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ЦЕНТР ИНТЕЛЛЕКТУАЛЬНОЙ ИСТОРИИ
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**АРИСТОТЕЛЕВСКОЕ НАСЛЕДИЕ
КАК КОНСТИТУИРУЮЩИЙ ЭЛЕМЕНТ
ЕВРОПЕЙСКОЙ РАЦИОНАЛЬНОСТИ**

МАТЕРИАЛЫ МОСКОВСКОЙ МЕЖДУНАРОДНОЙ
КОНФЕРЕНЦИИ ПО АРИСТОТЕЛЮ

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Под общей редакцией В.В. Петрова



А К В И Л О Н

Rodrigo GUERIZOLI

THE QUESTION OF THE PLURALITY OF DEFINITIONS IN TWO MEDIEVAL COMMENTARIES ON ARISTOTLE'S *TOPICS**

The subject I would like to address in what follows concerns the reception of Aristotle's theory of definition in the Latin 13th and 14th centuries. Specifically, the issue I will explore arises right away, as soon as certain passages of the *Corpus Aristotelicum* are put side by side. For instance, in the sixth book of the *Topics* Aristotle writes:

“For in describing it <sc. grammar> as ‘a knowledge of writing’ he has no more given a definition than who has called it ‘a knowledge of reading’, so that neither of them has given a definition, but only he who makes both these statements, *since there cannot be more than one definition of the same thing*”¹.

In the beginning of the *De anima*, in turn, he says:

“*But the student of nature and the dialectician would define each of these differently*, e.g. what anger is. For the latter would define it as a desire for retaliation or something of the sort, the former as the boiling of the blood and hot stuff round the heart”².

The contrast between the passages is *prima facie* manifest. In the *Topics*, Aristotle commits to the view that for every item there is just one definition. In the *De anima*, in turn, he accepts that the same thing might be grasped from different perspectives, resulting in different definitions that seem to be equally legit-

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¹ Aristotle. *Topics* VI, 5, 142b 33–35 (the italics are mine). See also *Topics* VI, 4, 141a 31–35 and 141b 31–36; VI, 14 151a 33–34 and 151b 16–17; VII, 3, 154a 8–11.

² Aristotle. *De anima* I, 1, 403a 29 – b 1 (the italics are mine). See also *Posterior Analytics* II, 4, 91a 37–b 3; II, 8, 93a 9–13. For a further difference between the *Topics* and the *Posterior Analytics* concerning definitions, related namely to the possibility of demonstrating a definition, see Allen. *Syllogism, Demonstration, and Definition in Aristotle's Topics and Posterior Analytics*.

imate. We are left with a problem, thus, the problem whether there can be multiple definitions of the same thing.

The medieval tradition of reception of Aristotle knew that problem well and articulated it in an interesting systematic way, by referring it to some central aspects of Aristotle's thought. Within this framework, in the treatment of the problem certain views Aristotle maintained on definitions were connected with some of his key ideas on knowledge and essentialism.

One example of the medieval reflection on the problem of the plurality of definitions is found in John Buridan's question-commentary on the *Topics*³. In this text, which is probably an early work by this arts master who died in 1361, being nowadays widely acknowledged as "the most important philosopher at the University of Paris in the fourteenth century"⁴, our problem is raised while the author is commenting on the sixth book of the *Topics*, which is entirely devoted to definitions. In this context, Buridan introduces the following question:

"Whether there can be several definitions of the same thing, and whether in a definition one shall place both the genus and the differentia of the item one wishes to define"⁵.

I limit myself to the first problem. According to Buridan, Aristotle might seem to lead us here in opposite directions. On the one hand, one possible answer to that question lies on the connection between definitions, the causal aspect of knowledge, and the idea of a plurality of causes of the same thing. Accepting the uncontroversial view that definitions encode knowledge about things, Buridan presents the following argument in favor of the plurality of definitions:

"(...) for Aristotle says in the second book of the *Posterior Analytics* that a definition can be given in respect to any kind of effect. Since there are many causes of the same effect, it follows that there can be many definitions of the same effect"⁶.

³ Green-Pedersen. 'On the interpretation of Aristotle's *Topics* in the 13th century' and Green-Pedersen, *The Tradition of the Topics in the Middle Ages* remain the authoritative studies on the medieval tradition of commentaries on the *Topics*.

⁴ Thijssen & Zupko, 'John Buridan, Metaphysician and Natural Philosopher. An Introductory Survey', p. ix. See Zupko, *John Buridan* and Klima, *John Buridan* for reliable surveys of Buridan's philosophical thinking.

⁵ John Buridan, *Quaestiones Topicorum* VI.3 (ed. Green-Pedersen, p. 172, ll. 21-22): "Utrum eiusdem rei plures possint esse definitiones, et utrum in definitione debeat poni genus et differentia definiti".

⁶ John Buridan, *Quaestiones Topicorum* VI.3 (ed. Green-Pedersen, p. 173, ll. 8-10): "(...) nam dicit Aristoteles in II. Posteriorum, quod in quolibet genere esse potest dari definitio causati, et cum eiusdem causati plures sint causae, sequitur eiusdem causati

The chain of concepts here mobilized is clear. Definitions, it is assumed, embody knowledge. Knowledge, as stated in the *Posterior Analytics*, concerns the cause on which a fact depends or, more precisely, it regards the many causes of a certain effect — mentioning a well-known Aristotelian doctrine⁷. This plurality of causes grounds, in turn, why there could be many definitions of the same thing.

However, a different answer to that question may emerge from the same claim that associates definitions with knowledge. For, instead of stressing the causal aspect of knowledge, i.e., the idea that we know something only when we know its causes, accent can be put on knowledge's essential nature, i.e., in the fact that we believe that we know something only when we know its essence. From this perspective, to know means to capture that which makes something what it is, that is, its quiddity. Now, as soon as one recognizes that “to make something what it is” amounts in “to give something its proper identity”, an argument in favor of the uniqueness of definitions can be made. This is how Buridan presents it:

“(…) if there were many definitions of the same thing, there would be many beings of the same thing, which is false. The consequence is evident from the fact that the definition is a sentence indicating what is the being of a thing. Thus, if there were many definitions of the same, there would be many beings of the same, indicated by those definitions”⁸.

In short, depending on how one grasps the reach of the notion of knowledge one considers being attached to definitions, different Aristotelian answers regarding the plurality of definitions may arise.

Now I would like to present Buridan's answer to the problem as we find it in his commentary on the *Topics*. Yet, in order to shed more light on its specific

plures posse definitiones esse”. Concerning the exact Aristotle's passage Buridan must have had in mind, in his critical edition of the *Quaestiones Topicorum* N. J. Green-Pedersen registers “*locum non inveni*”. Although this is certainly correct, we may assume that, broadly speaking, the reference is to *Posterior Analytics* II.11-12.

⁷ See *Aristotle*. *Posterior Analytics* I, 2, 71b 9–12 (p. 507): “We think we know a fact without qualification, not in the sophistical way (i.e. *per accidens*), when we think that we know its cause to be its cause, and that the fact could not otherwise (...)”, and *Aristotle*. *Physics* II, 3, 195a 4–5 (p. 29): “Since many different things are called causes, it follows that many different things can all be causes, and not by virtue of concurrence, of the same thing”.

⁸ *John Buridan*. *Quaestiones Topicorum* VI, 3 (p. 173, 29 – 174, 2): “(…) si unius rei essent plures definitiones, tunc unius rei essent plura esse; hoc est falsum. Consequentia patet ex eo, quod definitio est oratio indicans, quid est esse rei; si ergo eiusdem essent plures definitiones, tunc eiusdem essent plura esse indicata per illas definitiones”.

contours, I will compare it to a solution presented in another medieval commentary on the same work, authored by an arts master from the last quarter of the thirteenth century, namely, Boethius of Dacia, known nowadays mostly due to his troubles with the bishop of Paris⁹.

At first, Buridan and Boethius answer the problem in similar ways. They distinguish between proper and improper uses of definition, and they defend that according to its proper use to the term corresponds just one expression. Buridan differentiates, accordingly, complete from incomplete definitions, asserting that “one must know that some definition is called a complete definition of a thing, some other an incomplete”, and that “of one thing there must be only one complete definition”¹⁰. When answering the same question, Boethius, in turn, refers to a “true and perfect” or, alternatively, to a “simply and absolutely perfect” definition, which is then distinguished from a definition, which, he says, is merely “perfect in its genus”¹¹. In respect to the former kind of definition he affirms: “speaking on the true and perfect definition, of one thing there is just one definition”¹². Both authors defend, thus, *cum grano salis*, the uniqueness of definitions.

So far, so good. But questions remain. Are the different uses of proper definition in both authors equivalent? Do their options against the plurality of proper definitions force them to renounce to any attempt of connecting definitions to a sort of knowledge about what causes the thing defined?

Beginning with the last question, Boethius’s answer to it is negative. He defends, indeed, that “true and perfect” definitions do encode causal knowledge. They must do this, he maintains, if they are meant to fulfill their proper task, that is, if they aim to provide “a perfect cognition of a thing according to its substance”. For this “perfect cognition” must be such that it “excludes any doubt”. It must, thus, he claims, be knowledge of all the causes of the *definiendum*¹³.

⁹ See *Ebbesen*. The Paris art faculty: Siger of Brabant, Boethius of Dacia, Radulphus Brito. P. 272-276. A study on Boethius’s philosophy analogous to the surveys offered by Zupko and Klima on Buridan (see n. 4) remains a desideratum of the research. For a classic contribution see *Pinborg*, ‘Zur Philosophie des Boethius de Dacia’.

¹⁰ *John Buridan*. *Quaestiones Topicorum* VI, 3, 174, 6-11: “(...) sciendum est, quod quaedam dicitur definitio completa rei, quaedam incompleta. Tunc sit prima conclusio: eiusdem rei plures possunt esse definitiones incompletae. (...) Secunda conclusio: unius rei debet esse unica definitio completa et non plures”.

¹¹ *Boethius of Dacia*. *Quaestiones super librum Topicorum*. VI, 14, 294, 18 – 295, 2: “Dicendum quod licet definitio, quae datur in genere causae formalis, et quae aggregat quasdam rei causas, possit dici perfecta in genere, tamen illa sola est simpliciter et absolute perfecta, quae omnes causas aggregat, quia illa sola omnem dubitationem excludit”.

¹² *Boethius of Dacia*. *Quaestiones super librum Topicorum* VI, 13, 293, 16–17: “Dicendum quod loquendo de vera et perfecta definitione unius rei una tantum est definitio”.

¹³ *Boethius of Dacia*. *Quaestiones super librum Topicorum* VI, 14, 294, 14 – 125, 33: “(...) Definitio datur causa innotescendi. Sed perfectam notitiam non facit, quamdiu de

Also for Buridan, “complete definitions” encode knowledge of what causes the thing defined. He maintains, however, that they do not embrace all the causes of the *definiendum*. Rather, it is enough for such definitions to precisely express what is essential to a thing, i.e., its quiddity. And this is what we get when through genus and specific differentia we grasp the thing’s form:

“(…) the complete definition includes everything that is essential. Thus, if it were not like that, it would necessarily either not include everything which is essential, and it would not be complete, or it would include, beyond what is essential, what is accidental, and it would be not be a good definition, for a good definition should be given only with regard to what is essential to the thing defined”¹⁴.

“(…) Aristotle says in the seventh book of the *Metaphysics* that the parts of the definition must be of the form, and I say that he comprehends form there as signifying the essential predicates <i.e. genus and differentia> (...)”¹⁵.

aliqua causa potest dubitari; perfecta enim cognitio excludit omnen dubitationem. Ergo debet aggregare omnes causas. (...) Cum autem dicitur esse definitio perfecta, quae aggregat omnes causas, intelligendum est de definitione rei, quae requirit omnes causas ad esse suum. (...) illa definitio, quae essentiam rei indicat accipiens solum illas causas, quae sunt in re, illa est perfecta in genere; sed illa, quae cum istis accipit etiam causas, quae sunt extra rem ut efficientem et finalem, perfectissima est, quia maxime notificat definitum”.

¹⁴ *John Buridan*. *Quaestiones Topicorum* VI, 3, 174, 6–11: “(...) definitio completa omnia essentialia includit; modo si esset aliqua alia ab illa, vel oporteret, quod non omnia essentialia definiti includeret, et sic non esset completa; vel quod ultra essentialia includeret accidentalialia, et sic non esset bona definitio ex eo, quod bona definitio debet dari solum per essentialia definiti”. In the *Quaestiones Topicorum* I, 7, 34, 5–23, the proper or quidditative definitions are contrasted both with “descriptions” and with “causal definitions”. In this context, quidditative definitions are presented as follows (34, 18–21): “(...) sunt tales, quae dantur per praedicata mere substantialia, et indicant solum quid est et non a quo [et] nec ex quo nec propter quid nec quale est nec quantum et sic de aliis praedicamentis accidentium”. The pattern reappears in Buridan’s treatise *De demonstrationibus*. See *John Buridan*. *Summulae*. *De demonstrationibus* 8, 2, 4, 34, 18–22: “Definitio quidditativa est oratio indicans praecise quid est esse rei per praedicata essentialia. Quae sunt genus definiti et differentia vel differentiae essentialia donec totalis definitio sit convertibilis cum definito. Et haec definitio respondetur praecise, propriissime et vere ad quaestionem ‘quid est?’”. For fine-grained analysis of the various kinds of definition Buridan presents, always observing the idea of a single, exactly proper, kind of definition, see *Klima*. ‘Buridan’s Theory of Definition in his Scientific Practice’, *Klima*. *John Buridan*, P. 62–68, and *Biard*. ‘Comment definer un accident?’, who refers also to passages from the *In Metaphysicam Aristotelis Quaestiones* and from the treatise on the *locis dialecticis*.

¹⁵ *John Buridan*. *Quaestiones Topicorum* VI, 3, 174, 6–11: “(...) Aristoteles dicit VII. *Metaphysicae*, quod partes definitionis debent esse formae, dico, quod per formam ibi

Thus, Boethius and Buridan defend that for each definable thing there is only one proper definition. In this respect both acknowledge the lesson taught in the *Topics* as strictly Aristotelian¹⁶. They maintain, furthermore, that such proper definitions encode knowledge of the cause of the thing defined. Nevertheless, they understand the reach of this knowledge much differently. For Boethius, it encompasses all the causes of the defined thing, so that the variety of causal definitions that can be offered of one thing are somehow unified in one complete and, accordingly, proper definition. For Buridan, in turn, it relates only to the form of the *definiendum*. Thus, from Boethius's point of view, Buridan's "complete definition" is merely "perfect in its genus". It is not, though, a "true and perfect" definition, for it does not take into account the totality of causes of the *definiendum*. In contrast, from Buridan's perspective, Boethius's model of definition does not meet any acceptable standard of unity. His "true and perfect" definitions would be judged, in truth, as nothing but a long conjunction of definitions that refer to each of the causes of the *definiendum*.

In the end, the disagreement between Boethius and Buridan occurs, I suggest, because they understand differently the task definitions must fulfill. Admittedly, they agree that proper definitions must transmit both essential and causal knowledge of the thing defined. Yet, for Boethius, this corresponds to an absolute and "perfect cognition of a thing", that is, for him definitions must comprise a sort of epistemic *non plus ultra* knowledge of the *definiendum*. For Buridan, on the contrary, proper definitions, in order to keep their unity, should be limited to the indication of that which intrinsically makes the *definiendum* what it is, that is, its quiddity, which is clearly also a certain kind of cause, grasped by means of the combination of genus and specific differentia.

intelligit praedicata essentialia <sc. genus et differentia> (...)"'. See also *John Buridan. Quaestiones Topicorum* VI, 3, 175, 15–18: "Unde Aristoteles in prooemio Metaphysicae, cum dicit, quod quaedam definitio datur per formam et quaedam per materiam, per formam intellexit praedicatum quidditativum, quod bene apparet in exemplo (...)". As a matter of terminology, although both refer to the form of the *definiendum*, Buridan differentiates complete or quidditative definitions from causal definitions that grasp the formal cause of the *definiendum*. Thus, for instance, according to the former kind of definition, one comprehends *homo est animal rationale* as a (quidditative) definitional proposition, while, according to the latter, the analogous (causal) definitional proposition would be *homo est animal habens animam rationalem* (see *Biard. 'Comment définir un accident?'* P. 208-212). Evidently, in both cases what is transmitted is a kind of causal knowledge of the *definiendum*. On forms as causes in Buridan see *John Buridan. In Metaphysicam Aristotelis Quaestiones* V, 1, fol. XXVIrb–XXVIIrb.

¹⁶ For a contemporary interpretation of Aristotle similar to Boethius's and Buridan's see *Schiaparelli. 'Epistemological Problems in Aristotle's Concept of Definition: Topics vi 4'*. P. 129. For an alternative reading see *Angioni. 'Defining Topics in Aristotle's Topics VI'*. P. 160-161.

Departing from *prima facie* conflicting Aristotelian texts, I tried to reconstruct the way two arts masters from the medieval period dealt with the problem of the plurality of definitions. This has allowed us, first, to articulate the problem from a systematic perspective, on the basis of doctrines such as the Aristotelian essentialism and his views on the causal aspect of knowledge. Next, I presented the convergences and divergences of the solutions to the problem proposed by John Buridan and Boethius of Dacia. Although both defend the uniqueness of definitions, and that definitions transmit knowledge about the cause of the thing defined, they diverge on how proper definitions shall be construed. Whereas Boethius demands that they must encompass knowledge of all the causes of a thing, Buridan thinks it is sufficient for them to grasp the thing's form. This happens, I claimed, because proper definitions represent for Boethius the most perfect epistemic state one can possess about a thing, which must therefore embrace, not necessarily in a unified manner, knowledge of both its intrinsic and extrinsic causes, whereas Buridan considers them just as a unified tool for exactly grasping the quidditative and intrinsic aspects of the things. Certainly, if I had to choose which position seems to stay closer to Aristotle's original intention, I would pick Buridan's.

BIBLIOGRAPHY

- Allen, James, 'Syllogism, Demonstration, and Definition in Aristotle's *Topics* and *Posterior Analytics*', *Oxford Studies in Ancient Philosophy*, 40 (2011), p. 63-90.
- Angioni, Lucas, 'Defining Topics in Aristotle's *Topics* VI', *Philosophos*, 19 (2014), p. 151-193.
- Aristotle, *De anima. Books II and III (with passages from Book I)*, trans. by D.W. Hamlyn (Oxford: Clarendon Press, 1993).
- Aristotle, *Physics. Books I and II*, trans. by W. Charlton (Oxford: Clarendon Press, 1992).
- Aristotle, *Prior and Posterior Analytics*, ed. by W. D. Ross (Oxford: Clarendon Press, 1957).
- Aristotle, *Topica*, trans. by E.S. Foster (Cambridge, MA: Harvard University Press, 1960).
- Biard, Joël, 'Comment définir un accident? Le double statut de l'accidentalité selon Buridan et ses conséquences sur la théorie de la définition', *Revue Thomiste*, 112 (2012), p. 205-231.

- Boethius of Dacia [Boethius Dacus], *Quaestiones super librum Topicorum*, ed. by Niels Jørgen Green-Pedersen, *Corpus Philosophorum Danicorum Medii Aevi*, VI.1 (Copenhagen: Gad, 1976).
- Ebbesen, Sten, 'The Paris art faculty: Siger of Brabant, Boethius of Dacia, Radulphus Brito' in *Routledge History of Philosophy. Volume III. Medieval Philosophy*, ed. by J. Marenbon (London/New York: Routledge, 1998) pp. 269-290.
- Green-Pedersen, Niels Jørgen, 'On the interpretation of Aristotle's Topics in the 13th century', *Cahiers de l'Institut du Moyen Age Grec et Latin*, 9 (1973), p. 1-46.
- Green-Pedersen, Niels Jørgen, *The Tradition of the Topics in the Middle Ages. The Commentaries on Aristotle's and Boethius' 'Topics'*, (München & Wien: Philosophia Verlag, 1984).
- John Buridan [Johannes Buridanus], *Quaestiones Topicorum*, ed. by Niels Jørgen Green-Pedersen, *Artistarium*, 12 (Turnhout: Brepols, 2008).
- John Buridan [Johannes Buridanus], *Summulae. De demonstrationibus*, ed. by L.M. de Rijk, *Artistarium* 10-8 (Groningen & Haren: Ingenium Publishers, 2001).
- John Buridan [Johannes Buridanus], *In Metaphysicam Aristotelis Quaestiones*, ed. J. Badius (Paris, 1518) (repr. Frankfurt a.M.: Minerva, 1964).
- Klima, Gyula, 'Buridan's Theory of Definition in his Scientific Practice' in *The Metaphysics and Natural Philosophy of John Buridan*, ed. by Johannes M.M.H. Thijssen & Jack Zupko, *Medieval and Early Modern Science*, 2 (Leiden / Boston / Köln: Brill, 2001), p. 29-47.
- Klima, Gyula, *John Buridan*, (Oxford: Oxford University Press 2009).
- Pinborg, Jan, 'Zur Philosophie des Boethius de Dacia. Ein Überblick', *Studia Mediewistyczne* 15 (1974), p. 165-185.
- Schiaparelli, Annamaria, 'Epistemological Problems in Aristotle's Concept of Definition: *Topics* vi 4', *Ancient Philosophy*, 31 (2011), p. 127-143.
- Thijssen, Johannes M.M.H. & Zupko, Jack, 'John Buridan, Metaphysician and Natural Philosopher. An Introductory Survey' in *The Metaphysics and Natural Philosophy of John Buridan*, ed. by Johannes M.M.H. Thijssen & Jack Zupko, *Medieval and Early Modern Science*, 2 (Leiden / Boston / Köln: Brill, 2001), p. ix-xvii.
- Zupko, Jack, *John Buridan. Portrait of a Fourteenth-century Arts Master* (Notre Dame: University of Notre Dame Press, 2003).