

ELENCHOS

Collana di testi e studi sul pensiero antico

fondata da

GABRIELE GIANNANTONI

XL

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Collana di testi e studi sul pensiero antico

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SYRIANUS ET LA MÉTHAPHYSIQUE DE L'ANTIQUITÉ TARDIVE

ACTES DU COLLOQUE INTERNATIONAL, UNIVERSITÉ DE GENÈVE,
29 SEPTEMBRE-1^{ER} OCTOBRE 2006

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BIBLIOPOLIS

Publié avec l'appui du Fonds national suisse de la recherche scientifique

Le volume 2 été soumis à l'approbation de
Aldo Brancacci

Proprietà letteraria riservata

ISBN 978-88-7088-557-6

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À la mémoire de Michael Frede

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PREFACE

Le présent volume constitue les Actes du colloque «Syrianus et la métaphysique de l'Antiquité tardive», qui a eu lieu à l'Université de Genève du 29 septembre au 1^{er} octobre 2006.

Il s'agit du premier colloque international de philosophie antique à avoir été consacré intégralement au philosophe Syrianus (V^e siècle après J.-C.), maître de Proclus et diadoque de l'École platonicienne d'Athènes. Syrianus est un philosophe important pour la force de sa pensée et pour la grande influence qu'il a eue dans la tradition platonicienne de l'Antiquité tardive. Malgré cela, il reste encore trop peu connu et étudié. Son *Commentaire sur la Métaphysique d'Aristote*, dans lequel il développe une défense rigoureuse des réalités intelligibles et de leur connaissance scientifique, en réaction contre Aristote et la tradition péripatéticienne, est particulièrement important. En effet, il est l'un des rares platoniciens de l'époque à ne pas vouloir réaliser à tout prix une conciliation entre les doctrines de Platon et celles d'Aristote, et à critiquer de façon âpre ce dernier en matière de métaphysique, tout en gardant les apports aristotéliens en matière de logique.

Cette initiative s'inscrit dans un projet scientifique plus large (commencé en avril 2004) concernant l'étude systématique de la notion de dialectique et son emploi dans les Écoles platoniciennes d'Athènes et d'Alexandrie du V^e au VI^e siècle après J.-C. Ce projet, dont j'assure la coordination, est soutenu par le Fonds national suisse de la recherche scientifique.

Les contributions des spécialistes de la tradition platonicienne, réunis à cette occasion, ont traité des différents as-

pects du projet philosophique de Syrianus ainsi que de son savoir littéraire et rhétorique, sans négliger la question de l'état de la tradition manuscrite de ses ouvrages.

Les multiples articles du présent volume ont été rassemblés en deux parties selon les thèmes suivants: la première partie, après un aperçu général et un bilan critique concernant l'apport des différents manuscrits du *Commentaire sur la Métaphysique d'Aristote* (dont certains sont pris en compte pour la première fois), traite de l'astronomie, de la matière et des nombres, de l'âme et du monde intelligible ; dans la deuxième partie il est question de l'éventuelle harmonisation entre Platon et Aristote, de la logique, de la conception de la science, ainsi que du mythe et du savoir rhétorique. En outre, deux contributions qui n'ont pas fait l'objet d'une présentation orale lors du Colloque ont été ajoutées au volume, car elles apportent des approfondissements complémentaires sur la théologie et la logique de Syrianus¹.

La variété des compétences et des sensibilités des différents spécialistes de la tradition platonicienne conviés au Colloque, en provenance de Suisse, d'Europe et d'Amérique du Nord, devrait garantir à l'ensemble de ces études, dans la mesure du possible, un caractère à la fois exhaustif et nuancé. Il reste que la connaissance de Syrianus doit encore être approfondie et que ce volume, tout en marquant un premier résultat dans ce sens, se veut surtout un encouragement à poursuivre la recherche sur cet auteur ainsi que sur les Écoles platoniciennes d'Athènes et d'Alexandrie du V^e au VI^e siècles après J.-C.

Je tiens à remercier très vivement les personnes qui ont collaboré avec moi à la réalisation du travail éditorial, en

¹ Il s'agit respectivement de la contribution de L. Van Campe (*The Attributes of the One in Plato's Parmenides Syrianus' Interpretation*), et de la mienne (*The principle of Contradiction. An Ancient Interpretation (Syrianus, AD Vth cent.) and a Modern Interpretation (J. Łukasiewicz, 1878-1956): A Comparison*).

particulier L. Corti, qui a réalisé une première mise en pages de toutes les contributions du volume, D. Del Forno, qui s'est chargé des citations en grec ancien, E. Maffi, qui a réalisé une première uniformisation des citations des ouvrages des auteurs anciens et contemporains ainsi que les index, N. D'Andrès, qui a relu les articles en langue française et A. Schmidhauser, qui a relu les articles en langue anglaise.

Katerina Ierodiakonou a eu l'amabilité de me transmettre l'article de M. Frede, et Jonathan Barnes a eu la gentillesse de le relire.

Genève, hiver 2007

PREMIÈRE PARTIE

VII. LA LOGIQUE

ANGELA LONGO
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THE PRINCIPLE OF CONTRADICTION. AN ANCIENT
INTERPRETATION (SYRIANUS, AD Vth CENT.)
AND A MODERN INTERPRETATION
(J. ŁUKASIEWICZ, 1878-1956): A COMPARISON *

1. *Introduction*

In this paper, I will draw a comparison between an ancient and a contemporary interpretation of the Principle of Contradiction, as formulated by Aristotle in his *Metaphysics*. My aim here is not to discuss the Aristotelian text¹, neither is it to criticize Łukasiewicz' interpretation. Rather, it is to do something new, namely, (a) to present Syrianus' interpretation of the Aristotelian Principle of Contradiction, and (b) to compare this original, but usually ignored, interpretation with that of Łukasiewicz. This is worth doing because, while Syrianus speaks of several principles of contradiction in his commentary

* I warmly thank Jontahan Barnes, Arianna Betti, Jean-Pierre Leyvraz and Venanzio Raspa for their very helpful remarks on a previous version of this paper. I would also like to thank Angela Chew for her help with the English.

¹ I have previously produced a detailed analysis of the very varied way in which both Aristotle, in his *Metaphysics* Γ, and Syrianus, in his commentary on this work, express the Principle of Contradiction (cfr. A. LONGO, *Siriano e i principi della scienza*. Prefazione di J. Barnes, Napoli 2005, cap. III, pp. 83-140).

on Aristotle's *Metaphysics*, the Polish scholar also seems to do the same; at the very least, the latter uses three formulations of such a principle².

2. J. Łukasiewicz' Interpretation

It is well known that the Polish scholar Jan Łukasiewicz used three different formulations of the Principle of Contradiction, perhaps, even intending thereby to refer to three different such principles. The formulations in question are:

– The ontological formulation: «The same property cannot belong and not belong to a single object at the same time»³.

– The logical formulation: «Two contradictory sentences cannot both be true at the same time»⁴.

² It is not always clear whether Łukasiewicz intended to speak of three substantially different Principles of Contradiction, or only of three different formulations of the same principle. Arianna Betti has been so kind as to verify for me that this ambiguity is indeed present in the original Polish. In any case, I will proceed on the minimal assumption that Łukasiewicz worked with three formulations of a single principle, since this, at any rate is certain, and also because this position is much less exposed to criticism.

³ Cfr. J. ŁUKASIEWICZ, *Über den Satz des Widerspruchs bei Aristoteles*, «Bulletin international de l'Académie des Sciences de Cracovie », I-II (1910) pp. 15-38; I quote from the English translation of J. Barnes in J. BARNES, M. SCHOFIELD and R. SORABJI (eds.), *Articles on Aristotle, II, Metaphysics*, London 1975, pp. 50-64, especially p. 51. A previous English translation of Łukasiewicz' paper was produced by V. WEDIN, *On the Principle of Contradiction in Aristotle*, «Review of Metaphysics », XXIV (1971) pp. 485-509; for a French translation see B. CASSIN et M. NARCY, *Sur le principe de contradiction chez Aristote*. Présentation et traduction, «Rue Descartes », I-II (1991) pp. 9-32; for an Italian translation see V. RASPA, *Sul principio di contraddizione in Aristotele*, «Paradigmi », XVIII (2000) pp. 389-411. As regards the argument, I refer the reader to the monograph by J. ŁUKASIEWICZ, *Du principe de contradiction chez Aristote*, traduit du polonais par D. SIKORA, préface de R. POUVET, Paris 2000.

⁴ Cfr. Barnes' translation, *cit.*, p. 51.

– The psychological formulation: «Two beliefs that answer to two contradictory sentences cannot both exist at the same time in a single consciousness»⁵.

According to Łukasiewicz these three different formulations are not synonymous with each other, *i.e.* they do not mean the same thing, for the following reason. While the ontological formulation is about objects, the logical formulation is about the truth-value of propositions and, finally, the psychological formulation is about states of mind and beliefs⁶. These formulations are not even equivalent to each other, *i.e.* they are not inter-entailing. For while the psychological formulation could ultimately be derived from the ontological formulation (or from the logical one), the converse does not hold. Although the ontological and logical formulations seem equivalent to each other, in fact it is the ontological formulation that is the ground of the logical one, and this is the Principle of Contradiction *par excellence*⁷. It is worth making it clear that Łukasiewicz conducted his research on the basis of Aristotle's texts alone (in fact Alexander of Aphrodisias is mentioned only once⁸). Nevertheless, although he did not take into ac-

⁵ Cfr. Barnes' translation, *cit.*, p. 51 The reader is reminded that, before Łukasiewicz, H. Maier had already spoken of three formulations of the Principle of Contradiction, although not of three such principles (H. MAIER, *Die Syllogistik des Aristoteles*, Tübingen 1896, I, pp. 41-47), I thank Enrico Berti for giving me this suggestion about H. Maier. For a careful discussion of the Principle of Contradiction, both from an historical and from a theoretical point of view, see V. RASPA, *In-contraddizione. Il principio di contraddizione alle origini della nuova logica*, Trieste 1999.

⁶ Cfr. Barnes' translation, *cit.*, pp. 51-52; and J. ŁUKASIEWICZ, *Du principe de contradiction chez Aristote*, *cit.*, ch. II, pp. 52-55.

⁷ Cfr. J. ŁUKASIEWICZ, *Du principe de contradiction chez Aristote*, *cit.*, chs., II-III, pp. 52-61.

⁸ Cfr. J. ŁUKASIEWICZ, *Du principe de contradiction chez Aristote*, *cit.*, p. 57 footnote 12. In his later work on Aristotle's syllogistic the Polish scholar says that he has referred to ancient commentators such as Alexander of Aphrodisias, Ammonius and John Philoponus, but he no-

count Syrianus' commentary on Aristotle's *Metaphysics*, we may yet ask ourselves the following question. Can Syrianus, given that he speaks of several principles of contradiction, be regarded as a forerunner of Łukasiewicz or not?

At first sight, a passage in Syrianus' commentary seems to anticipate the Polish scholar in identifying our three formulations of the Principle of Contradiction. The passage in question is Syrian. *in metaph.* 65, 20-24⁹:

«And such is the [principle] according the contradiction (a) for neither is it possible that the same thing belongs and does not belong to the same thing at the same time in the same respect and in the same way; (b) nor is there someone in such a position [*scil.* thinking in this way], even if he is opposed to the thesis in order to provoke a quarrel, (c) nor is it possible to say the truth both affirming and denying»¹⁰:

ἔστι δὲ τοιαύτη ἢ [*scil.* ἀρχή] κατὰ τὴν ἀντίφασιν· οὔτε γὰρ τὸ αὐτὸ τῷ αὐτῷ ἅμα καὶ κατὰ ταῦτα καὶ ὡσαύτως ὑπάρχειν δύναται καὶ μὴ ὑπάρχειν· οὔτ' ἔστιν οὔτω τις διακείμενος, κἂν

where mentions Syrianus, cfr. J. ŁUKASIEWICZ, *Aristotle's Syllogistic: from the Standpoint of Modern Formal Logic*, Oxford 1958², [1951], pp. 16 and 19 (for a French translation see: *La syllogistique d'Aristote dans la perspective de la logique moderne*. Présentation et traduction française de F. CAUJOLLE-ZASLAWSKY, Paris 1972). Maier also nowhere mentions Syrianus in his discussion of the Principle of Contradiction (H. MAIER, *Die Syllogistik des Aristoteles*, cit., pp. 41 ff.).

⁹ I quote from Syrianus, *In Aristotelis 'Metaphysica' commentaria*, ed. W. KROLL, Berolini 1902 (C.A.G., VI, 1).

¹⁰ Concerning (c) we may suspect that something is missing in the Greek wording, for example *τινα*, as the subject of the two participles and of the infinitive ἀληθεύειν. Moreover we can suppose that the third οὔτε should be corrected into ὥστε μὴ, so that we would have something like: «(b) nor there is someone in such a position [*scil.* thinking in this way], even if he is opposed to the thesis in order to provoke a quarrel, so that it is not possible that somebody says the truth both affirming and denying»; I thank Jonathan Barnes for giving me this suggestion.

ἔνεκα λόγου θέσει παριστῆται, οὔτε φάντα καὶ ἀποφάντα
δυνατὸν ἀληθεύειν ἅμα.

If we would like to read this passage along the lines of Łukasiewicz' position, we could say that the three negations (οὔτε) introduce respectively (a) the ontological formulation of the Principle of Contradiction, (b) the psychological formulation, and (c) the logical formulation. However, in my opinion, this would not be appropriate for the following reasons.

Firstly, in this passage Syrianus neither speaks of several principles of contradiction (he is using the singular form, cfr. *in metaph.* 65, 20-21), nor, of course, does he speak of an ontological, logical or psychological formulation of that principle. Secondly, the content of the argument itself makes clear that he is not using several formulations, as I will now proceed to show. I recognise that the series of three negations in the text is not a happy way for Syrianus to express himself, and that it might provoke some misunderstanding. However, it is in fact a concise way of speaking that can be analysed in more detail and further clarified.

Indeed Syrianus explicitly affirms that if a principle is certain to a degree, there is no possibility of being mistaken about it (βεβαιότατον δ' ἐστὶ περὶ ὃ ἀπατηθῆναι οὐχ οἶόν τε, 65, 16). He then says that the Principle of Contradiction is the most certain of all principles, so that nobody can be mistaken about it (δεῖ δὲ τὴν βεβαιοτάτην καὶ ἀρχηγικωτάτην καὶ ἐναργεστάτην εἶναι, ἵνα μηδεὶς ἀπατῆται περὶ αὐτήν, ll. 19-20). Finally Syrianus states, in summary, that the Principle of Contradiction has such a feature (ἔστι δὲ τοιαύτη ἢ κατὰ τὴν ἀντίφασιν, ll. 20-21). What follows, *i.e.* the series of the three negations seen above, has the function precisely of stressing the fact that no one can be wrong about this principle. The first negation (οὔτε γάρ..., ll. 21-22) introduces the content of the Principle of Contradiction, while the second negation introduces the fact that no one really thinks that one thing belongs and does not

belong to the same thing at the same time, even if they say so for love of quarrelling (οὔτε..., ll. 22-23).

In other words what is introduced by the second negation is in continuity with the idea that the Principle of Contradiction is the most certain of all principles, so that no one is mistaken about it, *i.e.* no one really thinks that one property belongs and does not belong to a single object at the same time. Here, we do not have the introduction of a new principle of contradiction, but just a description of one of its features, which is there to explain in what sense nobody is wrong about it, *viz.* nobody consciously holds contradictory beliefs or says that he does in good faith.

Syrianus himself insists on this point and explicitly reproduces what he thinks to be the argument Aristotle is using to defend the thesis that it is impossible to be mistaken about the Principle of Contradiction (ὅτι δὲ ἀπατηθῆναι περὶ ταύτην οὐ δυνατόν τὴν ἀρχὴν [*scil.* the Principle of Contradictive], δείκνυσιν [*scil.* Aristotle] οὕτως, ll. 24-25).

According to Syrianus we have the following argument:

- if someone thinks that the same thing both belongs and does not belong to the same thing, he has in himself contrary beliefs;
- contradictory beliefs are contrary beliefs;
- but it is impossible that contrary entities are present together in a <single> thing at the same time;
- therefore it is also impossible that someone is mistaken about such a principle [*scil.* about the Principle of Contradiction] (ll. 25-29).

We might notice that, strictly speaking, the initial conclusion from the above premises should have been: «therefore it is impossible that a single person has in himself contrary beliefs, *i.e.* that he thinks that the same thing both belongs and does not belong to the same thing», and as a consequence of this impossibility it could then be maintained that it is also impossible to be mistaken about the Principle of Contradiction.

But in Syrianus' thought the two notions in question (*i.e.* the impossibility of having contrary beliefs and the impossibility of being mistaken about the Principle of Contradiction) are so closely related to each other, that he gives us an abbreviated version of the Aristotelian argument. He concludes straightforwardly that it is impossible to be mistaken about the Principle of Contradiction, taking the implicit step that it is impossible for contrary beliefs to be in the same person as a given that does not need to be expressed. In fact, this is evidence for the conclusion that no one can be mistaken about the Principle of Contradiction, but Syrianus takes it more or less to *be* the conclusion, near as no matter.

This makes clear, in my opinion, that the impossibility of having contrary beliefs at the same time is a notion neither primitive nor independent of the Principle of Contradiction for Syrianus. In other words, this is not a new formulation (a psychological one) of the Principle of Contradiction, much less a new principle of contradiction. It is only something Syrianus pauses to reflect upon in order to explain a certain feature of the principle of contradiction, namely that it is the most certain of all other principles.

Syrianus goes on to expand on the Aristotelian allusion to Heraclitus, maintaining that, if Heracliteans have really claimed to have contrary beliefs (and in accordance with the contrary features of reality itself, at that), they did so only in order to provoke a quarrel (λόγου μὲν ἕνεκα, I. 32). In a word, Syrianus, just as much as Aristotle, differentiates words from beliefs, and he considers that nobody really has contrary beliefs at the same time, even if he expresses contrary beliefs in words.

Finally, the third negation in our text introduces the impossibility that someone tells the truth when he both affirms and denies the same thing (cfr. οὔτε φάντα καὶ ἀποφάντα δυνατὸν ἀληθεύειν ἅμα, *in metaph.* 65, 23-24). Nevertheless, it is not clear in Syrianus' wording whether what is in question is a

contradiction – which is only an object of thought – or an actual contradiction expressed in words for love of quarrelling.

In sum, we may say that, although his use of the three negations is quite misleading – for he is speaking in an abbreviated way – Syrianus nonetheless limits himself to expressing, by means of the first negation, the content of a unique Principle of Contradiction. By means of the second negation, he describes how it is impossible for someone to be mistaken about this principle. And, by the final negation, he introduces the idea that it is impossible to say the truth when both affirming and denying some one thing. I therefore conclude that in this passage Syrianus does not formulate several principles of contradiction, neither does he give several formulations of a single Principle of Contradiction. In this sense, then, he cannot be taken as a forerunner of Łukasiewicz.

Let us now consider the passages where Syrianus actually speaks of several principles of contradiction. In my opinion, these do not coincide with the three formulations of the principle of contradiction (or three principles) spoken of by Łukasiewicz.

3. *The Principles of Contradiction according to Syrianus*

There are three extant passages of Syrianus where, in interpreting *Metaphysics* Γ, Syrianus speaks of the principles of contradiction in the plural (recall, however, that Syrianus, in his commentary, usually speaks of the principle of contradiction in the singular.)

In the first one, he says that the disciples of Protagoras and Anaxagoras «are forced to be against both the two axioms of contradiction»: ἔτι δέ φησιν [*scil.* Aristotle]¹¹ ἀναγκάζεσθαι

¹¹ The Aristotelian passage in question is ARISTOT. *metaph.* Γ 4. 1008 a 2-7.

τοὺς αὐτοὺς ἄνδρας καὶ πρὸς τὸ ἕτερον ἴστασθαι τῶν τῆς ἀντιφάσεως ἀξιωμαίων, *in metaph.* 71, 13-15)¹².

If we take into account the general context of the passage in question we will see that, according to Syrianus, the disciples of Protagoras and Anaxagoras are committed to doing two distinct things: First, they say that about one thing both its affirmation and its negation are true, so that they are against a first principle of contradiction, namely:

(A) «it is impossible that the two parts of a contradiction are true at the same time».

Second, as a consequence of their position, they are forced also to maintain that about one thing not only the affirmation is false, but also the negation (cfr. Syrian. *in metaph.*, p. 71, 9-12, 15-17), so that they are also against a second principle of contradiction, namely:

(B) «it is impossible that two parts of a contradiction are false at the same».

According to Syrianus, the disciples of Protagoras and Anaxagoras maintained that, if about one thing one part of the contradiction <is true>, then the other part also <is true> (*in metaph.* 71, 4-5). And this violates principle of contradiction (A). Now, the same people are forced to accept, because of their own position, that about every thing neither part of the contradiction is true:

¹² I translate ἴστασθαι by «to oppose», because this is the translation which, in my opinion, makes the argument meaningful; for a parallel text see SYRIAN. *in metaph.* 78, 34: ὁμοίως δέ φησι χρῆναι καὶ πρὸς τὰς ἄλλας ἴστασθαι θέσεις, «and he says that we must oppose in a similar way also to the other theses» (here Aristotle is being involved in a controversy with people who try to introduce a medium term of a contradiction).

«If indeed the affirmation about one thing is true, then the negation also will be true, and it will be necessary for them to admit that for each thing neither part of the contradiction will be true» (εἰ γὰρ ἐφ' οὗ ἡ κατάφασις, ἐπὶ τούτου καὶ ἡ ἀπόφασις, ἀνάγκη λέγειν αὐτοῖς μηδ' ἐπὶ παντός θάτερον μόνιον τῆς ἀντιφάσεως πεφυκέναι λέγεσθαι, *in metaph.* 71, 15-17).

Now this implies that these people would maintain that the two parts of a contradiction are false at the same time, thus they would violate principle of contradiction (B). For example, about X it will not be true that X is a human being neither will it be true that X is not a human being. So it will be false both to say that X is a human being and to say that X is not a human being.

In short, if, the original position, this being the only historical one, being attributable in one way or another to the disciples of Protagoras and Anaxagoras, is only that both the parts of a contradiction are true at the same time, this means that it is Syrianus who – following Aristotle's footsteps – has reversed this position to its contrary, maintaining that the disciples of Protagoras and Anaxagoras would be forced to admit also that both parts of a contradiction are false at the same time – and perhaps even that they are unspeakable.

It thus emerges that the two principles of contradiction of which Syrianus is speaking both concern the truth-value of a pair of contradictory propositions. For one principle, (A), affirms that it is impossible that a pair of contradictory propositions are both true at the same time, while the other principle, (B), affirms that it is impossible that they are both false at the same time. Therefore, it is not a question of an ontological formulation of the Principle of Contradiction as opposed to a logical formulation (or to a psychological one). Rather, what we have is in fact two symmetrical “logical” formulations of the same Principle of Contradiction (to use Łukasiewicz' terms).

In fact, Aristotle affirms that if it is necessary to affirm or to deny everything, then it is impossible that the two parts of a contradiction are equally false (Aristot. *Metaph.* Γ 8. 1012 b

11-13). Unfortunately, Syrianus does not comment on these lines of Aristotle, for he skims quite quickly through the last chapters of *Metaphysics* Γ, where the principle of the excluded middle is presented.

On the other hand, Alexander of Aphrodisias dedicates some lines to the Aristotelian passage in question, and he points out that, the impossibility that both parts of a contradiction are false at the same time also follows from the Principle of the Excluded Middle (cfr. Alex. Aphrod. *in metaph.* 340, 9-18 Hayduck).

Nonetheless, one thing is sure. Syrianus does not confuse his second principle of contradiction (B) with the Principle of the Excluded Middle. For in a passage of his commentary he affirms that in *Metaphysics* Γ Aristotle not only strengthens the principles of contradiction (in the plural), but also the Principle of the Excluded Middle (the one which establishes that there is no medium term of a contradiction), cfr. Syrian. *in metaph.* 78, 22-25. It is obvious that, in this passage Syrianus speaks in the plural about «principles of contradiction», and that he means by this something else than the Principle of the Excluded Middle. However, he does not explore in detail the link between his second principle of contradiction (about the impossibility that both parts of a contradiction are false at the same time) and the Principle of the Excluded Middle (that there is no medium term of a contradiction, but it is necessary to affirm or to deny any predicate about a single subject). If he had investigated the derivation of his second principle of contradiction from the principle of the excluded middle, he could hardly have spoken of (B) as a principle¹³.

However, let us pass now to the other two passages in which Syrianus speaks of «the axioms of contradiction» in

¹³ For further discussion of this question cfr. A LONGO, *Siriano e i precedenti pre-aristotelici del principio della contraddizione*, «Documenti e studi sulla tradizione filosofica medievale», xv (2004) pp. 81-97.

the plural. In these passages the Platonic author uses the plural form in a general way, and his wording does not point to exactly two axioms of contradiction. We can read both the passages in the final section of his commentary on *Metaphysics* Γ.

«The Philosopher [*scil.* Aristotle], after making so many remarks against these positions, does not strengthen *the <axioms> about contradiction* only, but he discusses also some other axioms, namely that it is impossible that a pair of contraries is in the same thing in the same respect and in the same way, and that there is no medium of a contradiction» (τοσαῦτα πρὸς τὰς θέσεις εἰπὼν ταύτας ὁ φιλόσοφος οὐ τὰ περὶ τῆς ἀντιφάσεως μόνα βεβαιοῖ, ἀλλὰ καὶ περὶ ἄλλων ἀξιωματῶν διαλέγεται, οἷον ὅτι τὰναντία τῷ αὐτῷ παρεῖναι κατὰ ταῦτόν καὶ ὡσαύτως ἀδύνατον, καὶ ὅτι μεταξὺ ἀντιφάσεως οὐδέν, *in metaph.* 78, 22-25)¹⁴.

These lines do not tell us anything about the exact number of the principles of contradiction, but they are extremely important if we are not to misunderstand. Indeed, the expression *περὶ* + genitive («about contradiction /on contradiction») could suggest that we have here something softer than a simple genitive («of contradiction») and that we could be concerned with some principles which, without being the Principle of Contradiction, are in some way “orbiting” around the notion of contradiction. In this case, the first principles to which one may refer are, evidently, the Principle of Contraries (which is actually not a principle, but a derived theorem) and the Principle of the Excluded Middle, which is mentioned by Aristotle in the end of his *Metaphysics* Γ.

However, the present passage has the advantage that it is clear on this point, since it says explicitly that the Principle of Contraries and the Principle of the Excluded Middle are *dif-*

¹⁴ Syrianus gives a brief exegesis of the chapter 7 of *Metaphysics* Γ, spent by Aristotle in formulating and explaining the so called principle of the excluded middle (cfr. SYRIAN. *in metaph.* 78, 22-33).

ferent from the principles of contradiction (cfr. *περὶ ἄλλων ἀξιωματίων*). It suggests that, in this context, the expression *περὶ* + genitive is simply a stylistic variation on the simple genitive, even though we find it only in this passage and the next, as we will see later. But we may remark that, when Syrianus speaks of the Principle of Contradiction in the singular, he uses different wording, in particular not only the simple genitive («of contradiction»), but also *κατὰ* + accusative («according to the contradiction»). Thus, if the various wordings represent only a stylistic variation, and especially, if the Principle of Contraries and the Principle of the Excluded Middle cannot be taken into the plural reference, we are obliged to say that Syrianus actually speaks of several principles of contradiction. Furthermore, we have to identify them with the two principles of contradiction mentioned in the previous passage (*in metaph.* 71, 14-15), namely to principle of contradiction (A) – it is impossible for both parts of a contradiction to be true at the same time – and principle of contradiction (B) – it is impossible for both parts of a contradiction to be false at the same time¹⁵.

Lastly, in the epilogue on the commentary on *Metaphysics* Γ, Syrianus summarizes the arguments discussed by Aristotle and sets out the results he has obtained in the following terms:

¹⁵ Concerning the Principle of the Excluded Middle, let us point out *en passant* that, although Syrianus does not show any great interest in it, he nevertheless insists on the definition of a true and of a false statement: «everyone who says the truth, either he states that something which is is, or that something which is not is not» (SYRIAN. *in metaph.* p. 78, 28-29). Also: «everyone stating something false, either states that something which is not is, or that something which is is not» (ll. 29-31). Kroll does not give any cross-reference for this definition of what it is to make a true and a false statement, but we may think of Plato's *Sophist*, and, in particular, of the passage where the true utterance, which says things as they are, is contrasted with the false one, which says things not in the way they are (PLAT. *Soph.* 263 B 7-10).

«after having taught what the first philosopher studies and after having established *the axioms on the contradiction* (παραστάς δὲ καὶ τοῖς περὶ τῆς ἀντιφάσεως ἀξιώμασιν, l. 16), and after having bound to each other the other principles, at the same time the dialectical ones and the physical ones... » (*in metaph.* 79, 15-17).

Here too (as in the previous passage) Syrianus speaks of several principles of contradiction. They are mentioned after the other objects of first philosophy, namely being *qua* being and its properties *per se*, and they are introduced as instances of that principle of demonstration that first philosophy studies together with the principles of being.

Concerning the «dialectical and physical principles», the first ones establish that people involved in an authentic dialogue must give a meaning to their words and must start from a definition of what is true and what is false (cfr. Aristot. *metaph.* Γ 8. 1012 b 5-8). The second ones establish that it is not true either that all things are at rest or that all things are in movement (cfr. Aristot. *metaph.* Γ 8. 1012 b 22-24).

In any case, Syrianus does not give us any explicit indication of the number and content of the principles of contradiction in this passage either; we are given to understand only that they are more than one. So, once more, we can only use what Syrianus said previously when he spoke of a first principle of contradiction, establishing that it is impossible that both parts of a contradiction are true at the same time, and of a second one, establishing that it is impossible that both parts of a contradiction are false at the same time.

In sum, we have found that Syrianus would not have agreed with Łukasiewicz either about the number (three) nor about the content (ontological, logical, and psychological) of the principles of contradiction. For, in some passages of his commentary, Syrianus states that there are two principles of contradiction, and they both have a logical content.

4. *Conclusion*

In the context of the present comparison we should be clear upon the point that Syrianus draws a distinction between two symmetrical principles of contradiction essentially in a doxographical and polemical context, in order to present and to refute the position of the disciples of Protagoras and Anaxagoras. As long as Syrianus attributes to these people two symmetrical false positions, and as long as he considers that these two positions are two symmetrical violations of something, he is, it seems to me, bound to isolate two symmetrical principles of contradiction, each of which is violated in a distinct way by the disciples of Protagoras and Anaxagoras.

In this doctrinal context, Syrianus does not seem interested in the Principle of the Excluded Middle, to which he gives only a cursory exegesis. With such an agenda, Syrianus is bound to deform things in a certain way, because what he considers to be a second principle of contradiction (it is impossible that both parts of a contradiction are false at the same time) in fact is not a principle but a consequence of the Principle of the Excluded Middle (establishing that there is no medium of a contradiction).

Perhaps, then, Syrianus is not being haphazard in giving the status of a principle to his principle of contradiction (B), but neglecting to give a detailed exegesis of the Principle of the Excluded Middle.

Lastly it might strike our attention that Syrianus insists, in a rather scholastic way, on giving a casuistry of the different possibilities admitted by his principles of contradiction: when the affirmative part of a contradiction is true, the negative one is false, and conversely when the negative part of a contradiction is true, then the affirmative part is false¹⁶. Even so, Syrianus' position is atypical and interesting, and deserves careful attention.

¹⁶ Cfr. SYRIAN. *in metaph.* 68, 36-69, 22 (for an analysis of this passage see A. LONGO, *Siriano e i principi della scienza*, cit., p. 109).

