of imposition is persuasive without being conclusive.

Dinneen's quip that while grammarians wrote about the *modi significandi*, theologians used them (Dineen 1980.41) needs to be taken with caution. We have shown that, while the grammarians rethought the legacy of the classical grammarians in terms of *modi significandi*, it was the logicians who set out how they were derived from the *modi essendi*, and the theologians

gians who used them, but not for exegesis, but for analysing the language processes affecting faith and morals. The language model that resulted from this amalgam of empirical and theoretical thinking was rather untidy, but completely viable: significatio was the form of the dictio and the modi significandi were properties which allowed the dictio to function as a part of speech. Both grammarians and commentators on Boethius were refining William of Conches and Abelard on consignificare. Abelard's metaphor of time as a comes of the res verbi, which shapes the action of the verb, reappears in various forms in later authorities. The most significant is Albertus Magnus, whose maxim that consignifying time means consignifying through time, seems to be the last word in defining Boethius's consignificatio.

The Porretani had emphasised that modi significandi had the implication of construction. They developed Priscian's principle that the noun is the substance from which the action of the verb proceeds: because the accidents of noun and verb interact, they made the workings analogous to the type of process described in Aristotle's Physics. It was within this matrix of process that Gilbert's discussions of alteritas in the Boethius commentaries fleshed out the standard definitions of persona and numerus as accidents of noun and verb, and showed how they functioned in both imposition and syntax. The major legacy of the grammarians of the late twelfth century was regularising the relationship between exigere and regere as syntactic processes and setting up the structural parametres of determinare by careful examination of Petrus Helias. This led eventually to the far neater concept of opening and closing a dependentia through the specific characteristics of the parts of speech.

The sporadic appearances of motus as the consignificate of the verb during the twelfth century and Alexander of Hales's mention of modus motus in his glosses on the Sentences during the 1220s, may well be due to the early Aristotle translations by Adelard of Bath and Gerard of Cremona. We do not know whether grammarians or theologians were the first to use modus motus during the 1240s as a modus significandi of the verb and participle. The cue was probably the Michael Scotus translations of Aristotle and the Arab commentaries on them during the 1220s, but Robert Grosseteste's commentary on the Physics of about 1230 played a pivotal role. Yet the rise of the motus model seems to be a Franciscan initiative: Alexander of Hales, an important pioneer in Aristotelian studies, Roger Bacon and Bonaventure were all Franciscans, Bonaventure was a pupil of Alexander, and Bacon and Bonaventure were firm friends. Grosseteste is clearly involved as he had been invited by the Franciscans to lecture in Oxford in 1230.

The cohesion of the *motus* model depended on relating the syntactic

possibilities of the parts of speech to their various habitudines. Because it postulated three terms (principium, motus, terminus) rather than two, the motus model looked to the utterance rather than the dyadic construction. It is not impossible that the coupling of modus substantiae and modus motus could have been adequate to the task of defining both morphological and syntactic possibilities, but the search was on for terms which made these possibilities more explicit. This time the cue seems to have come from early commentaries on 1 Sentences 18.2, and modus habitus and modus actus appear as a contrasted couple in Lambert of Auxerre and Kilwardby during the 1250s. Both are explicit terms. Modus habitus neatly summarises the functions assigned the noun and pronoun subject by the *Porretani*, and also highlights their role as terminus a quo and terminus ad quem of the act signified by the verb. Modus actus signified both actus primus proper to substance and actus secundus proper to action, and covered all three types of verb. However it strained the grammatical system: it was not a believable postpraedicamentum of actio and passio.

The wide range of terms at this time attests to the need for explicitness. The assiduous experimenting with modus fixi, modus permanentis and the like for noun and pronoun is directly due to the advent of modus habitus. They were eventually overshadowed by the Arab-flavoured modus quietis. which applied equally well to principium and terminus of a motus. Bacon's usage would suggest that fluxus came into grammar at the same time as motus and actus, and from a specifically Arab tradition, as it does not appear in Grosseteste. Bacon probably came across it in the early Latin versions of the Arabic Aristotle, or perhaps from the commentaries on the Physics and the De divinis nominibus by Albertus Magnus. It is strange that fluxus does not appear in the florilegia: the sense of entropy through the lapse of time it had in Roman philosophy and rhetoric would contrast the verb more tellingly with *permanentia* in the noun than *motus*. Fieri, as a standard term in metaphysics with a long and ancient lineage, was always available as the most formal primitive of the three of them, which probably accounts for its rarity at this time. Modus temporis does not occur. The final accommodation was modus substantiae et habitus and modus fluxus et fieri, which covers all possibilities.

The system was completed by the binary oppositions between noun and pronoun, and between verb and participle. The negative distinction between noun and pronoun through *substantia et qualitas* and *substantia mera* reflects the somewhat cursory nature of the grammatical tradition. The ancients caused some confusion by designating *qualitas* as both essential and accidental to the noun. The influence of Gilbert of Poitiers' *collecta pro-*

prietas can still be felt in most discussions of essential quality; thinking on accidental qualitas remains very unsure, even though it is firmly linked with the possibility or impossibility of plurality. As for the verb, the proposed specific modes of signifying encapsulated its functions of closing the gap between subject and object of the sentence. In a certain sense both pronoun and participle designated entia rationis. The substantia mera from which the pronoun was produced abstracted from reality by separating substance from quality. It would seem that the theologians' arguments over the precise meaning of the words of consecration in the Mass clarified the issues of relatio and demonstratio for other disciplines.

Verb is distinguished from participle in more spatial terms as in Kilwardby's modus motus inclinabilis ad substantiam intra vel extra or modus actus vel motus uniti subiecto et substantiae. The word unitus in relation to participle and conjunction with its repercussions of close and effective union is clearly tinged by theology, and perhaps by the important use of unio and conjunctio in alchemy. Grammarians are much more interested in debating the hybrid nature of the participle than theologians. They are vitally interested in the way it functions, particularly in relation to divine names and actions.

The indeclinables had come of age. Grammarians regularised their status only after logicians accepted Priscian's authority and agreed they were dictiones. Though they had been assigned modes of signifying as early as Petrus Helias, the principle that any lexical meaning was perfected in construction caused intense problems with the notion that they had modi essendi which were not tangible, but could only be summed up in terms of habitudines ad aliud. The general agreement that they signify dispositio comes with considerable ambiguity, and there was so far no attempt to put them into any formal system. Kilwardby's discussion of the relationship of preposition and case in terms of a mutual habitudo ad constructionem is a major step towards the later differentiation of officium, significatum and modus significandi from each other.

It is clear that the ologians solved many of their doctrinal problems in terms of the *habitudines* proper to adverb and preposition. But the direction of influence is not clear: did Jordanus draft his discussion of the transparent link between derivative adverbs and the nouns or adjectives from which they were derived before William of Auxerre used this derivational link in his *De trinitate* as a basis of argument? Likewise it is impossible to know whether the far-reaching discussions of Petrus Helias's list of prepositions in terms of *habitudo* by Bonaventure, for instance, came before Kilwardby or not. Theological explorations of the exact force of the case with which prepositions are constructed, and the chemistry which produces meaning in different contexts, have their echoes in grammarians like Ps-Grosseteste. Thinking of Priscian's casus and Kilwardby's casualitas in terms of significatio was aimed at simplifying the model, for habitudo was a working synonym of significatio in its sense of an operative principle in many parts of speech. It is obvious that grammarians did not come to terms with the interjection, because it is not granted a habitudo. Since Augustine, much good grammar and moral theology depended on recognising that the dosage of modus affectus and modus conceptus in various interjections differed according to circumstances. Yet despite the cogency of models like that of Bacon, grammarians could not agree on whether it is a part of speech distinct from the adverb. Treating affectus as a principle of imposition suited the pragmatic approach of the theologian, but stretched the grammarians' principles too far for comfort.

To sum up, the model of speculative grammar which developed by the early thirteenth century balanced formal aspects of language against pragmatic. By reason of its balance between structure and meaning this model served the scholastic philosopher-theologians and their predecessors extremely well; and in return many of their solutions to theological problems rested on ideas which grammarians later took up. It was against this background that grammar was redefined as a science whose subject was language, and whose object was analysing the way in which one expressed one's thoughts. The undergraduate curriculum set the scene for the interdisciplinary approach to university grammar we have been examining. The ubiquitous florilegia with its snippets of Aristotle defined the common ground among the sciences for the undergraduate, but remains a presence in their adult lives as grammarians, who situate their teaching with well placed quotes. One has, however, to contend with some extremely erratic citation habits: a well-stocked memory is no guarantee of strict textual accuracy or correct ascription to an author.

There is no sign of Foucault's 'new type of rationality' among the *modistae*, merely new applications of the current intellectual schemas. Their essential difference from the mainstream lay in a radical change of intellectual goals. The majority preoccupation with the pragmatics of interpretation and interaction between speaker and listener was none of their concern: they gave priority to a generative explanation of the linguistic sign and its functioning in terms of Boethius's *esse*, *intelligere* and *significare*. In their eyes the natural good language sought was expression of ideas, and the good sought by grammar was knowledge of how this was achieved. Grammar analysed the processes by which language conveyed meaning. Having

accepted that immaterial beings are in passive potency to receiving form, they relied heavily on the physics of potency and act and on the allied issues of matter and form and *propria operatio*.

Their lack of unanimity and at times consistency shows that they were finding their feet. Joannes Dacus and Michel de Marbais, for example, do show some shift of position as they get into their subject, although it would be possible to blame the copyists for introducing their own ideas into the text. Martinus Dacus is the most model-oriented: Joannes Dacus on the other hand, seems to be attempting a middle way between intentionalism and formalism, and at times seems a transitional figure.

Joannes Dacus's debt to Augustine shows how far he leant towards pragmatics. His agreement with Augustine that sound is created by the speaker and then recreated in the hearer's mind implies considerable respect for the theologian's linguistics of parole. More important, his major discussion of the imposition of the dictio illustrates the standard doctrines on the difference between animal and human language with Augustine's account of childhood learning from Confessiones I.8. His long development on understanding, intentio significabilis and the reasoned production of words seems to have been taken from Albertus Magnus (De anima 3.4.5) with its analysis of Aristotle's cyclical model of human action. It is not to be wondered at then, that he is the only modista to introduce appetitus into the theory of imposition. The very casualness of his gloss on Aristotle's definition of the vox would indicate he did not expect his colleagues to dispute it. It is ironical that he provides the only evidence inside grammar of a possible cyclical hypothesis for imposition, which almost incidentally accounts for the behaviour of both speaker and listener. Did he make himself clear in the lost section of his grammar?

The nickname, *modistae*, that was given them at the beginning of the fourteenth century, is testimony to the importance Augustine's musings on Wisdom 11.21 and his commentators prompted them to give *modus*. Their strict view of *modus* as a due way of operating is at the root of the two innovations essential to them, the successive impositions of *ratio significandi* and *modus significandi*, and the dichotomy between active and passive modes of signifying. For *modus* provides a measure of a measure, and active and passive are measures one of the other.

The transformation of Porphyry's positio prima et secunda into the impositio prima et secunda of the modistae shows how the thirteenth century moulded what went before it. The coherence of a model, in which the form inhering in a matter was made manifest through its propria operatio, demanded these two impositions be presented as the second and third steps

in the evolution of the *vox* into the *vox significativa*. As the generation of the *vox* set the pattern for first and second impositions, the recursiveness of the model demanded reading signification and consignification as *propriae operationes* of the *dictio* and *pars orationis*. They repudiated the traditional view that the form of the *dictio* was *significatio*, because operation denoted by postverbals flowed from form and was an index to it: *ratio significandi* had the necessary theoretical precision to be the form of the *dictio* without having to specify exactly the nature of the causes of signification. Again we are before the question of priority: were Ebbesen's *Incerti auctores* first with their *significare* for the *dictio* and *sic significare* for the *pars*, or was Michel de Marbais first in the field?

Joannes Dacus (213.5–8) recognised that changing the rank of modus significandi from property of the dictio to form of the pars depended on the ability of the intellect to separate the accidents of the thing signified from its substance, an operation Aristotle had already carried it out in the Categories. He then treated them as decontextualised beings. Analysis of their nature and functions then made them into abstract objects classed into genera and species and then arranged them in a theoretical structure whose basis was the categories (Slaughter 1982: 47–48). The key to refocussing Boethius's positio secunda on modi significandi ultimately came from the parallel Porphyry drew between the Categories and the Perihermeneias. Labels like nomen and verbum, that were obviously contingent, became objects that were necessary and therefore amenable to scientific analysis through the categories they consignified through either their essence or their accidents.

Boethius's consignificatio had long since evolved into a measure, and its status had been powerfully reaffirmed by Albertus Magnus on the role of time in the verb. Because the binary opposition between articulatio ad significandum and articulatio ad consignificandum was one of the commonest ways in which the modistae set out the specific differences of dictio and pars orationis, coining ratio consignificandi as a more formal synonym of modus significandi was a useful contrary to ratio significandi, but the traditional modus significandi proved too stable to replace.

Although the *modistae* almost invariably argue that the cohesion between *modus essendi*, *modus intelligendi* and *modus significandi* depended on identity between them, there are strong hints, particularly in Boethius Dacus and Joannes Dacus, that the central point at issue is similitude among the three levels, another indication of the theologian's hand in discussions of the modes of signifying. But for the theologian *similitudo* covers both likeness in quality or image and likeness in effect. The *modistae* clearly accept similitude between being, understanding and signifying in quality,

but exclude similitude through effect: the rigorist principle that the form of the thing signified informed the intellect implied the mental image was a carbon copy of reality. The grudging nod towards the principle of bonitas intelligentis does not impugn unitary imposition in any way at all. The modistae never seem to have reached a happy accommodation between seeing the modi significandi as word-features patterned strictly on reality and as mental artefacts shaped by the independence of the mind.

It is impossible to say whether the distinction between modi significandi active et passive was the creation of the modistae themselves. If it was, Siger de Brabant could be counted a modista. Like double imposition this opposition is to be found in some logicians, and Boethius Dacus and Martinus Dacus do not mention it, which would indicate that the distinction was new enough to be passed over in silence. Philosophers' and theologians' discussions of the active and passive possibilities of postverbals and gerundives probably account for Joannes Dacus's view, which he abandons later in his grammar, that modi significandi active et passive are two faces of the same modus significandi. As yet the idea of modus intelligendi active et passive was merely implicit in grammar, though it had been stirring in theology for some time. The material identity the modistae postulated between modus essendi and modus significandi passive seems to be a product of the strict senses in which they took similitudo. Though this can be explained by the principle that form was the principle of both being and being known, it could indicate that a cyclical pattern of generation was accepted by some modistae, in particular Joannes Dacus.

Our modistae are negotiating their split from the standard university speculative grammar. Reading the general modes as material principles and the specific as formal is a device to tidy up the model of the parts of speech by carrying the recursive principle as far as they could: in essence they were systematising the relationships between the parts of speech postulated by grammarians in general by passing Priscian's propria of the declinables through the Porretan similitudo naturalium. The general tidying-up of terminology leans towards the usage of the mid-century scholastics. Indeed the multiplicity of terms and the most unmedieval dearth of polemic about them shows the hand of the theologian, for whom the concretio implied by the verb was different from that implied by adjective and participle.

Thus in the noun transparent terms like *modus fixi*, yielded to the competition of *modus substantiae et habitus*, which were constantly glossed by *modus quietis* and *modus permanentis* from the scholastic tradition. The general modes of verb and participle did not settle down quite so easily, even though *modus fluxus et fieri* was already well-rooted in grammar, and

it was well supported by Albertus Magnus and the new translations of the *Physics. Modus motus* could not be abandoned as their material principle due to the eminence of the authorities who paired it with *substantia. Modus temporis* and *modus successionis* made a brief nod towards the importance Aristotle accorded time as a *differentia* between noun and verb. The preference shown by Boethius Dacus and Martinus Dacus for *modus fieri*, the ultimate primitive of *tempus*, *actio* and *passio* could suggest the influence of Aquinas, who was still teaching at the time the *modistae* were being trained. Does the preference for one term over the other indicate who taught who?

The noun is the only declinable with a realist specific or formal mode. Modus distincti vel determinati looks back to the observational aspects of Gilbert of Poitiers's collecta proprietas, which has no counterpart in the pronoun. The formulation of substantia mera retained by a few for the pronoun does not make its opposition with the substantia et qualitas of the noun verbally explicit. It seemed more congenial to sort these four parts of speech according to mental concepts. The slightly more common modus determinate apprehensionis emphasises the subjective and conceptual components of a noun, which were in act. Those who sought to make it explicit went in two directions: modus substantiae sine qualitate and modus indeterminate apprehensionis represented lack of quality as a privation, and therefore static; but modus distinguibilis, determinabilis, vel specificabilis represented lack of quality as a potency to deemonstration and relation and therefore dynamic.

The specific modes of verb and participle more frequently cited at this time run in the opposite direction, and show how the the motus and composition models met. Modus dicibilis [enuntiabilis] de altero and modus inclinabilis ad [aliud] substantiam represent the verb as embodying an active potency. Modus uniti cum substantia, modus inhaerentis and modus informantis on the other hand represent the participle as in act. The grammarians do not offer an explicit pairing for these terms: but in Nicholas of Paris the verb signifies actio et passio unibilis substantiae et non unita et dependens ab illa. Modus distantis and modus indistantis, which have some element of realism, are the only specific modes transparently contrasted. Michel de Marbais's objections to this couple in the sentence seem to rise out of Kilwardby's comment that everything that determines a site separate from that of the noun is another part of speech, site being taken not only in the physical sense, but also in the sense of a disposition to act in a certain environment. We do not know whether his objections were shared by any other modista.

The common confusion between officium, significatum and modus significandi of the indeclinables rose because they each signified a relation, a

modus essendi ad aliud, which can exist in reality but which very often is an ens rationis whose modus essendi is identical to its modus intelligendi. But the search for a primitive is possibly the reason why our modistae assigned preposition, adverb and conjunction modus dispositionis substantiae, modus dispositionis actus and modus dispositionis utriusque alongside the older and more explicit modes, which specified the field of action peculiar to each indeclinable.

The immediate suggestion for this attempt at systematisation was almost certainly dispositio verbi, which had been current in theology to denote the task of the adverb since Bonaventure at least. However dispositio allowed the modistae to distinguish officium, significatum and modus significandi from each other. Dispositio could clearly be taken as the officium of the indeclinables, because it was essentially an ordering to function. Discussions in logicians and theologians of the importance of the indeclinables to reasoning and to doctrine relied on the various shaded their significata took on in the stream of speech, and showing how the significata varied was the task of the modus significandi. This opened the way to specification of modi essendi for these three parts of speech, although the modistae treated the matter with caution.

But in this area in particular, the *modistae* ignore a good part of existing scholarship through their inveterate preference for theoretical rigour over observation. The latitude accorded derivative adverbs by other grammarians is nowhere mentioned by the *modistae*, as it would spoil the neatness of the model, and presumably they could not handle it. They are also completely silent on the theoretical repercussions of the logicians' principle that adverbs could be treated as nouns. The niggling question of whether the interjection was an adverb or not caused each *modista* to espouse a slightly different formulation of its mode of signifying and consequent role in syntax. They ignore the cline between *modus conceptus* and *modus affectus* set out in the theological analyses of verbal abuse originating with Augustine and faithfully reflected in Roger Bacon's *De signis* and *Compendium theologiae*. These two books give an excellent account of how the *intentio significabilis* can be scamped in the heat of the moment. Under these circumstances a system of indeclinables satisfactory to everyone was bound to be a pipe-dream.

Covington (1984: 127) notes the discomfort of many of the *modistae* with syntax. Certainly there is no such thing as a complete speculative treatment of the whole of Latin syntax, nor is there any great innovation in syntactic theory. Indeed the university speculative grammar was responsible for a number of innovations often ascribed to the *modistae*, such as the dependency model and the dyadic model of *constructio*. What is different is

their view of the place syntax holds in the system. Because the *etymologia* of the *modistae* had the implication of syntax, *constructio* is the final process in a recursive series by which the *vox* attains its final perfection, transmitting meaning through the powers of its *modi significandi*.

Simon Dacus's six pairs of proportions by which subject enters into construction with verb demonstrates how vital proportio between the modi significandi of the two elements of a constructio was to formalising the modistic theory of syntax. Proportio, glossed as habitudo unius ad alterum, is yet another legacy of the mid-century scholastics and grammarians like Kilwardby. The distinction between absolute and respective modes of signifying seems to have risen in this context, the immediate impulse coming from those philosophers who distinguished between absolute and respective accidents. The only forerunner in grammar seems to be Gosvin de Marbais's unsystematic mention of absolute accidents and the respectus two elements in a construction have to each other. The modistae however, make a system out of it by envisaging the habitudines of dependens and terminans as active and passive potencies in proportion to each other. It is this philosophical model that is summed up in the principle that the dependens opens a dependency and the terminans closes it.

Proposals to explore 'modes of signifying not mentioned by Donatus and Priscian' bear witness of the power of proportion between the elements of a constructio to affect medieval etymologia. Michel de Marbais's proposal that ablative and accusative be assigned modus retorquibilis to match the modus retorquentis of the preposition rises from the sense that one word governed another by forcing it into a particular case. Among the other characteristic syntactic innovations of the *modistae* is modelling the pradigm of the noun by developing the repercussions of dicibilis de altero from Aristotle's definition of the verb. Even in Aristotle's terms alterum here is the nominative, as it is the only case the finite verb can say something about. Besides, to the mind of the *modistae alterum* designates all the characteristics the Porretani assign the noun as subject of the sentence. Designating the nominative as modus significandi ut quid alterum dicitur is an egregious intrusion of syntax into etymologia, as are the other designations like modus significandi ut cuius est alterum and the rest of them. Besides emphasising the function of the nominative as *principium* of the paradigm, this allows transparent exposition of syntactic theory: cappa when possessed by Socrates signifies per modum ut alterius, Socratis signifies per modum ut cuius.

Given the interplay of passive and active potencies, it is not surprising that the *modistae* entertained the possibility that the sentence had matter and form, and that it therefore enjoyed a complex *modus significandi* derived

from the interaction of the *modi significandi* of the words. The corresponding *modus essendi* was the relationships between things, person and actions *extra animam*. As a mental image it passed through a complex *modus intelligendi* to become the *significare* of the sentence. Nor is it surprising that this conjecture was never developed.

The modistae had inherited a science of grammar with a very clear sense of its own separateness from the other language sciences. Because the goal of a speculative grammar was delineating the natural processes which resulted in self-expression, they put forward a language theory based not on the ideal speaker-hearer, but on the ideal thinker-speaker. It is not a rearrangement of basic schemas and ways of thinking, but a different exploitation of the intellectual patrimony through reifving accidents which otherwise could not become the object of a science. Looked at from a modern stand-point the *modistae* arrived at a theory which mapped the genesis and workings of language according to an Aristotelian paradigm which imposed a contemporary dress on the great Classical grammarians. In medieval terms they were claiming to examine the nature of language through a speculum that was much more accurate and far simpler than that in the hands of their colleagues and rivals. For the image in their speculum was one that was almost completely recursive, depending on a number of basic processes taken from De anima and the Physics. It was for this reason they gave the pragmatic aspects of language short shrift.

Speculative grammar had obviously fed from both philosophy and theology since Gilbert of Poitiers, so that the evolution of grammar was to a large extent tied to developments in those two disciplines. Until the 1250s efforts to reconcile the new Aristotle with Augustine had resulted in the 'eclectic Aristotelianism' professed by John Blund and Robert Kilwardby, for instance (Steenberghen 1970: 143). We have remarked on the pragmatic flavour this produced in a formalist grammar which relied heavily on commentaries on Boethius and Peter Lombard's Sentences. The atmosphere in theology changed with Albertus Magnus's insistence on the importance of profane knowledge within the primacy of theology. The controversy over this issue climaxed with his intervention in the disputes over Averroes in the 1250s (Steenberghen 1970: 172–173) with the result that both philosophy and theology take on a more rationalist flavour, and the first large crop of young graduates with this new orientation come on the job market in the late 1250s.

The medieval university made extensive use of young graduates as part-time teachers, but university posts in theology were thin on the ground. In 1362 the University of Paris employed twenty-five teachers of theology

and four hundred and forty-nine teachers in Arts, a ratio of eighteen to one (Ong 1958: 133), and there is no reason to believe that the situation in the last third of the thirteenth century had been any different in Paris or in any other university. Hence, many of the young masters graduating from the Faculty of Theology taught at least temporarily in the Arts Faculty, and circumstances forced some to make their career there. Among our modistae, for instance, some parts of the manuscript tradition note Boethius Dacus as Magister Theologiae. Martinus Dacus was a Master of Theology from Paris, and the interests of Joannes Dacus, who held an Arts professorship in Paris, took in philosophy and theology as well.

One can expect that the university grammar classroom under the control of a young theologian would be sensitive to interventions like that of Albertus Magnus. Theologians were not interested in grammar for grammar's sake, but in grammar as a series of processes by which the mind derived meaning from reality. The purpose they assigned the science of grammar was analysing how one made meaningful utterances in normal day-to-day living, and how the impossible task of speaking to and about the divine could be efficiently handled: hence the marked shift in purpose from university grammar. In the period which interests us, the situation was probably not unlike that at MIT in the 1950s and 1960s. I strongly suspect that in the Paris of the 1260s for instance, there was a circle of Young Turks around Boethius of Dacia who had decided to make grammar into a 'real science' by bringing the whole panoply of scholastic method to bear on language, its generation and its nature. As a result ratio and modus took on the importance they had in theology as systematic theoretical principles, and modus became so important to their metalanguage that it gave them their nickname a generation later.

It is difficult to see the rise of our *modistae* as a *rupture*, even a minor one. Their change of emphasis is no evidence of the new type of rationality Foucault would expect to see in an intellectual revolution. Indeed their focus on process is completely in tune with the ruling scholastic *épistémè*. The language model they developed is severely reductionist, too reductionist, I expect, to be widely applied to other disciplines. Yet this first generation did their work well: they finally came up with a laboratory model of language which conformed faultlessly to the Aristotelian norms of the period. Even though the rigour of their principles meant that they used the rich tradition inside and outside grammar very selectively, the *modistae* gave an insightful account of language processes, coherent and productive enough for two generations of their successors to remain satisfied with the general shape of speculative grammar as they saw it and to continue developing the model.

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#### STUDIES IN THE HISTORY OF THE LANGUAGE SCIENCES

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