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An Example of Rearrangement of an Aristotelian Text

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THEMISTIUS' PARAPHRASE OF *POSTERIOR ANALYTICS* 71a17-b8

AN EXAMPLE OF REARRANGEMENT OF AN ARISTOTELIAN TEXT^{*}

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RÉSUMÉ : L'auteur met en évidence la façon dont Thémistius, dans sa paraphrase, réorganise les parties du texte des lignes 71a17-b8 des Seconds Analytiques. Par une analyse détaillée du propos d'Aristote dans ces lignes, il montre que la réorganisation proposée par Thémistius est fidèle à l'esprit du texte aristotélicien, et s'appuie vraisemblablement sur des indices externes dont disposait le paraphraste.

ABSTRACT : The author shows how Themistius, in his paraphrase, reorganizes the parts of Posterior Analytics 71a17-b8. Through a close analysis of Aristotle's text, he demonstrates that this reorganization rests on a sound reading of Aristotle, and that, in all likelihood, it was prompted by external evidence that Themistius had at his disposal.

As I pointed out elsewhere,¹ ancient commentators seem to have ascribed special importance to the first chapter of the *Posterior Analytics*, in which Aristotle claims, among other things, to offer the solution to Meno's famous paradox of inquiry.² In his paraphrase of the chapter, Themistius uses a number of complex paraphrastic

^{*} A first version of this paper was read at the Annual Conference of the *Classical Association of Canada*, at Memorial University, St. John's (Newfoundland), in May 2007. A revised version was presented at a special conference on the ancient commentators, organized by Peter Adamson at King's College London, London (United Kingdom), in February 2008. I would like to thank Peter Adamson, Amos Bertolacci, Sarah Francis, Marwan Rashed, Richard Sorabji, Robert B. Todd, and especially Fiona Leigh and Robert W. Sharples, for insightful comments and criticisms.

See M. ACHARD, "Philoponus' Commentary on Posterior Analytics, I.1, 71a17-b8. A Translation", Dionysius, 24 (2006), p. 139-148; ID., "Jean Philopon, Commentaire aux Seconds Analytiques, 12, 4-20, 2", in J.-M. NARBONNE, P.-H. POIRIER, ed., Gnose et Philosophie. Mélanges en hommage à Pierre Hadot, Québec, PUL, 2008 (in press); and ID., "La paraphrase de Thémistius sur le chapitre I 1 des Seconds Analytiques", Cahiers des études anciennes, 43 (2006), p. 7-11.

^{2.} On the importance of the *Meno* in the reception of Platonic doctrine in later Antiquity, see H. TARRANT's engrossing book, *Recollecting Plato's* Meno, London, Duckworth, 2005.

procedures,³ which stand in contrast with most of his rather straightforward explanations of the rest of the treatise.⁴ In this paper, I would like 1) to show how Themistius, in lines 3,15-5,1 of his paraphrase, reorganizes the parts of Aristotle's text in lines 71a17-b8 of the Posterior Analytics, in which the solution to Meno's paradox of inquiry is proposed, 2) to argue that Themistius' rearrangement is not unfaithful to the text of the *Posterior Analytics*, and makes sense as a reading of Aristotle, and 3) to draw attention to the fact that Themistius' interpretation seems to rest on an overlooked and probably valuable piece of external evidence about the identity of the proponents and nature of a specific logical puzzle. As will be seen, lines 3,15-5,1 of Themistius' paraphrase are quite informative about some of the most sophisticated aspects of the commentator's "working method"⁵ and approach to the Aristotelian texts, and they help us to get a better idea of what has been called "the specific modalities of Themistius' paraphrastic technique".6 They also give a clear illustration of the fact, which is now becoming more widely recognized, that Themistius' paraphrases are often "far more informative than the designation 'paraphrase' might suggest".7

First, let me recall briefly the parts and content of *Posterior Analytics* I.1. In this chapter, Aristotle does not yet deal with the main subject of his treatise, *i.e.*, science and the demonstrative syllogism or deduction.⁸ Rather, as J. Barnes rightly puts it in his commentary, the chapter "considers in general terms some of the conditions for the acquisition of knowledge",⁹ without saying explicitly how this topic relates to the rest of the treatise.¹⁰ The text can be divided into seven parts. In the first (71a1-11),

^{3.} I have tried to bring to light some of them in my "La paraphrase de Thémistius sur les lignes 71 a 1-11 des *Seconds Analytiques*", *Dionysius*, 23 (2005), p. 105-116.

^{4.} It is well known that, generally speaking, Themistius' "paraphrase of the *de Anima* represents a somewhat more ambitious project than that undertaken for the *Posterior Analytics*" (R.B. TODD, *Themistius. On Aristotle On the Soul*, London, Duckworth, 1996, p. 4). But Themistius' paraphrase of *Posterior Analytics* I.1 is more akin to his paraphrase of the *De Anima*. See also O. BALLÉRIAUX, "Thémistius et l'exégèse de la noétique aristotélicienne", *Revue de philosophie ancienne*, 7 (1989), p. 200-201. On Themistius in general, see G. VERBEKE, "Themistius", *Dictionary of Scientific Biography*, 13 (1976), p. 307-309; and R.B. TODD, "Themistius", *Catalogus Translationum et Commentariorium*, 8 (2003), p. 56-103. For a good study of the paraphrase as a literary genre, see A. PIGNANI, "La parafrasi come forma d'uso strumentale", in W. HÖ-RANDNER et al., ed., XVI. Internationaler Byzantinistenkongress, Akten, II.6, Vienna, Österreichischen Akademie der Wissenschaften, 1982, p. 21-32.

M. CAPONE CIOLLARO, "Osservazioni sulla *Parafrasi* di Temistio al *De Anima* aristotelico", in C. MORE-SCHINI, ed., *Esegesi, Parafrasi e Compilazione in Età Tardoantica*, Atti del Terzo Convegno dell'Associazione di Studi Tardoantichi, Naples, D'Auria, 1995, p. 80 (my translation).

P. VOLPE CACCIATORE, "La parafrasi di Temistio al secondo libro degli Analitici Posteriori di Aristotele", in C. MORESCHINI, ed., Esegesi, Parafrasi e Compilazione in Età Tardoantica, p. 390 (my translation).

^{7.} R. SORABJ, "General Introduction", in *Philoponus. Against Aristotle, on the Eternity of the World*, translated by C. Wildberg, London, Duckworth, 1987, p. 4. See also ID., *The Philosophy of the Commentators 200-600 AD*, Vol. 1, *Psychology*, London, Duckworth, 2004, p. 8.

The best study of the subject-matter of the *Posterior Analytics* is still J. BRUNSCHWIG, "L'objet et la structure des *Seconds Analytiques* d'après Aristote", in E. BERTI, ed., *Aristotle on Science*, Padova, Antenore, 1981, p. 61-96.

^{9.} J. BARNES, Aristotle. Posterior Analytics, 2nd Edition, Oxford, Clarendon Press, 1994, p. 81.

For an interesting attempt to explain how, in one respect at least, chapter I.1 is essential to what follows, see M.T. FEREJOHN, "Meno's Paradox and De Re Knowledge in Aristotle's Theory of Demonstration", *History of Philosophy Quarterly*, 5, 2 (1988), p. 99-117.

Aristotle argues that "all teaching and all learning (mathêsis) that involves the intellect come about from pre-existing knowledge" (71a1-2). In the second (71a11-17), he states that "it is necessary to have prior knowledge in two ways" (71a11), because sometimes we must know that things are, and sometimes we must know what they are. In the third (71a17-24), he "slightly restricts his general thesis of 71a1-2, but without contradicting it",¹¹ when he explains that, sometimes, a new knowledge may come about not only from things that are previously known, but also from other things, like facts about sensible particulars, that one gets to know, through senseperception, "at the same time" as the thing that one learns (71a18).¹² In the fourth (71a24-29), he explains that, in some cases at least, even though we have not grasped a deduction vet, we must nevertheless say that, in a sense, we know the conclusion of that deduction, and that, in another sense, we do not know it. In the fifth (71a29-30), he claims, without giving further explanations, that the point made in the fourth part makes it possible to avoid "the paradox in the Meno". In the sixth (71a30-b5), he dismisses a solution proposed to a logical puzzle that arises from a question like : "Do you know that every pair is even or not" (71a31-32). Finally, in the seventh (71b5-8), he restates the point made in the fourth part, *i.e.*, that it is possible for someone who learns to know what he is learning in one way, and to not know it in another. The last five of these seven parts are tightly knit,¹³ and it will be useful to quote them in full :

(3) It is possible to know when some things are previously known, and when one gets the knowledge (*lambanonta tên gnôsin*) of other things at the same time, for example, everything that happens to be under a universal of which one has knowledge. For that every triangle has angles equal to two right angles, one already knew (*proeidenai*); but that this thing in the semicircle is a triangle, one has known at the same time as he did the induction (*epagein*).¹⁴ For the learning (*mathêsis*) of some things happens in this way, and the

W. DETEL, Aristoteles Analytica Posteriora, Vol. II, Berlin, Akademie Verlag, 1993, p. 13 (my translation). See also R.D. MCKIRAHAN, Principles and Proofs. Aristotle's Theory of Demonstrative Science, Princeton, Princeton University Press, 1992, p. 183.

^{12.} Another way to understand this part of the text, which would not imply a restriction on Aristotle's part of his general thesis, would be to say that, in it : "Aristotle modifies the concept of pre-existent cognition to the extent that at least in one case the 'pre-existent' cognition occurs in conjunction with the cognition of a new fact" (F.A.J. DE HAAS, "The Discriminating Capacity of the Soul in Aristotle's Theory of Learning", in R. SALLES, ed., *Metaphysics, Soul and Ethics in Ancient Thought. Themes from the Work of Richard Sorabji*, Oxford, Oxford University Press, 2004, p. 321-344). I think that both readings are defensible.

^{13.} It is obvious that, in one respect at least, these parts form a distinct section of the text. But, in another respect, parts (1), (2), and (3), on the one hand, and parts (4), (5), (6), and (7), on the other, could be seen as two distinct sections, inasmuch as parts (1), (2), and (3) deal with pre-existing knowledge, whereas parts (4), (5), (6), and (7), form a kind of parenthesis to part (3), since they answer questions raised by this part.

^{14.} On some of the questions raised by this use of the verb *epagein* (also in 71a24), which doesn't seem to square with the usual meaning of the verb in Aristotle, see W.D. ROSS, *Aristotle's Prior and Posterior Analytics*, Oxford, Clarendon Press, 1949, p. 506, and especially R.D. MCKIRAHAN, "Aristotelian *Epagoge* in *Prior Analytics* 2.21 and *Posterior Analytics* 1.1", *Journal of the History of Philosophy*, 21 (1983), p. 1-13 (for a good recent account of Aristotle's standard view on induction, see M. TUOMINEN, *Apprehension and Argument : Ancient Theories of Starting Points for Knowledge*, Dordrecht, Springer, 2007, p. 59-65). Here, as M. GIFFORD puts it, some commentators take *epagein* "to indicate the actual process of drawing the syllogistic inference to the singular conclusion that [this thing in the semicircle has angles equal to two right angles], while others have it indicating the non-inferential process by which we apprehend the singular minor that [this thing in the semicircle is a triangle]" ("Lexical Anomalies in the Introduction to the

extreme term is not known through the middle term — all that are in fact particulars and are not said of any subject. (4) Before an induction is performed, or before a deduction is grasped, it must perhaps be said that one knows in one way, but not in another (tropon men tina isôs phateon epistasthai, tropon d' allon ou^{15}). For the thing that one did not know without qualification if it is, how did he know without qualification that it has its angles equal to two right angles ? But is it clear that one knows in this sense : he knows universally, but he does not know without qualification (katholou epistatai, haplôs d' ouk epistatai¹⁶). (5) Otherwise, the paradox in the Meno (to en tôi Menôni aporêma) will arise; for either one will learn nothing, or he will learn what he knows (ê gar ouden mathêsetai ê ha oiden). (6) For we must not speak like some who attempt to solve [the following puzzle] (ou gar dê, hôs ge tines enkheirousi luein, lekteon) : "Do you know that every pair is even or not ?" When you say "yes", they produce a pair which you did not think existed and hence did not think was even. They solve [the puzzle] by saying that they do not know that every pair is even, but what they know to be a pair. However, they know what they have a demonstration of and of what they have assumed [an attribution], and they did not assume [an attribution] of everything that they know is a triangle or a number, but of every number or triangle without qualification. For no premiss is taken such as "what you know is a number" or "what you know is a rectilinear figure", but [one takes premisses that apply] to every case. (7) But nothing, I think, prevents one from in a sense knowing what he learns (manthanein) and in another sense being ignorant of it. For what is absurd is not that one knows in some way what he is learning, but that he knows it

Posterior Analytics, Part I", Oxford Studies in Ancient Philosophy, 19 [2000], p. 170). The exact meaning that must be given to the verb, however, has no direct bearing on our present inquiry.

^{15.} One should note in this sentence "l'uso retorico di *isôs* [...] che ha la funzione di formula di *politesse* per addolcire la secchezza di una presa di posizione troppo brusca" (M. MIGNUCCI, L'argomentazione dimostrativa in Aristotele. Commento agli Analitici Secondi I, Padova, Antenore, p. 13). Aristotle has no doubt about the truth of his claim, and in fact, *isôs* could be translated here by "surely" (see I. BEKKER, *Ind. Ar.*, 347b33-39).

^{16.} According to M. GIFFORD, this use of epistasthai haplôs constitutes, like the use of epagein a few lines earlier, a "lexical anomaly", because it "violates both Aristotle's formal definition [of 'knowing without qualification' in *Posterior Analytics* [.2] and his otherwise uniform usage [in the rest of the *corpus*] of this crucial technical term" ("Lexical Anomalies in the Introduction to the Posterior Analytics, Part I", p. 171). Gifford may very well be right, but this point needs not concern us here (for an attempt to answer Gifford's arguments, see S. LABARGE, "Aristotle on 'Simultaneous Learning' in APo I.1 and APr II.21", Oxford Studies in Ancient Philosophy, 27 [2004], p. 177-215). I would like, however, to express my genuine sympathy for Gifford's approach, which leads him to conclude that the opening chapter of the Posterior Analytics "simply cannot have come from Aristotle without having suffered significant editorial modification at some point early in its career" (ibid., p. 163). That this kind of hypotheses is not being formulated more in the case of the Corpus Aristotelicum is generally due, not to a praiseworthy scholarly circumspection on the part of many modern commentators working on Aristotle, but to their unwillingness to adopt, in some respects at least, a serious historical perspective. For an approach which, in some ways, is similar to Gifford's, see my "Tradition et histoire de l'aristotélisme. Le point de vue des indices externes dans le problème de l'authenticité du traité des Catégories", Laval théologique et philosophique, 56, 2 (2000), p. 307-351, in which I carefully show (but without drawing too definite conclusions) that external evidence strongly suggest that the Categories are inauthentic, a fact that should have at least some methodological consequences regarding the way commentators use and quote the treatise. I also systematise and enumerate on pages 319-322 of this paper, with numerous references, the main pieces of evidence that prove that, following Aristotle's death, his writings were "in the hands of people who, to say the least, did not bestow on them the care and attention which was given [...] to Plato's works" (F. GRAYEFF, "The Problem of the Genesis of Aristotle's Text", Phronesis, 1 [1955-1956], p. 108). I will be the first one to admit that this point is nothing new. It was thoroughly demonstrated decades ago by pioneering scholars (see especially I. DÜRING, Aristotle in the Ancient Biographical Tradition, Göteborg, Almqvist & Wiksell, 1957, which is still the best study on the subject), but its consequences remain too often ignored (for no good reason, as far as I can see) in scholarship on Aristotle.

in *this* way, *i.e.*, as he is learning it and in the way that he is learning it (71a17-b8; my translation).¹⁷

In his paraphrase, Themistius proposes the following reformulation of these parts of chapter I.1 :

 $(3)^{18}$ But it is possible for the one who learns to know some things immediately and upon first contact, for example, everything that is under some universal of which we have previous knowledge. For the one who knows that every triangle has its interior angles equal to two right angles, but who does not know that this drawing there is a triangle, will be able, when he sees the drawing for the first time, to learn it and to know it at the same time, but not in the same respect. Rather, he will be able to learn that it is a triangle, and he will be able to know that it has its angles equal to two right angles. For he knows now that it is a triangle, but he had previous knowledge, through the universal, that it has its angles equal to two right angles. For there are two things in regard to the knowledge of this drawn triangle : that it is a triangle, and that it has its angles equal to two right angles. But that it is a triangle, one must see and learn in this way, and that it has its angles equal to two right angles, someone can grasp through a deduction. For of this fact, there is not, properly speaking, a perception through the senses, but an account and a demonstration a demonstration by means of the knowledge of the universal, since this attribute belongs to every triangle, and this is a triangle. (4) Therefore, when the triangle is still hidden in the tablet, it must be said that one knows in one way that the triangle has its angles equal to two right angles, but that he does not know in another. For we must neither say that we know without qualification that it has its angles equal to two right angles, this triangle that we do not even know to be a triangle, nor, on the contrary, that we are ignorant without qualification of the fact that it has its angles equal to two right angles, this triangle about which we know the universal, which is more common.

(6) For these reasons, therefore, we must not fear the arguments that the sophists call "veiled" (tous logous hous enkekalummenous onomazousin hoi sophistai). [They ask :] "do you know that every pair is even ?" Once we have said "yes", [they say :] "but you do not know this pair that we are hiding in our hands, and you know neither that it is a pair nor that it is even, so that you both know and do not know the same thing" (to auto oidas te kai ouk oidas). But this is not strange at all. For one knows the universal property of every pair. But if this pair itself exists, I am ignorant of that fact. Therefore, I do not know this particular thing (this particular thing, I am ignorant of it), but I know the universal, and I am ignorant of the particular thing. In the same way, even though I know that every man is an animal, I know neither if the man who is now walking in Sardes is a man, nor if he is an animal. For we must not, as some try to do, answer the sophists in this way : "we do not know that every pair is even, but what we know to be a pair". For this answer is completely unsound, since they know what they have a demonstration of and of what they have assumed [an attribution], and they did not admit the demonstration with such an addition : "this pair, that we know to be a pair, is even", but [the demonstration speaks] without qualification of every pair and of every triangle. (7) But nothing, I think, prevents

^{17.} I am using the text of W.D. ROSS, *Aristotle's Prior and Posterior Analytics*. It should be pointed out that these lines of the *Posterior Analytics* have a parallel passage at *Prior Analytics*, 67a8-30. This last passage, however, is also filled with difficulties, and it is therefore hard to see the exact relationships between it and the lines that I have just translated. This may explain why (with the notable exception of W. DETEL, *Aristoteles Analytica Posteriora*, Vol. II, p. 30 ff.) it is seldom quoted or referred to in general commentaries on the first chapter of the *Posterior Analytics*.

^{18.} I have numbered the parts of Themistius' text according to the way that they relate to Aristotle's text, which means, among other things, that the same number can appear twice, if Themistius paraphrases one part in two different places.

it being the case that those who learn know in some way the things that they are learning, and are ignorant of it in some other way, and nothing prevents them from having previous knowledge of an element of a thing, and from seeking another.

(5) It is by using the same distinctions that we must also answer the argument in the Meno. This argument tries to show that it is impossible to search because every person who searches must search for the thing that he does not know * * *.¹⁹ For even if by chance the person runs into the thing, he will not know that this thing is the thing that he is searching for. But if every inquiry is for the sake of learning, and it is not possible to search, we will not be able to acquire knowledge, so that we are left with the other of the two possibilities : either we learn absolutely nothing, or we learn only the things that we know. For it is also in this way that we are able to recognize things, when we discover that these things are those that we are searching for, just like in the case, I suppose, of a household slave who has run away : if we do not know him, we cannot search for him, but if we know him, we are able both to search for him and to discover him. In response to this argument, Plato seems rather to concede the sophism that is in it. For he almost agrees that we learn these things that we know, since he assumes that acts of learning are recollections and that learning is nothing but recognizing. But we say that these things are different, and we say that we learn these things that we did not know before, and that we know these things that we knew before. (7) And absolutely nothing prevents the one who learns, when he is learning, to know the thing [that he is learning], but according to a different point of view and in a different way (and we have said before how this was possible) (3,15-5,1; my translation).²⁰

Perhaps the most striking feature of the paraphrase of these lines, from a structural point of view, is the way Themistius rearranges the parts of Aristotle's text. Instead of dealing with "the paradox in the *Meno*" (part 5) after the explanation of how we can both know and not know the conclusion of a demonstration that we have not yet grasped (part 4), he chooses to comment on the paradox in the last section of his rewriting of chapter I.1, *i.e.*, after treating of the logical puzzle that arises out of the question : "Do you know that every pair is even or not ?" (Part 6). He also proposes two separate reformulations of part (7) : one after his explanation of part (5), and another one after his explanation of part (6) — as was to be expected, because this order conforms with the text of the *Posterior Analytics*. So, in Themistius' paraphrase, the parts (3), (4), (5), (6), and (7) of Aristotle's text are rearranged in the following sequence : (3), (4), (6), (7), (5), (7).

In the proem to the *Paraphrase*, Themistius explains why he sometimes felt it appropriate to rearrange the parts of Aristotle's text. In fact, he ties this exegetic pro-

^{19.} According to L. Spengel (see M. WALLIES, *Themistii. Analyticorum Posteriorum paraphrasis*, CAG V.1, Berlin, G. Reimer, 1900, p. 4), we must add here to the text : "and that it is not possible to search for what we do not know". The conjecture makes sense.

^{20.} I am using the text of M. WALLIES, *Themistii. Analyticorum Posteriorum paraphrasis* (on the existing Greek manuscripts of the paraphrase, see R.B. TODD, "An inventory of the Greek manuscripts of Themistius' Aristotelian commentaries", *Byzantion*, 67 [1997], p. 268-276). There is still no complete translation of Themistius' paraphrase of the *Posterior Analytics* in any modern language, although an English translation is scheduled to appear soon in the *Ancient Commentators on Aristotle* series (*www.kcl.ac.uk/kis/schools/hums/philosophy/aca/*). There exists, however, a Latin translation, made by Gerard of Cremona in the 12th century from an Arabic translation (this work has been edited by J.R. O'DONNELL, "Themistius' Paraphrasis of the *Posterior Analytics* in Gerard of Cremona's Translation", *Mediaeval Studies*, 20 [1958], p. 239-315). Also, I have translated into French the whole of chapter I.1 in my "La paraphrase de Thémistius sur le chapitre I 1 des *Seconds Analytiques*", p. 7-11.

cedure to the main goal that he is trying to achieve in all his paraphrases.²¹ His chief intent, he makes it clear, is not to give exhaustive commentaries and to propose detailed explanations of Aristotle's treatises since, according to him, there already existed in his time a fair number of commentaries that were fulfilling this office (1, 2-7).²² Rather, he explains, it appeared to him useful, in order to facilitate the revision of Aristotle's books (1, 10-11),²³ "to abstract the meanings (boulêmata) of what is written" in them, and "to make these meanings known quickly, with the conciseness of the Philosopher" (1, 7-10). Such a goal, he adds, is especially fitting in the case of the Posterior Analytics, which is even more cryptic than the other Aristotelian treatises (1, 16-17), due to Aristotle's "usual brevity of speech (*brakhulogia*)" (1, 18), and also because, in this treatise, "the arrangement of the main points has not been sorted out" (hê taxis tôn kephalaiôn ou diakekritai ; 1, 18-19). Despite the relative vagueness of this last remark,²⁴ the general point made by Themistius is clear : the plan of Aristotle's text is not always apparent or neatly brought out²⁵; and this is why, goes on to explain Themistius, "you must excuse me if I appear to interpret some matters at rather great length (it was impossible to state them more clearly in an equivalent number [of words]), and with others to make readjustments (metharmozesthai) and rearrangements (metatithenai) so that each of the main sections can be clearly demarcated (perigraphein)" (1, 19-21).²⁶

The fact that Themistius is rearranging the points raised in lines 71a29-b8 of the *Posterior Analytics* in order to demarcate clearly parts (5) and (6) is thus an attempt on his part to make Aristotle's text more readily intelligible, and in all fairness, his attempt can at once be deemed, in one respect at least, successful, because it does dispel a source of uncertainty brought about by the extreme abruptness of the transitions

^{21.} For an excellent general description of Themistius' paraphrastic method, see R.B. TODD, *Themistius. On Aristotle On the Soul*, p. 2-7; and ID., "Thémistios : paraphrases exégétiques", in R. GOULET, ed., *Dictionnaire des philosophes antiques V*, Paris, Éditions du CNRS (forthcoming). Themistius also gives important indications about his methodology in his *Or.* 23, 89,20-90,5 (Downey-Norman) (this oration has now been translated into English by R.J. PENELLA, *The Private Orations of Themistius*, Berkeley, Los Angeles, London, University of California Press, 2000).

^{22.} In the case of the *Posterior Analytics*, Themistius certainly had in mind Alexander of Aphrodisias' commentary, of which only fragments have survived (they have been usefully collected by P. MORAUX, *Le commentaire d'Alexandre d'Aphrodise aux* Seconds Analytiques *d'Aristote*, Berlin, Walter de Gruyter, 1979). It should be noted that we do not have any fragment of Alexander's commentary on chapter I.1.

^{23.} This practical aim explains why, as R.B. TODD has rightly observed, "the paraphrases of Themistius [...] belong both to the history of philosophical exegesis and to the history of philosophical pedagogy" (*Themistius on Aristotle Physics 4*, London, Ithaca, Duckworth, 2003, p. 1).

^{24.} Which could allow for different translations, such as the one proposed by R.B. TODD: "the sequence of the main sections is not separately identified" (*Themistius. On Aristotle On the Soul*, p. 3).

^{25.} Themistius is certainly right about this point. This is even true for the large discussion of chapters II.1-10, which obviously form a unity within the *Posterior Analytics*. On the many problems raised by the plan of these closely interrelated chapters, see O.M. GOLDIN, *Explaining an Eclipse : Aristotle's* Posterior Analytics 2 1-10, Ann Arbor, University of Michigan Press, 1996 ; and M. ACHARD, *Épistémologie et pratique de la science chez Aristote. Les* Seconds Analytiques *et la définition de l'âme dans le* De Anima, Paris, Klincksieck, 2004.

^{26.} I am borrowing R.B. TODD's translation of this passage (*Themistius. On Aristotle On the Soul*, p. 3-4 ; italics are mine).

between parts (4), (5) and (6). Let me quote once again lines 71a27-32, which cover the last sentence of part (4), part (5), and the first sentence of part (6) :

(4) [...] But is it clear that one knows in this sense : he knows universally, but he does not know without qualification. (5) Otherwise, the paradox in the *Meno* will arise ; for either one will learn nothing, or he will learn what he knows. (6) For we must not speak like some who attempt to solve [the following puzzle] (*ou gar dê, hôs ge tines enkheirousi luein, lekteon*) : "Do you know that every pair is even or not ?"

The main problem with this section of the text is that it is not at all clear, on a first reading at any rate, how part (6) relates to part (5). The relationship between the two parts is problematic, because the start of part (6) is elliptic (the words that I have put in square brackets, which suggest that part (6) deals with a new difficulty, are of course absent from the Greek text), and because it contains the conjunction gar, which might create the impression that part (6) is a direct continuation of part (5), and so still has to do with "the paradox in the Meno".²⁷ In fact, such is the understanding of, for instance, as good a commentator as M. Mignucci, who, in his excellent commentary on the first part of the Posterior Analytics, writes that Aristotle, in what I have labelled as part (6), "tries to dismiss an alternative solution to the puzzle [raised in the Meno]".28 So, according to Mignucci, Aristotle would be addressing only one logical puzzle ("the paradox in the Meno") in parts (5) and (6) of chapter I.1, and he would be presenting two solutions to this one and only difficulty : his own in part (4) (and part [7], which restates part [4]) and someone else's in part (6). But Themistius, in his rewriting of the text, makes it clear that this cannot be the case. According to him, parts (5) and (6) deal with two distinct difficulties, and so part (6) does not have to do anymore with "the paradox in the *Meno*". In fact, we could hypothesise that it is precisely because Themistius wanted to make this last point even clearer that he chose, as we have seen, to treat part (6) before part (5).

So Themistius does make the text easier to understand, by dispelling the source of uncertainty that is brought about by the abruptness of the transitions between parts (4), (5) and (6); and thus, in one respect at least, his paraphrase achieves its goal. But, at this point, we can still ask a very basic (and relevant) question : is Themistius' interpretation on this point a correct reading of Aristotle ?

In order to answer this question using internal evidence only, we have to try to reconstruct, as completely as possible, the detail of Aristotle's explanations in parts (3) to (7). To start with the obvious, the syllogism that Aristotle has in mind in part (3) is the following²⁹:

^{27.} It should however be remembered that *gar* can refer "not to the immediately preceding sentence, but to something further back" (J.D. DENNISTON, *The Greek Particles*, Oxford, Clarendon Press, 1934, p. 63).

^{28.} M. MIGNUCCI, L'argomentazione dimostrativa in Aristotele. Commento agli Analitici Secondi I, p. 14 (my translation). Such is also the understanding of W. DETEL, who writes, in the first sentence of his "Spezielle Anmerkungen" on parts (6) and (7), that "Die Lösung des Problems im Menon, die Aristoteles im Schlußteil von Kapitel I 1 (71a30-b8) erwähnt und kritisiert, beruht auf einem *finiten* Verständnis von allgemeinem Wissen (Wissen des Allgemeinen)" (Aristoteles Analytica Posteriora, Vol. II, p. 36).

^{29.} See BARNES, Aristotle. Posterior Analytics, p. 85-86, who argues convincingly (contra T.L. HEATH, Mathematics in Aristotle, Oxford, Clarendon Press, 1949, p. 37-39, and W.D. ROSS, Aristotle's Prior and

A1 : Every triangle has angles equal to two right angles.

A2 : This thing in the semicircle is a triangle.

A3 : This thing in the semicircle has angles equal to two right angles.

And what Aristotle claims, in part (3), is that, when someone sees the triangle in the semicircle for the first time, the following chain of events comes about :

B1 : (One already knew that) Every triangle has angles equal to two right angles.

B2 : (One learns [or "gets the knowledge"] that) This thing in the semicircle is a triangle.

B3 : (One learns³⁰ that) This thing in the semicircle has angles equal to two right angles.

Next, in part (4), Aristotle introduces a distinction. Before one sees for the first time that the thing in the semicircle is a triangle, and before one grasps the syllogism A1, A2, A3, we can, according to him, both say that :

C1 : (One knows that) Every triangle has angles equal to two right angles.

C2 : (One does not know without qualification that) This thing in the semicircle is a triangle.

C3 : (One does not know <u>without qualification</u> that) This thing in the semicircle has angles equal to two right angles.

And that :

D1 : (One knows that) Every triangle has angles equal to two right angles.

D2 : (One does not know without qualification that) This thing in the semicircle is a triangle.

D3 : (One knows <u>universally</u> that) This thing in the semicircle has angles equal to two right angles.³¹

Posterior Analytics, p. 505-506) that this is the only possible interpretation of the text, whose meaning is crystal clear anyway. On the nature of the mathematical examples used in the *Posterior Analytics*, see W. KULLMANN, "Die Funktion der mathematischen Beispiele in *Aristoteles Analytica Posteriora*", in E. BERTI, ed., *Aristotle on Science*, p. 245-270.

^{30.} The fact that, according to Aristotle, one *learns* both B2 and B3 is perfectly obvious from what is said in parts (3) and (7). Themistius' explanation, in his paraphrase of part (3), to the effect that "the one who knows that every triangle has its interior angles equal to two right angles, but who does not know that this drawing there is a triangle, will be able, when he sees the drawing for the first time, to *learn (manthanein)* it and to *know (gnôrizein)* it at the same time, but *not in the same respect (ou kata tauton)*. Rather, he will be able to *learn (manthanein)* that it is a triangle, and he will be able to *know (gnôrizein)* that it has its angles equal to two right angles" (3, 16-20), makes sense from a certain point of view, but does not correspond to the perspective adopted by Aristotle in lines 71a17-b8 of the *Posterior Analytics*. Themistius himself, in his paraphrase of the rest of the passage, appears to drop the distinction (this is especially evident in his two rewritings of part [7]).

^{31.} As R.W. Sharples has pointed out to me in an email, this formulation, taken at face value, might seem self-contradictory. But, as M. GIFFORD has observed, "to know *universally*" is here usually understood by commentators as meaning "to know *potentially*" ("Lexical Anomalies in the Introduction to the *Posterior Analytics*, Part I", p. 170-171); and "context" makes it clear that, in the last sentence of part (4), what is known universally (or potentially) is "the particular triangle drawn in the semicircle" (*ibid.*, p. 170). Aristotle himself, in lines 67a19-20 of the parallel passage of the *Prior Analytics* (see above, n. 17), explicitly asserts that, in a case like the one described in part (4), "one knows *by universal knowledge* that C [*i.e., a particular triangle* (see 67a14)] contains two right angles, but he does not know it by particular knowledge" (*hôs têi katholou oide to C hoti duo opthai, hôs de têi kath' hekaston ouk oiden*). For a formulation of D3 similar to mine, see P. PELLEGRIN, *Aristote. Seconds Analytiques*, Paris, Flammarion, 2005, p. 343, n. 13.

Since part (3) deals with what happens *when* someone sees the triangle, and part (4) deals with what is the case *before* this happens, we can depict the relationship between B3, C3 and D3 with the following diagram :

Before one sees the triangle When one sees the triangle and grasps the syllogism
C3 ______ B3
D3 _____

Then, in part (5), Aristotle asserts that, "Otherwise, the paradox in the *Meno* will arise ; for either one will learn nothing, or he will learn what he knows". It is easy to be misled by the seemingly straightforward character of this sentence, and to not see that its second part ("for either one will learn nothing, or he will learn what he knows") actually does not readily fit with Meno's account of the paradox in Plato's dialogue, or with Socrates' immediate reformulation of it. There would certainly be a lot to say about this fact, which is never pointed out in modern commentaries on the *Posterior Analytics*,³² but I shall indicate here briefly only a couple of points, which are relevant to my topic.

In the Meno, the paradox is introduced by Meno through a series of questions :

How can you search for (*zêtein*) something, Socrates, when you do not know at all what that thing is ? What sort of thing, amongst those that you do not know, will you put forth as the object of your search ? Or even supposing that, by an extraordinary chance, you hit upon it, how will you know that this is the thing which you did not know ? (80D6-10; my translation).³³

^{32.} This may not be as surprising as it seems, since, as M. GIFFORD has rightly observed, "students of Aristotle have", generally speaking, "evinced very little interest" in lines 71a17-30 ("Lexical Anomalies in the Introduction to the *Posterior Analytics*, Part I", p. 168, n. 3). One will find, however, a sketchy discussion in S. LABARGE, "Aristotle on 'Simultaneous Learning' in APo I.1 and APr II.21", p. 190-192, which tries to show that Aristotle gives "a very curious reading of Meno's paradox" (p. 190). In this paper, LaBarge also tries to explain the meaning of the dilemma expressed through the formula "for either one will learn nothing, or he will learn what he knows" (p. 200-201 and 213-214), but I find his explanations far-fetched and, on the whole, quite implausible. In what follows, I will favour an interpretation that doesn't contradict the apparent meaning of Aristotle's assertion.

^{33.} I am using the OCT text. As R.W. SHARPLES explicates : through these questions, "Meno produces [in fact] two arguments to show that one cannot enquire after something if one does not know it already [...] : (1), one will not know where to direct one's search, and (2), one will not recognise the answer even when one has found it" (*Plato. Meno*, Warminster, Aris and Phillips, 1985, p. 142). It is "impossible to say who originated this *eristikos logos* [...]. It bears an obvious similarity to the sort of questions that are asked in the *Euthydemus*, and are explained by Socrates (277e sq.) as verbal quibbles. One thinks of the Megarians, and in particular of Eubulides (Diog. L. II, 108)" (R.S. BLUCK, *Plato's Meno*, Cambridge, Cambridge University Press, 1964, p. 272).

Then, it is restated by Socrates in the following way, which turns it into a dilemma³⁴ :

I understand, Meno, what you mean. Do you see what a debater's argument you are introducing — that a man cannot search for (*zêtein*) either that which he knows or that which he does not know? For he cannot search for what he knows, because he knows it, and in that case he does not need to search for it; nor again can he search for what he does not know, since he does not know what he is to search for (80D10-E5; my translation).³⁵

A first difference between these two versions of the puzzle and Aristotle's gloss to the effect that "either one will learn nothing, or he will learn what he knows", is that Aristotle's formulation of the second branch of the dilemma ("[...] or he will learn what he knows"), actually does not correspond to anything in the two above quoted accounts of Meno's paradox. Here, we must see that, when Aristotle mentions the possibility that one "will learn what he knows", he is in fact referring, not to a part of the paradox as expressed by Meno or Socrates, but rather to Plato's well-*known* solution to it, which is developed in the following pages of the *Meno* (80E-86C), and according to which, as Themistius puts it in his paraphrase of part (5), "acts of learning are recollections and [...] learning is nothing but recognizing" (4, 29-30),³⁶ a solution which would indeed seem to entail that one "will learn [only] what he knows".³⁷ So Aristotle's reference to Meno's paradox of enquiry, in his gloss to the effect that "either one will learn nothing, or he will learn what he knows", is actually to be found only in the first horn of the dilemma, *i.e.*, in the possibility that "one will learn (*manthanein*) nothing".

A second difference, which the very wording of this first branch of the dilemma makes clear, is that Aristotle understands the puzzle to be, first and foremost, about "learning" (*manthanein*), whereas Meno's and Socrates' actual formulations only speak about "searching for" or "inquiring" (*zêtein*), and not about "learning" (*manthanein*). It is interesting to note that Themistius was obviously aware of this discrepancy, because, in his paraphrase, he tries to make the bridge between Meno's actual argument (which, as he summarises correctly, tries to show that "it is impossible to

^{34.} See M. CANTO-SPERBER, Platon. Ménon, Paris, Flammarion, 1991, p. 247, n. 104.

^{35.} According to this reformulation, as R.W. SHARPLES once again explains : "Either (3) one knows something, in which case there is no point in searching for it, or else (4) one does not, in which case one will not know what to look for" (*Plato. Meno*, p. 143). It should be pointed out that, in this reformulation, (3) does not correspond to anything in Meno's formulation, and that "(4) is a restatement of (1) rather than of (2)" (*ibid.*). For a very stimulating philosophical analysis of the disjunction postulated here by Socrates, see M.M. MCCABE, *Plato's Individuals*, Princeton, Princeton University Press, 1994, p. 53 ff.

^{36.} This is the common view, espoused by Aristotle and Themistius, but for an interesting defence of the idea that it is the distinction between knowledge and true belief, and not the theory of recollection, that, according to Plato, provides the solution to the paradox, see G. FINE, "Inquiry in the *Meno*", in R. KRAUT, ed., *Cambridge Companion to Plato*, Cambridge, Cambridge University Press, 1992, p. 200-226.

^{37.} Once again, this is the common view, of which Aristotle and Themistius are proponents, but for a vigorous defence of the idea that Plato's theory of recollection is actually designed to explain not ordinary concept acquisition, but only real or philosophical knowledge (a view which would seem to imply that, for Plato, it is possible to "learn", at least in some sense, some things that we do not know [*i.e.*, ordinary concepts]), see D. SCOTT, "Platonic Anamnesis Revisited", *Classical Quarterly*, 37 (1987), p. 346-366; and ID., *Recollection and Experience : Plato's Theory of Learning and Its Successors*, Cambridge, Cambridge University Press, 1995, p. 13-85.

search [*zêtein*]" [4, 18-19]) and Aristotle's emphasis on "learning" by writing, as we saw, the following :

But if every inquiry (*zêtêsis*) is for the sake of learning (*manthanein*), and it is not possible to search (*zêtein*), we will not be able to acquire knowledge (*ginôskein*), so that we are left with the other of the two possibilities : either we learn absolutely nothing, or we learn only the things that we know (4, 21-24).

I won't speculate here as to the reasons why Aristotle thought that Meno's paradox had to do, first and foremost, with the impossibility of "learning", and not primarily with the impossibility of "searching for".³⁸ It is sufficient, here, to stress that this was his view, because, from this fact, we can formulate a hypothesis as to why he felt it appropriate, at this point of his text, to allude to the paradox. In part (3) he claims, as we have seen, that when someone sees the triangle in the semicircle for the first time, the following chain of events comes about :

B1 : (One already knew that) Every triangle has angles equal to two right angles.

- B2 : (One learns that) This thing in the semicircle is a triangle.
- B3 : (One <u>learns</u> that) This thing in the semicircle has angles equal to two right angles.

But if the conclusion of Meno's argument — as Aristotle understands it — was true, and if learning was impossible, then the last two events of this chain could not happen, and so the whole case that Aristotle is putting forward as a possibility in part (3) would in fact be an impossibility. So Aristotle felt that he had to handle Meno's paradox of inquiry, in order to secure his point.

But how is Meno's paradox related to the difficulty and putative solution to it presented in part (6) ? Once again, let us start with the obvious. The case presented in part (6) clearly involves the following syllogism, which is formally identical to the one presented in part (3) :

E1 : Every pair is even.

E2 : This is a pair.

E3 : This is even.

And it involves the following chain of events, which is formally similar to the one presented in part (3) :

F1 : (One claims that he knows that) Every pair is even.

F2: (After making this claim, he is shown a pair that he did not know to exist, and so he learns that) This is a pair.

F3 : (And he also learns that) This is even.

^{38.} It is of course perfectly true that, since Meno's paradox has to do with the impossibility of "searching for", it must also have to do, on some other level, with the impossibility of "learning", but even then, it can legitimately apply "only to 'learning by inquiry', not to 'learning' by being instructed" (R.W. SHARPLES, *Plato. Meno*, p. 143; see also J.M.E. MORAVCSIK, "Learning as Recollection", in G. VLASTOS, ed., *Plato*, Vol. I, Garden City, New Jersey, Anchor Books, 1971, p. 54). So Aristotle's claim that the paradox has to do with learning *simpliciter* is still problematic. This point also shows that Themistius' argument (that I have just quoted), by which he attempts to make the bridge between Meno's argument and Aristotle's emphasis on "learning", is unsound, since from the fact that "every inquiry is for the sake of learning, and it is not possible to search", it does not follow that "we will not be able to acquire knowledge". Even if it were true that "it is not possible to search", we could still be able to acquire knowledge by being instructed.

Since Aristotle does not really say what was, exactly, the problem that some people saw with this case, we have to infer it from the solution that some other people wanted to supply in response to it. This solution, as Aristotle writes, consists in "saying that they do not know that every pair is even, but what they know to be a pair". In other words, it consists in changing the major premiss of the syllogism to something like :

G1 : What we know to be a pair is even.

But of course, the only reason why someone would want to change the major premiss of syllogism E1, E2 and E3 is because a kind of inconsistency or contradiction was seen between it and the other parts of the syllogism. And indeed, in the chain of events F1, F2 and F3, there could seem to be a contradiction between F1, on the one hand, and F2 and F3, on the other. The inconsistency can be seen in two ways, depending on where we start, either from F1 or from F2 and F3, but it is the same inconsistency. For, if we start from F1, and if it is true that "Someone knows that *every* pair is even", then how can it also be true, as F2 and F3 imply, that there is one pair that he does not know, and so that he does not know to be even? Conversely, if we start from F2 and F3, and if it is true that there is at least one thing that the person does not know to be a pair and to be even, then how can it also be true, as he claims in F1, that he knows that "*every* pair is even"? For how can you know that "every pair is even" if you don't know every pair ?³⁹ This is why some people, who thought that this was a real difficulty, wanted to solve it by avoiding the claim that "They know that every pair is even", *i.e.*, by changing the major premiss.

But clearly, this difficulty is not the same as Meno's puzzle.⁴⁰ This can be shown from at least two considerations. First, the people who put the difficulty forward do think, and contrary to the conclusion of Meno's puzzle (as Aristotle understands it, at any rate), that learning is possible.⁴¹ In fact, the difficulty that they want other people to see rests on the assumption that it is possible to learn. For it is precisely because one can *learn*, after contending that he knows that, for instance, "Every cat is a mammal", about a cat that he did not know to exist and to be a mammal, that there might seem to be a difficulty with his assertion that he knew that "Every cat is a mammal". So, according to the proponents of the difficulty in part (6), learning is definitely not an impossibility. Second, the challenge that the difficulty poses to Aristotle's claim in part (3) is not the same as the one posed by Meno's puzzle. As I

^{39.} For an essentially similar, but superficially different account of the puzzle, see J. BARNES, *Aristotle. Posterior Analytics*, p. 87.

^{40.} As was already seen by Barnes (*ibid.*), M. GIFFORD ("Lexical Anomalies in the Introduction to the *Posterior Analytics*, Part I") and S. LABARGE ("Aristotle on 'Simultaneous Learning' in APo I.1 and APr II.21"). But, in what follows, I will offer two new arguments to prove the fact.

^{41.} As R.W. Sharples has pointed out to me, it could be claimed that Meno's paradox rests on the same assumption, since, according to one way of understanding the paradox, if it were not assumed that learning (or discovery) is possible, it would not be a paradox in the first place. But such an understanding of the nature of the paradox is clearly not at play in Aristotle's text, and so it does not affect the argument that I am about to make. The only aspect of Meno's paradox that, in *Posterior Analytics* I.1, Aristotle takes into consideration, is that learning by inquiry is impossible, which Aristotle takes to mean that "one will learn nothing".

have just recalled, in part (3), Aristotle claims that, when someone sees the triangle in the semicircle for the first time, the following chain of events comes about :

- B1 : (One already knew that) Every triangle has angles equal to two right angles.
- B2 : (One <u>learns</u> that) This thing in the semicircle is a triangle.
- B3 : (One <u>learns</u> that) This thing in the semicircle has angles equal to two right angles.

And, as we have also just seen, because, according to Aristotle, it aims to show that learning is impossible, Meno's puzzle threatens the possibility of B2 and B3, *i.e.*, of the minor premiss and of the conclusion. But of course, since the difficulty discussed in part (6) takes it for granted that learning is possible, it cannot and does not threaten the possibility of B2 and B3. Rather, as the solution proposed by the people who think that the difficulty is real shows, it threatens the possibility of the major premiss, B1, *i.e.*, it threatens the possibility of knowing that "Every X is Y", because, as the putative solution would have us to believe, all that we can legitimately say is something like "What we know to be a X is a Y".⁴² Interestingly, this fact makes it possible to formulate another hypothesis as to why Aristotle felt, after dealing with Meno's paradox in part (5), that it was now appropriate to handle this other difficulty in part (6). He needed to dispel it, in order to secure the possibility of another part of the case that he puts forward in part (3), *i.e.*, the possibility of knowing that "Every triangle has angles equal to two right angles".⁴³

We can therefore conclude that Themistius is not being unfaithful to Aristotle when, in his rewriting of *Posterior Analytics* I.1, he demarcates sharply between parts (5) and (6), in order to place emphasis on the fact that, despite some appearances to the contrary, there are really two distinct difficulties in these two parts. This is what internal evidence show. But what is interesting is that Themistius, who provides us with the earliest systematic treatment of the *Posterior Analytics* to be preserved in its entirety,⁴⁴ seems to have had another kind of reason for thinking that parts (5) and (6) present two different difficulties or logical puzzles. He appears to be relying on external evidence,⁴⁵ for he says, in his paraphrase of part (6), where the

^{42.} This is why, in my opinion, M. GIFFORD is right to call the difficulty discussed in part (6) the "Paradox of Knowing Universals" ("Lexical Anomalies in the Introduction to the *Posterior Analytics*, Part I", p. 169). This formula encapsulates the gist of the paradox.

^{43.} Aristotle also offers his solution to the "Paradox of Knowing Universals" at *Prior Analytics* 67a8-30. For a good analysis of the latter text, see M. GIFFORD, "Aristotle on Platonic Recollection and the Paradox of Knowing Universals", *Phronesis*, 44 (1999), p. 1-29. I owe this reference to Jacques Brunschwig.

^{44.} For two very useful overviews of the fortune of the Aristotelian commentaries, see C. D'ANCONA COSTA, "Commenting on Aristotle : From Late Antiquity to the Arab Aristotelianism", in W. GEERLINGS, C. SCHULZE, ed., *Der Kommentar in Antike und Mittelalter. Beiträge zu seiner Erforschung*, Leiden, Brill, 2002, p. 201-251 ; and S. FAZZO, "Aristotelianism as a commentary tradition", in P. ADAMSON, H. BALTUS-SEN, M.W.F. STONE, ed., *Philosophy, Science and Exegesis in Greek, Arabic and Latin Commentaries, I* (*BICS* suppl. Vol. 83, 1), London, Institute of Classical Studies, 2004, p. 1-19.

^{45.} Of course, we cannot be sure as to what Themistius' source or sources might be, but it is worth pointing out that, in all likelihood, he had at his disposal Alexander of Aphrodisias' lost commentary on the Posterior Analytics (see P. MORAUX, Le commentaire d'Alexandre d'Aphrodise aux Seconds Analytiques d'Aristote, p. 3-4 and 142). We also know that Theophrastus wrote a book entitled Posterior Analytics (see W.W. FORTENBAUGH et al., Theophrastus of Eresus. Sources for his Life, Writings, Thought and Influence, pt. 1, Leiden, Brill, 1992, p. 117), which was not a commentary on Aristotle's treatise of the same name, but that nevertheless addressed some of the same questions as Aristotle's work (on the nature of Theophrastus of Life).

second difficulty is coming from, and he adds some details to it that are not in Aristotle's text. He writes, as we have seen, the following (phrases that are underlined are those that give elements which are not in *Posterior Analytics* I.1):

For these reasons, therefore, we must not fear <u>the arguments that the sophists call "veiled"</u> (*tous logous hous enkekalummenous onomazousin hoi sophistai*). [They ask :] "do you know that every pair is even ?" Once we have said "yes", [they say :] "but you do not know this pair that <u>we are hiding in our hands</u>, and you know neither that it is a pair nor that it is even, <u>so that you both know and do not know the same thing</u>" (*hôste to auto oi-das te kai ouk oidas*) (4,2-6).

Strikingly, we find a very similar account in John Philoponus' commentary on the *Posterior Analytics*. In lines 15,26-16,2 of his long commentary on chapter I.1, Philoponus writes that, as a consequence of Aristotle's explanations in part (4) (I have once again underlined phrases that provide elements which are not in Aristotle's text) :

[...] there will be no room for Meno's puzzle, which suppresses the possibility of discovery,⁴⁶ nor for the puzzle of the Sophists (*hoi sophistai*) that eliminates knowledge (*to eidenai*) <u>universally</u> (*katholou*) in the following way. They hide, for example, a triangle under their hand, and they ask : "Do you know that the two sides of every triangle are greater than the remaining side ?" When we answer "yes", they show the triangle and say : "But you did not know that this is a triangle, and if you did not know that this is a triangle, neither did you know that it has its two sides greater than its remaining side. Therefore, you both know and do not know the same thing, which is impossible (*to auto ara kai oidate kai ouk oidate, hoper atopon*)".⁴⁷

It is somewhat surprising that these testimonies by Themistius and Philoponus have not been used or even taken into consideration by modern commentators, whose unanimous view seems to be that we do not know who are the people about whom Aristotle is speaking in part (6), and who make no efforts to relate the difficulty alluded to in part (6) to known sophisms. Can Themistius be right when he claims that Aristotle is dealing, not just with "a sophism", but with a version of the sophism known as the "veiled argument",⁴⁸ a detail that, in his commentary, Philoponus, even though he gives a similar account of the sophism, omits ? An attempt to answer this

phrastus' logical writings, see I.M. BOCHENSKI, *La Logique de Théophraste*, Fribourg, Librairie de l'Université, 1947). It is possible that Themistius knew at least some of the content of Theophrastus' treatise, since, in lines 7,3-6 of his paraphrase, he quotes Theophrastus (but without mentioning the title of any of his works) about the definition of an "axiom". Philoponus, in the 6th century, could also have known some of the content of Theophrastus' treatise, since, in his commentary on *Posterior Analytics* I.4, he reports at some length the reasons why Themistius and his followers thought that "per se" and "qua itself" were not synonymous (CAG XIII.3, p. 71, 4-14).

^{46.} It should be observed, incidentally, that this phrase shows that Philoponus, like Themistius and unlike Aristotle, thought that Meno's paradox had to do first and foremost with the possibility of discovery.

^{47.} I am translating the text of M. WALLIES, *Philoponi Ioannis in Aristotelis Analytica Posteriora commentaria cum Anonymo in librum secundum*, CAG XIII.3, Berlin, G. Reimer, 1909. I have revised here the translation of these lines that I had proposed in my "Philoponus' Commentary on *Posterior Analytics*, I.1, 71a17-b8. A Translation", p. 144, in light of R. McKirahan's very perceptive translation (*Philoponus. On Aristotle Posterior Analytics 1.1-8*, London, Duckworth, 2008, p. 27-28).

This sophism is usually attributed to Eubulides or Diodorus Cronus (see M. MIGNUCCI, "Logic", in K. AL-GRA et al., ed., The Cambridge History of Hellenistic Philosophy, Cambridge, Cambridge University Press, 1999, p. 159-160).

question would require a separate study, but I shall make, by way of conclusion, some preliminary remarks.

We know that Aristotle knew about the "veiled argument", because he discusses it briefly in *On Sophistical Refutations*, as an example of arguments "which turn upon accident" (179a26). He first refers to it through the following question : "Do you know the man who is coming towards us or who is veiled (*enkekalummenos*)?" (179a33-34), and then gives the following solution to it, which rests on the fact that the attribute which is true of the accident is not necessarily true of the subject :

Nor, in the case of "the man who is coming towards us (or who is veiled [*enkekalummenos*])", is "to be coming towards us" the same thing as "to be Coriscus"; so that, if I know Coriscus but do not know the man who is coming towards me, it does not follow that I know and do not know the same man (*ton auton oida kai agnoô*) (179b2-4).⁴⁹

In his commentary on these lines, the author (probably Michael of Ephesus⁵⁰) of the commentary on *On Sophistical Refutations* (ascribed to Alexander of Aphrodisias in some manuscripts), gives the following account of the argument that Aristotle is trying to refute, an account which is often considered to be the standard version of the veiled argument⁵¹:

"Do you know the man who is coming towards us and who is veiled (*kekalummenos*)? — No". They take away the veil (*perikalumma*). "But don't you know this man? — Yes. — Therefore, you know and do not know the same man (*ton auton ara oidas kai ouk oidas*)" (161, 12-14).⁵²

From these accounts by Aristotle and the Pseudo-Alexander, we can see that the veiled argument (or at least one version of it) has one important similarity with the argument that Aristotle is considering in part (6), namely the fact that, in both cases, someone is led to make seemingly contradictory statements about what appears to be one single thing or state of affairs.⁵³ So, in one regard at least, the gists of the two arguments are the same. Furthermore, if Themistius' and Philoponus' testimonies about the nature of the argument that Aristotle is considering in part (6) are correct, it is striking that the conclusion of the argument, as it is expressed by both Themistius and Philoponus ("you both know and do not know the same thing"), is formally identical to the conclusion of the "veiled argument", as it is passed on to us by both Aristotle ("I know and do not know the same man") and the Pseudo-Alexander ("you know and do not know the same man"). So, the possibility that Aristotle, in lines 71a30-b5 of the *Posterior Analytics*, is dealing with a version of the "veiled argument" is worth investigating.

^{49.} I am using the OCT text.

^{50.} See R. SORABJI, "The Ancient Commentators on Aristotle", in ID., ed., *Aristotle Transformed : The Ancient Commentators and Their Influence*, London, Duckworth and Cornell University Press, 1990, p. 21.

^{51.} See R. MULLER, *Introduction à la pensée des Mégariques*, Paris, Vrin ; Bruxelles, Ousia, 1988, p. 78, and J.-B. GOURINAT, *La dialectique des stoïciens*, Paris, Vrin, 2000, p. 278.

^{52.} I am translating the text of M. WALLIES, In Sophisticos Elenchos, CAG II.3, Berlin, G. Reimer, 1898.

^{53.} The knowledge of who is Coriscus in the case of the veiled argument, and the knowledge that every pair is even in the case of the argument considered by Aristotle.