

## TRADITIONAL VS. MODERN LOGIC: PREDICATION THEORY

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Hubien<sup>1</sup> criticizes authors who ignore mediaeval logic and emphasizes how much the mediaevals have anticipated modern ideas and developments. In fact, work in modern logic together with research in the history of mediaeval logic has increasingly confirmed the view of a unique *logica perennis* to such a point that, I think, the interesting task today is no longer to look for coincidences but rather to look for discrepancies and real discrepancies, if possible. In this note I wish to consider one such hopeless discrepancy: it has to do with the theory of *predication*.

This delicate topic of predication is often overlooked both by modern logicians and by historians of scholastic logic. Modern logicians criticize the traditional uses of the copula *est* in ways that are superficial and miss the central issue. Such, for instance, is Russell's complaint (quoted by Hubien) that in traditional logic the sentence "S est P" could mean identity, class-membership and class-inclusion. One can meet this criticism, as in fact Hubien does, by simply claiming that lack of distinctions does not necessarily bring about harmful confusions or inconsistencies. Hubien rightly points out that, for example, the lack of certain terms in French compared with Latin does not lead French speakers to confuse the corresponding objects. He also remarks that the mediaeval copula can be consistently analyzed.<sup>2</sup>

There is, however, a deeper problem, neither touched by

<sup>1</sup> Hubien, H.: "Logiciens médiévaux et logique d'aujourd'hui", in *Revue Philosophique de Louvain*, 75, 1977, 219-233.

<sup>2</sup> p. 228.

the Russell type of criticism nor solved by the consistency type of reply used by Hubien. In order to see this problem we must first agree on the nature of predication.

There is one proper or primary sense: we use a predicate (linguistic expression) as a label we "stick" on an object in order to "declare" to others a feature of the object. For example, we stick (now literally) the label "printed matter" on an envelope we give to the post-office. In this proper sense predication appears as a relation between a linguistic expression (written word or spoken word or in fact any other sort of sign) and an object (normally extralinguistic).

There is a secondary (I would say improper) sense of "predication", often found in the literature. In this sense what we predicate of the object is not the linguistic predicate but the alleged property (or attribute or whatever we want to call this alleged denotatum of the linguistic predicate). Thus, for example, we predicate of the envelope we turn in to the post office that it has the property of containing printed matter.

For our present purposes it is irrelevant which of the two described senses is to be ranked as primary or secondary, as proper or improper. Both can be understood and made sense of.

When the traditional logicians tell us, for example, that *homo praedicatur de Socrate* or that *animal praedicatur de Socrate*, we easily understand their use of predication relative to either of the two described senses. The reason why we understand it lies in the fact that we feel that the object for which the singular term Socrates stands *is* really human and *is* really animal.

The great surprise for a modern reader comes when he finds that *animal* is predicated of *homo* just as well as of Socrates. This is not an incidental case but a full, systematic theory of predication presented in such texts as *Analytica Priora I*, 27, Porphyry's *Isagoge* ch. 6, Aquinas' *In Perihermeneias*<sup>3</sup> and many others, through the entire history of

<sup>3</sup> Ed. Marietti, Rome, 1955, n. 126.

logic. It is not just *animal* predicated of *homo*, it is quite generally any “superior” predicated not only of its individuals but also of its subordinated universals.

How can we understand or make sense of, for example, *animal praedicatur de homine* as distinct from *animal praedicatur de Socrate*? I do not think there is any way of making sense of this use of “predication” relative to either of the two meanings described above. There are four possible combinations: the linguistic expression *animal* is attached (similarly to our post office “printed matter” label) to the linguistic expression *homo*, the linguistic expression *animal* is attached to or said of the property denoted by *homo*, the property denoted by *animal* is predicated of the linguistic expression *homo*, the property denoted by *animal* is said of the property denoted by *homo*. None of these four cases yields anything that might be regarded as true or even remotely meaningful. The truth of the matter is that neither the linguistic expression *homo* nor the property denoted by *homo* are entities that in any acceptable sense can be said *to be* animals. The traditional logicians and philosophers would surely agree with this, but then the puzzle is even greater.<sup>4</sup>

Apparently it took twenty centuries before someone dared to refuse such awkward uses or rather abuses of the word predication. This was Frege, who urged us either to drop the term predication altogether or to reserve it strictly for the case in which we really say something about the object in question.<sup>5</sup> The latter occurs exactly when, in Frege’s language, the object falls under the concept (property) denoted by the linguistic predicate. Frege could not understand how the rela-

<sup>4</sup> In the cited text, Aquinas suggests that if M is an ingredient of the essence of P, then we predicate M of P: *Quandoque aliquid attribuitur universali ratione ipsius naturae universalis, puta cum attribuitur ei aliquid quod ad essentiam eius pertinent . . . ut cum dicitur homo est animal*. This hints at a third sense of predication, which however fails to help us, inasmuch as we are still forced to predicate *animal* of something that is surely *not* an animal.

<sup>5</sup> *Man sollte mit Subjekt und Prädikat in der Logik aufräumen . . . oder man sollte diese Wörter auf die Beziehung des Fallens eines Gegenstandes unter einen Begriff (Subsumption) einschränken*, Frege’s letter to Husserl, 1906 in Frege’s *Briefwechsel*, Meiner, 1976, p. 103.

tion of subordination between two concepts (*homo est animal*) could be classified as predication. Of course, we cannot understand that either, and we wonder how could the traditional logicians understand it.

Frege's revolution in predication theory took place in a curious way. He rarely used the term predication. This however was not for lack of interest in the idea but simply because he found the word too closely identified with the traditional and wrong sense. From the two alternatives mentioned above—either drop the term or use it properly—he preferred, as a rule, the first. His revolution in predication theory was accomplished via the terminology *Merkmal-Eigenschaft* as early as in his 1884 *Grundlagen der Arithmetik* (§53).<sup>6</sup>

<sup>6</sup> Cf. my *Studies on G. Frege and Traditional Philosophy*, Reidel, 1967. Also my *Freges Ort in der Begriffsgeschichte*, in *Frege und die moderne Grundlagenforschung*, ed. by Ch. Thiel, Hain, 1975.