The Rest of Cajetan's Analogy Theory: *De Nominum Analogia*, Chapters 4–11

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ABSTRACT: The influence of Cajetan's *De Nominum Analogia* is due largely to its first three chapters, which introduce Cajetan's three modes of analogy: analogy of inequality, analogy of attribution, and analogy of proportionality. Interpreters typically ignore the final eight chapters, which describe further features of analogy of proportionality. This article explains this neglect as a symptom of a failure to appreciate Cajetan's particular semantic concerns, taken independently from the question of systematizing the thought of Aquinas. After an exegesis of the neglected chapters, which describe the semantics of analogy through the three levels of cognition (simple apprehension, composition and division, and discursive reasoning), the article concludes with observations about the relationship between Cajetan and Aquinas and the philosophical and historical significance of Cajetan's approach to the semantics of analogy.

INTRODUCTION: CAJETAN'S PHILOSOPHICAL AGENDA

AJETAN'S TREATISE *De Nominum Analogia* (1498) has hardly been ignored. It is easily the single most influential treatise on analogy, in the Thomistic or any other tradition, both among late medieval thinkers¹ and in contemporary scholarship. But its influence is largely due to the first three chapters, where Cajetan asserts and articulates his famous threefold classification and hierarchy of analogy. Almost entirely overlooked, especially in the scholarly discussions over the last century, are the eight chapters that make up the balance of Cajetan's treatise.²

Why these chapters have been ignored is a complicated story that I can only summarize briefly here. Suffice it to say that most scholars have expected from Cajetan an interpretation or summary of Aquinas's own views of analogy and have evaluated *De Nominum Analogia* accordingly. Writing about Cajetan's analogy theory has thus constituted a debate over its "Thomism," and for this there has been little need to look beyond the first three chapters, where there can be found plenty of material to

¹The most prominent examples are Suarez, who disagrees with Cajetan's teaching, and John Poinsot (John of St. Thomas), who adopts it wholeheartedly. See Suarez, *Disputationes metaphysicae*, disp. 28 and 32, and Poinsot, *Ars Logica*, 2, qq. 13 and 14.

²To my mind, the most significant exceptions are the *Ars Logica* of John Poinsot and an article by Yves Simon (one of Poinsot's English translators), "Order in Analogical Sets," *New Scholasticism* 34 (1960) 1–42, reprinted in *Philosopher at Work: Essays by Yves R. Simon*, ed. Anthony O. Simon (Lanham: Rowman and Littlefield, 1999), pp. 135–71. But Poinsot is usually accused of following Cajetan too blindly, and Simon's article does not advertise its heavy dependence on the sixth chapter of Cajetan's *De Nominum Analogia*. Simon's plans for a longer treatment of analogy, with even further attention to Cajetan's teaching, were never realized (cf. "Yves R. Simon Papers, 1920–1959," University of Notre Dame, Box 2, Folder 18).

feed this debate: the very distinction of three types of analogy (analogy of inequality, analogy of attribution, and analogy of proportionality); Cajetan's claim that analogy of attribution always involves extrinsic denomination, while analogy of proportionality always involves intrinsic denomination; Cajetan's preference for analogy of proportionality over analogy of attribution; Cajetan's use of Aquinas, and of other authorities. These are the issues, all introduced within the first three chapters, around which the bulk of scholarship have focused, both for those who defend the Thomism of Cajetan's analogy theory³ and for those who criticize it.⁴

A few recent scholars, however, have helped us to see that Cajetan's *De Nominum Analogia* should not be interpreted primarily in light of its faithfulness or unfaithfulness to Aquinas. The work of Franco Riva,⁵ Michael Tavuzzi,⁶ and especially E. J. Ashworth⁷ has helped to reconstruct the philosophical and historical context of Cajetan's analogy theory, which, it is now clear, depends more on evolving conversations among late medieval Thomists than on an unmediated concern to interpret Aquinas. As Ashworth has put it, in writing about analogy, Cajetan "had his own

³See especially M. T-L. Penido, Le Rôle de L'Analogie en Théologie Dogmatique (Paris: Libraire Philosophique J. Vrin, 1931); Aloys Goergen, Kardinal Cajetans Lehre von der Analogie; ihr Verhältnis zu Thomas von Aquin (Speyer a. Rh.: Pilger-Druckerei, 1938); Edward A. Bushinski, and Henry J. Koren, The Analogy of Names and the Concept of Being (Pittsburgh: Duquesne Univ. Press, 1953; 2nd ed., 1959).

⁴In the second half of the twentieth century, a series of studies of Aquinas's teachings on analogy all criticized Cajetan for departing from Aquinas: Hampus Lyttkens, *The Analogy Between God and the World:* An Investigation of its Background and Interpretation of its Use by Thomas of Aquino (Uppsala: Almqvist and Wiksells Boktrycheri AB, 1952); George P. Klubertanz St. Thomas Aquinas on Analogy: A Textual Analysis and Systematic Synthesis (Chicago: Loyola Univ. Press, 1960); Ralph McInerny, The Logic of Analogy: An Interpretation of St. Thomas (The Hague: Martinus Nijhoff, 1961); Bernard Montagnes, La Doctrine de l'Analogie de L'Être d'après Saint Thomas d'Aquin (Louvain/Paris: Publications Universitaires/Béatrice-Nauwelaerts, 1963); and David Burrell, Analogy and Philosophical Language (New Haven: Yale Univ. Press, 1973).

⁵See especially Franco Riva, Analogia e univocità in Tommaso de Vio 'Gaetano' (Milan: Vita e Pensiero, 1995). But see also Riva, "L'analogia dell'ente in Dominico di Fiandra," Rivista di Filosofia neo-scolastica 86 (1994) 287–322; Riva, L'analogia metaforica: Una questione logico-metafisica nel tomismo (Milan: Vita e Pensiero, 1989); and Riva, Tommaso Claxton e l'analogia della proporzionalità (Milan: Vita e Pensiero, 1989).

⁶See especially Michael Tavuzzi, "Some Renaissance Thomist Divisions of Analogy," *Angelicum* 70 (1993) 93–121. But see also Tavuzzi, "Hervaeus Natalis and the Philosophical Logic of the Thomism of the Renaissance," *Doctor Communis* 45 (1992) 132–52.

⁷See especially E. J. Ashworth, "Analogical Concepts: The Fourteenth-Century Background to Cajetan," Dialogue 31 (1992) 399–413; Ashworth, "Signification and Modes of Signifying in Thirteenth-Century Logic: A Preface to Aquinas on Analogy," Medieval Philosophy and Theology 1 (1991) 39–67; and Ashworth, "Analogy and Equivocation in Thirteenth-Century Logic: Aquinas in Context," Mediaeval Studies 54 (1992) 94–135. But see also Ashworth, "Analogy and Equivocation in Thomas Sutton, O.P." in Vestigia, Imagines, Verba: Semiotics and Logic in Medieval Theological Texts (XIIth–XIVth Century), ed. Constantino Marmo (Brepols, 1997), pp. 289–303; Ashworth, "Analogy, Univocation, and Equivocation in Some Early Fourteenth-Century Authors," Aristotle in Britain During the Middle Ages, ed. John Marenbon (Brepols, 1996), pp. 233–47; Ashworth, "Domingo de Soto (1494–1560) on Analogy and Equivocation" in Studies on the History of Logic, ed. Ignacio Angelelli and María Cerezo (Berlin: Walter de Gruyter, 1996), pp. 117–31; Ashworth, "Equivocation and Analogy in Fourteenth Century Logic: Ockham, Burley and Buridan" in Historia Philosophiae Medii Aevi: Studien zur Geschichte der Philosophiae des Mittelalters, vol. 1, ed. Burkhard Mojsisch and Olaf Pluta (Amsterdam: B. R. Gruner, 1991), pp. 23–43; and Ashworth, "Suárez on the Analogy of Being: Some Historical Background," Vivarium 33 (1995) 50–75.

philosophical agenda, which in many ways owed more to fourteenth-century developments than it did to Aquinas himself."8

What was this philosophical agenda? Textual and contextual considerations indicate that Cajetan was concerned, first, to characterize the possibility and nature of a semantic mean between univocation and equivocation. The Aristotelian tradition had always insisted that there was such a mean, but logicians had tended to regard the "mean" of analogy as in fact a species of equivocation: a deliberate or intentional equivocation, one in which might be found some degree of order among the diversity, and so an order of priority and posteriority. For all he has to say about analogy, Aquinas's own semantics of analogy does not go much beyond this. 9 But two developments of later medieval philosophy pressed for a more sophisticated treatment of analogy: first, and more generally, the continuing refinement and sophistication of logical or semantic vocabulary; second, and more specifically, Scotus's arguments against the possibility of an alternative to univocation and equivocation. Scotus argued that two uses of a term employ either one or two concepts; that there can be no mean between one concept and two; that if we have one concept, then we have univocation, 10 and if two, then we have equivocation and the consequent danger, when such equivocation occurs in a syllogism, of the fallacy of equivocation.

Cajetan was one of several Thomists¹¹ who hoped to take advantage of the first pressure to respond to the second and more threatening one. Cajetan set out to answer two semantic challenges, challenges that were long latent in the Aristotelian logical tradition but that had been formulated rather late by Scotus, in the spirit of scholasticism's increasing rigor in semantics: (1) how can there be a mean between univocation and equivocation; and (2) if that mean is in fact a variety of equivocation, how can it avoid causing the fallacy of equivocation in discursive reasoning?

The familiar teachings of the first three chapters of *De Nominum Analogia* should be read in light of these questions. The famous threefold classification of analogy is an answer to the first question. It shows that there are three senses in which there can be a mean between univocation and equivocation. Cajetan's notorious preference

⁸Ashworth, "Analogy and Equivocation in Thirteenth-Century Logic," p. 94.

⁹See Joshua P. Hochschild, "Did Aquinas Answer Cajetan's Question? Aquinas's Semantic Rules for Analogy and the Interpretation of *De Nominum Analogia*," *Proceedings of the American Catholic Philosophical Association* 77 (2003) 273–88.

¹⁰Duns Scotus, In Librum Praedicamentorum Quaestiones, q. 1: "ubi est idem conceptus, ibi est univocatio." Cf. In Libros Elenchorum Quaestiones, 2 (Vives 1891, 20a–25a). For more references and discussion see Robert Prentice, "Univocity and Analogy According to Scotus's Super Libros Elenchorum Aristotelis," Archives d'Histoire Doctrinale et Littéraire du Moyen Age 35 (1968) 39–64.

¹¹Dominic of Flanders, Paulus Soncinas, and Thomas Sutton all included discussions of the fallacy of equivocation in their treatments of analogy. For citations and excerpts of texts for Dominic and Soncinas, see Tavuzzi, "Some Renaissance Thomist Divisions of Analogy." Tavuzzi also cites Soncinas, Super artem veterem (f. 19 r–v), published in 1499—the year after Cajetan's De Nominum Analogia—which explictly addresses the fallacy of equivocation. On Dominic, also see Franco Riva, "L'analogia dell'ente in Dominico di Fiandra," and Riva, Analogia e univocità in Tommaso de Vio 'Gaetano', pp. 140–46, 154–59, 344. Sutton's discussion appears in his Quaestiones Ordinariae, q. 33 (5th objection and reply), ed. Johannes Schneider (Munich: Verlag der Bayerischen Akademie der Wissenschaften, 1977), pp. 911, 929.

for analogy of proportionality is the beginning of an answer to the second question: only this third sort of analogy is a genuine mean, in which a non-univocal term is nonetheless not subject to all the rules governing equivocation and can avoid causing the fallacy of equivocation.

The key to this second answer, and so to Cajetan's preference for analogy of proportionality, is Cajetan's invocation of proportional sameness or proportional unity. Univocation involves multiple uses of one and the same concept under one and the same word; equivocation employs different concepts under the same word. Analogy, the mean between them, will have to involve concepts that are "partly the same and partly different" (or "partly one and partly many"). 12 How can this sameness and difference be characterized? Cajetan finds three ways. Analogy of inequality involves a concept wholly the same, albeit realized differently in things; it is, formally, a case of univocation. 13 Analogy of attribution involves two concepts that are distinct in themselves, but (to an extent) the "same" insofar as one is related to another;¹⁴ but this is, formally, a case of equivocation.¹⁵ Analogy of proportionality, however, involves two concepts that are proportionally similar or, to put it another way, it involves proportionally the same concept. In short, Cajetan's often noted but seldom appreciated interest in characterizing the unity of the analogical concept is determined by his desire to respond to the Scotist challenge about the semantic possibility of a mean between univocation and equivocation; and Cajetan's strategy in responding to this challenge is to appeal to the *metaphysical* distinction of a kind of non-generic unity, a unity that is proportional or analogical.

But this response to Scotus cannot be complete without an examination of the behavior of proportionally unified concepts through the whole of logic—one that addresses in turn the levels of analysis corresponding to the three acts of intellect: simple apprehension, judgment (combination and division), and discursive reasoning. This is the business of the rest of Cajetan's analogy theory in chapters four through eleven of his *De Nominum Analogia*, and it is my purpose in this paper to explore

12The formulation is a commonplace, but see, e.g., Cajetan, Commentaria in De Ente et Essentia (ed. M.-H. Laurent, Turin, 1934), §21: "Univocata sunt, quorum nomen est commune, et ratio secundum illud nomen est eadem simpliciter. Pura aequivocata sunt, quorum nomen est commune, et ratio secundum illud nomen est diversa simpliciter. Analogata sunt quorum nomen est commune, et ratio secundum illud nomen est diversa simpliciter. Analogata sunt quorum nomen est commune, et ratio secundum illud nomen est aliquo modo eadem, et aliquo modo diversa seu secundum quid eadem, et secundum quid diversa. . . . Unde analogum est medium inter purum aequivocum et univocum, sicut inter idem simpliciter et diversum simpliciter cadit medium idem secundum quid et diversum secundum quid." It is the difficulty of characterizing a mean between one and many concepts that leads to the question of what Ashworth has called "the arithmetic of concepts" (Ashworth, "Analogical Concepts," p. 403). It is also worth remarking that, although in the passage quoted here Cajetan has replaced Aristotle's "dicuntur" with "sunt" in rephrasing the definitions of univocals and equivocals, he should not thereby be assumed to have ignored or failed to appreciate the import of Aristotle's wording. Cf. Cajetan, Commentaria in Praedicamenta Aristotelis, ed. M.-H. Laurent (Rome, 1939), p. 9: "Signantur quoque dixit «dicuntur» et non dixit «sunt», quia rebus non convenit aequivocari ut sunt in rerum natura, sed ut sunt in vocibus nostris. "Aequivocari enim praesupponit vocari, quod rebus ex nobis accidit."

¹³Cf. Cajetan, *De Nominum Analogia*, ed. Zammit and Herring (1951), §§4–7. Hereafter *DNA* followed by section numbers.

¹⁴DNA, §8.

¹⁵DNA, §§19-22.

Cajetan's arguments in these chapters. ¹⁶ As we will see, these chapters culminate in an argument, directed against Scotus, that a term employed non-univocally in a syllogism need not cause the fallacy of equivocation. But further, an examination of these chapters yields some important conclusions about the philosophical and historical significance of Cajetan's analogy theory. Above all, given some widespread opinions about the inadequacy of Aristotelian semantics to handle the phenomenon of analogy, I think that these later chapters of *De Nominum Analogia* reveal the surprising resilience of the Aristotelian semantic framework, at least in Cajetan's hands.

PROPORTIONALITY AND SIMPLE APPREHENSION (CHAPS. 4–5)

The centrality of the Aristotelian semantic triangle for Cajetan is evident from the beginning of the fourth chapter. Cajetan raises the question of how the analogue (that which is common in analogical signification) differs from the analogates (the individual things that share the common analogue). Since the analogue can be considered as the word, the mental (or formal) concept, and the external reality (or objective concept), ¹⁷ Cajetan considers each of these in turn.

His most significant theorizing in this chapter is on the level of the concept, but first, as regards the external reality, he reiterates what follows immediately from his definition of analogy of proportionality in the previous chapter. According to that definition, analogy of proportionality involves diverse analogates denominated with respect to diverse *rationes* that are proportionally the same. ¹⁸ Analogy is unlike equivocation in that the external realities signified are not totally different, but it is unlike univocation, in that they are not wholly the same. They are *proportionally* the same. This leads Cajetan to clarify that there is a difference between the foundation of univocation and the foundation of analogy: the former is based on different things' *rationes* being different, but proportionally similar. ¹⁹

Cajetan illustrates with examples. The word "animal" is univocally said of man, cow, and lion because each has in it an individual sensitive nature. These natures, though diverse in being, are so alike that the *ratio* of animality abstracted from any

¹⁶A similar observation about dividing *DNA* chapters 4–11 into these three groups was made by Hyacinthe-Marie Robillard, *De L'Analogie et du Concept D'Être de Thomas De Vio, Cajetan: Traduction, commentaires et index* (Montreal: Les Presses de l'Université de Montréal, 1963), p. 253, although unlike Robillard I find it appropriate to include chapter 11 under the heading of discursive reasoning.

¹⁷DNA, §31.

¹⁸Following the common Latin translations of Aristotle's *Categories*, Cajetan had defined each of the three modes of analogy in terms of the relationship between words, *rationes*, and things. I leave the Latin *ratio* untranslated because Cajetan relies heavily on the useful flexibility of this term, by it sometimes indicating the (formal) concept in the mind, sometimes the nature in things, but most often the "objective concept," the nature or perfection in itself as terminating an act of conception. Cf. Cajetan, *Commentaria in Praedicamenta Aristotelis*, p. 9: "Ly «ratio», licet multipliciter sumi possit, hic sumitur non pro diffinitione, quoniam res generalissimae aequivoca dici non possent, eo quod diffinitione carent, sed sumitur pro conceptu significato

per nomen, qui in habentibus diffinitionem est diffinitio ipsa, in non habentibus vero diffinitionem ratio quam significat nomen vocatur, et nihil aliud est quam id quod directe significatur pro nomen."

19DNA §33.

one of them contains nothing more or less than the *ratio* of animality abstracted from any other; this is just what it means to say that "animal" is univocal. The word "being," however, is said of substance, quantity, and quality, not because each has in itself an individualized nature from which some one, generic *ratio* can be abstracted.²⁰ Rather, each analogate has a different nature, one which is nonetheless similar enough—proportionally similar—to found an analogy.²¹

But here we see the necessity of careful psychological distinctions in a semantics of analogy. For in analogy of proportionality so described, the proportionally similar but nonetheless distinct natures signified are each properly conceived by distinct acts of intellect, which Cajetan calls "perfect" concepts. Since they are distinct, the perfect concept of one analogate is not a perfect concept of another analogate; but since they are perfect concepts of proportionally similar natures, the perfect concepts themselves are proportionally similar, and so the perfect concept of one analogate can represent²² other natures proportionally and "imperfectly."²³

Cajetan thus introduces the notion of an "imperfect concept" by allowing that there can be a common concept of diverse analogates. But what is this "imperfect concept"? The argument just offered implies that the "imperfect concept" is not another concept in addition to the perfect concept, but that it is just the perfect concept insofar as it is representing something other than its proper object. As Cajetan puts it, "one concept perfectly representing one analogate imperfectly represents the rest." This would mean that for a set of analogates there would be several distinct imperfect concepts (viz., each of the several distinct perfect concepts considered as imperfectly representing objects other than their proper objects), but Cajetan also seems to say that a set of analogates has just one imperfect concept. If so, then it would seem that in addition to the perfect concepts there is one imperfect concept, a concept that would imperfectly represent all the analogates rather than perfectly representing one and imperfectly representing the others. In the concept of the several distinct perfect concept.

In any case, perhaps we are not to press this question too far, for Cajetan himself warns us that, given the nature of analogy as a mean between extremes, our characterizations of the semantics of analogy may appear different in different contexts, depending on whether we are emphasizing its difference from one or another of the extremes. Cajetan thinks that it is most proper *not* to say that there is a common concept, but to say that there are many concepts that are proportionally similar. However, in some contexts—presumably when speaking to those who deny the unity that is involved in analogy—it can be appropriate to speak of a common concept.

²⁰DNA §34.

²¹DNA §35.

²²Cajetan's "repraesentare" seems to indicate the natural signification of the objective concept (the object of the intellect) by the formal concept (the act of the intellect); cf. Cajetan, *De Conceptu Entis*, ed. Zammit and Herring (1951), §4. And of course it need not imply the questionable "mental representationalism" of the later empiricist tradition.

²³DNA §36.

²⁴DNA §38.

²⁵DNA §§36, 38

²⁶Cajetan develops his position about perfect and imperfect concepts in analogy also in *De Conceptu Entis*, §§3–7.

For this reason, we have to read different claims about analogy with sensitivity to context and use careful interpretive judgment; as Cajetan puts it, "one ought to be in the habit of using discretion when one finds it written that the analogates agree in one *ratio*, and when one finds it said elsewhere that the analogates do not agree in one *ratio*." These two claims can seem to contradict each other, but they may just be attempts to emphasize different aspects of a consistent, delicately balanced analogy theory.

Such advice is useful to keep in mind as we read the next chapter, the fifth, in which Cajetan addresses the senses in which we can and cannot "abstract" a common analogous concept from diverse analogates. Abstraction, strictly speaking, seems to imply a univocal common meaning that can be understood apart from the diverse things in which it is realized. It implies one common element. Since, properly speaking, analogy involves diverse things that are proportionally similar, abstraction strictly speaking is not possible. However, it is possible to attend to the diverse analogates with respect to their proportional similarity, and so in a way to "abstract" from them what is (proportionally) one. In other words, a kind of quasi-abstraction of a common analogue from diverse analogates is possible—what Cajetan calls an abstraction by confusion: the diverse proper analogues are considered *as similar*, and their diversity is ignored, "confused," or made indistinct.²⁸

If such an abstraction-by-confusion is possible, it might be asked, why can we not say that there is, after all, some common element in the analogates, some generic and univocal *ratio* common to them all? If two things are similar, do they not need to be similar *with respect to* some common element?²⁹ Apparently not in the case of proportional similarity, but why not? Cajetan here responds to this question by insisting that it cannot be answered. It is the sort of question that betrays the misunderstanding of the questioner. It is just the nature of proportional similarity that it is a genuine similarity yet without some commonly abstractable element, and those who ask why this is the case are simply failing to grasp this nature. They are asking what cannot rightly come up for question—it is like asking why man is a rational animal.³⁰

As Bochenski noticed, modern logic has made some accommodation for this notion of a similarity lacking a common element under the rubric of "isomorphy." Assume two structures, S_1 and S_2 , whose elements have a one-to-one correspondence, and for any relation R_1 between elements a_1 and b_1 of structure S_1 , there is a corresponding relation R_2 between elements a_2 and a_3 of structure a_4 (Consider,

²⁷DNA §37.

²⁸DNA §41-47.

 $^{^{29}}$ Cf. Burrell, p. 14: "If one needs to speak of similitude, it had best be a single one and not a proportional one. For whether we think of a similitude as a kind of template or prefer to be guided by careful use of language, the upshot will have to be something invariant, else why invoke the expression? Careful attention to language would note that 'x is similar to y' is an ellipsis which must furnish 'in respect of z' on demand." $^{30}DNA 49 .

³¹I. M. Bochenski, "On Analogy," *The Thomist* (1948) 425–77, reprinted with corrections in *Logico—Philosophical Studies*, ed. Albert Menne (Dordrecht: D. Reidel, 1962) and in *Inquiries into Medieval Philosophy: A Collection in Honor of Francis P. Clarke*, ed. James F. Ross (Westport: Greenwood Publ., 1971), pp. 99–122.

for example, a map and the geographical territory that it maps; the correspondence of relationships between points on the map and points on the mapped territory is precisely what accounts for the map's usefulness; the ability to read these correspondences and to transfer apprehension of one relationship to apprehension of the corresponding relationship is the ability to read maps.) Relations R_1 and R_2 are not the same relation, but they are said to be similar insofar as they relate corresponding elements of their respective structures. In this case, S_1 and S_2 can be said to be isomorphic, as can R_1 and R_2 . We could also say that they are proportionally similar. By extension, corresponding elements a_1 and a_2 are also proportionally similar, i.e., analogous. This is why Bochenski noted that isomorphy captures Cajetan's sense of analogical or proportional similarity: to understand the isomorphy (or proportional unity) of elements in structures is not to understand some common element shared by them, but to understand them as playing corresponding roles in their respective structures.³²

In short, the primary lesson that Cajetan would have us learn about analogy on the level of simple apprehension is that there cannot be a concept or *ratio* which captures one common element shared by diverse analogates, but there can be a kind of quasi-abstraction—abstraction-by-confusion—of an *imperfect* concept, which is an apprehension of diverse things in their proportional similitude.

PROPORTIONALITY AND JUDGMENT (CHAPS. 6-9)

The first question to be asked on the level of the second act of intellect, then, concerns predication. If there cannot, properly speaking, be abstraction of a common element from the analogates, how can diverse analogates be subject to a universal predication of a common analogue? Chapter six answers this question by distinguishing between the universality (or predicational superiority) of univocals and that of analogues. Just as the foundation of similarity should not be confused with the foundation of univocation,³³ so the foundation of superiority should not be confused with the foundation of univocation.³⁴ The foundation of univocation is the *complete* identity of *rationes*; the foundation of superiority, more generally speaking, is the identity of *rationes*, where identity can include even *proportional*

³²Bochenski, "On Analogy," §17. Cf. Bochenski, A History of Formal Logic, trans. Ivo Thomas (Notre Dame: Univ. of Notre Dame Press, 1961), p. 397, commenting on a discussion of "systematic ambiguity" from Principia Mathematica: "all the statements in question evidently share the same formal structure. We have in fact a case of isomorphy. It is remarkable that the name used for this kind of isomorphy, 'systematic ambiguity,' is an exact translation of the common Scholastic expression aequivocatio a consilio, synonymous with 'analogy'; for isomorphy is precisely analogy."

33DNA §§33-34.

³⁴This is not just an *ad hoc* distinction, but one anticipated before the writing of *DNA*, as is evident from Cajetan's discussion of univocation in his commentary on Aristotle's *Categories*. Regarding Aristotle's definition of univocals, according to which there is "eadem ratio substantiae," Cajetan says of the word "eadem": "non dicit identitatem simpliciter vel secundum quid, sed identitatem simpliciter, ita quod licet ad aequivocationem sufficiat qualiscunque diversitas rationis secundum illud nomen, ad univocationem tamen non sufficit qualiscunque identitas rationis secundum illud nomen, sed exigitur quod ratio univocatorum, quae attenditur penes illud nomen in quo univocantur, sit totaliter eadem et nihil plus aut minus includat unum quam reliquum in ratione illius nominis." Cajetan, *Commentaria in Praedicamenta Aristotelis*, p. 11.

identity. So in diverse analogates can be found the foundation of superiority, insofar as the diverse *rationes* of the analogates are *proportionally* the same. And just as this is sufficient to warrant speaking of a kind of "abstraction," so it is sufficient to found universality or superiority, because it is almost as if there were a common *ratio* of all analogates, insofar as the *ratio* of one analogate is proportionally the *ratio* of another analogate.³⁵

So, here again we see Cajetan refining semantic distinctions on the basis of the metaphysical distinction of varieties of unity, identity, and similarity. Consistently, the metaphysical category of a proportional unity, irreducible to generic unity, is the point that he emphasizes in response to Scotist arguments against analogy on the level of logic. Cajetan describes a fallacy of concluding from a *ratio*'s being superior or universal to its being univocal.³⁶ Although he does not name a culprit here, he does name Scotus in a parallel discussion of the same *sophisma consequentis* in his commentary on Aquinas's *Summa theologiae*.³⁷ In both places, Cajetan explains that the fallacy results from failing to distinguish between *identity* and *mode of identity*, and thus from failing to distinguish between the foundation of superiority and the foundation of univocity. While it is a fallacy about logic, it is rooted in a failure to appreciate the metaphysical category of proportional identity. "For identity and unity contain under themselves not only complete unity and identity, but proportional."³⁸

It is worth noting that after this clarification, Cajetan refers to three incorrect views about the unity of the analogical concept, views previously mentioned in the very first paragraph of the treatise.³⁹ As Ashworth has noted,⁴⁰ the literature on *De Nominum Analogia* gives little indication about whose views Cajetan is considering, or even what these views mean, despite the fact that their mention at the beginning of the treatise suggests that they are central to the occasion of the work and might be a key to its philosophical agenda.⁴¹ The fact that they are dismissed so easily,

³⁵DNA §§67-68.

³⁶DNA §69.

³⁷In response to Scotus's famous argument that a concept is univocal between God and creatures if it is not specific to one but applies commonly to both, Cajetan replies: "illud argumentum nihil aliud concludit nisi alietatem conceptus sapientiae, verbi gratia, in communi, a sapientia Dei et sapientia creaturae. Sed ex hoc inferre, *ergo univocus conceptus*, est sophisma Consequentis: quoniam conceptus analogus est etiam alius ab inferioribus. Non tamen eo alietatis modo, quo est alius conceptus univocus ab univocatis: quia hic est alius ut praecisus ab eis, ille vero ut continens eos, ut diffuse scripsimus in tractatu *De Nominum Analogia*." Cajetan, *Commentaria in Summam Theologiae St Thomae* (Leonine ed., Rome, 1906), I.13.5, nn. 9–10.

³⁸DNA §69.

³⁹DNA §71. Cf. DNA §1.

⁴⁰Ashworth, "Analogical Concepts," p. 399.

⁴¹On these issues, see especially Ashworth, "Analogical Concepts." The view that analogy involves a concept "unequally participated" seems to have been held by Capreolus and Soncinas, and perhaps Dominic of Flanders. Cf. Tavuzzi, "Some Renaissance Thomist Divisions of Analogy," pp. 99–102, and Riva, "L'analogia dell'ente in Dominico di Fiandra," pp. 289–90. It was rejected by John Versoriius (Ashworth, "Analogical Concepts," p. 406). The view that analogy involves a "unity of order" seems to have been proposed by John of Jandun and Henry of Ghent (Ashworth, "Analogical Concepts," p. 407), and could be attributed to Versorius (Tavuzzi, "Some Renaissance Thomist Divisions of Analogy," p. 96, n. 11). The third proposal, that analogy involves a "unity of disjunction" (or "indisjunction," *DNA* '1), we can find discussed by several thinkers—including Dominic of Flanders, Hervaeus Natalis, and Peter Aureol—none of whom espouse it (Ashworth, "Analogical Concepts," p. 408).

and without much explanation, here at the end of chapter six, suggests that however much these alternative ideas about analogy may have immediately provoked Cajetan, refuting them is not the central aim of the work. With these three proposals dealt with indirectly—dismissed in passing as "manifestly" false based on what has been said—and with five chapters to go in the treatise, it seems clear that Cajetan's primary concerns are elsewhere.

When Cajetan turns to the topic of *defining* the analogue in chapter seven, the natural question is whether one analogate is defined in terms of the other. It had not been uncommon to regard it as a rule for analogous naming that the *ratio* of one analogue is posited in the definition of the others. ⁴² Cajetan had shown that this is the case with analogy of attribution—indeed, this is just what it means, for him, that secondary analogates are always denominated *extrinsically* in analogy of attribution. But in analogy of proportionality, it is not that two things are analogous by one's determinate relation to another; rather, they are related insofar as they are proportionally the same, or proportionally one.

It is in this context that Cajetan makes the important but often overlooked claim that in analogy of proportionality what is signified is not a relation, but the foundation of a relation.⁴³ In analogy of attribution, the analogous term predicated of a secondary analogate (for example, the term "healthy" predicated of food) signifies a relation, namely, the relation of the secondary analogate to the primary analogue (for example, the relation of causing the health of the animal). In analogy of proportionality, however, the analogical term, as predicated of any analogate (primary or secondary) signifies not a relation to something else, but the foundation of a relation (i.e., the foundation of a relation of proportional sameness or unity). Take, for example, the example of "sees," predicated of the intellect by analogy with the seeing of an eye. The proper operation of the intellect—its grasping of its proper object—is the foundation of a relation between the intellect and the eye insofar as the eye has a proper operation—grasping its proper object—that is analogous to, or proportionally similar to, the intellect's proper operation. It is on the basis of this relation that "sees" can be analogically extended from the eye to the intellect, but then the term, as predicated of the intellect, does not signify the relation but its foundation.

As a consequence, there is this further difference between analogy of proportionality and analogy of attribution, namely, that in analogy of proportionality one analogous *ratio* can be known without knowing the others. Although the significate of an analogous term (as the significate of a univocal predication) is in reality related to something else, the term does not signify that relation. Just as the *ratio* of "animal," predicated univocally of man and horse, does not include the relation of univocal predication and can be understood as predicated of man without knowledge of its other univocal predications, so "sees" does not include the relation of analogi-

⁴²For citations, and discussion of other allegedly Thomistic rules for analogy, see Hochschild, "Did Aquinas Answer Cajetan's Question?"

⁴³DNA §83. The claim is also made in Cajetan, Commentaria in Summam Theologiae St Thomae, I.13.6,

cal predication in its *ratio* and can be understood as predicated of intellect without understanding the seeing of the eye.⁴⁴ If it were otherwise, we would have a case, not of proper proportionality but of metaphor, "since it is impossible to understand what something is according to a metaphorical name without knowing that to which the metaphor refers."

This discussion of definition leads naturally to a discussion in chapter eight of "priority" in analogy. Another oft-cited rule for analogy is that it involves predication according to an order of priority and posteriority (secundum prius et posterius), and for many the most obvious sense of priority has been the priority of the "focal" meaning in "pros hen" equivocation, the primary ratio included in the definition of the others. If, in proportionality, there is not some primary analogate whose ratio is included in the definition of the others, how can we identify primary and secondary analogates? Cajetan answers that there are two orders that can still be considered: the order of imposition (according to which the secondary analogate is what the analogical term is extended to cover from its primary analogate, which the word was originally imposed to signify) and the order of reality (according to which the primary analogate has the reality in a more fundamental way, whether it was named first or not—as God is the primary analogate of "good," which is secondarily said of creatures).

These reflections allow Cajetan to turn, in the ninth chapter, to reflect on the "division" of the analogue into analogates and on the "resolution" of the analogates into the analogue. At first glance, it would seem that what Cajetan says about division and resolution does not add much to his discussions of distinction and abstraction in chapters four and five respectively, but a closer reading suggests that the chapter offers here further explanation and more precise characterization of what had heretofore only been described as a quasi-abstraction. We have already seen that the quasi-abstraction possible in analogy must differ from proper abstraction in not having an abstractable common element in the diverse things. But a further consequence of this is that diverse analogates do not differ from each other by differences separable from and added to a common (generic) nature. Such differences would necessarily be outside the common nature, so analogates can only differ by something that is *included* in the common analogical *ratio*. As Cajetan points out, ⁴⁶ this is one of Aristotle's arguments why being is not a genus: the "differences" that are "added" to it to constitute the categories themselves have being, and so are not outside of the common "nature" that they differentiate.

In general, then, the reason there cannot be genuine abstraction in the case of analogy is that the common analogue is in principle inseparable from those features that constitute the diversity of the analogates. It would seem then that Cajetan offers "division" and "resolution" as alternative technical terminology since properly speaking we cannot speak of "differentiation" and "abstraction" in analogy. Resolution,

⁴⁴DNA §79. Cajetan makes the point here by applying the distinction between the term in actu exercitu and in actu signato.

⁴⁵DNA §75.

⁴⁶DNA §99.

then is the mind's capacity to give attention to the proportional unity of necessarily diverse *rationes*, whose necessary diversity is not constituted by the addition of differences to a genus absolutely one; and since it is attention to proportional unity *as such*, even this attention must be accompanied by awareness of the necessary diversity of the analogates—otherwise, it would collapse into a univocal *ratio* and be absolutely one. And since the analogous *ratio* so "resolved" is not absolutely one, it necessarily includes an order of priority, according as the analogous *ratio* results from adding to one *ratio* (of the primary analogate) qualifications that allow it to be extended to secondary analogates, resulting in a modified *ratio* proportionally one with the original *ratio*. So, again, *being* cannot be regarded as abstractable from substance (*substantial being*) and quantity (*measurable being*) as a genus from species because *substantial* and *measurable* are not differences constituting diverse species of absolutely one genus; rather, they are qualifications constituting diverse yet proportionally one *ratio/rationes* of *being*.⁴⁷

PROPORTIONALITY AND DISCURSIVE REASONING (CHAPS. 10 AND 11)

The tenth chapter of *De Nominum Analogia*, which addresses the semantics of analogy on the level of discursive reasoning, is where Cajetan most obviously has in mind Scotus's objections to analogy. How is it possible that a term used non-univocally in a syllogism can avoid causing the fallacy of equivocation? Consider the syllogism: "Every simple perfection is in God, wisdom is a simple perfection, therefore wisdom is in God." In the minor premise, "wisdom" signifies the *ratio* of creaturely wisdom (otherwise, how could it be learned and known apart from knowing the conclusion, that wisdom is in God?), while in the conclusion "wisdom" signifies the *ratio* of divine wisdom. Scotus would argue that since this is a clearly valid syllogism, the *ratio* of divine and creaturely wisdom must be the same, in other words, "wisdom" must be a univocal term. For Scotus, to insist that "wisdom" here is not univocal but analogical is to make this a bad syllogism, one that exhibits the fallacy of equivocation. 49

Again the key to Cajetan's response is the notion of proportional unity. Only when we accept the proper *rationes* or perfect concepts of "wisdom" in themselves would they cause the fallacy of equivocation; but if we accept them *as proportionally the same*, they do not. The reason for this, Cajetan explains, is that

whatever agrees with one, agrees also with the other proportionally; and whatever is denied of one, is denied of the other proportionally; because whatever agrees with a similar, insofar as it is similar, agrees also with that to which it is similar, while always preserving the proportionality.⁵⁰

⁴⁷I am grateful to Gyula Klima for helping me to make some sense of this chapter of *DNA*.

⁴⁸DNA §105.

⁴⁹DNA §106; citing Scotus, I Sent., d.3, q.1.

⁵⁰DNA §106: "eo quod quidquid convenit uni, convenit et alteri proportionaliter; et quidquid negatur de una, et de altera negatur proportionaliter: quia quidquid convenit simili, in eo quod simile, convenit etiam illi, cui est simile, proportionalitate semper servata."

By applying the principles laid out in early chapters of *De Nominum Analogia*, we can say that in analogy of proportionality the different rationes of the term do not cause the fallacy of equivocation because the proportional similarity of those different rationes as predicated of their different subjects allows for a superior, imperfect concept that can be predicated of both subjects. This concept is said to be "imperfect," however, because it is not a definite, univocal concept of which the diverse proper rationes are specifications derived by the addition of differences; rather it is a "confused," that is, indeterminate concept of both of those rationes considered in their proportional similarity. Of course, in the example above, the individual premises are true because the word "wisdom" as predicated of creatures does signify creaturely wisdom; and as predicated of God, it signifies divine wisdom. But because creaturely wisdom and divine wisdom are proportionally the same, the truth of those premises is also saved if we consider not two different rationes of wisdom, but the superior, confused apprehension of them both in their proportional similarity. In other words, the two different rationes of wisdom are, in fact, proportionally the same, and their proportional similarity is a sufficient similarity to avoid the fallacy of equivocation.⁵¹

This leads Cajetan further to clarify what constitutes contradiction by criticizing Scotus's claim that contradiction is a univocal's affirmation and negation of a univocal. Cajetan's alternative proposal is that it is "the *same*'s affirmation and negation of the *same*," where sameness can obviously include proportional sameness: "Identity, as much in thing as in *ratio*, as is repeated many times, is extended to proportional identity." Cajetan can thus diagnose Scotus's mistake as either on the level of metaphysics (a failure to apprehend proportional unity), or on the level of logic (a failure to apprehend the basis of contradiction), or both. 53

Cajetan does not end his consideration of the use of analogy in reasoning with his discussion of syllogistic reasoning; his eleventh and final chapter is effectively a brief *de fallaciis* to conclude the logical *organon* of the preceding chapters. With a series of warnings and clarifications about the *use* of analogical terms in reasoning, Cajetan essentially offers practical hermeneutic advice to complement the logical analyses already given. Two of the warnings remind us that we should not be misled by the presence or absence of common names: on the one hand, there can be an analogical *ratio* even if there is not an analogical name (he uses Aristotle's example of spine, sepion, and bone),⁵⁴ and on the other hand, we do not necessarily have univocation even if there is an apparently common definition since that definition can itself contain analogical terms.⁵⁵ Two of the other warnings remind us of the importance of interpreting propositions in context. First, words that are

⁵¹Bochenski, "On Analogy," §19 contains a formal proof for the validity of syllogisms mediated by proportional or "isomorphic" concepts.

⁵²DNA §112

⁵³DNA §113. As far as I am aware, Scotus was the first to define univocity in terms of the capacity to preserve validity in syllogisms; Duns Scotus, *Commentaria Oxoniensia*, I, d. 3, qq. 1 & 2, a. 4, ¶346 (ed. Garcia, Florence, 1912, 309): "conceptum univocum dico qui ita est unus, quod eius unitas sufficit ad contradictionem affirmando et negando ipsum de eodem: sufficit etiam pro medio syllogistico, ut extrema unita in medio sic uno sine fallacia aequivocationis concludantur inter se uniri."

⁵⁴DNA §117.

⁵⁵DNA §118.

univocal in some contexts may be analogical in others.⁵⁶ And, most relevant to the present discussion, since analogy is a mean between extremes and will sometimes be portrayed as like and sometimes as unlike either of these extremes, theoretical remarks about analogy themselves need to be interpreted carefully, lest consistent claims seem contradictory.⁵⁷ Thus, after some examples of how to apply this advice, Cajetan ends his treatise with a general exhortation to interpret claims with sensitivity to their context. "If someone does not wish to err," says Cajetan, "he ought habitually to consider the occasion of speech."⁵⁸

CONCLUSION: EVALUATING A SEMANTICS OF ANALOGY

In conclusion, I would like to summarize briefly what I take to be the most significant findings of this reading of chapters four to eleven of *De Nominum Analogia*. First, this reading confirms the judgment of Ashworth, that Cajetan has his own philosophical agenda independent from a commentary on Aquinas. Although it would be hard to guess from other scholarly assessments of *De Nominum Analogia*, the work is not an exposition of Aquinas's claims but a set of arguments making up a systematic semantic account of analogy. Aquinas's texts play very little role in the development of these arguments, the formulations of which, Cajetan is well aware, often and for good philosophical reasons differ from the terminology of Aquinas.

Second, Cajetan's preference for analogy of proportionality over analogy of attribution is *not* based primarily on the distinction between the former's intrinsic and the latter's extrinsic denomination.⁵⁹ The characteristic denomination of these modes of analogy are properties that follow from the fact that one signifies a relation, while the other signifies the foundation of a (proportional) relation; and it is the proportional relation which is the basis for Cajetan's preference, for it is on account of it that analogy of proportionality is the most genuine mean between univocation and equivocation, able to meet the objections of Scotus against analogy.⁶⁰

Third, and following from these previous two points, the question of the relationship between Cajetan's analogy theory and Aquinas's teaching on analogy is rather more complicated than has often been assumed. Indeed, on my reading of the text, this question is far less relevant to the interpretation and evaluation of *De Nominum*

⁵⁶DNA §115.

⁵⁷DNA §119.

⁵⁸DNA §125

⁵⁹On the distinction between extrinsic and intrinsic denomination in *De Nominum Analogia*, see Joshua P. Hochschild, "Logic or Metaphysics in Cajetan's Analogy Theory: Can Extrinsic Denomination be a Semantic Property?" *Proceedings of the Society for Medieval Logic and Metaphysics* 1 (2001) 45–69.

⁶⁰It should also be noted, in connection to these first two points, that contrary to what has often been claimed Cajetan's distinction between three modes of analogy is not *based* on Aquinas's remarks at *I Sent*. d. 19, q. 5, a. 2, ad 1, nor is his preference for proportionality over attribution *based* on Aquinas's *De Veritate* q. 2, a. 11. It may be the case that Cajetan was eager to show the harmony of his theory with Aquinas, and these passages serve his purposes well, but they can hardly be pointed to as the foundation of Cajetan's classification and hierarchy of modes of analogy.

Analogia than Cajetan's philosophical exposition and argument. What is more, the secondary question of the "Thomism" of Cajetan's theory will have to be recast as a set of questions, including at least the following: What is the general relationship of Cajetan's semantic framework to Aquinas's? How much can Cajetan's admittedly different vocabulary be said to derive ultimately from the positions of Aquinas, and how much does it owe to the polemical contexts of later Dominicans and Franciscans? Would Aquinas have taught similarly about analogy if he had been pressed to respond to the challenges that Cajetan was addressing?

Fourth, as we could have already inferred from the earlier chapters of *De Nominum Analogia* and as is made explicit in the final chapter, Cajetan does *not* regard analogical signification to be a fixed semantic property of terms independent of the context of their use. In this respect, he appears to be an exception to the phenomenon noted by Ashworth, that "medieval logicians . . . discussed analogy and equivocation as if they were properties of single terms, as if neither sentential context nor speaker use and intention were at issue." This has been the basis of many objections to a semantic analysis of analogy and to medieval semantics in general. But from several passages brought out here, it is clear that Cajetan does not regard analogical, equivocal, or univocal signification as fixed properties of terms independent of their use in propositions.

In continuity with this, then, I note fifth and lastly that in Cajetan's handling of analogy we have a simultaneous attention to semantic rigor and to hermeneutic sensitivity that is remarkable. As L. M. de Rijk has noted, the "contextual approach" to language and "the doctrine of signification" seem to be in tension. Here, however they seem to find a comfortable harmony. Cajetan unquestionably retains the classical Aristotelian semantic framework, especially the two key assumptions that words signify reality by the mediation of concepts and that the meanings of propositions depend on the meaning of their component terms. But these conceptualist and compositionalist assumptions do not themselves determine the semantic values of individual terms, and Cajetan is fully aware that such semantic values must be carefully and prudently discerned in the process of interpretation in light of the dialectical context of utterances.

The phenomenon of analogy has often been regarded as a weight that the framework of medieval Aristotelian semantics could not bear. The arguments of Scotus, which brought out semantic difficulties long latent in the Aristotelian tradition's

⁶¹Ashworth, "Equivocation and Analogy in Fourteenth Century Logic," p. 28. Similar statements are found on pp. 42–43, as well as Ashworth, "Signification and Modes of Signifying," pp. 45–46, 67; Ashworth, "Analogy and Equivocation in Thirteenth-Century Logic," p. 107; and Ashworth, "Analogical Concepts," p. 400.

⁶²E.g., James F. Ross, *Portraying Analogy* (Cambridge: Cambridge Univ. Press, 1981), ix; Burrell, pp. 5–15

⁶³L. M. de Rijk, "The Origins of the Theory of the Properties of Terms" in *The Cambridge History of Later Medieval Philosophy*, ed. Norman Kretzmann, Anthony Kenny, and Jan Pinborg (Cambridge: Cambridge Univ. Press, 1982), pp. 162, 173.

⁶⁴For a further exploration of this point, see Joshua P. Hochschild, "Analogy, Semantics, and Hermeneutics: The 'Concept versus Judgment' Critique of Cajetan's *De Nominum Analogia*," *Medieval Philosophy and Theology* 11 (2003) 241–60.

treatment of analogy, might have made this judgment seem unavoidable. But Cajetan rose to the challenge. The subject of analogy and the difficulties raised by Scotus were for him an opportunity to exhibit the strength and the flexibility of the Aristotelian semantic framework.