

## PLATO'S CONTRIBUTION TO SPECULATIVE LOGIC

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**Abstract:** *The author of the study refers to some of the most important contributions of Plato regarding speculative logic and supports the statement that although Plato's works do not contain a systematic approach on logic, on the one hand, and, on the other hand, Plato's manner of dealing with philosophical issues is not suitable for the science of logic, nevertheless, the merits of the Greek philosopher regarding the history of logic are substantial, especially since Aristotle takes from Plato more concepts of his own logic.*

**Keywords:** *logic, dialectic, speculative, idea*

Plato's conception is, beyond any doubt, a turning point within the ancient Greek philosophy and also for Western philosophy. Nevertheless, this change had been announced by the sophists, but mainly by Socrates, since they changed the stream of thought from the research of nature towards human consciousness; in other words, starting with Socrates, philosophy gains its second large component, i.e. ethics, after the pre-Socratic thinkers had placed the accent on the study of nature or physics. Logic would have to wait a little more until its systematic settlement, in Aristotle's works. This is because, despite the dimensions and diversity of Plato's conception, his works do not contain an elaborate approach of logic; the specific issues of this philosophical discipline are rarely found within Plato's dialogues<sup>1</sup> and, most of the times, they are mixed up with metaphysics, ethics of epistemology issues. A fair reading of Plato's works justifies the idea that Plato did not intend to separate the discussion upon logic's matters from other fields of philosophy and that he referred to logic aspects only inasmuch as their clarification served for achieving his initial goals that had to do with other fields of philosophy he was interested in<sup>2</sup>. Aristotle would burden himself with a separate approach of logic, settling it up as a separate philosophical science, even if it be a mere organon which he never used in another paper. Despite this situation, one cannot deny Plato's contributions to the development of logic, since he is the one that raises a lot of problems Aristotle would deal with later. We refer here to at least some of the major issues of logic: truth and falsity and the entities bearing them; valid inferences; definition<sup>3</sup>. Of course, the discussion of these matters is not to be found in just one paper of Plato; they are to be approached on in many dialogues and a systematic approach is completely justified precisely to point out Plato's contributions. Thus, one can refer to a logic of Plato which can very easily be reconstructed and placed to the beginning of a

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<sup>1</sup> Especially in logic dialogues, *Parmenides, The Sophist, Theaetetus, The Statesman*.

<sup>2</sup> See Martha and William Kneale, (1974), *Dezvoltarea logicii. I*, Ed. Dacia, Cluj-Napoca, trad. Cornel Popa, p. 26, *passim*. The point of view of these authors according to which Plato did not like a separate approach of logical matters seems a little exaggerated. Probably Plato preferred – from teaching reasons – to use the form of a dialogue and not that of a treaty. But a philosophical science could be separately treated upon only within a treaty, as Aristotle would do. Moreover, Plato seems to like telling stories precisely because that would enable him to give examples. This is just a question of style and not a proof of hostility for a certain manner of discussing upon a philosophical matter.

<sup>3</sup> *Ibidem*, p. 26. See also A. Dumitriu, (1993), *Istoria logicii*, vol. I, Ed. Tehnică, București, p. 144.

history of logic<sup>4</sup>. Nevertheless, Plato in the first philosopher (of course, together with his master, Socrates, to whom western thinking owes the rehabilitation of the concept – which was previously reduced by the sophists to a mere convention – and, of course, to its fixation by means of a definition<sup>5</sup>) who will look towards the ideas and utter that the ultimate reality is that of thought, thus leaving behind the naturalistic biased opinion of pre-Socratic thinkers<sup>6</sup>. One could clearly see here that the next step would be the systematic elaboration of a science of thought as such, i.e. a logic, the achievement of Aristotle. Still, one must make a clear separation between Plato's ontology and logic. The theory of ideas belongs to the previous one and only by accident to the second. Nevertheless, regarding the formal approach of logic, Plato has very little to say. There is no classification of syllogisms, but only the use of some of them within the dialogues in order to reach some conclusions; there is only a primitive theory of judgement, in *Parmenides* and *Sophist*; there is a continuous concern to find definitions, but one cannot find anything about the rules of definition or types of definitions. Regarding this last matter, one can say only that Plato did not like ostensive definitions, since he often refuses to accept for instance beauty to be defined as a beautiful woman or horse (he used to receive this kind of answers from sophists). In fact, to require such an approach from Plato would be too much, especially due to the discipline of his discourse: except the dialogues concerning logic matters an probably also *Phaedon*, Plato starts from concrete things and reaches general definitions or the destruction of his opponent's opinion; in other words, he does not elaborate any treaty, as Aristotle would, and this stops him from having a rigorous point of view regarding logic. The use of myths, metaphors and poetic style, the use of a poetic language full of allegories is somehow strange for a science as logic is<sup>7</sup>. Despite these facts and despite the fact that Plato has scarcely any contribution regarding formal approach of logic, many aspects of his works cannot be left aside from a history of logic.

The first and probably the most important thing that has to do with speculative logic is that regarding the setting up of the idea as a separate form of thought. Hegel recognized within the platonic idea what later on would be called speculative idea. Thus, speculative idea – the basic form of speculative logic – is different from subjective ideas that Hegel would call mere intuitions or representations and which are found within the human mind (*in mente*, as Aristotle says<sup>8</sup>). The main feature of these ideas is that they are beyond human mind and that they impose themselves on human mind<sup>9</sup>. Thus speculative logic starts – within Plato's philosophy – with the statement that besides what one usually calls a normal idea – intuition – there is also a philosophical idea, a speculative one which, from an ontological point of view, refers to a reality different from that one can reach by means of senses and, from a logical point of view, obeys other rules. For instance, supreme genera of Plato's *Sophist* are ideas or forms that mirror

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<sup>4</sup> One can find such a reconstruction in Al. Surdu's work, (1989), *Introducere la dialogurile logice*, în Platon, *Opere VI*, Ed. Științifică și enciclopedică, București.

<sup>5</sup> A. Dumitriu, *op. cit.*, p. 141.

<sup>6</sup> This has to do a lot with Plato's ontology, and less with his logic, the main point being an clarification of the relations between ideas and perceivable things. Still, one can see here an approach on logic considered as separated from its applications. See also G. W. F. Hegel, *Prelegeri de istorie a filosofiei. I*, Ed. Academiei Române, București, 1963, trad. D. D. Roșca, p. 485, *passim* and Anton Dumitriu, *op. cit.*, p. 144.

<sup>7</sup> This manner of writing would determine Hegel to say that Plato's way must be left behind, since the Greek philosopher remains at the level of exposing philosophical issues by means of myths and metaphors. See also G. W. F. Hegel, *op. cit.*, p. 472.

<sup>8</sup> Placing ideas *in mente* is largely dealt with by Al. Surdu, in his *Aristotelian Theory of Prejudicative Forms*, Georg Olms Verlag, Hildesheim-Zürich-New York, 2006.

<sup>9</sup> As compared to subjective ideas that man has, speculative ideas are themselves imposing on human mind and are not a mere product of the usual processes of thinking, but the result of a revelation. See also G. W. F. Hegel, *op. cit.*, p. 470.

reality and to which all being participates. These are forms of reproduction the process of the world and the relations among them are ruled by completely different rules than those obeyed by usual ideas<sup>10</sup>.

Secondly, despite the misfit between Plato's style and science of logic, there is an obvious contribution of his regarding formal approach of logic. Besides the necessity of a separate approach of logic there is also the statement that the relations among ideas<sup>11</sup> exist indeed separately from those among perceivable things, which enables the statement that Plato is the first one to have in mind a science of logic<sup>12</sup>. Of course, we deal here with a special kind of logic, one that refers to speculative or philosophical ideas, a logic that is also called enantiology<sup>13</sup>. Hegel would introduce this new science in his dialectical-speculative logic, and thus supreme genera become ideas, but ideas in God's mind, their study becoming the very contents of the logic of Hegel<sup>14</sup>. More than that, one can see in Plato a specific methodology, since he is not interested only in the mere game of ideas, but also in the relation between ideas and perceivable reality, since he conceives this relation as a generative one<sup>15</sup>. Therefore, beyond separately treating ideas and relations among them – logic as such – there is also a methodology dealing with the relation between ideas and given reality. Moreover, if platonic ideas are what later on Hegel would call speculative or philosophical ideas, methodology, at its turn, should be a speculative one that should take into account this special type of relations. Here Hegel would strongly criticize those that separate transcendence from existence by saying that ideas are not merely external models of perceivable realities, but are substantially bound to given reality<sup>16</sup>. nevertheless, this critique is aimed towards a wrong interpretation of platonic philosophy, since Hegel considers the right interpretation of platonic philosophy as founding his own system, although leaving behind the platonic point of view is somehow unavoidable. Though he accepts these merits of Plato, Hegel will criticize his non-speculative manner of dealing with ideas from a logical point of view, since Plato forgot about the concrete individual that he took as being separate from ideas and merely as appearance<sup>17</sup>.

The third aspect one has to mention has to do with dialectics. First of all, Plato reaches important conclusions regarding the nature and role of dialectic, but also types of dialectic, even if this is not always explicit. Platonic dialectic has to do distinguished from that of sophists by the fact that it appeals to a mere *reduction ad absurdum* only at a first stage<sup>18</sup>. Besides this, Plato's goal is a constructive one, and not destructive as in the case of sophists who would resume to require a hypothesis in order to lead it – by means of logical mistakes and sometimes due to the ignorance of others or their lack of wits – to absurd consequences, thus proving it should be rejected. Of course, smart sophists that controlled the art of speech and eristic could do that even with two opposing statements,

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<sup>10</sup> Al. Surdu, (2000), *Gândirea speculativă*, Ed. Paideia, București, p. 50.

<sup>11</sup> These relations are the contents of dialectic. See A. Dumitriu, *op. cit.*, p. 147.

<sup>12</sup> See also Al. Surdu, *Introducere la dialogurile logice*, in Platon, *op. cit.*, p. 16-18.

<sup>13</sup> Idem, *Gândirea speculativă*, ed. cit., p. 52-53.

<sup>14</sup> G. W. F. Hegel, (1966), *Știința logicii*, Ed. Academiei Române, București, trad. D. D. Roșca, p. 32.

<sup>15</sup> Alexandru Surdu, *Introducere la dialogurile logice*, in Platon, *op. cit.*, p. 18. See also G. W. F. Hegel, *Prelegeri de istorie a filosofiei, I*, ed. cit., p. 486.

<sup>16</sup> G. W. F. Hegel, *Prelegeri de istorie a filosofiei, I*, ed. cit., p. 486. The close relation between transcendence and existence is noticed many times by Al. Surdu, who is legitimately keeping the separation between the two fields without considering that there is a gap between them. See also *Filosofia pentadică I. Problema transcendenței*, Ed. Academiei Române, București, 2007. Even from the general schema of pentadic philosophy one notices that Alexandru Surdu keeps the idea – of a platonic and hegelian origin – according to which transcendence has a generative character. See p. 67.

<sup>17</sup> This is what Al. Surdu calls separation of being and existence. See *Introducere la dialogurile logice*, in Platon, *op. cit.*, p. 31.

<sup>18</sup> M. și W., Kneale, *op. cit.*, p. 18.

as in the famous case of the two sophists who would choose two groups of people, one of them supported  $A$  the other one supported  $\sim A$  in front of the respective group, and then they would change groups and convince them of the opposite statements, respectively. It is hard to say that Plato meant that, but he probably must have seen, or at least felt, the necessity of obeying the principles of logic<sup>19</sup> and understood that sophists' manner to practice dialectic was more than debatable. Thus, even if Plato uses dialectic to destroy some hypotheses, his goal is to raise the interlocutor beyond mere opinion and towards science, and by no means to make him even more confuse. Given these circumstances, platonic dialogues do not support the idea that one cannot know anything, therefore searching for knowledge is useless (as sophists would do), but they are aimed to prove that although man think they possess knowledge and are sure of it, in fact they do not, thus they have to keep on searching. This renders a new meaning to platonic dialectic, that is its ascendant<sup>20</sup> meaning, that of rising towards ideas, therefore of leaving behind opinion and searching for the essence<sup>21</sup>. Obviously, this meaning of dialectic has a positive bias<sup>22</sup>, i.e. Plato searches for some basis for the entire system of ideas. This is even more obvious if one takes into account that the goal of using dialectic is precisely the setting up of a definition<sup>23</sup>. This meaning of dialectic – i. e. method of finding a definition by means of dichotomic division<sup>24</sup> – will make Hegel say that Plato's merit is that of referring to the form of infinity, i. e. the form of thought, rejecting the finite forms of intuition and representation<sup>25</sup>. The finite, which is specific to sensibility and representation, is always characterized by the passing into another, it does not exist by itself, therefore does not belong to science, to eternal ideas. Following Hegel's interpretation, the conclusion is that Plato established once and for all that logical forms must have a universal character and have to have the nature of thought, thus anticipating Aristotle's statements regarding the ineffable character of the individual and placing *in mente* the forms of logic. To be more precise, according to Hegel, Plato did not accept that logic can operate with proper names or individuals, but only with universal concepts.

One also has to mention Plato's contribution regarding the role of the negative in logic, especially that this is the occasion he leaves aside the Eleatic perspective<sup>26</sup>. Thus, the problem of the negative relies both on the issue of the method of division, and on that of supreme genera, from *The Sophist*. These are very closely linked since defining a thing leads, by means of the method of division, to the idea of that thing but, at the same time, that thing exists only by participating to opposing genera. Thus, at every level of division, a certain thing is better captured (i.e. fixed at the level of identity, of the Same) by his very differentiation from the Other<sup>27</sup>. Therefore, definition can never be found only by means of identity, but always by means of difference also. Beyond this one finds very important Plato's use of negation within the table of supreme genera. Thus, within the relations that are established between supreme genera – relations whose nature is not very clear but, anyhow, should differ from their relations between ideas and

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<sup>19</sup> A. Dumitriu says that he explicitly uttered these principled, even if he did it in a non-systematic manner. See also *Istoria logicii*, vol. I, ed. cit., p. 156-157.

<sup>20</sup> *Ibidem*, p. 149.

<sup>21</sup> See also Al. Surdu, *Introducere la dialogurile logice*, in Platon, *op. cit.*, p. 38.

<sup>22</sup> M. și W. Kneale, *op. cit.*, p. 18.

<sup>23</sup> *Ibidem*, p. 19. See also Al. Surdu, *Introducere la dialogurile logice*, in Platon, *op. cit.*, p. 38.

<sup>24</sup> Al. Surdu, *Introducere la dialogurile logice*, în Platon, *op. cit.*, p. 39.

<sup>25</sup> G. W. F. Hegel, *Prelegeri de istorie a filosofiei I*, ed. cit., p. 505.

<sup>26</sup> G. W. F. Hegel, *Prelegeri de istorie a filosofiei I*, ed. cit., p. 512-513.

<sup>27</sup> See Al. Surdu, *Introducere la dialogurile logice*, în Platon, *op. cit.*, p. 44-45.

perceivable things<sup>28</sup> – the power of the negative is extended everywhere, since supreme genera are permanently reported to their opposite. This power of the negative is even clearer in the case of identity – difference. Thus, identity is determined, as a supreme genera, by its difference from difference; thus, it participates to difference. On the other hand, difference is determined as itself, therefore it participates to identity. One can easily recognize here aspects of Hegelian speculative thinking, and especially that concept of passing of a determination into its opposite and its fixation by means of it, concept that Hegel used throughout the first part of his objective logic. This situation enables Hegel to refer to the unity of opposites and to state that Plato does justice for the concept of negative within his table of supreme genera<sup>29</sup>.

Of course, one could refer to other contributions of Plato regarding the evolution of logic, but these are better dealt upon by Aristotle, which makes Plato just their discoverer. For example, it is sure that Plato noticed the syllogism and that the method of division is an anticipation of the doctrine of syllogism that was remarkably developed later on by Aristotle. Some historians of logic even say that syllogism is a form of division<sup>30</sup>, division being even more precise. One spoke also about placing supreme genera in dialectical couples<sup>31</sup>, and also about Plato's contribution regarding the relation between thought and language. The last one is important since it represents a reply to the illicit identification of thought and language which was made by the sophists<sup>32</sup>. These ideas will be further on debated upon Aristotle in a systematic manner.

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<sup>28</sup> *Ibidem*, p. 43. Al. Surdu states that these relations could refer to mixing or participation, but that using these terms might cause mistakes.

<sup>29</sup> G. W. F. Hegel, *Prelegeri de istorie a filosofiei. I*, ed. cit., p. 510.

<sup>30</sup> A. Dumitriu, *op. cit.*, p. 154-156.

<sup>31</sup> *Ibidem*, p. 152. This statement is also supported by D. Bădărău, in (1986), *Categoriile lui Aristotel*, in *Scrieri alese I*, Ed. Academiei Române, București.

<sup>32</sup> A. Dumitriu, *op. cit.*, 157-158.