ABELARD'S THEORY OF RELATIONS: REDUCTIONISM AND THE ARISTOTELIAN TRADITION

Jeffrey E. Brower

Due to the influence of Bertrand Russell (1872–1970) and Gottlob Frege (1848–1925), twentieth-century philosophers have devoted a great deal of attention to questions concerning the logic and metaphysics of relations. But systematic philosophical interest in relations does not originate in the twentieth century. On the contrary, it originates in antiquity, dating back at least to Aristotle's short treatise, the *Categories*. In the *Categories*, Aristotle attempts to provide a philosophical account of relations (or relatives, *ta pros ti*) as part of an overall inventory of the basic kinds of things there are (*onta*). He identifies relations as one of the ten irreducible kinds of being, and devotes an entire chapter—the seventh chapter of the treatise—to analyzing their nature and ontological status.

Aristotle's discussion in *Categories* 7 provides the starting point for a long and rich tradition of thinking about relations, one which stems from antiquity, runs through the Middle Ages, and eventually makes its way into the early modern period. Despite the prominence of

¹Although Aristotle was not the first ancient philosopher to discuss relations, his writings appear to contain the first systematic treatment of them. For a discussion of relations in ancient philosophy before Aristotle, see Julius R. Weinberg, *Abstraction, Relation, and Induction: Three Essays in the History of Thought* (Madison: University of Wisconsin Press, 1965), 61–7. For Plato's theory of relations see Erhard Scheibe, "Über Relativbegriffe in der Philosophie Platons," *Phronesis* 12 (1967): 28–49. Plato's treatment of relational statements in the *Phaedo* has generated some interesting contemporary discussion. See Hector-Neri Casteñada, "Plato's *Phaedo* Theory of Relations," *Journal of Philosophical Logic* 1 (1972): 467–80; "Plato's Relations, Not Essences or Accidents, at *Phaedo* 102b2–d2," *Canadian Journal of Philosophy* 7 (1978): 39–53; "Leibniz and Plato's *Phaedo* Theory of Relations and Predication" in *Leibniz: Critical and Interpretive Essays*, ed. Micheal Hooker (Minneapolis: University of Minnesota Press, 1982); Mohan Matthen, "Plato's Treatment of Relational Statements in the *Phaedo*," *Phronesis* 27 (1982): 90–100; and Mark McPherran, "Matthen on Casteñada and Plato's Treatment of Relational

this tradition in the history of philosophy, the theories that comprise it are often contrasted unfavorably with more contemporary theories. Unlike twentieth-century philosophers, who speak of relations as holding 'between' two or more objects, Aristotle and his followers prefer to say that relations belong to one thing and somehow point 'toward' (*pros*) another; relations, they say, have *subjects* of inherence whose relations they are and *termini* with respect to which they relate their subjects. This old-fashioned way of speaking has led many commentators to suppose that Aristotelians have a conception of relations radically different from the now familiar, twentieth-century conception. "Obviously," says Francis M. Cornford, "the author of the *Categories* did not conceive of relations as subsisting *between* two things, as they are now symbolised by *R* standing between *a* and *b* in *aRb*." Like Cornford, many other commentators have wanted to draw a sharp contrast between the Aristotelian and the contemporary conception of relations. Some, however, are more explicit than Cornford about extending this contrast to include Aristotle's followers. Consider, for example, the following remarks from Kenneth Olson's interesting monograph, *An Essay on Facts*:

When Aristotle and the Scholastics talk of relations they mean relational *properties*. The things related are divided into subject and term, and the relation is held to *inhere* in the subject, as opposed to holding *between* subject and term, as Russell has taught us to view it.³

For lack of a better name, we might call the conception of relations typically associated with Aristotle and his followers the "monadic conception of relations." According to this conception, Simmias's being taller than Socrates is not to be explained by an entity to which both Simmias and Socrates are somehow jointly attached (namely, the dyadic or two-place

Statements in the Phaedo," Phronesis 28 (1983): 298-306.

²Francis M. Cornford, *Plato's Theory of Knowledge* (London: Routledge and Kegan Paul, 1967), 283.

³Kenneth Olson, An Essay on Facts (Stanford: Center for the Study of Language, 1987), v.

relation *being-taller-than*). Rather, Simmias's being taller than Socrates is to be explained by a pair of monadic properties—Olson's "relational properties"—one of which inheres in Simmias and points him toward Socrates, and another of which inheres in Socrates and points him toward Simmias.⁴

Although attributing the monadic conception to Aristotle and his followers is now commonplace, the attribution is unfortunate, since it permits the quick dismissal of their views. Contemporary philosophers have almost universally rejected the monadic conception on the grounds that it involves a fundamental confusion of two different kinds of concept—namely, the concept of a relation and the concept of a non-relational or monadic property. Perhaps the best known criticism of the monadic conception occurs in Bertrand Russell's *Principles of Mathematics*. But C.I. Lewis and C.H. Langford have constructed a proof which is also habitually cited as evidence against the monadic conception.

⁴Various explanations have been given for why Aristotelians might have held a monadic conception of relations, most of which trace back to Aristotle's views in the *Categories*. Some philosophers have thought that Aristotle's emphasis on particular (or primary) substance explains his acceptance of the monadic conception. In the *Categories* Aristotle suggests that primary substances are that in which all accidents inhere and that of which everything is predicated. This emphasis, says Martha Kneale, led him to neglect propositions whose form is properly regarded as relational. (See William Kneale and Martha Kneale, *The Development of Logic* [Oxford, 1962], 31.) Other philosophers, such as Julius Weinberg and Reinhardt Grossmann, have suggested that the monadic conception stems directly from two other Aristotelian doctrines, both of which they think can be found in the *Categories*:

⁽¹⁾ Relations are a certain type of accident, and

⁽²⁾ Particular accidents inhere in only one subject at a time.

The second of these two doctrines appears to imply that all accidents are monadic properties. For if the particular instances of a universal F are one-termed, then F would seem to be a monadic property. But (2) implies that the particular instances of all universal accidents are one-termed. If all accidents are monadic properties, however, and relations are a certain type of accident, then it follows that

⁽³⁾ Relations are a certain type of monadic property. (See Weinberg, *Abstraction, Relation, and Induction*, 75; and Reinhardt Grossmann, *The Categorial Structure of the World*, [Bloomington: Indiana University Press, 1983], 155. Kenneth Olson takes the same position as Weinberg and Grossmann in *An Essay on Facts*, 19–21.)

⁵In *Principles of Mathematics* (Cambridge, England: Cambridge University Press, 1903), §§212–14, Russell argues that relations are irreducible in meaning. He calls the metaphysical view associated with the monadic conception "monadism."

⁶In Symbolic Logic (New York: Dover Publications, 1932), 387–8, Clarence I. Lewis and Cooper H. Langford argue

Although rejecting the monadic conception may have genuine philosophical merit, I believe that contemporary philosophers have been too quick to associate this conception with the Aristotelian tradition. Aristotelian theories of relations are capable of far more subtlety and sophistication than most contemporary philosophers have recognized; hence the current rejection of them is premature, or at least based on an oversimplification. In order to defend this claim, I will focus in this paper on the work of an influential medieval logician, Peter Abelard (1079–1142). As I will show, Abelard develops a conception of relations that is quite different from the one commonly attributed to Aristotle and his followers. In the course of reflecting on the *Categories*, Abelard accepts the view that

- (1) Relations are a certain type of monadic property.

 Nonetheless, when he uses the term "relation" (or the Latin equivalent, *relatio*) he is referring, not to relations *simpliciter*, but to the characteristics in virtue of which two or more things are related (what we might call their relative-making characteristics). Properly understood, therefore, what is expressed by (1) on Abelard's view is not the proposition that relations are a certain type of monadic property, but rather the proposition that
- (1') Relative-making characteristics are a certain type of monadic property.

 And while contemporary philosophers may still find a proposition such as (1') dubious, at least they cannot say that it involves the confusion that they may rightly attribute to the monadic conception.

that the reduction of relations to monadic predicates or concepts involves a formal contradiction.

⁷For a brief survey of Abelard's life, works, and historical significance see David E. Luscombe, *The School of Peter Abelard* (Cambridge, England: Cambridge University Press, 1969).

As we shall see, the relation between Simmias and Socrates is not to be explained, on Abelard's theory, by a pair of mysterious relational properties—say, being-taller-than-Socrates and being-shorter-than-Simmias. Rather, the relation is to be explained by a pair of heights—say, being-six-feet-tall in the case of Simmias and being-five-foot-ten in the case of Socrates. Now, since the exemplification of these heights by Simmias and Socrates necessitates that they are related, Abelard maintains that the relation is nothing ontologically over and above Simmias, Socrates, and their respective heights. On his view, therefore, relations are ultimately reducible to monadic properties of related things, but as we shall see, they reduce in such a way as to avoid any straightforward or simple-minded conceptual confusion.

I should state at the outset that I do not intend to make any historical claims about the connection between Abelard's and Aristotle's conception of relations. Abelard develops his views in the course of commenting on *Categories* 7, but I do not want to infer from this that his understanding of relations is the same as Aristotle's in all its details. I think a strong case could be made for the claim that Abelard is merely expanding views already present in Aristotle's text, but I shall not attempt to make that case here.

The rest of the paper is divided into three parts. In the first part (sections I–II), I set out and explain Abelard's account of relatives (or relative-making characteristics). My discussion in this part focuses on one of Abelard's most important logical works, his *Logica 'ingredientibus'*. Since the relevant portion of this work takes the form of a commentary on Aristotle, however, I begin my discussion with a brief sketch of *Categories* 7. In the second part of the paper (sections III–V), I indicate what Abelard's account of relatives tells us about his own theory of relations. Although this requires some reconstruction on my part, we shall see that it is possible

to determine with some accuracy what sort of theory Abelard held. In the third and final part of the paper (sections VI–VII), I turn to the defense of Abelard's theory. My purpose in this last part is to begin the project of rehabilitating a much denigrated tradition in the history of philosophy.

I

In the *Categories*, Aristotle attempts to provide a philosophical account of relatives (*ta pros ti*), one that will not only serve to illuminate their nature but also to distinguish them from the members of other categories. He intends this account to form part of an overall inventory of the basic kinds of things there are (*onta*). Thus, having discussed the categories of substance and quantity in chapters 5 and 6, he turns in chapter 7 to the category of relatives.

Although "relations" (*relationes*) is the term that Abelard uses to refer to the items discussed in *Categories* 7, Aristotle's own name for them is "relatives" (*ta pros ti*). The latter expression is often translated into English as "relations," but the use of this term is misleading, since there is no noun in ancient Greek corresponding to the abstract English term "relation." Aristotle's own practice, at least when he is speaking in the plural, is to refer to these items using a technical expression, *ta pros ti*, which is most literally translated as "things relative to something," or more economically as "relatives." So translated, the expression appears to lay

⁸See, for example, Hippocrates G. Apostle, *Aristotle's Categories and Propositions* (Grinell, Iowa: Peripatetic Press, 1980); Harold P. Cooke, *Aristotle: The Categories*, the Loeb Classical Library (London: W. Heinemann, 1938); William David Ross, *Aristotle* (London: Methuen, 1949).

⁹John L. Ackrill makes this point in *Aristotle's Categories and De Interpretatione* (Oxford: Clarendon Press, 1963), 78 and 98. See also Fabio Morales, "Relational Attributes in Aristotle," *Phronesis* 39 (1994): 256.

¹⁰Aristotle's technical expression consists of the neuter definite article, *ta*, and the prepositional phrase, *pros ti*. When a neuter definite article occurs by itself in Greek, it can mean "the things" or just "things." The Greek

emphasis, not on relations, but on the things related by them—what we might call the relata of relations. Commentators sometimes justify their use of a freer translation—namely, "relations"—on the grounds that Aristotle uses pros ti as a noun. 11 At the outset, however, we need to leave open the question whether *pros ti* refers, in its capacity as a noun, to relations or things related. In order to avoid begging any questions, therefore, I shall always translate ta pros ti (as well as ad aliquid, the Latin equivalent of Aristotle's expression) using "relatives," the most economical of the two literal translations.

In Categories 7 Aristotle considers two different accounts of relatives, both of which he describes as "definitions" (horismoi). 12 He opens the chapter with a statement of the first definition, which is traditionally associated with Plato: 13

The following sorts of things are called relatives: all those things said to be just what they are of something else, or *relative to* something else in some other way (anyway whatsoever). ¹⁴

Aristotle devotes most of *Categories* 7 to an examination of the first definition and the characteristics (or Greek: propria) of things that satisfy it. Near the end of the chapter, however,

preposition, pros, on the other hand, has the force of "toward" or "relative to," and its object in this context, ti, functions as the indefinite pronoun, "something" or "anything." Taken as a whole, therefore, Aristotle's complex expression literally means *things relative to something*.

11 See, for example, Apostle, *Aristotle's Categories and Propositions*, 62–3 and 76.

¹²Aristotle describes the first account of relatives as a "definition" (horismos) at Categories 8a29; he seems to imply here also that his own account of relatives should be described in the same way. Aristotle's use of the term "definition" in this context is puzzling. Relatives are supposed to constitute one of the ten categories but according to a well-known Aristotelian doctrine, categories cannot be defined. See Apostle's discussion of this use of term in Aristotle's Categories and Propositions, 80.

¹³Aristotle does not explicitly attribute the first definition to Plato, but his ancient and medieval commentators habitually trace it back to him. Simplicius credits Boethus (not to be confused with the Roman philosopher, Boethius) with attributing this definition to Plato. In support of this attribution, Simplicius refers us to Sophist 255d and Republic 438a7-b1 (see his In Aristotelis Categorias commentarium, ed. Carolus Kalbfleisch and CAG, vol. III, 159). This attribution makes its way into the Middle Ages through Boethius (see his In Categorias Aristotelis collected in Patrologiae Latinae Cursus Completus, ed. Jacques Paul Migne [Paris: Vivès, 1860], 217) and becomes commonplace thereafter.

¹⁴Categories, 6a36–7. Throughout this section I have adopted, with slight modification, Ackrill's translation of the Categories.

in an effort to resolve a particular puzzle to which it gives rise, Aristotle rejects the first definition in favor of a second. This second definition appears to provide Aristotle's own account of relatives.

There are a number of interpretive difficulties associated with Aristotle's discussion in *Categories* 7, but to understand Abelard's theory of relations we need to consider just one of them—what I will call the problem of circularity. The problem of circularity arises with Aristotle's statement of the second definition. Having rejected the first definition, Aristotle offers the following in its place:

Relatives are those entities for which this is their very being: being relative to another in a certain way.¹⁵ As stated, the second definition appears to be not only uninformative but perfectly circular, containing a form of the term "relative" in both its definiendum and definiens.

In the part of his *Logica 'ingredientibus'* devoted to Aristotle's *Categories*, Abelard attempts to make sense of this definition. Although he never explicitly mentions the problem of circularity, we shall see that his interpretation is calculated to resolve it. According to Abelard, the key to interpreting the second definition lies in Aristotle's use of the qualification "in a certain way." Indeed, once the qualification is properly understood, Abelard thinks that it is obvious that Aristotle is using the term "relative" in two distinct, but closely related senses.

¹⁵Categories, 8a31–2.

¹⁶Abelard's failure to mention the problem of circularity is initially surprising, since Boethius's commentary, which Abelard frequently cites, refers to it explicitly (see Boethius, *In Categorias Aristotelis*, 235). Abelard's failure to mention the problem seems less surprising, however, once we consider Boethius's own treatment of it. According to Boethius, if the second definition has the appearance of circularity, this is due to laziness on the part of Aristotle's readership: "Now it may appear to those reading *carelessly* and paying *little attention* that the very term to be defined [that is, 'relative'] has been presupposed in the definition" (ibid., emphasis added). Abelard may avoid mentioning the problem of circularity to escape Boethius's censure.

Abelard's two most important works in logic are his *Logica ingredientibus* and his *Dialectica*, each of which contains extensive commentary on Aristotle's *Categories*. Although Abelard discusses the second definition in both of these works, his clearest and most extended account of it occurs in the *Logica 'ingredientibus'*. Since much of what Abelard says about the definition in the *Dialectica* merely repeats this account, I will limit my discussion to the *Logica 'ingredientibus'*. Since much of what Abelard says about the definition in the *Dialectica* merely repeats this account, I will limit my discussion to the *Logica 'ingredientibus'*.

In the *Logica 'ingredientibus'*, Abelard states his interpretation of the second definition in a single passage. This passage is somewhat lengthy, but since the line of thought it expresses is extremely compressed, I will begin by quoting it at length. (I number the lines of the passage for ease of reference.)

Abelard entreats us to "expound the definition which Aristotle offers on his own behalf in the following way":

Relatives—that is, *relations*—are those entities for which this is the being that underlies them: being relative to another. Entities of this sort are relatives because they are relative to other entities—namely, by *holding them in view*. Now strictly speaking the foundations of relations (such as the substance which is a father or a son) are said to hold one another in view, whereas the relations (such as fatherhood and sonship) are the viewpoints in virtue of which the subjects hold one another in view. For this reason [Aristotle] adds "in a certain way." Relations are relative to one another not because in their being *they* hold one another in

¹⁷Abelard's *Logica 'ingredientibus*' is collected in *Peter Abaelards Philosophische Schriften* I, Beiträge zur Geschicte der Philosophie und der Theologie des Mittelalters, Band XXI, ed. Bernard Geyer (Münster: Aschendorff, 1933)—hereafter abbreviated LI and cited in the text. For Abelard's *Dialectica*, see Lambert M. de Rijk's edition (Assen: Koninklijke Van Gorcum and Co., 1970)—hereafter abbreviated D. All translations are my own. There is a controversy surrounding the dating of these two logical works. For relevant discussion, see the introduction to Geyer's edition of the *Logica ingredientibus*, and Constant J. Mews "On Dating the Works of Peter Abelard" in *Archives d'Histoire Doctrinale et Littéraire du Moyen Age* 60 (1985), 73–134. See also Mews, "Aspects of the Evolution of Peter Abelard's Thought on Signification and Predication," *Gilbert de Poitiers et ses contemporains. Aux origines de la "Logica Modernorum*," ed. Jean Jolivet and Alain de Libera (Naples, Italy: Bibliopolis, 1987), 15–41.

¹⁸Abelard discusses the second definition at two places in the *Dialectica* (see D, 83 and 86). In each case he presupposes an understanding of the technical terminology introduced in the *Logica 'ingredientibus'* (*referre*, *respicere*, and cognates) and of the role assigned there to the qualification "in a certain way."

view, but rather because they make their subjects hold one another in view. This is why they are spoken of as holding one another in view in a certain way. On the same basis, Boethius calls certain things good in [De] divisionibus, not because they are good in themselves, but because they make [other] things good. We are accustomed to speak similarly about healthy food. ¹⁹ (LI, 216–17)

In less than fifteen lines, Abelard not only restates and expounds Aristotle's definition, he also begins sketching a sophisticated theory of relations of his own. I turn now to some preliminary observations on the sense of this passage.

The first thing about the passage to notice is that, in the course of restating Aristotle's definition, Abelard introduces two new ways of speaking about relatives. In the first line, he introduces the term "relations" (relationes). The introduction of this term is clearly to be a gloss on Aristotle's first use of "relative":

Relatives (ad aliquid)—that is, relations (relationes)—are those entities for which this is the being that underlies them: being relative to another.

Abelard's gloss is initially useful, if only because it helps to distinguish the two uses of the term "relative" in Aristotle's definition. As noted earlier, the purpose of this Aristotelian definition is to define a certain class of accidents. But instead of calling these accidents relatives, as Aristotle does, Abelard calls them *relations*, thereby reserving "relative" (ad aliquid) solely for Aristotle's second use of that term.

But Abelard's gloss is also useful in another way, inasmuch as it tells us how *not* to read the definition. When Aristotle uses the term "relative" it is natural to suppose that he is referring to things that stand in relations—the relata of relations—rather than the relations themselves. By

^{1944 [}A]d aliquid, hoc est relationes, sunt res illae quibus est hoc ipsum esse quod supponunt, scilicet habere se ad aliud, quae sunt ad <aliquid> essentiae huiusmodi quod esse habent ad alias essentias, eas videlicet respiciendo. Sed quia proprie fundamenta relationum, veluti substantia ipsa quae pater est vel filius, respicienda ad invicem dicuntur, relationes vero, sicut ipsa paternitas vel filiatio, ipsi sunt respectus secundum quos subiecta sese respiciunt, addit: quodammodo relationes se habent ad invicem, non secundum quod in essentiis sese respiciant, sed quia subiecta ad invicem respicere faciunt. Ideo 'quodammodo' respicientes dicuntur. Sic enim quaedam bona in Divisionibus dicit Boethius non quod in se bona sint, sed quia bona faciunt, sanos cibos similiter dicere solemus."

introducing the abstract noun "relation" (*relatio*), however, Abelard self-consciously excludes this possible interpretation.

Abelard introduces his other way of talking about relatives in the third line of the passage. This time, however, he glosses Aristotle's second use of the term "relative."

Entities of this sort [that is, relations] are relatives because they are relative to other entities—namely, by *holding them in view (respiciendo)*.

The precise expression Abelard uses here, *respiciendo*, is difficult to translate, but its purpose in the passage is clear. Abelard introduces a form of the Latin verb *respicere* to give us a handle on the notion of being relative. To say that an entity is relative, he suggests, is just to say that it holds some other entity in view.²⁰

Now, it is important to notice that, in his initial restatement of the second definition, Abelard omits any mention of Aristotle's qualification. According to Aristotle, relatives are entities that are relative to another "in a certain way." But in his initial restatement of the definition, Abelard defines them merely as entities that are relative to another (see lines 1–2).

²⁰Respiciendo is sometimes translated using a form of the English verb "refer" (namely, "referring"). The problem with this translation, however, is that "referring" has technical and linguistic connotations in English that are bound to be misleading: it conjures up images of Russell and Frege and issues in the philosophy of language. The only obvious alternative, however, is "having a respect." Although this translation has the virtue of preserving an important etymological connection—"respect" is derived from the fourth principle part of *respicio*—it ultimately fares no better than "referring"; it is not clear what a respect is, much less what it means for something to "have a respect to another."

In the end, I have elected to translate *respiciendo* as "holding another in view" because, unlike other translations, it clearly brings out the visual metaphor implied by Abelard's expression. Literally *respicere* means "to look back" or "to look beyond oneself." Thus, when Abelard calls things *respicientes*, he is suggesting, if only metaphorically, that the things in question visually perceive one another (that is, hold one another in view). The significance of this visual metaphor will become apparent in section V, where I argue that it helps to explain Abelard's view of the ontological status of relations.

For a helpful discussion of *respectus* and other terms used by medieval philosophers to signify relations, see Robert W. Schmidt, *The Domain of Logic According to Saint Thomas Aquinas* (The Hague, Holland: Martinus Nijhoff, 1966), 133–40.

This omission is apparently intentional, for Abelard immediately goes on to explain himself in lines 3–6:

Now strictly speaking the foundations of relations (such as the substance which is a father or a son) are said to hold one another in view, whereas the relations (such as fatherhood and sonship) are the viewpoints in virtue of which the subjects hold one another in view. For this reason [Aristotle] adds "in a certain way."

According to Abelard, it is not relations, but their "foundations" or "subjects,"²¹ that are relative in the strict or primary sense of the term. For, strictly speaking, only they "hold one another in view." Abelard's examples help to clarify his point. It is not fatherhood or sonship that is related, but particular fathers and sons.

By omitting "in a certain way" from his initial restatement of the definition, Abelard deliberately draws our attention to role that he thinks the qualification is playing in the definition. If only the subjects of relations can be relative in the strict or primary sense, then the relations themselves must be relative in a derivative or secondary sense. Thus, he describes relations as that *in virtue of which* two or more things are related.

Having suggested that relations are relative only in a derivative sense, Abelard attempts to clarify that suggestion by introducing a slightly different terminology. Instead of describing relations as that in virtue of which things are relative, he now proceeds to describe them as those entities which *make* other things relative. Here again he lays emphasis on Aristotle's use of the qualification "in a certain way."

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²¹Abelard uses the terms "foundation" and "subject" interchangeably. This is significant because, unlike Abelard, later medieval philosophers commonly distinguish the two. For example, if Simmias is taller than Socrates, then Simmias's height is the foundation and Simmias is the subject of the relation being-taller-than. (For a discussion of later medieval theories of relations, see Mark G. Henninger, *Relations: Medieval Theories 1250–1325* [Oxford: Clarendon Press, 1989].) Abelard seems to collapse this common distinction, but perhaps the difference in terminology can resolved by the introduction of a distinction between remote and proximate foundations of relations. Some later medieval philosophers, such as John Duns Scotus, use "proximate foundation" to refer to an accident and "remote foundation" to refer to a substance. See Olson, *An Essay on Facts*, 27 and the texts of Scotus cited in his

Relations are relative to one another not because in their being *they* hold one another in view, but rather because they make (*faciunt*) their subjects hold one another in view. This is why they are spoken of as holding one another in view *in a certain way*.

With the 'making' terminology now in hand, Abelard illustrates his interpretation of the second definition using two analogies or cases in which we call something F because it makes another thing F in the strict or primary sense.

On the same basis, Boethius calls certain things good in [De] divisionibus, not because they are good in themselves, but because they make [other] things good. We are accustomed to speak similarly about healthy food.

Of the two analogies, the one involving healthy food is perhaps the most familiar and so initially the most useful. Relations are relative, Abelard suggests, in the same way that food is healthy. But food is healthy only in the derivative sense that it makes animals healthy—animals, of course, being healthy in the primary sense.

While the analogy to healthy food is suggestive, it is important to recognize its limitations. There is an important difference between (a) the way in which relations make things relative and (b) the way in which food makes things healthy. Relations are accidents. Hence they make things relative by informing or inhering in them. Food, by contrast, is a substance. Hence, it makes things healthy not by inhering in them but by (efficiently) causing or bringing about their health.

Abelard may have recognized the disanalogy between relations and healthy food.

Indeed, his recognition of the disanalogy may explain why he gives priority to his other the analogy, the one involving good things. Abelard gives no examples of things spoken of as derivatively good, so it is difficult to know precisely what he has in mind. Nonetheless, it is possible to interpret him as drawing an comparison between relations and the characteristics in

virtue of which things are good. Just as, say, good-making characteristics of a strawberry are those characteristics in virtue of which it is good, so too, we might say, relations are the characteristics in virtue of which two or more things are related. Now if this is what Abelard has in mind, then his analogy to good things is more apt than his analogy to healthy food. Like relations, good-making characteristics inhere in substances; hence they make their subjects good by *informing* them.

The preceding observations are sufficient to show that Abelard's reading of the second definition avoids the problem of circularity. According to Abelard, Aristotle is using the term "relative" in his definition in two distinct but closely connected senses: he is using the term in a derivative sense in the definiendum and in its primary sense in the definiens. We can indicate these two different senses, along with their connection, by reconstructing Abelard's interpretation as follows:

(2) Accidents are relative₂ if and only if they make their subjects relative₁.

As this reconstruction makes clear, the term "relative" applies to accidents in one sense and to subjects in another. Since these applications are not univocal, the definition on Abelard's reading escapes the charge of circularity.²²

²²It is interesting to note that Aristotle's use of term "relative" turns out, on this interpretation, to have what G.E.L. Owen has called "focal meaning." (See G.E.L. Owen, "The Platonism of Aristotle," reprinted in *Articles on Aristotle*, ed. Jonathan Barnes, Malcolm Schofield, and Richard Sorabji, 4 vols. [London: Duckworth, 1975], vol. 1, 14–34.) According to Owen, a term has focal meaning just in case it has a primary sense by reference to which its other senses can be explained. "Healthy" is, of course, a paradigm example of such a term, but Owen chooses to focus on one of Aristotle's other examples, namely "medical":

It is medical skill that is called "medical" in the primary sense; a medical knife is a tool required for the exercise of that skill, medical treatment is the regimen prescribed in the exercise of that skill, and so forth. (32)

It is well-known that the concept of focal meaning plays an important role in Aristotle's later philosophical works. But if Abelard's interpretation is correct, it would confirm the suspicion of some contemporary commentators that the concept of focal meaning actually traces back to the *Categories*. See, for example, Terence H. Irwin's discussion of "being" in chapter 3 of *Aristotle's First Principles* (Oxford: Clarendon Press, 1988); and James Duerlinger's

Having provided what he takes to be the correct interpretation of the second definition, Abelard proceeds to defend the account of relatives it contains.²³ I do not want to discuss the details of that defense here, but merely to note that, properly interpreted, Abelard takes the second definition to express, not just Aristotle's account of relatives, but the true account as well.²⁴

discussion of "inherence" in "Predication and Inherence in Aristotle's *Categories*," *Phronesis* 15 (1970), 179–203. ²³See LI, 218 and following. Abelard's position vis-a-vis the second definition emerges even most clearly from the *Dialectica*, where he suggests that one reason for defending the Aristotelian definition is a lack of promising alternatives:

But even if we presume to blame Aristotle, the leader of the peripatetics, [for providing an incorrect account of relatives] what more shall we accept on this subject? We say rather that his definition applies to all and only to relation[s]. (D, 88)

²⁴It is interesting to note that, while Abelard is eager to defend the second definition of relatives, his defense puts him in an awkward position. Since Aristotle introduced the second definition to correct the first or Platonic account of relatives, Abelard's defense appears to commit him to saying, not only that Plato and Aristotle disagree, but that Plato's account of relatives is mistaken. Like other philosophers of this period, however, Abelard is loathe to accept this consequence. "It is absurd," he says, "to allow philosophers so great to contradict one another" (LI, 398). In the *Logica 'ingredientibus'* Abelard attempts to harmonize the views of Plato and Aristotle by denying that the first definition is really Plato's. It is 'Platonic', he concedes, but only in the sense that some of Plato's self-appointed students held it (LI, 217).

Abelard's attempted harmonization in the *Dialectica* is much more interesting. There he grants that the first definition is Plato's and denies instead that Aristotle really rejects it. But this, of course, raises an obvious question: If Aristotle does not really reject the first definition, why does he give the appearance of doing so? In a rather revealing passage, Abelard suggests that the answer has to do with a character flaw in Aristotle:

We know that in other places Aristotle rose up against this teacher of his, the foremost leader in all philosophy, wanting—perhaps out of a spark of envy, jealousy of his name, or [a desire to] showcase [his own] knowledge—to attack his positions with certain sophistical arguments, for example, in the case that Macrobius mentions regarding the motion of the soul. Perhaps the attack on [Plato] is misdirected, either because [Aristotle] does not understand the imposition of the name "relative" in the same way [Plato] does, or because he expounds the sense of [Plato's] definition perversely and then gives his own perverse examples, so that he can find something that he is able to correct. (D, 91)

Having identified Abelard's interpretation of the second definition, and seen that it expresses his own account of relatives, we are naturally led to a consideration of two further questions. Does Abelard have anything approaching a theory of relations in the contemporary sense? And if so, How is this theory connected to his account of relatives? In this section I prepare the way for an answer to these questions by clarifying an ambiguity in Abelard's use of the Latin term *relationes*.

It will greatly aid our discussion in what follows to recognize that Abelard's account of relatives presupposes a conceptual distinction between three different classes of things:

- (A) Relatives (that is, the relata of relations)
- (B) Relative-making characteristics
- (C) Relations

As we have seen, Abelard thinks that a distinction must be drawn between things that are relative in a primary sense (relatives₁) and things that are relative in a derivative sense (relatives₂). This distinction corresponds to the distinction between classes (A) and (B). The things that fall in class (A) are what Abelard calls "the subjects" or "foundations" of relations. They include fathers and sons, Simmias and Socrates, and all other things that "hold one another in view." The things that fall in class (B), on the other hand, are what Abelard refers to as "viewpoints," or "that in virtue of which subjects hold one another in view." They are relative only "in a certain way," and include Simmias's and Socrates's heights, as well as all other accidents that make their subjects relative in the strict or primary sense of the term. On analogy with good-making characteristics, it seems appropriate to call them "relative-making characteristics."

In addition to (A) and (B), however, Abelard is committed to distinguishing (at least conceptually) another class of things, (C), which includes all and only relations. To see why he is committed to this further distinction, consider the analogous cases of health and goodness. Health must be distinguished from both the animals which possess it and the food which makes them healthy. So, too, goodness must be distinguished from both good things and the characteristics in virtue of which they are good. By parity of reasoning, the class of relations—call it (C)—must be distinguished from both (A) the class of relatives and (B) the class of relative-making characteristics.

Now at this point we need to be careful. Although Abelard is committed to distinctions among (A), (B), and (C), the ontological significance of these distinctions is not yet clear. Just because relations and relative-making characteristics are conceptually distinct, for example, it does not follow that they are also ontologically distinct. Like the terms "morning star" and "evening star," "relation" and "relative-making characteristic" may refer to the same thing under different descriptions, and so have different senses but the same referent.

Indeed, even the conceptual significance of these distinctions is not altogether clear, for Abelard has not yet said anything about his own conception of relations. Does he conceive of relations as what philosophers nowadays call many-place or polyadic properties (such as being-taller-than or being-shorter-than, which hold *between* individuals such as Simmias and Socrates)? Or does he rather conceive of them as a *sui generis* type of monadic property (that is, as relational properties such as being-father-of-a-son or being-father-of-Socrates)? Abelard's silence on this matter is significant; as we shall see, he develops his theory of relations without ever taking a stand on the issue. Hereafter I shall assume, merely for the sake of convenience,

that Abelard conceives of relations as polyadic properties. This assumption might seem anachronistic, since ancient and medieval philosophers are often thought to lack the concept of a polyadic property. This is an important question and I shall return to it in section VI below. Meanwhile, however, I do not intend anything of historical or philosophical significance to turn on my assumption.

Returning now to the tripartite distinction between (A), (B), and (C), it is easy to see how someone could be misled by Abelard's use of the Latin noun *relatio*. The noun is most naturally rendered into English by the abstract term "relation," but this rendering invites a certain amount of confusion. For it suggests that Abelard is using *relatio* to refer to the items falling in class (C), whereas in fact he introduced the term expressly to mark the derivative sense of relative—that is, to refer to the accidents falling in class (B). Thus, when Abelard calls fatherhood (*paternitas*) and sonship (*filiatio*) "relationes," he does not mean that fatherhood and sonship are relations in the contemporary sense, but rather that they are father- and son-making characteristics.

To avoid confusion in what follows, it will be useful to introduce some stipulations.

Hereafter whenever I want to refer to the items included in class (C), I will use the term "relations." On the other hand, whenever I want to refer to the items included in class (B)—Abelard's *relationes*—I will use the term "relative-making characteristics."

IV

Although Abelard's account of relatives commits him to a distinction between relations and relative-making characteristics, his actual discussion focuses almost exclusively on relative-

making characteristics. Other than speaking of things as "holding one another in view," he says very little about relations or being related. If we want to understand Abelard's theory of relations, therefore, we must see what we can infer from his account of relative-making characteristics.

Abelard assumes that relative-making characteristics constitute one of the ten categories of being. Following Aristotle, he claims that they are a certain type of accident. This suggests not just the fairly weak claim that there exist some monadic properties which relate two or more substances, but the stronger claim that, wherever two or more substances are related, there exist some monadic properties that relate them. According to Abelard, therefore, relations appear to be dependent beings—that is, beings dependent for their existence upon the exemplification of the characteristics in virtue of which they hold.

But what precisely does this dependency amount to? Perhaps we can answer this question if we return to Abelard's analogy involving good things. Just as there are certain characteristics—say, being red, juicy, and sweet—that make strawberries good, so too, there are certain characteristics that make two or more subjects related to one another. In the case of the good things, however, the 'making' amounts to a form of necessitation. Being red, juicy, and sweet makes strawberries good in the sense that, necessarily, any strawberry that has these characteristics will also be good: no two strawberries can be alike with respect to these natural properties and yet differ with respect to goodness. On analogy with this case, therefore, we might say that relations are dependent in the sense that they are necessitated by the exemplification of certain other characteristics.

It used to be common for philosophers to distinguish two different kinds of relations, internal and external. I think we can usefully characterize Abelard's theory of relations if we avail ourselves of the same distinction. Consider, therefore, the following definitions:²⁵

- (3) Two or more subjects are *internally* related if and only if there exist some monadic properties of the subjects whose exemplification necessitates that the relation holds.
- (4) Two or more subjects are *externally* related if and only if they are related but not internally. In light of these definitions—and the strong claim that whenever two or more substances are related, there exist monadic properties responsible for the relation—Abelard's theory may be characterized as the view that all relations are internal. If two or more subjects share all the same monadic properties, then they will necessarily share all the same relations. We might put Abelard's view in more contemporary terminology by saying that relations *supervene* on the exemplification of certain base properties, provided we add that these base properties are themselves always monadic.

That the base properties of relations (that is, relative-making characteristics) are always monadic seems to follow from the claim that they are a certain type of accident. Aristotelians typically, if not always, endorse the doctrine that particular accidents can belong to only one subject at a time.²⁶ Perhaps the most famous endorsement of this doctrine occurs in a passage taken from one of Leibniz's letters: "I do not think you will allow for an accident which belongs to two subjects at once."²⁷ But similar endorsements can be found in the writings of numerous medieval philosophers. To give just one example, consider how Thomas Aquinas responds in

²⁵My definitions are loosely based on definitions given by David Armstrong in *Universals and Scientific Realism*, 2 vols. (Cambridge, England: Cambridge University Press, 1978) vol. 1, 85.

²⁶See note 4 above.

²⁷Gottfried W. Leibniz, *Die philosophischen Schriften*, ed. Carl I. Gerhardt, 7 vols. (Berlin: Weidmann, 1875-1890), vol. 7, 486.

his *Sentences* commentary to the question whether it is possible for "numerically one and the same relation" to belong to two subjects at a time: "This cannot be, for one accident cannot belong to two subjects." Although I have not argued that Abelard endorses this familiar Aristotelian doctrine, it seems highly unlikely that he would deny it. Indeed, in the passage from the *Logica ingredientibus*, which we considered at length, Abelard appears to treat characteristics such as fatherhood and sonship as two distinct relative-making accidents.²⁹

Now in the case of relations such as being-father-of and being-son-of, it is admittedly difficult to identify the monadic characteristics on which they supervene. In the case of other relations, however, it is possible to identify plausible candidates. Consider, for example, Simmias's being taller than Socrates. Here it seems plausible to suppose that the relation of being-taller-than supervenes on Simmias's and Socrates's heights, since taken together they necessitate the relation. There is no possible world in which Simmias is, say, six-feet-tall and Socrates is five-feet-ten, and yet in which Simmias fails to be taller than Socrates.

It is important to recognize that monadic characteristics are not, by themselves, typically relative-making. Simmias's height, for example, does not by itself necessitate his being taller than anyone (or anything). On the contrary, it is only when Simmias's height is taken together with the height of another, say Socrates's, that both heights come under the description "relative-making." One might be tempted to respond that, although Simmias's height is not by itself relative-making, it is nonetheless *potentially* relative-making. Strictly speaking, however, I think

²⁸Thomas Aquinas, *Scriptum super libros Sententiarum*, ed. Pierre Mandonnet (Paris: L_theielluex, 1929) I, d.27, q.1, a.1, ad 2.

²⁹Abelard's treatment of fatherhood and sonship as distinct, monadic properties or accidents is even clearer in the *Dialectica*, where he says that a substance can take on the *form* of fatherhood if and only if some other substance simultaneously takes on the *form* of sonship (and vice versa). See D, 83 and following.

it is better to say that, by itself, Simmias's height is potentially a constituent of a relative-making set of characteristics—and to reserve *relative-making* as an attribute of subjects exemplifying monadic properties.

V

I have now set out what I take to be Abelard's theory of relations—at least in its essentials. There is, however, one further issue that still needs to be addressed. What, according to Abelard, is the ontological status of relations?

It is possible to accept the thesis that all relations are internal and still admit the existence of properties which attach to two or more subjects (what we have been calling many-place or polyadic properties). Such relations would, of course, be dependent on other properties, but that need not diminish their ontological status completely. Although this sort of view is possible, contemporary philosophers who acknowledge the existence of internal relations often try to reduce them to properties of the related terms. David Armstrong, for example, has adopted the following reductive principle for internal relations:

(5) If two or more subjects are internally related, then the relation is nothing more than the possession by the subjects of the properties which necessitate the relation.³⁰

According to Armstrong, internal relations are real, they just are not anything over and above subjects and their relative-making properties. In general he thinks that if one thing supervenes on another, then it is not ontologically distinct from that on which it supervenes (the so-called subvenient entity). He calls this view, that the supervenient is nothing additional to that on

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³⁰Armstrong, *Universals and Scientific Realism*, vol. 1, 86. For the sake of continuity with my earlier discussion, I have substituted "subjects" where Armstrong's principle has "particulars."

which it supervenes, the doctrine of the "ontological free lunch." You get supervenient entities but without having to add anything to your ontology.³¹

The moral Armstrong draws from his reductive principle is significant. Assuming, he says, that there are internally related subjects, it follows that relational predicates or concepts need not apply to the world in virtue of polyadic properties. In the case of Simmias and Socrates, for example, the two-place predicate "is taller than" may apply solely in virtue of their respective heights. And in the case of internally related subjects generally, n-place predicates may apply to the world solely in virtue of n subjects exemplifying monadic properties.³²

Now there are good reasons for thinking that Abelard himself accepts a reductive principle for internal relations. For one thing, if there really are relative-necessitating characteristics, then nothing is gained by postulating relations over and above them. We might push Abelard's analogy with goodness here. Aristotelians often accord goodness an ontologically "reduced" status, since good-making characteristics are themselves sufficient to ground the applicability of the predicate or concept good. Similarly, we might argue that if relative-making characteristics are sufficient to ground the applicability of relational concepts, then postulating relations over and above them serves no explanatory purpose.

Such considerations are not, I admit, anywhere explicitly formulated by Abelard. But they do not seem very far removed from his general approach to metaphysics and the philosophy

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³¹David Armstrong, *A World of States of Affairs* (Cambridge, England: Cambridge University Press, 1997), §2.1. See also David Armstrong, *Universals: An Opinionated Introduction* (Boulder: Westview Press, 1989), 100. ³²Armstrong, *Universals and Scientific Realism*, vol. 1, 85–7.

³³For a discussion of Aristotle's metaphysics of goodness see Scott MacDonald, "Aristotle and the Homonymy of the Good," *Archiv für Geschicte der Philosophie* 71 (1989): 150–74. For a discussion of how Aristotle's view was received by philosophers in the Middle Ages, see the articles collected in *Being and Goodness: The Concept of Good in Metaphysics and Philosophical Theology*, ed. Scott MacDonald (Ithaca, NY: Cornell University Press,

of language.³⁴ In any case, I have at least two other reasons for thinking that Abelard endorses a reductive principle for internal relations.

First of all, there is his use of the expression "holding another in view." As we have seen, Abelard introduced this way of speaking as an explanatory gloss. If two or more subjects are related, he suggests, then they hold one another in view. Now to say that two subjects—call them a and b—hold each other in view is literally just to say that a visually perceives b and vice versa. In such a case, however, it seems natural to deny that there is some entity—vision, or better, reciprocal vision—to which a and b are somehow jointly attached. There is just a's perceptual state or "viewpoint" (to borrow Abelard's term) and b's perceptual state or "viewpoint." Thus, when Abelard says of two related things that they "hold one another in view," this can plausibly be taken to indicate that there is nothing over and above the monadic properties of the relata.

The second reason is perhaps more compelling. Given Abelard's commitment to the view that relative-making characteristics comprise one of the ten categories, there does not seem to be any further room left in his ontology for relations. Relations cannot constitute a distinct category of being, for accidents are monadic properties. Furthermore, Abelard accepts Aristotle's division of the categories, and the only category that even remotely resembles relations is the one Aristotle calls relatives (*ta pros ti*). If there are relations, therefore, they must be reducible to monadic properties of their relata.

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³⁴For a good example of this approach see Abelard's discussion of universals in LI (7–32), an English translation of which occurs in Paul Vincent Spade, *Five Texts on the Medieval Problem of Universals* (Indianapolis: Hackett, 1994), 26–56.

We have now assembled all the pieces of Abelard's theory of relations. That theory may be fully characterized as the view that relations are internal and, for that very reason, reducible to monadic properties of related things. This sort of reductive theory can, perhaps, be stated more perspicuously using the so-called linguistic mode. Let the expression "xRy" mean "x stands in relation R to y." According to Abelard, if a statement of the form "xRy" is true, then what makes it true is nothing more than individual subjects and their monadic properties. Thus, the truthmaker for a statement such as "Simmias is taller than Socrates" consists of nothing more than Simmias, Socrates, and the pair of heights instantiated by them.

VI

In the twentieth century, the main objection to reductive theories of relations has come from logicians and philosophers of language. These philosophers maintain (almost to a person) that reductionism about relations is mistaken and that there exist irreducibly many-place properties or relations. Not surprisingly, their reason is derived from the nature of relational discourse: relational statements, we are told, or a certain subset of them (namely, those containing asymmetrical relational expressions) cannot be reduced to statements of any other type. The classic defense of this claim was given by Bertrand Russell in the *Principles of Mathematics*, but variations on it have been repeated by philosophers and logicians ever since. Indeed, since Russell, the argument from the irreducibility of relational discourse has virtually dominated all discussion between reductionists and non-reductionists about relations.

There are two different ways in which relational discourse might be irreducible. Russell himself argued that it is irreducible in meaning.³⁵ But an even stronger case can be made for the irreducibility of its logical form, since relational and non-relational statements belong to logical systems which have incompatible formal properties. As W.V.O. Quine and others have pointed out, first-order monadic predicate logic is decidable, whereas first-order predicate logic with relations is undecidable.³⁶ Again, C.I. Lewis and C.H. Langford have demonstrated that first-order monadic predicate logic allows for the derivation of certain quantification laws that are invalid in first-order predicate logic with relations.³⁷

Due to these sorts of considerations, some of which could not have been formulated before the twentieth century, philosophers no longer take reductive theories of relations seriously. Indeed, there is now widespread conviction that recent advances in logic have shown any type of reductive theory to rest on a confusion.³⁸ The following remarks by Steven Wagner are indicative of the current, anti-reductive climate of opinion: "Since relations are indispensable to modern logic and semantics, their inferiority to one-place properties can no longer be

³⁵Russell, *Principles of Mathematics*, §§212–14. The claim that relational statements are irreducible in meaning is clearly discussed and defended by Fred Wilson, "Weinberg's Refutation of Nominalism," *Dialogue* 8 (1969): 466–72.

³⁶W.V.O. Quine, *Methods of Logic*, rev. ed. (New York: Holt, 1960), 92. It is worth noting that, although *non-modal* first-order monadic predicate logic is decidable, *modal* first-order monadic predicate logic is undecidable (see Saul A. Kripke, "The Undecidability of Monadic Modal Quantification Theory" *Zeitschrift für mathematische Logik und Grundlagen der Mathematik*, vol. 8 [1962]: 113–16). Hence, even if relational statements cannot be reduced to ordinary non-relational statements, they may still be reducible to non-relational statements which are modal in character.

³⁷Lewis and Langford, *Symbolic Logic*, 387–8. Lewis and Langford's proof is often cited as evidence against the monadic conception. See, for example, Weinberg, *Abstraction, Relation, and Induction*, 62–3, n. 3; Grossmann, *Categorial Structure of the World*, 161–2; and Wilson, "Weinberg's Refutation of Nominalism," 472.

³⁸This theme is common in Russell's popular as well as his philosophical writings. See, for example, "Logic as the Essence of Philosophy," in *Our Knowledge of the External World: As a Field for Scientific Method in Philosophy*, rev. ed. (London: G. Allen and Unwin, 1926), 42–69.

seriously entertained."³⁹ Twentieth-century philosophers have not, of course, always appreciated how subtle and sophisticated reductive theories can be. But even when they have, it has not always resulted in a change of opinion. Consider, for example, the following remarks by Simon Blackburn (who takes Leibniz as his representative):

Philosophically relations are interesting because of the historic prejudice, given its most forceful expression by Leibniz, that they are somehow 'unreal' compared to the intrinsic, monadic properties of things. A way of putting the idea is that if all the monadic properties of the objects are fixed, then the relational properties are fixed as well (relations *supervene* on monadic properties). But in modern logic and science there is no justification for this claim. 40

In response to the standard 'logical' objections, the first thing to be said is that their main premise—the premise that relational propositions are irreducible—is perfectly compatible with the theory that I have attributed to Abelard. As I have formulated it, Abelard's theory entails that the truth-makers for statements of the form "xRy" will never consist of anything more than individuals and their monadic properties, and hence that one and the same fact can make true both a relational and a non-relational statement. On Abelard's view, for example, the fact that Simmias is six-feet-tall while Socrates is five-feet-ten makes true both the relational statement "Simmias is taller than Socrates" and the complex non-relational statement "Simmias is six-feet-tall and Socrates is five-feet-ten." It would be a mistake, however, to infer from this that Abelard regards relational statements as reducible to non-relational statements. After all, there are an indefinite number of facts that can make true "Simmias is taller than Socrates" but only one (complex) fact that can make true "Simmias is six-feet-tall and Socrates is five-feet-ten."

³⁹The Cambridge Dictionary of Philosophy, ed. Robert Audi (Cambridge, England: Cambridge University Press, 1995), s.v. "Relation".

⁴⁰Simon Blackburn, *The Oxford Dictionary of Philosophy* (Oxford: Oxford University Press, 1994), 325; emphasis added.

The main premise of the logical objections is consistent, therefore, with the theory that I have attributed to Abelard. But then, what should we say about the inference from claims about the irreducibility of relational discourse to the conclusion that there are irreducible relations or many-place properties? Russell and others appear to think that if relational statements are irreducible, that can only be because the facts that make them true contain an irreducibly relational constituent. But why suppose this is true? The inference here appears to be licensed only by the very dubious assumption that our conceptual framework displays an exact isomorphism to the structure of the world. There are, of course, many cases in which it is plausible to suppose that one and the same fact makes true logically distinct statements.

Consider, for example, the following:

- (6) Bill Clinton is president of the United States.
- (7) Bill Clinton is president of the United States *or* the Moon is made of green cheese.

These two statements clearly differ both in logical form and meaning. Nonetheless, it is plausible to suppose that they are made true by the same fact—namely, Bill Clinton's being president of the United States. But if this true, then why cannot the same sort of thing occur in the case of relational and non-relational statements?

Presumably, neither Russell nor anyone else would want to accept a naive theory of representation according to which a different type of fact exists for each irreducible type of statement. In the context of relations, however, Russellian arguments continue to surface, and hence philosophers continue to argue *as if* they accepted the naive theory apparently required by the argument. Reflecting on the type of theory that Abelard develops can help us to see that this is a mistake.

There is nothing in Abelard's theory as such that commits him to the reducibility of relational discourse. Nonetheless, we might still wonder whether Abelard is committed to it on other grounds. Ancient and medieval philosophers are often accused of lacking the concept of a relation in the contemporary sense (that is, the concept of a many-place or polyadic property). And if the accusation is true, there would seem to be independent grounds for supposing that Abelard is committed to the reduction of relational discourse.

There is, however, no good reason to suppose that the accusation is true. Contemporary philosophers sometimes speak as if no one could have possessed the concept of a polyadic property prior to the nineteenth and twentieth centuries—as if conceiving of relations in this way only became possible with advent of a formal logic of relations and a logic of multiple quantification. But surely this is mistaken. What recent advances in logic have made possible is not the concept of a polyadic property, but merely its representation within a formal system.

Now it is true that ancient and medieval philosophers lacked a formal logic of relations.

Nonetheless, they did recognize the logical structure of relational predications (this is a point that has often been overlooked). Abelard, for example, argues that a relational predicate is one whose true predication requires a comparison to something other than the subject of which it is

⁴¹Bertrand Russell is, perhaps, as responsible as anyone for this accusation, but it is now so widely accepted that at least one philosopher has written a history whose sole purpose is to explain how ancient and medieval philosophers could have failed to conceive of relations properly. See Weinberg, "The Concept of Relation: Some Observations on its History," in *Abstraction, Relation, and Induction*, 61–119. Weinberg describes his purpose in this essay as follows: "I shall attempt to set forth some of the ideas and causes which account for the slow realization of the *concept* of relation" (61, emphasis mine). And again: "There are also psychological, linguistic, and, perhaps, sociological conditions which contributed to the failure to *conceive* relation correctly. My concern, however, is with philosophical theories about the world and their effect on the *concept* of relation, rather than with causes that can, at the very best, be only conjectured" (62–3, emphasis mine). Weinberg specifically cites failure to conceive of relations properly as the best explanation for why ancient and medieval philosophers never developed a formal logic of relations or a logic of multiple quantification (62).

predicated.⁴² Following Aristotle, he gives "taller" (*maius*) as an example of this type of predicate, for when we assert of an individual, say Simmias, that he is taller—that is, when we predicate the predicate "taller" of him—we necessarily do so in comparison to someone or something else.⁴³ We do not say merely that Simmias is taller but that he is taller *than* Socrates, or Theatetus, or the average man. If we were to borrow on his behalf the notation of first-order logic, I think that it would be obvious that Abelard is characterizing relational expressions in much the same way that we do: a relational predicate "R" is such that a statement of the form "x is R" is more perspicuously represented by a statement of the form "xRy."

But perhaps the most compelling evidence for saying that Abelard has the concept of a polyadic property is this. Taken in its broadest possible sense, a polyadic property just is a property that belongs to two or more subjects. But Aristotelians are notorious for denying the existence of properties (or accidents) belonging to two or more subjects, as is clear from the passages I quoted earlier from Aquinas and Leibniz. Such denials, then, strongly suggests that not only Abelard, but Aristotelians in general conceive of relations polyadically. Presumably to say "there are no properties in the world that belong to two or more subjects" is just another way of saying "nothing in the world is isomorphic to the concept of a polyadic property."

So the accusation that ancient and medieval philosophers lacked the concept of relation appears to be mistaken. It is not only irrelevant to the evaluation of Abelard's theory (since nothing in his theory commits him to the reducibility of relational discourse), but even its

⁴²Abelard treats the nature of relational predications in connection with the first or Platonic definition of relatives (see LI, 201–2 and D, 83 and following). I have discussed Abelard's treatment of the first definition in "Medieval Theories of Relations before Aquinas: *Categories* commentaries, 510–1250 A.D.," 2 vols. (Ph.D. diss., University of Iowa, 1996), vol. 1, chaps. 2 and 4.

⁴³See LI, 202. Aristotle gives "taller" (*meizon*) as an example of a relational predicate at *Categories* 6a37.

historical accuracy is open to question. Given what Abelard and other Aristotelians say about the existence of many-place accidents and the nature of relational predication, it seems uncharitable to suppose either that they lacked the concept of a polyadic property or failed to recognize its irreducibility to concepts of any other type.

VII

I hope that I have already gone some distance toward changing the way in which philosophers commonly think about ancient and medieval theories of relations. There are, of course, serious questions still to be raised about the metaphysical claims underlying Abelard's theory, most notably the thesis that all relations are internal and the reductive principle for internal relations. I cannot attempt to provide a complete defense of these metaphysical claims here, but I do want to highlight some of the dialectical considerations favoring the type of reductive theory that Abelard develops.

First of all, there are considerations of ontological parsimony. All other things being equal, the ontology that postulates the fewest types of entity is to be preferred. If relations can be reduced in the way Abelard suggests, then we can avoid postulating the existence of many-place properties while at same time allowing many-place predicates and concepts.

Second, there are important phenomenological considerations that count in favor of a reductive theory. Relations or many-place properties do not appear to be among the things that are given to us in experience. We can single out Simmias and Socrates, and attend to their specific shapes and sizes. But what about the relations that hold between them? Certainly the relations do not literally exist between Simmias and Socrates, that is, in the place bounded by

their bodies. Indeed, it does not appear even to make sense to say that a relation such as being-taller-than has spatial location. But if relations are not in space, then by what mode of consciousness are they given?⁴⁴

At one time considerations of this sort led empiricist philosophers to say that relations are "the products of comparison" or "the results of thought." In the twentieth century, however, largely under the influence of Russell, these considerations have been ignored (in part, I suspect, because the existence of relations is generally taken for granted on the basis of logical considerations). Even Russell, however, eventually came to appreciate the difficulty of saying that we are directly acquainted with relations. As he remarked near the end of his life:

I think it is as certain as anything that there are relational facts such as 'A is earlier than B'. But does it follow that there is an object of which the name is 'earlier'? It is very difficult to make out what can be meant by such a question, and still more difficult to see how an answer can be found. There are certainly complex wholes which have a structure, and we cannot describe the structure without relation-words. But if we try to descry some entity denoted by these relation-words and capable of some shadowy kind of subsistence outside of the complex in which it is embodied, it is not at all clear that we can succeed. 46

Unlike non-reductive theories of relations, Abelard's theory does justice to the phenomenological data. According to Abelard, we do not "descry" any relations because there are none to be descried. Nevertheless, we can still be "as certain as anything" that there are relational facts because we are acquainted with individuals and the properties sufficient to ground our relational predicates or concepts.

⁴⁴For a more complete discussion of this type of objection, see Panayot Butchvarov, *Being qua Being: A Theory of Identity, Existence, and Predication* (Bloomington: Indiana University Press, 1979), 241–2. Evan Fales attempts to answer the phenomenological objections for the causal relation in *Causation and Universals* (London: Routledge and Kegan Paul, 1990).

⁴⁵See, for example, John Locke, *An Essay Concerning Human Understanding* (Oxford: Oxford University Press, 1975) bk. 1, chap. 15; and David Hume, *A Treatise of Human Nature*, ed. Lewis A. Selby-Bigge (Oxford: Clarendon Press, 1888), bk. 2, pt. 1, §v.

⁴⁶Bertrand Russell, *My Philosophical Development*, with an appendix by Allan Wood (New York: Simon and Schuster, 1959), 172–3.

Undoubtedly, the least attractive feature of a reductive theory such as Abelard's is its commitment to the thesis that all relations are internal. In the case of some relations, it is difficult to identify any properties, much less monadic properties, to which the relations can plausibly be regarded as internal. As I indicated earlier, this difficulty arises even for some of the relations that Abelard himself discusses, namely, causal relations such as being-father-of or being-son-of. But there are also many others, including most notably, spatial and temporal relations such as being-a-mile-from and being-earlier-than.

The difficulty in question has led many philosophers to regard these relations as, not only irreducible, but external. It is important, however, not to overestimate the force of this objection. One who postulates external relations still faces the phenomenological objections raised above. Moreover, postulating external relations appears to raise difficulties of its own. There are well-known reasons for thinking that external relations are not, by themselves, sufficient to account for the relatedness of individuals. To say that a relation such as being-a-mile-from is external is to deny that there are any monadic properties which necessitate its holding. But then merely postulating an external relation cannot account for Simmias's being a mile from Socrates. For Simmias, Socrates, and being-a-mile-from might all exist and yet it fail to be the case that Simmias is a mile from Socrates (for example, being-a-mile-from might be exemplified by another pair of entities). This type of objection is typically associated with the Absolute Idealist, F.H. Bradley, but it was known to philosophers during the Middle Ages and taken by many (for example, William Ockham) to be decisive. Contemporary philosophers have sought to avoid

⁴⁷For Bradley's use of this argument, see *Appearance and Reality*, 2nd ed. (Oxford: Clarendon Press, 1962), chap. 3. For Ockham's use of the argument, see Henninger, *Relations*, chap. 7 and texts cited in his notes. See also Marilyn McCord Adams, *William Ockham*, 2 vols. (Notre Dame: University of Notre Dame Press, 1987). For a

this type of objection by postulating the existence of states of affairs. ⁴⁸ But even if this strategy works, the need to invoke it suggests that a heavy metaphysical price must be paid for adopting an external theory of relations. Such a theory may require the introduction of not just one but two new types of entity, many-place properties and states of affairs.⁴⁹

There are, then, some strong dialectical considerations that can be marshaled in support of Abelard's reductive program. Of course, to make the program ultimately defensible, much more needs to be said about the reduction of apparently external relations (such as causal, spatial, and temporal relations). Abelard himself seems not to have spent much time worrying about how to reduce these specific types of relation, at least not in the parts of his commentaries devoted to Categories 7. There is a plausible explanation for this: Abelard comes early enough in the Aristotelian tradition to have made his primary concern, not the defense, but rather the proper formulation of a reductive theory of relations. For detailed treatment of these apparently external relations, we might suppose that we have to turn to philosophers who come later in the Aristotelian tradition such as Aquinas, Scotus, Ockham, and Leibniz.

I have no doubt that examining the works of later medieval philosophers will prove philosophically fruitful both for our understanding of relations and for the ultimate tenability of reductive approaches to them. It is important to say, however, that Abelard does have a systematic or methodological reason for leaving spatial, temporal, and causal relations out of his discussion of Categories 7. Although he is committed to denying the externality of these

contemporary defense of the argument, see Milton Fisk, Nature and Necessity: An Essay in Physical Ontology (Bloomington: Indiana University Press), 150-6.

⁴⁸See, for example, Armstrong, A World of States of Affairs and Olson, An Essay on Facts.

⁴⁹For some reasons against admitting states of affairs, see Panayot Butchvarov, "States of affairs," in *Roderick M*. Chisholm, ed. Radu Bogdan (Dordrecht, Holland: Kluwer Academic Publishers, 1986).

relations, he thinks that they are sufficiently different, both from one other and from the other internal relations we have considered, to justify their independent treatment. Indeed, following Aristotle, Abelard characterizes space, time, and causation (or more accurately, action and passion) as distinct categories of being.

Part of the interest of Aristotelian theories of relations is that they call our attention to deep metaphysical questions which have all too often been ignored in contemporary discussions of relations. Obviously there is no guarantee that any sequel to this study which further investigates the Aristotelian tradition will have a happy ending. Nonetheless, I hope to have said enough already to indicate the value of undertaking such further investigation.