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Annals of Pure and Applied Logic 127 (2004) 339–360

ANNALS OF  
PURE AND  
APPLIED LOGIC

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# *Aletheia* in Greek thought until Aristotle

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## Abstract

This paper investigates the concept of *aletheia* (truth) in ancient philosophy from the pre-Socratics until Aristotle. The meaning of *aletheia* in archaic Greek is taken as the starting point. It is followed by remarks about the concept of truth in the Seven Sages. The author discusses this concept as it appears in views and works of philosophers and historians. A special section is devoted to the epistemological and ontological understanding of truth. On this occasion, influential views of Heidegger are examined. The paper is concluded by a review of various meanings of truth in Aristotle.

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MSC: 01A20; 03A05

Keywords: Ontology; Epistemology; Correspondence

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## 1. Introduction

Tarski claimed that his semantic definition of truth conforms to the ordinary analysis of “true” and philosophically follows Aristotle. The core of Tarski’s analysis is captured by the T-scheme: a sentence *A* is true if and only if *A*. This paper has two goals. Firstly, I intend to review how the word *aletheia* was used in archaic Greek and philosophy until Aristotle in the light of sources as well as some recent (in the last hundred years) interpretations. Secondly, I would like to derive some lessons about the concept of correspondence.

A technical note. This paper has no footnotes or endnotes. They are replaced by digressions which begin with the letter D followed by a number and ending by the sign ►. All bibliographical references are inserted directly into the text; these references are normally made by indicating the author, the reference number and, if necessary, the page number(s). The pre-Socratics are mainly quoted from H. Diels, *Fragmente*

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*der Vorsokratiker*, 3 vols., 17th ed., Weidmannsche Verlagsbuchhandlung, Berlin 1954 (I use the standard notation: Diels I 4B 35 refers to the fragment 35 in Section B of Chapter 4 in the 1st volume) or G. S. Kirk, J. E. Raven, and M. Schofield, *The Presocratic Philosophers*, 2nd ed., Cambridge University Press, Cambridge 1983 (the reference is: Kirk, Raven and Schofield plus page number); otherwise a special indication will be made. Other references in the text use the name of the author and the reference number, except sources which are mentioned by the full title. The titles of the books and papers listed in the bibliography at the end are always given in the language of the original. If English translation or a further edition is added, page references are to them. All non-English single words or nominal phrases are written in italic when they occur outside quotations. All quotations closely preserve the original with two exceptions: (a) double-spaced print, sometimes used in older German writings, is replaced by italic (for instance, ‘n a m e’ by ‘*name*’); (b) Greek words are replaced by their Latin transliterations but without accents. The last remark applies to all Greek words used in this paper. The work on this paper was supported by The Geneva–Lausanne IRIS Project on the Philosophy and History of Logic. I thank Prof. Kevin Mulligan, the director of this project, for his help. In particular, he corrected my English and made several very valuable comments.

(D1) I am not an expert in classics. My remarks in this section rely heavily on the material which I have found in writings of other people. The most important works which I employed are: Levet [18] and Komornicka [15]. Both books are more linguistic than philosophical, contain very rich material (I cannot take into account all registered, also in writings by other authors, linguistic and historical facts) and provide a very reliable starting point for further philosophical analysis. Of course, my report is also governed by some principles and perhaps prejudices. I try to find compromises between competing interpretations, using as a guide the rule, already mentioned, that eclecticism is sometimes sound. In general, I rely more on linguists than philosophers, and I regard etymological studies on philosophical terminology as indispensable for understanding concepts. There is a book, quite extensive (263pp.), by Richard Herberth [13] entirely devoted to the concept of truth in ancient Greek philosophy. This book completely neglects etymological and linguistic problems and embeds the discussed questions only into very general philosophical views (naive realism, idealism, scepticism, rationalism, etc.). I do not deny that the history of philosophical concepts should be closely related to philosophical standpoints, but I claim that it must be supplemented by a solid linguistic knowledge. It is particularly important that we have at our disposal explicit definitions of relevant terms and their meanings must be extracted from contexts and different usages. The archaic concept of truth is a good example. First statements which can be considered as attempts to give definitions of truth appear not earlier than in Plato. My general view is that the philosophical usage of a term (in the present case, the counterpart of “truth” in archaic and ancient Greek) was related to the archaic one. If we assume, as I do, that philosophy and science is a continuation, at least in some respects, of ordinary life and ordinary ways of thinking, then it is not without interest to investigate which theory of truth concurs with a natural development of philosophical terminology, that is, with its transition from the pre-philosophical stage to the philosophical stage. ►

## 2. Archaic Greece

*Aletheia* is the most important Greek counterpart of our ‘truth’; *alethes* (true), *alethos* (truly) and *alethein* (to speak the truth) are related words. However, the Greek “truth-family” is much more comprehensive and consists of 14 words, among others (adjectives): *atrekes*, *nemertes*, *adolos*, *ortos*, *apseudos*, *etymos* and *etetymos*. It is characteristic that several words, including *aletheia* also, belonging to this variety begin with ‘a’. The most common interpretation of this lexical phenomenon is to consider ‘a’ as a sign of privativum, that is, as a negative noun or adjective. This understanding of *aletheia* was proposed by Sextus Empiricus, Plutarch, Olimpiodoros and the so-called *Lexicon Gudianum* in antiquity (see [20, pp. 12–13; 9, pp. 222, 375]). In our times, it was recalled by Leo Myers in his influential *Handbuch der griechischen Etymologie* (1901) and popularized by Rudolf Bultmann (see [2, p. 239]): “aletheia—etymologisch das Nicht(s)-verheimlichen—bedeutet”. According to this interpretation, we should consider such words as complexes of the following structure: *a-letheia*, *atrekes*, *a-dolos* or *a-apseudos*; *nemertes* can be understood in a similar way, because ‘ne’ functions as ‘a’, that is, as an indicator of a privative character. As far as the matter concerns *aletheia*, its etymology is derived as *a* + *lethe* + suffix. *Aletheia* as a noun occurred with so-called *verba dicendi*, that is, verbs like Greek counterparts of “to tell” or “to hear”. So much about matters of lexicology and a simple grammar. Of course, semantic matters are much more important. Very schematically, if  $V(\textit{aletheia})$ , where the letter  $V$  stands for a *verbum dicendi*, represents an *aletheia*-context, to  $V$  an *aletheia* consisted in issuing a concrete sentence in the present tense about something, usually supported by direct experience, particularly seeing (see [1,29, pp. 68–71]). Then, applications of *aletheia*-contexts were extended to past and future events. Finally, *aletheia* became an abstract noun, denoting a property of sentences (judgements, etc.); examples documenting this development will be given in what follows.

(D2) Many discussions about *aletheia* are strongly influenced by Martin Heidegger’s philosophy of truth (see [11]). I will not enter into details of Heidegger’s theory of truth and restrict myself only to his remarks about the archaic and pre-Socratic meaning of *aletheia*. Heidegger agrees that this word is a privativum. According to him, *aletheia* principally means *Unverborgenheit*, “disclosure” or “un-concealedness” and stands in opposition to *Verborgenheit*, “closure” or “concealedness”; a more colloquial reading, namely “which is not hidden” is proposed in [9, p. 221]. Heidegger derives his interpretations from the analysis of the famous allegory of the cave in Plato’s *Republic*. The fragment 515 with the word *alethes* (the truth, the true) is crucial here. The English translation runs as follows: “Then the prisoners would in every way believe that the truth is nothing other than the shadows of those artifacts” (Plato, *Republic* 515c, transl. by G. A. M. Grube, rev. by C. D. C. Reve, in Plato, *Complete Works*, ed. by J. M. Cooper, and D. S. Hutchinson, Hackett, Indianapolis 1997); another possible rendering of *alethes* in this context is “which is the true”. Heidegger translates this word as *unverbogene*, that is, disclosed or unconcealed, and agrees that *aletheia* is a privativum. It is clear that the linguistic material used by Heidegger is extremely poor and is limited to two occurrences of the crucial word; the second is the fragment 515d (my italic): “[...] if we pointed to each of the things passing by, asked him what

each of them is, and compelled him to answer, don't you think he'd be at a loss and he'd believe that things he saw earlier were *truer* than the one he was now being shown?" Thus, although Heidegger followed the canonical approach to etymology of *aletheia*, he was guided in his analysis mainly by personal definite intuitions concerning the concept of truth. Heidegger derived from his reading of Plato very far-reaching consequences. He argued that the pre-Socratic philosophers had only the ontological concept of truth which meant the disclosure of being; according to Heidegger, the further course of philosophy changed this sound understanding of truth and introduced the epistemological concept of truth as something in the mind. The Heideggerian interpretation of *aletheia* was strongly criticized by Friedländer (see [9, pp. 221–229]). He pointed out that Heidegger overlooked the ambiguity of *aletheia* which meant in Plato, "reality of being and correctness of apprehension and assertion" (p. 227). In order to demonstrate Heidegger's errors, Friedländer suggests that the interpretation of *aletheia* as a privativum is perhaps not correct, however, without outlining a firm alternative. Friedländer was criticized by Luther (see [22, pp. 34ff]) who insisted (also in [20, pp. 11–12]) that the canonical interpretation of *aletheia* was right. He also agrees that the archaic usage of this word was entirely ontological. It seems that Friedländer looked for an alternative interpretation of *aletheia* just in order to criticize Heidegger. It is a surprising strategy, particularly if no alternative is even sketched. Friedländer's other and more serious argument is that *aletheia* as a privativum occurs only once in the archaic texts (in Hesiod's *Theogony* where the sea god Nereus is described as *a-pseudos* and *alethes*). Luther replies (p. 34) that one can find further examples in Sophocles and Euripides. Friedländer's strongest argument points out Heidegger's interpretation is semantically not admissible: "Thus, in the one case where in early times *alethos* is understood as *a-alethos*, it has nothing to do with the hiddenness of being, but designates a person who does not forget or neglect, who does not lose something out of sight or mind; in short, it means exactly the "correctness of perception", which Heidegger in his sketch of the words ἀληθής and ἀλήθεια attributes to a period of the decline of Greek thought." (p. 223). It is clear that this argument may hold even if *aletheia* occurred very frequently in the archaic Greece as a privativum. Now, it is beyond any doubt (see below) that *aletheia* and cognate words are ambiguous. Friedländer might be still right even if there are no reasons to say that *alethes* in archaic Greek meant only and exactly the "correctness of perception". In order to reject Heidegger's interpretation it is quite sufficient to demonstrate, and it is rather a simple task, that *aletheia* expressed various contents. Heidegger is, of course, right that Plato's words translated as "truth" and "truer" did not express epistemological relations but properties of being; clearly, Plato had in his mind forms as true or truer being. On the other hand, the meaning attributed to *aletheia* word by Heidegger was rare or secondary (see [29, pp. 145–146, note 92] for a brief summary of objections against Heidegger). The translation of *Republic* 515c—"Then the prisoners would in every way believe that the *true being* is nothing other than the shadows of those artifacts."—probably adequately renders Plato's intuitions. However, the discussion is difficult, because we encounter here an intervention of philosophical insights (perhaps even a priori) into etymological analysis. Anyway, it seems that neither Heidegger nor Luther proved that the basic usage of *aletheia* in archaic Greek was purely or even mostly ontological. And this

is a crucial point for philosophers. In order to complete this digression, I would like to note that the relation of Luther to Heidegger is quite complex. In Luther 1935 we read:

“Die Grundbedeutung von *lethe* liegt in Richtung der deutschen Konzeptionen “ich bin verborgen, verdeckt, verhüllt”. [...]. Von den ermittelten Grundkonzeption aus erklärt sich ferner die Privatbildung *aletheia* [...]. Ihre etymologische Bedeutung ist “*Unverborgenheit*”. (p. 12)

Speaking about “deutsche Konzeptionen” Luther alludes to Heidegger, who is mentioned, with a great respect, a few pages earlier. On the other hand, Luther in his later study (see [22, pp. 172–173]) considered Heidegger’s interpretation of Plato on truth as completely mistaken. To sum up: for Luther, (a) *aletheia* is a privativum; (b) *aletheia* means disclosure, but only in early Greek philosophy (see also the next section); (c) the concept of truth in early Greek philosophy was ontological; (d) Plato was a predecessor of the correspondence theory of truth. Thus, the main disagreement between Luther and Heidegger was how to interpret Plato, although it is still not quite clear whether the former understood (particularly, in [21]; [22] by *Unverborgenheit* the same as Heidegger did. ▶

What about meanings of the words belonging to the truth-family? It is convenient to consider adjective-forms. *Alethes* can also be translated by “unhidden” (also contrasted with “silent” or “forgotten”), *atrekes* by “not disformed”, *nemertes* by “fautless”, *adolos* by “not deceitful”, *ortos* by “simple-minded” (or “not double-faced), *apseudos* by “truthful”, *etymos* and *etetymos* by “real”, “actual” or “authentic”. The inspection of these meanings (or ambiguities, if you like) immediately shows that words from the truth-family express ontological, epistemological and moral contents, often combined in utterances used in ordinary situations. Particular items from the truth-family could be used and were used interchangeably. It is certain that dialogues in Homer’s poems were modelled on ordinary dialogical situations in which to say “it is true” and “it is actual” means the same; the same situation occurs in our contemporary life. Concrete dialogical exchanges are very sensitive to lying, deceiving, etc. and, thus, truth was contrasted rather with lying than falsehood; it seems that in archaic Greek there was no sharp difference between lying and uttering false sentences. Although the word *pseudos* became the most popular from the Greek falsehood-family, this variety includes 67 items, that is, much more than the truth-family; it is indirect evidence that lying and deceiving impressed Greeks more than telling truth. It is possible the moral and ontological dimensions of *aletheia* and related words were earlier, but their constructions with *verba dicendi* indicate that the epistemological usage was also not absent in the archaic employment of language. Krischer [17], Snell [27], Snell [28] and Komornicka [15] point out that *aletheia* indicated that a state of affair is real or actual in relation to the epistemic state of the teller or knower. On the other hand, according to these authors, *etymos* is more (or purely) ontological and refers to purely or fully actual states of affairs, independently of any involvement of epistemic states. Bultmann [2, p. 239] thinks that *aletheia* possessed both aspects, but the ontological was more basic. It is not my aim to discuss which view is correct. What I can derive from this account is that the epistemic factor early supplemented the ontological one (assuming that the

latter was really prior). Thus, we have no reason to deny that “to tell truth” in archaic Greek also expressed “to tell as things are”. On the other hand, since there was no philosophy surrounding this language, it is difficult to look for explicit philosophical contents associated with truth-talk in which the archaic *aletheia* was involved, for example, to consider the problem of truth-bearers (although it is possible to maintain that “to say *aletheia*” was understood as “to issue a true utterance”) or the relations of truth to logic (there was no logic at that time).

(D3) We do not know who originally formulated the Liar paradox and in which wording. Diogenes Laertios (*Lives of Eminent Philosophers*, tr. by R. D. Hicks, Harvard University Press, Cambridge, MA, 1925, 2, 108) attributes it to Eubulides of Megara (see also [4,26]). Diogenes Laertios seems to be the first who used the label “the Liar” for this paradox which is semantically the antinomy arising from self-referential use of the predicate “is false”. That the paradox in question was baptized “the Liar paradox” seems to confirm the view that there was lack of a sharp distinction between lying and saying falsehoods. See also the next digression and Epidemides’ fragment quoted there. ►

(D4) Three texts from the transition of the archaic to philosophical period are interesting. (A) Epimenides, the Cretan (Diels I, B1 3): “Cretans always lie” (*profasis, pseudai*); (B) Solon (Diels I, 10β 6: “Don’t lie, tell truths” (*ne pseudos, all’ aletheie*); (C) Pittakos (Diels I, 10ε 12): “Take care about piety, [...], common sense, truth (*aletheias*), [...], friendship.” These are instructive fragments. Epidemides accuses Cretans of always deceiving; however, (B) is not equivalent to the Liar paradox. Pittakos locates truth among other personal virtues. Both fragments clearly point out the moral dimension of telling the truth and lying. One can conclude that since Solon was the legendary legal reformer, his words apply to legal matters (perhaps “Don’t lie before the court”). On the other hand, several of the preserved Solon maxims have nothing to do with the law. Since all can be interpreted as principles of practical wisdom, one can say that also (C) offers a moral prescription. Moreover, the second part of (C) possesses the crystalline grammatical structure: *verbum dicendi* (*all’*) plus *aletheie*. It is interesting that the ontological interpretation of (C) seems to be quite artificial, while the epistemological one (tell about things as they are) looks fairly natural. ►

(D5) I finally sketch an interpretation of the archaic *aletheia* developed by Detienne (see [7]). He, following Vernant, looks for a general social context in which “truth-talk” arose. In particular, Detienne points out that habits concerning *aletheia* were formed by religion (in fact, *Aletheia* had a divine personification as a daughter of Zeus), myths, poetry, and legal (truth as justice) and political practices. Detienne (p. 49) constructs two sequences. One (positive) consists of Praise, Speech, Light, Memory and *Aletheia*, and the second (negative) includes Blame, Silence, Darkness, Oblivion and *Lethe*. Detienne argues that there was no sharp opposition (contradiction) between *positiva* and *negativa* (the same point was noted by Heitsch [12, p. 31]), but elements of the particular parts were partly contrastive and partly complementary; they form, according to Detienne, a semantic field (a type of structural linguistic). I will not discuss this topic, because I do not see special profit in applying a fairly controversial linguistic theory to our problem; similarly, the hypothesis appealing to prelogical thinking explains very little, if anything at all. It is sufficient to note that *aletheia* and



*pseudos* were regarded as different, at least in the time of the Seven Sages (see (C) in (D4) above). Of course, Detienne collects well-known facts, for example, the connection of light and truth. However, I think that Detienne exaggerates in insisting on the connection between truth, and memory and tradition. Certainly, there are reasons for understanding “true” as “present in memory or tradition” or “false” as “forgotten”, but one should note that, due to the lack of other records, memory and tradition functioned as sources of knowledge or conditions of the possibility of telling truth, particularly about the past. Similarly, the prophetic power also associated by Detienne with the archaic uses of *aletheia* had an obvious link with the already mentioned extension of application of truth-talk to the future. Thus, there is nothing in the facts pointed out by Detienne which obliged us to abandon the interpretation of the archaic *aletheia* as “tell as things are”. ▶

### 2.1. Pre-Socratics

No preserved fragment of the philosophers from Milet speaks about truth by using *aletheia* or an other word from the Greek truth-family. I do not know how to explain this fact. Interests of the Milesians in the philosophy of nature do not provide any hint, because their way of doing philosophy does not prevent one from thinking about truth. Also nothing is achieved if one points out that perhaps relevant writings disappeared, because if the Milesians spoke about truth, it would be recorded by secondary sources. For instance, Sextus Empiricus (*Against the Logicians*, Book I, tr. by R. G. Bury, in *Against the Professors*, vol. 1, Harvard University Press, Cambridge, MA, 1925) reports many views about truth but does not mention the Milesians in this context. Incidentally, the silence of the first philosophers of nature about truth should be particularly astonishing for the adherents of the ontological understanding of *aletheia*, because if this word primarily refers to the world, it should be used by the Milesians. Still more surprising is that *aletheia* does not occur in the Pythagoreans in spite of their interests in mathematics, ethics and practising advanced deductive reasonings. Historically, it was Xenophanes of Colophon who spoke about truth in two preserved fragments of his writings (Kirk, Raven, Schofield, p. 179): (a) No man knows, or ever will know, the truth about the gods and about everything I speak of; for even if one chanced to say the complete truth, yet oneself knows it not; but seeming is wrought over all things. (b) Let these things be opined as resembling the truth. The first fragment contains a word *tetelesmenon*, also, although seldom, used in archaic Greek for truth; fragment (b) employs *etymos*. The word *aletheia* occurs once in Heraclitus (Diels I 22B 112; unfortunately, this fragment is not translated in Kirk, Raven and Schofield), when he says that wisdom consists in saying the truth. And this is everything that can be found in writings by the older philosophers of nature (including Heraclitus), the Pythagoreans and the first of the Eleatics.

(D6) The lack of words belonging to the Greek truth-family in the Milesians, the Pythagoreans and also the so-called younger philosophers of nature (Empedocles, Anaxagoras) does not preclude attempts to reconstruct concepts or even theories of truth presumably maintained by these philosophers, because the lack of definite words does not entail the lack of related concepts. Such reconstructions are based on general

views held by particular thinkers and their remarks about related questions, for instance, ways of cognition, and began to be practised even in ancient times. For example, Sextus Empiricus (*Against the Logicians* I, 115) informs us that Empedocles gave six truth-criteria; considerations about methods of knowledge-acquisition gave rise to theories of truth-criteria. In (D1) above I mentioned Herbertz 1913. This book tries to outline the truth-theories of several “silent” philosophers. For example, Herbertz derives the theory of truth of the Milesians from their naive epistemological realism. However, it is (see (D1) above) not a convincing approach. The most advanced analysis of this kind is to be found in Luther [22]. He uses not only general views of particular philosophers but also their concrete statements. For instance, Luther observes that something follows for the problems of truth from remarks of Alcmaeon of Croton about clarity and exactness of cognition, from Heraclitus’ ideas of logos and reason as well as from his remarks about the fallibility of senses, from Empedocles’ theory of experience, from Anaxagoras’ account of *nous* or from Democritus’ view that there are two ways of cognition: obscure (via senses) and true (via intellect) (see Diels II 68B 9–11; Kirk, Raven and Shofield, pp. 409–410); it is interesting to note that Democritus used the truth-talk in a more abstract way than it did earlier. ▶

(D7) Luther reconstructs truth-theories of pre-Socratics as ontological. It is surprising in some cases, because he often derives his conclusions from typical epistemological categories, like clarity, exactness, logos, reason or sense-experience and its properties. Thus, Luther extends his account of *aletheia* to views expressed in a new vocabulary. One point requires in my opinion some critical comments. Luther argues that early Greek historians, notably Herodot, understood truth ontologically. Luther (p. 88) reports that Hekataios of Milet, a historian (one generation before Herodot, that is, about 500 B.C.), used the word *aletheia* in his description of his way of writing history. He says that he will write what the truth (*aletheia*) is, according to his experience; thus, his use was more abstract than the ordinary one, but still coloured by personal experience. Also Herodot, who is regarded as the first methodologist of history, speaks about true (*alethes*) reports about the past. Kahn (see [14, passim]) quotes several veridical uses of “*to eon*” (to be) in Herodot; for instance (pp. 352–353):

“He should not have told the truth [*legein to eon*], if he wanted to lead the Spartans on an expedition into Asia.”

“Cleomanes asked Crius this, and the latter told him what was [*to eon*] (told him truth).”

Luther admits that Hekataios and Herodot (by the way, Herodot’s examples show how *aletheia*-contexts were used in concrete cases) wanted to show that historical truth is the task of writing history. Yet he insists that both understood *aletheia* (and its substitutes) as an ontological category. Is it not simpler to say that methodologically self-conscious historians were interested in telling things as they are? We also have a very interesting fragment in Thucydides (*History of the Peloponnesian War* I, XX.2, tr. by C. Foster Smith, Heinemann, London, 1919):

“So averse to taking pains are most men in the search for the truth [*aleteias*], and so prone are they to turn to what lies ready at the hand.”



I do not know whether Luther would be ready to include Thucydides (he was a contemporary of Socrates) among the ontologists in truth-theory. It is clear that the replacement of “truth” by “reality” transforms the quoted fragment into not quite coherent text. It proves that Thucydides understood *aletheia* in an epistemological manner; moreover, his understanding is abstract and intersubjective. In fact, he commented on obstacles to the apprehension of historical truth, that is, the correct report of how things were. Moreover, we should rather look at the link between Hekatoias and Herodot, and Thucydides, which is much more comprehensible, than the commitment of the historians to disclosure as the meaning of *aletheia*. I do not insist that locutions with *aletheia* and *alethes* in Hekatoias and Herodot are completely devoid of ontological aspects, but I think that Luther’s interpretations are too one-sided for his philosophical prejudices concerning the ontological use of *aletheia* as basic.

If we inspect (a) and (b), it is clear that Kahn’s translations assume that telling truth consists in telling as things are (were, will be). It supports the view that truth-talk in archaic Greek was not limited to the ontological dimension of *aletheia* and its equivalents. Since I regard this matter as fairly crucial, the following comment is in order. Even if we say that *aletheia* concerns things or being, or that it is about things or being, this is not sufficient for the ontological conception of truth. This conception requires us to consider truth as a feature (I do not enter here into the problem of the meaning of ‘feature’ in this context) of things or being. Plato in *Republic* did that (see (D2)), but there is no convincing evidence that this conception prevailed. Of course, I do not deny that some uses of *aletheia* in the pre-Socratics were ontological. Consider for example, the following fragment of Democritus (more precisely, it is the report of Sextus Empiricus about Democritus’ views; Kirk, Raven and Schofield, p. 410):

“Democritus sometimes does away with what appears to the senses, and says that none of these appears according to truth [*aletheias*] but only according to opinion: the truth [*alethes*] in real things is that there are atoms and void.”

Clearly, *alethes* refers to real things and *aletheias* can be replaced by “reality” or “actuality”. On the other hand, truth is here contrasted with opinion (*doxas*) that also invites an epistemological reading.►

Heraclitus’ passage about truth does not yield anything new; that wisdom consists in saying the truth can be implicitly found in Solon or Pittakos (see (D4) above). But Xenophon’s ideas began a new chapter in the history of epistemology. The fragment (b) (once more: “Let these things be opined as resembling the truth.”) introduces the distinction of the utmost importance, namely between opinion and truth, although it is restricted to theological matters. This distinction became one of the main themes of Parmenides. There are three important fragments about truth in Parmenides (Kirk, Raven and Shofield, pp. 245, 254–255):

“Come now and, and I will tell you (and you must carry my account away with you when you have heard it) the only ways of enquiry that are to be thought of. The one, that [it] is and that it is impossible for [it] not to be, is the path of persuasion (for she attends upon Truth [*Aletein*]; the other, that [it] is not and that

it is needful that [it] not be, that I declare to you is an altogether indiscernible track; for you could not know what is not—that cannot be done—nor indicate it.”

(b) “Here I end my trustworthy discourse and thought concerning truth [*aletheias*]; henceforth learn the beliefs of mortal men, listening to the deceitful ordering of my words.”

(c) “It is proper that you should learn all things, both the unshaken heart of well-rounded truth [*Aletheias*], and the opinions of mortals, in which there is no true [*alethes*] reliance. But nonetheless you shall learn these things too, how what is believed would have to be assuredly, pervading all things throughout.”

The fragments (b) and (c) introduce the distinction between truth and opinion in a fully general way, not only restricted to a particular field as in Xenophon. It is customary to render this distinction as the contrast between *episteme* and *doxa*. Thus, truth is a property of *episteme* or we can even say that the domain of truth and the domain of *episteme* are identical. Let me only register this function of truth without further comments, although it deserves them, but perhaps not in the context of the concept of truth; the history of epistemology from Plato to the Gettier counterexamples shows that the problem is that of defining *episteme* (knowledge) rather than of defining truth. Thus, there remains a budget of problems connected with (a), in particular the question of how truth is related to being and existence. It is well known that there are a number of difficult issues, additionally strengthened by a cryptic thesis of Parmenides “For the same thing is there both to be thought of and to be” or (simpler, but not clearer) “Thought and being are the same”, and a number of proposals about how to solve difficulties in interpreting Parmenides (see [31] for an extensive discussion). I cannot enter into this interpretative jungle. Fortunately, my task justifies a restriction to a few rather simple remarks: according to Parmenides, truth is extensionally equivalent to being what justifies the veridical use of “*to on*” (to be) (see [14, Chapter VII] for further discussion). Thus, to say “... is” and “... is true” is sometimes (of course, not always) equivalent. *Aletheia* in this meaning is really an ontological category, *pace* Luther, but it is clear that this sense is only one possible sense. Even (a) can be interpreted more epistemologically if one focuses more on “enquiry” than on “that [it] is and that it is impossible for [it] not to be”, but the most plausible interpretation of Parmenides is that he focused on being. Incidentally, the equivalence of truth and being has plagued philosophy from the Eleatics to the present. The problem concerns the truth of negative existentials: if truth and being are equivalent, it is mysterious how it is possible to issue true sentences about objects that do not exist, because non-existing objects, due to the assumed equivalence, seem to be a *contradictio in adiecto* (see [23,24] for a discussion of this problem). Plato was the first who tried solve this difficulty (see below).

For Parmenides, the contrast between being and not-being is sharp and exhaustive: the product of being and non-being is empty, and there is nothing in between being and non-being. If we map these principles onto truth, we get the laws of non-contradiction and excluded middle, no matter whether they are understood ontologically or logically. In any case, if it was true, as Heitsch and Detienne maintain (see (D5) above) that *aletheia* and *pseudos* were at least partly complementary in archaic Greek, what

passed away with Parmenides. This is not surprising if we remember that the Eleatics essentially contributed to the rise of logic, perhaps not logical theory (this had to wait for Aristotle), but to logical deductive practice. The last question is whether the idea of correspondence between thought and reality was involved in Parmenides' thinking about truth. The answer is “yes” but with various qualifications. Certainly, not in the sense which is usually attributed to Aristotle or Thomas Aquinas. On the other hand, extensional equivalence of true and being (and also the identity of being and thought, whatever this might mean) strongly suggested that truth is a relational concept because truth-talk is related to being. Thus, the novelties and problems introduced by Parmenides into the philosophy of truth were numerous and fundamental, including his popularization of the word *aletheia* as a standard one. The role of Parmenides is well summarized in the following quotation:

The presence and even the possibility of truth is closely related to the Greek distinction between *doxa* and *episteme* [...] and their proper objects. Thus there is really no critical problem until Parmenides distinguishes being from nonbeing, associates the later with sense perception, asserts that there is no truth in the phenomenal world of *doxa* [...], and contrasts the latter with the “way of Truth” [...]. As a corollary of this and of the realization of the arbitrary nature of laws and customs [...], Protagoras propounded his theory of the relativity of truth [...]. [25, pp. 16/17]

Protagoras is presumably the author of the first work in which the word “truth” occurs; according to the tradition, he wrote a treatise *Aletheia e kataballountes* (Truth or Refuting Speeches). The only fragment which is preserved is the famous passage expressing the doctrine of man-the-mensura (quotation after Guthrie [10, p. 183]):

Man is the measure of all things that are that they are, and of things that are not that they are not.

Typically, the first part of this statement is quoted and taken as the formulation of Protagoras' relativism and subjectivism: if man is the measure of all things, then everything is relative or subjective. However, Parmenides, in order to develop his anthropological views, did not need to add the second part of his maxim; he could rely on practical and rhetorical premises.

The title of Protagoras' work suggests that he wanted to refute some views about truth. It is clear that Parmenides' absolutism and rationalism were the target for Protagoras. The sequel to “Man is the measure of all things”, that is the phrase “[things] that are that they are, and of things that are not that they are not” uses the Parmenidean language. The end of the discussed phrase—“things that are not that they are not”—clearly contradicts Parmenides who rejected the idea that they are things that are not. The first part, namely “[things] that are they are”, obviously expresses Parmenides' idea of truth. Protagoras rejected this understanding of truth by admitting that human opinions dictate the truth and falsehood, that is, decide whether things that are that they are or whether things that are not that they are not. This view devastated logic which, as I pointed out above, came into existence with the Eleatics. In fact, Protagoras maintained that everything is true, Gorgias that everything is false, and both

views destroyed the principle of contradiction as does, to use contemporary metalogic, every one-valued logic. I do not deny that discussions of Socrates, Plato and Aristotle with Protagoras and other sophists had enormous historical significance. However, these debates focused (and still do, see [5]) mainly on the first part of his statement and thereby concealed an important matter which seems relevant for the history of the concept of truth. Protagoras, in his man-the-mensura maxim, introduced a canonical language for speaking about truth, although it is not clear whether sentences or sensations were for him the primary bearers of truth (the same ambiguity is in Democritus). If we add “to tell truth is to tell” to “of things that are that they are and of things that are not that they are not”, we obtain a prototype of famous formulas of Plato and Aristotle (see Kahn [14, p. 367]) that certainly apply to sentences. Thus, Protagoras is “a corollary” of Parmenides not only for replacing absolutism by relativism, but also by developing a suitable language in which “The Way of Truth” could be expressed without poetic allegories. Another important point is that Protagoras who was a typical epistemologist probably contributed to the rise of the view that truth is in intellect, not in things. If I am right, then, surprisingly, Protagoras who refuted Parmenides and was refuted by Socrates, Plato and Aristotle, became a link between the Eleatics and the great Athenians philosophers.

### 3. Plato

Plato developed the idea of *episteme* and made it one of the most crucial points of his philosophy. According to Plato, *episteme* has its own special subject matter: the world of forms. Thus, *episteme* is the true knowledge about the true being. It is the ontological doctrine of truth, although some authors (see [29, p. 15]) speak about ontological-epistemological theory of truth in Plato. This section is exclusively devoted to Plato’s definition of true and false sentences (propositions); I leave apart Plato’s account in *Cratylus* where he speaks about the truth of names.

Plato’s definition of propositional truth is given in *Sophist*. There are relevant fragments in two translations (starred passages will appear in the second translation):

I. *Sophist*, transl. by N. P. White, in Plato, *Complete Works*, ed. by J. M. Cooper and D. S. Hutchinson, Hackett, Indianapolis 1997).

(261e–262d): Visitor [of Elea]: [...] there are two ways of use your voice of indicating something about being.

Theaetetus: What they are:

Visitor: One kind is called names, and the other is called verbs.

Theaetetus: Tell me what each of them is.

Visitor: A verb is the sort of indication that’s applied to an action.

Theaetetus: Yes.

Visitor: And a name is the kind of spoken sign that’s applied to things that perform the actions.

Theaetetus: Definitely.

Visitor: So no speech is formed just from names spoken in a row, and also not from verbs that are spoken without names.

Theaetetus: I didn't understand that.

Visitor: Clearly you were focusing on something else when you agreed with me just now. What I meant was simply this: things don't form speech if they're said in a row like this.

Theaetetus: Like what?

Visitor: For example "walks runs sleep", and other verbs that signify actions. Even if somebody said all of them one after another that wouldn't be speech.

Theaetetus: Of course not.

Visitor: Again, if somebody said "lion stag horse" and whatever names there are of things that perform actions, the series wouldn't make up speech. The sounds he uttered in the first and second way wouldn't indicate either action or an inaction or the being of something that is not something that is or of something that is not—not until he mixed verbs with nouns. But when he did that, they'd fit together and speech—the simplest and smallest kind of speech, I suppose—would arise from that first weaving of name and verb together.

Theaetetus: What do you mean?

Visitor: When someone says "man learns", would you say that's the shortest and simplest kind of speech?

Theaetetus: Yes.

Visitor: Since gives an indication about what is, or comes to be, or has come to be, or is going to be. And he doesn't just name, but *accomplishes* something, by weaving verbs with names. That's way we said that he speaks and doesn't just name. In fact this weaving is what we use the word "speech" for.

Theaetetus: Right.

Visitor: So some things fit together and some don't. Likewise some vocal signs don't fit together, but the ones produce speech.

Theaetetus: Absolutely.

Visitor: But there's still this one point.

Theaetetus: What?

\*Visitor: Whenever there's speech it has to be about something. It's impossible for it not to be about something.

\*Theaetetus: Yes.

Visitor: And speech also has to have some particular quality.

Theaetetus: Of course.

Visitor: Now let's turn our attention to ourselves.

Theaetetus: All right.

Visitor: I'll produce some speech by putting a thing together with an action by means of a name and a verb. You have to tell me what it's about.

\*Theaetetus: I'll do it as well as I can.

\*Visitor: "Theaetetus sits" That's not a long piece of speech, is it?

\*Theaetetus: No, not too long.

\*Visitor: Your job is to tell me what it's about, what it's of.

\*Theaetetus: Clearly it's about me, of me.

\*Visitor: Then what about this one?

\*Theaetetus: What one?

\*Visitor: “Theaetetus (to whom I’m now talking) flies.”

\*Theaetetus: No one could ever deny that it’s of me and about me.

\*Visitor: We also say that each piece of speech has to have the same particular quality.

\*Theaetetus: Yes.

\*Visitor: What quality should we say each one of these has?

\*Theaetetus: The second one is false, I suppose, and the other one is true.

\*Visitor: And the true one says *those that are*, as they are, about you.

\*Theaetetus: Of course.

\*Visitor: And the false one says things different from *those they are*.

\*Theaetetus: Yes.

\*Visitor: So it says *those that are not*, but that they are.

\*Theaetetus: I suppose so.

(II) *Sophist*, transl. by F. M. Cornford, in [6, pp. 308–312].

Str[anger]: Whenever there is a statement, it must be about something; it cannot be about nothing.

Theaet[etus]: That is so.

Str. “Theaetetus sits”—not a lengthy statement, is it?

Theaet. No, of very modest length.

Str. Now it is for you to say what is about—to whom it belongs.

Theaet. Clearly about me: it belongs to me.

Str. Now take another.

Theaet. Namely?

Str. “Theaetetus (whom I am talking to at this moment) flies”.

Theaet. That too can only be described as belonging to me and about me.

Str. And moreover we agree that any statement must have a certain character.

Theaet. Yes.

Str. Then what sort of character can we assign to each of these?

Theaet. One is false, the other true?

Str. And the true states about you things that are (or the fact) as they are.

Theaet. Certainly.

Str. Whereas the false statement states about you things *different* from the things that are.

Theaet. Yes.

Str. And accordingly states *things that are-not* as being.

Theaet. No doubt.

Plato clearly attributes truth and falsehood to sentences as grammatical units with a definite structure: noun+verb. Neither nouns (names) nor verbs (predicated in our present sense) can be qualified as true or false. The relevant definitions that can be extracted from both translations are as follows: (I) A sentence *A* about an object *O* is true if and only if *A* says about *O* things those that they are, as they are; A sentence *A* about an object *O* is false if and only if *A* says about *O* things different from those that are; (II) A sentence *A* about an object *O* is true if and only if *A* states about *O* things those that are (or the facts) as they are; A sentence *A* about



an object  $O$  is false if and only if  $A$  states about  $O$  things different from the things that are.

Cornford (pp. 311–314) adds comments. He writes

[...] the notion [of truth] is that truth consists in the *correspondence* of the statement with the ‘things that are’ or ‘the facts’. How they correspond is not explained. (p. 310)

Cornford gives what he takes to be an explanation in the name of Plato. Assume that the sentence ‘Theaetetus sits’ is true. It is so because ‘Theaetetus’ stands for Theaetetus, ‘sits’ stands for sitting, and ‘Theaetetus sits’ corresponds to the existing fact, namely: Theaetetus sitting. And further we read:

Here each of the two words *stands for* one element in the complex fact. The statement as the whole is complex and its structure *corresponds to* the structure of the fact. Truth means this correspondence. (p. 311)

However, Plato speaks nothing about correspondence or about facts. Thus, Cornford’s explanation is an overinterpretation of what Plato literally said. Clearly, Cornford tries to reconcile Plato with the correspondence theory of truth in its modern version (truth as the correspondence with facts).

(D8) There is one point which I have deliberately neglected. It concerns the problem of how false statements are possible. This question is nearly considered when one speaks about Plato’s theory of propositional truth (see, for example, [19] and a very extensive treatment in [29, Part II]). Plato considered these questions in *Theaetetus* 187–200 and *Sophist* 237–246, 259–263. This last indication shows that Plato’s quoted definitions of truth were given in the context of his considerations about the possibility of the false. I did not enter what is said in the *Theaetetus* because we do not find in this dialogue any definition of truth; Plato speaks there about truth, falsehood and *episteme*. Look at the following fragments: (Ia) Visitor: Whenever there’s speech it has to be about something. It’s impossible for it not to be about something. (Ib) Visitor: And the false one says things different from *those they are*. Visitor: So it says *those that are not*, but that they are. (IIa) Str[anger]: Whenever there is a statement, it must be about something; it cannot be about nothing. Str. Whereas the false statement states about you things *different* from the things that are. (IIb) Str. And accordingly states *things that are-not* as being.

There is an interesting difference in translation. In (Ia), Visitor/Stranger says that if there is a speech about something, it cannot be not about something, but in (IIa), Visitor/Stranger seems to derive another conclusion about speech: since speech must be about something, it cannot be about nothing. Let us agree for the sake of argument that if I say about nothing, I do not say anything about Theaetetus. Platon insisted that it is impossible to speak about nothing. Provided that classical logic is used, he was right. Saying something about nothing would have to have the form “nothing is  $P$ ”, where “nothing” functions as a term. Since nothing as the denotation of “nothing” has to be individuated, we have further that there is something which is nothing, which gives a contradiction. This proves that the sentence “nothing is  $P$ ” has no model, that is, it is not about anything. If we will conventionally define that “not something (anything) =

nothing”, we can say that if it is necessary for speech to be about something, thereby it is impossible to be about nothing. Consider now the crucial sentence “Theaetetus flies” in circumstances provided by Plato, that is, in the situation where Theaetetus sits. One can say that the sentence ‘Theaetetus flies’ is about nothing. Conford says (p. 313) that, according to this interpretation, our sentence is about a non-existing fact (p. 313). Plato ascribes to Visitor/Stranger the following inference: if a sentence states about an object  $O$  things different from those that are, then it entails that the things that are not, are. The Visitor/Stranger came from Elea and he exposed Parmenides’ theory. Let us assume that the Parmenidian logic licensed the inference (I do not assert that it is so): if “ $a$  is  $P$ ” is true and “ $a$  is  $Q$ ” is false, then the latter is about nothing. Certainly, predicate logic invalidates this reasoning. We have only this: if “ $a$  is  $Q$ ” is false, then “it is not the case that  $a$  is  $Q$ ” is true (perhaps “ $a$  is non- $Q$ ” is true). Since individual constants in predicate logic are not empty (in strict accordance with Plato’s claim that speech must be about something), we can perfectly well say that the sentence “Theaetetus flies” is about Theaetetus, but it is false (or states false things about Theaetetus, or states about him things that are not). The problem is how to understand phrases like “things that are”. There is no trouble if we regard them as expressing predications, but difficulties arise when the purely existential meaning is attributed to them.► However, I would like to add three more remarks.

It is a very common thing to say that Plato’s analysis of false sentences was a reply to the Sophists. As a matter of fact, Protagoras (see above) maintained that everything was true, but he did not argue from logical considerations but with the help of the man-the-mensura principle. I do not deny that Plato was against the Sophists, but it seems that he also refuted Parmenides in this case. Plato’s argument was very simple: if “ $a$  is  $P$ ” is true and it implies “ $a$  is non- $Q$ ”, then “ $a$  is  $Q$ ” is false. Therefore, false sentences about something are possible.

I will not follow Conford’s interpretation of Plato on truth. I think that if we want to do justice to the text, we should stay with a simple interpretation suggested above: a sentence is true if it says about its object things as they are, and false if it says things as they are not. This assumes that the phrase “they are” is understood as an abbreviated predication. In contemporary terminology, we can express this in such a way: a sentence “ $a$  is  $P$ ” is true if and only if it says about  $a$  things as they are, that is, says that  $a$  is  $P$ .; otherwise it is false.

(D9) Translation of Plato by Nicolas White, is much more closer to the original Greek text than Cornford’s translation. As far as I know, to translate the classics in a way more conforming ordinary Greek or Latin became now a standard. The way of translating is significant for philosophical interpretations. White’s translation does not allow us to interpret Plato’s theory of truth as a correspondence theory without further ado.►

#### 4. Aristotle

There is no question that Aristotle was the most influential person in the philosophy of truth. There is a selection of the Stagirite statements about truth (I will mention

various translations in cases in which differences seem significant) : E—Aristotle, *Categoriae, De Interpretatione*, transl. by E. M. Edgill, in *The Works of Aristotle*, ed. by W. D. Ross, Oxford University Press, Oxford 1928; A—Aristotle's, *De Interpretatione*, transl. by J. L. Acrill, At the Clarendon Press, Oxford 1963; C—Aristotle, *On Interpretation* transl. by H. P. Cooke, in *Aristotle in 23 Volumes I*, Harvard University Press, Cambridge, MA, 1983; R—Aristotle, *Metaphysics*, transl. by W. D. Ross, Oxford University Press, Oxford 1924; K—Aristotle, *Metaphysics*, Books  $\Gamma$ ,  $\Delta$ , and  $E$ , transl. by Ch. Kirvan; due to Aristotle's significance for the Middle Ages, I also include Latin translations (indicated by (L)) of some fragments after *Aristoteles Latine*, editit Academia Regia Borussica, Georgius Reimer, Berolina, 1831):

(A1) *Categorie* 14b

(E) “The fact of the being of a man carries with it the truth of the proposition that he is, and the implication is reciprocal: if a man is, the proposition wherein we allege that he is true, then he is. The true proposition is, however, in no way the cause of the being of the man, but the fact of the man's being does seem somehow to be the cause of the truth of the proposition, for the truth or falsity of the proposition depends on the fact of the man's being or not being.”

(A2) *De Interpretatione* 19a 35

(E) “A sea-fight must either take place to-morrow or not, but it is not necessary that it should take place to-morrow, neither is it necessary that it should not take place, yet it is necessary that it either should or should not take place to-morrow. Since propositions correspond with facts, it is evident that when in future events there is a real alternative, and a potentiality in contrary directions, the corresponding affirmation and denial have the same character.”

(A) (Omitting the first sentence) “[...], since statements are true according to how the actual things are, it is clear that wherever these are such as to allow of contraries as chance has it, the same necessarily holds for contradictories also.”

(C) (Only the middle sentence) “[...] as the truth of propositions consists in corresponding with facts.”

(L) (Only the middle sentence) “[...] cum orationes similiter verae sint atque res [...]” (transl. by Julius Pacius)

(A3) *Metaphysics* 1011b

(R) “Falsehood is saying of that which is that it is, or that what which is not, that it is not; truth is saying of that which is that it is, or of that which is not that it is not. Therefore, he who says that a thing is or not is, says what is either true or false. But if the subject is a middle term between contradictories, neither that which is nor which is not is being said to be or not to be.”

(K) “[...] for to say that which is not or that which is not is, is a falsehood; and to say that which is and that which is not is not, is true; so that, also, he who says that a thing is or not will have the truth or be in error. But it is said that neither that which is nor that which is not either is not or is.”

(L) “[...] dicere [...] ens non esse aut hoc esse, falsum: ens autem esse et non esse, verum est. Quare et qui dicit esse aut non esse, verum dicet aut mentietur, sed nec ens dicitur non esse aut esse, nec non est”. (tr. by Bessarion)

(A4) *Methaphysics* 1027b

(R) “Being as truth and not-being as falsity depend on a putting together and a taking apart; both together are concerned with the partition of a pair of contradictory propositions. [...] true judgement affirms when the subject and predicate are in fact combined, denies when they are separated, while the false does the opposite; how thinking things together or separately takes place is another question [...]. [...] falsity and truth are not in things [...], but in thoughts.”

(K) That which is as true and that which is not as falsehood are concerned with composition and division and, taken together, with the apportionment of a contradiction. For truth has the affirmation in the case of what is compounded and the denial in the case of what is divided, while a falsehood has the contradictory of this apportionment. (How we come to conceive things together or separately is another question) [...]. [...] Falsehood and truth are not in actual things [...] but in thoughts.”

(L) “[...] verum, ens et non ens, ut falsum quoniam circa compositionem et divisionem est, et omnino circa partitionem contradictionis. Verum enim affirmationem in compositio habet, negationem vero in diviso, falsum vero huius partitionis contradictionem quo autem modo quod simul aut quod separatim est, intelligere accidat, alia ratio est. [...] Non enim est falsum et verum in rebus [...] sed in mente.” (tr. by Bessarion)

(A5) *Metaphysics* 1051a–b

(R) “‘Being’ and ‘not being’ are used with reference (1) to the categories, (2) to potency and actuality, (3) to truth and falsity. Truth means thinking that to be divided or united which is divided or united, respectively; error means being in state contrary to the facts. When is truth present? You are not white because we truly think you are, but vice versa.”

(L) (Restricting to the counterpart of “Truth means thinking that to be divided or united which is divided or united”) “Quamobrem verum dicit, qui divisum dividi et compositum componi putat, falsum autem, qui contraquam res se habeant, aut quando sunt aut not sunt.” (tr. by Bessarion)

Aristotle clearly distinguishes being *qua* being and being *qua* truth (see (A5)). Since truth and falsehood is in thoughts (see (A4)), not in things, we can interpret this distinction as one between an ontological and one epistemological concept of truth, and regard Aristotle as advocating the epistemological account of truth. Another certain point is that the Stagirite closely connects truth, falsehood and logic, defending (see (A3)) principles of contradiction and the excluded middle, yielding the law of bivalence (see, however, (D10) below). Truth is independent of concrete acts of thinking (see (A1), (A5)) which do not cause something to be true or false; the causal relation goes rather from the world to truths as formulated by people. Also Aristotle (see (A4)) makes a distinction between truth and its criteria. Although Aristotle is not quite explicit about bearers of truth, we can assume that sentences, propositions or statements play this role (see (A2); in the Greek original the word *logoi* occurs). Aristotle in many respects continues Plato’s path in thinking about truth and strengthens it; he also adds something new, particularly as far as logic is concerned. After all, his theses about this topic are ordered, interconnected and this is what shows that we have here to do with the first full-blooded theory of truth in the history of philosophy.

Fragments of (A3)–(A5), more precisely locutions (a) Falsehood is saying of that which is that it is, or of that which is not, that it is not; truth is saying of that which is that it is, or of that which is not that it is not. (b) True judgement affirms when the subject and predicate are in fact combined, denies when they are separated, while the false does the opposite. (c) Truth means thinking that to be divided or united which is divided or united, respectively; error means being in state contrary to the facts, look like attempts to define the concept of truth. The statements (b) and (c) express approximately the same thing. However, under the literal interpretation, (a) is different. The main point is that (a) applies to existential propositions (*a* exists, or *a* does not exist), but (b) and (c) to that composed of subject and predicate (*'a is b'*, *'a is not b'*). The interpretation of (b) and (c) is easier. Let us say that the structure *'a is b'* expresses that the subject *a* and the predicate *b* are combined, and the structure *'a is not b'* expresses that they are divided. Here we are at the level of language. On the level of things, we have combination and division of substances, the primary substance denoted by *a* and the secondary one denoted by *b*. Now, we can say that a sentence is true if combination (division) on the level of language is properly related to combination on the level of substances; otherwise it is false. This explanation cannot be extended to existential sentences in a straightforward way. Why did Aristotle introduce this dualism? One explanation is that (a) appears in the context of Aristotle's polemics against Protagoras. The formula (a) is an extension of the-man-the-mensura-principle (see Kahn [14, p. 367] to the effect that Protagoras introduced the prototype of (a) into Greek philosophy), and Aristotle simply used the language of his philosophical enemy when he criticized him. Aristotle's task consisted in defending the principle of excluded middle against sophistic attacks and perhaps he wanted to carry out the defence by adopting Protagoras' truth-talk. However, if we accept Kahn's view (see Kahn [14, pp. 331–370]) about the veridical use of the Greek counterpart of "be" (*esti, einai*), then a new perspective is opened up. According to Kahn (see p. 367) the formula "that what (instead of "which", but it does not make any difference) is" is to be understood as "what is so". If we take this hint, (a) means (see [14, p. 336]): (a1) To say what of is (so) that it is and of what is (not so) that it is, is falsehood; to say of what is (so) that it is and of what is not (so) that it is not, is true. This reading makes (a) closer to (b) and (c), and now we can say that the latter explains what "what is (is not) so" means.

A separate, but related problem concerns whether Aristotle gave a version of the correspondence theory of truth. According to Cavini [4, p. 87], (A1) is an informal statement of the equivalence of the type "*A* is true if and only if *A*" (T-equivalence). This point is important because T-equivalences is a stable ingredient of any correspondence theory of truth. However, two remarks are here in order. Firstly, T-equivalence is only a part of the correspondence theory of truth, not the whole theory. Secondly, Cavini's interpretation must be qualified by observing that a causal nexus is involved in the Aristotelian formulation, but typical later versions, in particular, contemporary formulations of T-equivalence, are devoid of any such factors. On the other hand, the idea that the truth of a sentences is rooted in the world, but facts are independent of their assertions, was always accepted by advocates of this theory. (A2) is of special interest in this context. The relevant fragment in the Greek original goes: (G) *est epei honoios*

*oi logoi aletheis hosper ta pragmata*. It is the first part of a compound sentence of which the second part asserts that both contrary contingent statements about the future (that is, “the sea-battle will be tomorrow” and “the sea-battle will not be tomorrow”) have the same character, that is, are possible (I will not enter into the famous problem of future contingents). (E) translates (G) as “Since propositions correspond with facts”, which is certainly wrong since it neglects the word *aletheis*; clearly, (G) says something about true propositions, not propositions. The problem with (A) and (C) is that the connection between both parts of the whole sentence is mysterious, because it is not clear how truth as the correspondence with facts makes both contrary future contingents together possible. Independently of that, one may note that no word in (G) justifies using the word “correspondence”, “corresponds” or *similariter* (as in (L)). In this respect, (A) is much better, but it suggests too much in my opinion, because it employs the phrase “the actual things” which is burdened by quite a rich philosophical content. I think that (A) should be translated literally, something like: “Just because statements are true according to how things (events, facts, etc.) are”. This clearly indicates that the double possibility of contrary future contingents depends on how things are or rather will be. Nothing more, unless we decide to follow Jan Łukasiewicz and apply three-valued logic to this issue.

J. L. Ackrill says in his comments on (A): “[Aristotle] seem to hold a rather crude realistic correspondence theory of truth.” (p. 140). Ackrill (like many other commentators; I will mention them later, but see Carretero [8] for an extensive treatment of Aristotelian theory as based on the concept of correspondence) takes this qualification as granted and beyond all doubt. However, I see little justification for this interpretation. Certainly (G) is not sufficient. More promising are (A4) and (A5). Both seem to invite the concept of correspondence, but as an interpretative device, and not as something provided by the literal meaning of those fragments. A good summary of the problem is to be found in Kahn [14, p. 367]:

“As we have seen [...] the classical formula given by Aristotle—to say of what that it is and of what is not that is not—merely articulates the pattern of the ordinary veridical idiom in Greek. Wherever their full structure is clear, these uses of *einai* are characterized by an explicit comparison, formulated by *ontos ... os* between an essive clause which expresses how things are, were, or will be, and an intentional clause with a verb of saying or thinking. [...] As in the most contemporary idiom so in Homer and Sophocles: the man who speaks the truth “tells it like it is”, and the liar tells it otherwise.

This informal *façon de parler* leaves open many of the philosophic issues involved in a correspondence theory which conceives truth as some kind of relation between language and the world. This idiom specifies only that there is some relation of this kind, such that it admits a comparison between its terms, that one term is to be found in *what is said or thought*, the other in *what is actually the case*, and that the truth depends upon some point of similarity or agreement (*ontos ... os*) between two.”

Yet I think that Kahn goes too far, because “agreement”, “similarity” and “comparison” are dangerous words, unless they are taken in a very informal way. If that is the case, I would cancel the word “comparison” and the very last clause, namely, “that truth depends, etc.”. The fragment *Metaphysics* 1011 B expresses the basic Aristotelian



intuition concerning the concept of truth which, as further history shows, was considerably obscured by explanations, like (A4) and (A5). It is interesting that *Metaphysics* 1011 B can be seen as a development of the classical scheme “verbum dicendi plus *aletheia*”. In fact, develops the meaning of *aletheia* hidden in traditional usages. In order to see this link, it is enough to rephrase the passage in question as “To say falsehood is to say what of is (so) that it is and of what is (not so) that it is; to say truth is to say of what is (so) that it is and of what is not (so) that it is not.” Aristotle here takes the last step toward an abstract treatment of *aletheia* in the antiquity. Tarski did the same things in the 20th century by embedding the concept of truth into a precise metalogical conceptual scheme. If we agree that Aristotle refined the ordinary use of *aletheia*, we should also recognize that Tarski’s definition, following *Metaphysics* 11 B, determines the concept which is not at odds with the everyday linguistic practice.

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