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Methodological Issues from Medicine in Plato

Gottfried Heinemann (Kassel)

1. The philosophical quest for truth is sometimes represented as a quest for *remote truths*, that is, for truths that lie beyond the reach of common sense and ordinary discourse.¹ Thus, philosophy is identified with metaphysics, and is described as being continuous to religion and mythos. Sure, there is ample evidence from the history of philosophy in support of this view. Non-metaphysical approaches to philosophy, however, are not refuted by this. Nor are non-metaphysical approaches even deprived of an ancestry in the metaphysical tradition itself, provided that the latter is re-interpreted in a suitable way.²

Hence, as a starting point, I will take it for granted that, in the so-called Presocratics and Plato, philosophy begins as metaphysics. In particular, ancient Greek philosophy gives shape to a certain habit to assume that things have true natures (besides or beyond such features as are evident to common sense) or that (besides or beyond the world of ordinary discourse) there is a true reality to be searched for or investigated. Any attempt to understand the beginnings of philosophy in a non-metaphysical way, therefore, requires that this habit be somehow explained. Accordingly, my preliminary question concerns the kind of explanation required.

Let me give an example: Another habit to be observed in ancient Greek thought is the habit to assume that (besides such ordinary beasts as mice and sheep) there are crocodiles living in Egypt. This habit is easily explained by the facts (i) that there actually were crocodiles living in Egypt and (ii) that Herodotus (2,68) and others described them and made their existence known to the public. Yet I think that the habit described earlier cannot be explained this way. For in this case, there is no equivalent to item (i), viz., to the existence of crocodiles in Egypt.

¹ Obviously, the same scheme applies to science when theoretical terms are given realistic interpretations. – *The Quest for Truth. Greek Philosophy and Epistemology*. was the title of the conference to which my paper was presented.

² For a systematic exposition - with particular emphasis on the concept of nature - see HEINEMANN [2001].

That is to say, it is not - or rather,³ it is pointless to claim that it is - a feature in the nature of things that things have true natures. Rather, it is a fact concerning the history of ideas that things sometimes or even notoriously are claimed to have true natures. Nor is it a feature of reality that, besides or beyond the world of ordinary discourse, there is a true reality to be searched for. Again, it is a fact about the history of ideas that ordinary questions of truth and falsehood were sometimes given the form of assuming that true reality is hidden and, under certain circumstances, can be revealed. It is this kind of fact that, in my opinion, requires explanation.

Now, there usually is no talk about remote truths to be known without there being experts (*sophoi*) who claim to know the truths in question. And *vice versa*, there is no expert knowledge (*sophia*) without claims to knowing some remote truths.⁴ Hence, I suggest that knowledge-claims about remote truths - about true reality or the true nature of things - are equivalent to claims about the job that experts can do. Accordingly, such claims are best understood in the light of quite another set of questions, namely: (i) What does it mean to be an expert? and: (ii) How can the distinction of experts from laymen or ordinary folk be justified in a rational way?

2. There are diverse types of expert knowledge, that is, of ways to be a *sophos*. Art - or craftsmanship, *technê* - is one such type which, I claim, became paradigmatic for philosophy in Plato and after.⁵

In particular, medicine is an art (*technê*). This means,⁶ on the one hand, that medicine is a profession. It serves a purpose which, as such, is undisputed and which, both by the practitioners of

³ Object language here is merely a shorthand for the metalanguage required.

⁴ On the notion of σοφία (*sophia*), see SNELL [1924], p. 4 sqq.; GLADIGOW [1991].

⁵ As regards Plato, see also HEINEMANN [1999]. On Aristotle and Hellenistic philosophy, see ANNAS [1993], p 69 sqq. and passim.

⁶ On the notion of τέχνη (*technê*), see HEINIMANN [1961], SCHNEIDER [1989]. - The account I shall give in the sequel mainly relies on the Hippocratic treatises Περί τέχνης (*De arte*) and Περί ἀρχαίης ἰητρικῆς (*VM*), both of which were presumably written about 400 B.C. In both cases, authorship is uncertain. In particular, *De arte* is sometimes claimed to be sophistic rather than medical in origin (for a discussion, see JOUANNA [1988], p. 179 sqq.). This question, however, does not affect my argument. For, assume (as Menachem Luz has put it in the discussion of the present paper) that "it is likely that *VM* and *De arte* record not the [sc. methodological] vocabulary of professional *medici* but the vocabulary of how sophists and the public regarded and digested medical thought". Still, either treatise will be found to present a line of thought and a methodological vocabulary designed to assess medical thought in a rational way. And this is enough since my argument merely depends on the assumption that the relationship of professional *medici* to the public did require some kind of rational justification.

the art and by a considerable part of the public, is agreed to be incapable of being served in any other way. Its usefulness makes it possible for practitioners of the art to earn their living by it. Since, on the other hand, the purpose in question may be served in a more or less satisfactory way, there must be standards with which professional practice is bound to comply. Roughly speaking, professional practice may be right or wrong and, accordingly, practitioners may vary in competence. Hence, there is an art which serves its purpose in a reliable way if and only if there are "marks" (*horoi*) by reference to which right and wrong are distinguishable in advance.⁷

The degree to which such "marks" are accessible depends on professional knowledge. Yet, in addition to any requirement that art itself can ensure, there must be something providing the "marks" of right and wrong which are required for there to be an art. Usually, this claim takes the form that things are supposed to have "natures". That is to say, in "technical" discourse to have a "nature" (*physis*) ultimately means to provide "marks" by reference to which right and wrong are distinguishable.⁸

⁷ See [Hippocrates], *De arte* 5.6 (Jouanna): Καίτοι ὅπου τό τε ὀρθόν καὶ τὸ μὴ ὀρθόν ὄρον ἔχει ἐκάτερον, πῶς τοῦτο οὐκ ἂν τέχνη εἴη; Τοῦτο γὰρ ἔγωγέ φημι ἀτεχνίην εἶναι ὅπου μήτε ὀρθόν ἐνι μηδὲν μήτε οὐκ ὀρθόν. - For the meaning of ὄρος (*horos*: "mark"), see CORNFORD [1935], p. 238 (on Plato, *Soph.* 247e). CORNFORD rightly insists against WHITEHEAD (cf. *ibid.*, p. v) that a "mark" is something less than a "definition"; this criticism equally applies to ROOCHNIK's rendering of ὄρος (at *De arte* 5.6) by "defined limit", see his [1996], p. 47.

⁸ Sure, this definition was never explicitly stated by classical authors. What comes closest to it is the general principle presupposed in Plato's *Cratylus* 386c sqq. which may be stated as follows.

- (1) For any realm of activities, if there is a distinction of right and wrong (or equivalently, if there is an art) then there must be something with a "nature" such that just those activities are right which follow that "nature".

In *Crat.* 386c sqq., this something is the activity itself, together with its passive counterpart, thus allowing that correct uses of names follow the "nature" of naming and of being named rather than the "nature" of the spatio-temporal things to which names are applied. Analogously, when the correct use of evaluative terms is at issue, the "nature" of evaluation is attributed to the meanings of the terms in question, that is, to the relevant "form" (see below, Section 3).

In (1), arts are linked with "natures" via the distinction of right from wrong. At *De arte* 5.6, where no "natures" are mentioned, this distinction is claimed to require "marks" by reference to which it is effected. A straightforward way of taking this requirement into account in (1) is provided by additionally claiming that

- (2) Something has a "nature" if and only if it provides "marks" by reference to which right and wrong are distinguishable.

While the latter statement in itself describes metaphysical foundations of art, it may well serve as a *definition* when metaphysics, including the concept of nature, is approached in a non-metaphysical way.

For a good analysis of the *Cratylus* passage, see chap. 4 in PALMER [1989]. In addition, PALMER's hint at a medical background for Plato's examples (cutting and burning, see *ibid.* p. 93 n. 4) is valuable. Yet, I

This notion of art being guided by natural knowledge is expounded in the treatise *On Ancient Medicine* ([Hippocrates], *VM*).⁹ The argument of *VM* starts from the general principle that, for the assessment of any pretence to knowledge, there must be something "by reference to which certainty can be attained".¹⁰ Meteorological theories fail to meet this requirement and hence must be based on theoretical entities (*hypotheseis*).¹¹ By contrast, medicine deals with the everyday affairs of its clients. Accordingly, medical knowledge is claimed to be in contact with reality by being intelligible to laymen and, hence, to have no need for theoretical entities (ch. 2). In medical practice, right and wrong are distinguished by reference to the bodily "sensitivity" (*aisthêsis*) of the clients¹² - that is, as becomes clear from the context, to the particular way a sick body reacts to foods and drinks etc. This claim is echoed when later in the treatise (ch. 20) the kind of "natural knowledge" (*peri physeôs eidenai*) required by medicine is described as answering such questions as "what is man in relation to foods and drinks, and to habits in general, and what will be the effects of each on each individual"?¹³ Accordingly, (sc. human) "nature" is described as a pattern to which bodily interactions with external factors (*dynameis*, *VM* 3.4 and *passim*) conform. Since, therefore, natural knowledge is causal knowledge referring to facts of ordinary life, it is convincingly suggested throughout the treatise that natural knowledge must be acquired by, and be ultimately derived from, experience.

3. In Plato's early and middle dialogues, medicine is a paradigm illustrating methodological standards for any art. This is explicitly claimed for politics and rhetoric in, e.g., *Grg.* (465a, 501a) and *Phrd.* (270cd). Yet, in a sense, the methodology of medicine is also paradigmatic for dialectic

disagree with PALMER's claim (*ibid.* p. 82) that the distinction of wisdom and folly at *Crat.* 386cd does not serve as premise from which the existence of essences is inferred. Cf. *VM* 1.2, where the same distinction is stated as a direct proof for the existence of art.

⁹ For details, see HEINEMANN [2000]. In the sequel, quotations of *VM* are from JOUANNA [1990].

¹⁰ *VM* 1.3: (sc. something) πρὸς ὅ τι χρῆ ἐπανενέγκαντα εἰδέναι τὸ σαφές.

¹¹ *Ibid.* - On my rendering of ὑπόθεσις (*hypothesis*, *VM* 1.1. and *passim*) by "theoretical entity", see HEINEMANN [2000], p. 30.

¹² *VM* 9.3: Διότι πολλὸν ποικιλώτερά τε καὶ διὰ πλείονος ἀκριβίης ἐστί. Δεῖ γὰρ μέτρου τινὸς στοχάσασθαι· μέτρον δὲ οὐδὲ ἀριθμὸν οὔτε σταθμὸν ἄλλον πρὸς ὃ ἀναφέρων εἶση τὸ ἀκριβές, οὐκ ἂν εὐροῖς ἄλλ' ἢ τοῦ σώματος τὴν αἴσθησιν. My translation of αἴσθησις (*aisthêsis*: "sensitivity" rather than "sensation") follows JOUANNA's commentary [1990], p. 174, with references).

¹³ *VM* 20.3: ὅ τι τέ ἐστὶν ἄνθρωπος πρὸς τὰ ἐσθιόμενά τε καὶ πινόμενα καὶ ὅ τι πρὸς τὰ ἄλλα ἐπιτηδεύματα καὶ ὅ τι ἀφ' ἐκάστου ἐκάστῳ ξυμβήσεται. On *VM* 20.1-3, see also HEINEMANN [2000], sect. 2 and 3.

tic. In particular, Plato's semantic use of *anapherô* (*Rep.* 484c, *Phdr.* 237cd; cf. *Phd.* 75b) and *epanapherô* (*Crat.* 425d; cf. *Phd.* 76de) is best understood as being derived from the epistemic use of the same terms in *VM* (1.3 and 9.3).¹⁴

Plato (*Rep.* 560c sq.) agrees with Thucydides (3,82.4) that communities and people are wrecked by perverse ways of employing evaluative terms.¹⁵ It is quite a safe guess that Plato has phenomena like this in mind when he claims that the evils suffered by communities and mankind in general cannot be removed but by philosophers' rule (*Rep.* 473cd). Philosophers, in the *Republic*, are practitioners of dialectic, having access to "forms" by virtue both of their "philosophic" character and talent (*Rep.* 375e and particularly, 485a-503c: *philosophos physis*) and of a specialized training.¹⁶ They are thus enabled to assess and supervise agreed evaluative habits (*Rep.* 484d2: *nomima kalôn te peri ...*) by referring (ibid. c9: *anapherontes*) these habits to "standards" (*paradeigmata*), viz., to the "forms" that are related to the evaluative terms involved.¹⁷ Sure, dialectic neither is a profession nor does it enable its practitioners to earn their living. Accordingly, dialectic is labeled *epistêmê* rather than *technê* by Plato (who, however, isn't consistent in this respect). Yet, it is hard to deny that dialectic is similar to art in that it serves a purpose which, according to Plato, cannot be served in any other way.

Plato's dialectic is based on the assumption that ways to employ general and, in particular, evaluative terms may be right or wrong and, hence, must not be determined by agreement or custom but rather be governed by knowledge. Plato agrees with the author of *VM* that knowledge must be assessable, and is assessable only if there is something "by reference to which certainty can be attained" (*VM* 1.3). For dialectic, the "forms" related to the evaluative terms in question are this something.¹⁸ That is to say, if evaluative terms have meanings that regulate their use, then each meaning is supposed to be something with a "nature" providing

¹⁴ On DILLER's claim that "das ἀναφέρειν [...] auf ein Kriterium ist platonisch" and, hence, *VM* is dependent on Plato ([1952], p. 54) see HEINEMANN [2000], p. 6 sq. (n. 6).

¹⁵ See HEINEMANN [1999], section 6.

¹⁶ Here Plato's use of φύσις (*physis*) is the same as in Protagoras' famous claim that "talent" and "exercise" are requirements for education (DK 80 B 3: φύσεως καὶ ἀσκήσεως διδασκαλία δεῖται).

¹⁷ The full quotation is: Ἡ οὖν δοκοῦσί τι τυφλῶν διαφέρειν οἱ τῷ ὄντι τοῦ ὄντος ἐκάστου ἐστερημένοι τῆς γνώσεως, καὶ μηδὲν ἐναργὲς ἐν τῇ ψυχῇ ἔχοντες παράδειγμα, μηδὲ δυνάμενοι ὥσπερ γραφῆς εἰς τὸ ἀληθέστατον ἀποβλέποντες κάκεισε αἰεὶ ἀναφέροντες τε καὶ θεώμενοι ὡς οἶόν τε ἀκριβέστατα, οὕτω δὴ καὶ τὰ ἐνθάδε νόμιμα καλῶν τε πέρι καὶ δικαίων καὶ ἀγαθῶν τίθεσθαι τε, ἐὰν δέη τίθεσθαι, καὶ τὰ κείμενα φυλάττοντες σώζειν; (*Rep.* 484cd).

¹⁸ According to *Parm.* 135bc, "forms" are required by dialectic, not *vice versa*.

marks by reference to which correct and incorrect ways of employing the term in question are distinguishable.¹⁹

Sure, the notion of meanings having "natures" sounds very strange. What I claim, however, is not that Plato first assigns meanings to terms and then assigns "natures" to meanings. On the contrary, I suggest that Plato, being in need of some "nature" *N* that allows an "art" of using evaluative terms to exist, is also in need of something of which *N* is the "nature"; and that's why, on my interpretation, he construes meanings as abstract entities having the "natures" required. In particular, this suggestion is designed to explain the strange fact that Plato does assign "natures" to "forms" and even, at *Phd.* 103b, *Rep.* 597b sq., and *Parm.* 132d, lets "nature" as a whole be the realm of all "forms".²⁰

¹⁹ The meaning, or "idea", of *F* is usually referred to by such phrases as "the *F* itself" (αὐτὸ τὸ *F*) or "the thing that truly is *F*" (ὁ ἔστιν *F* or αὐτὸ ὃ ἔστι *F*); also, as a shorthand, the phrase "the thing that truly is [*sc.* *F*]" (αὐτὸ ὃ ἔστι) is used. Accordingly, the correct application of *F* is secured by inspecting the "nature" of "the *F* itself" (cf. *Rep.* 476b6-7: αὐτοῦ δὲ τοῦ καλοῦ ... τὴν φύσιν ἰδεῖν) or, equivalently, the "nature" of "each thing that truly is [*sc.* *F*, or *G*, etc.]" (cf. *Rep.* 490b3: αὐτοῦ ὃ ἔστιν ἐκάστου ἢ φύσις). From here it becomes clear why Plato also says that "the *F* itself" is "the thing that by nature is *F*" (cf. *Rep.* 501b2: τὸ φύσει δίκαιον καὶ καλὸν κτλ.).

²⁰ As far as I can see, this usage has never been explained satisfactorily. The majority of commentators are silent about it; what follows is a selection of my findings.

(i) For GUTHRIE ([*HGP*], vol. IV, p. 551), φύσις at *Rep.* 597b is equivalent with "reality". Similarly, HACKFORTH ([1955], p. 149) renders ἐν τῇ φύσει at *Phd.* 103b by "in the world of true being"; according to HAGLER ([1983], p. 64), παραδείγματα ... ἐν τῇ φύσει at *Parm.* 132d are "Urbilder 'in voller Wirklichkeit'". The explanations quoted are in accordance with GRAESER's general claim "daß das Wort '*physis*' im Kontext seiner philosophischen Verwendung den Inbegriff von Realität bedeutet bzw. im Begriff *physis* nun erst ein Begriff von Realität verfügbar wird" ([1989], p. 13). This claim, however, is not confirmed by pre-Platonic usage. That is to say, I am not aware of any pre-Platonic occurrence of φύσις of which the interpretation requires that φύσις be assumed to mean "reality". Hence, while it may not be disputed that for Plato, the realm of all ideas is "the world of true being", Plato's use of φύσις as referring to that world cannot be thus explained.

(ii) ADAM claims that "in Platonism ... the φύσις or 'nature' of anything means its idea"; hence, while the phrase ἡ φύσις at the passages mentioned above "means 'Nature' i.e. *rerum natura*", it is claimed to refer to "the Ideal World" ([1969], p. 392). ADAM's premise is directly refuted by the majority of occurrences of φύσις in Plato and, moreover, does not explain why both artificial things and such abstract entities as the meanings of evaluative terms have "natures" at all. According to CROSS and WOOZLEY ([1964], p. 86), the description of "forms" as "patterns fixed in the nature of things" (*Parm.* 132d) means that "they are the permanent furniture of the universe". MANNSPERGER ([1969], p. 184) suggests that φύσις at *Parm.* 132d is "das sinngebende Medium für Platons 'Ideen', die als εἶδη, Modelle für die Handhabung, durchaus starr sind ..., als ἰδέαι durch die Wirklichkeit hindurchgehen können und als φύσεις miteinander in Beziehung treten, zu leben beginnen und zugleich den Zusammenhang der Welt garantieren". The authors just quoted seem to suggest that Plato's use of φύσις at the passages mentioned above is designed to attribute a

If, however, meanings are abstract entities and the "nature" of a given thing is the pattern of its causal, or "dynamic", characteristics, then "natures" can be attributed to meanings only metaphorically. Neither is there causal knowledge about meanings in the ordinary sense nor can meanings be known by experience.²¹ This difficulty is resolved by the suggestion stated above, viz. that to have a "nature" here means to provide "marks" by reference to which right and wrong are distinguishable. When being applied to "forms", the term 'nature' (*physis*) is employed by Plato to indicate methodological principles derived from medicine and adapted to dialectic.²²

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cosmological function to "forms". This, however, is far from obvious. In particular, when cosmology is at issue, Plato never uses the term to refer to whatever he claims is "the permanent furniture of the universe".

(iii) I agree with MOREAU ([1939], p. 478) that the usage in question is best understood when the discussion at *Crat.* 386c sqq. is adduced (see my footnote in section 2). MOREAU, however, overstates his case by suggesting that φύσις, in the *Cratylus* passage, ultimately refers to "une hiérarchie des Formes, qui tirent de l'exigence absolu d'unification, de la nécessité pratique du Bien, leur réalité transcendante" (ibid.). That is to say, the "nature" followed by skillful activities is claimed to be the way that technical norms are derived from evaluative norms, i.e., from the "form" of the "good". Sure, this claim is true in a sense. What I doubt, however, is the supposition that the term φύσις is meant by Plato to convey this idea. On my interpretation, φύσις is meant here to refer to technical norms as such. In particular, when evaluation is at issue the term φύσις is employed by Plato to indicate that there are technical norms with which evaluation, as any skillful activity, is bound to comply.

²¹ In the discussion of my paper, Eric Ostenfeld hinted at the fact that Plato does sometimes speak of "forms" as having causal characteristics. There is no room here to discuss this issue. It may be noted, however, that any attribution of causal characteristics to "forms" requires the concept of causality to be stretched considerably. This is particularly true if I am right in suggesting that medicine, as presented in *VM*, is the paradigm from which methodological standards are derived.

²² I am grateful to Richard King for having read the penultimate draft of this paper, and having helped me to remove some of its linguistic deficiencies.

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