Pythagoreanism in the *Meno*

and

Platonic Development

Πλάτων δὲ καὶ ἐν τούτοις πυθαγορίζει

Diels DG p. 335
This paper will be tripartite in structure. In a short first part I shall indicate what appears to be Aristotle’s idea of Platonic development. In the main middle section, Pythagorean factors in the *Meno* will be detected and analyzed. And then the question as to the “meaning” of this dialogue will be addressed in the final part, what main point, namely, if anything, Plato wanted to bring to his readers’ awareness by writing and publishing this work. The intimate connection among these three parts will become manifest as they are unfolded.

I

In his critical history of philosophy (*Metaphysics* A, and further M and N), Aristotle clearly and unmistakeably (however we may interpret or account for it) considers Plato (just as his immediate successors in the Old Academy) a sort of Pythagorean. By Pythagoreanism in this paper I shall mean basically what Aristotle signified, when he described the proper and peculiar characteristic of that “school” of thought: οἱ δὲ Πυθαγόρειοι δύο μὲν τὰς ἀρχὰς κατὰ τὸν αὐτὸν εἰρήκασι τρόπον (i.e. one ἐν ὑλῆς εἰδεῖ, the other τὴν ὅθεν ἢ κίνησις - this being Aristotle’s reduction (συνάγειν) of what the previous thinkers expressed μορφωτερον, to his systematic theory of causality). τοσούτον δὲ προσεπέθεσαν ὁ καὶ ἰδιῶν ἐστίν αὐτῶν, ὅτι τὸ πεπερασμένον και τὸ ἀπειρὸν και τὸ ἐν οὐχ ἐτέρας τινὰς φύσεως εἶναι φύσεις, οίον πῦρ ἢ γῆν ἢ τι τοιοῦτον ἔτερον, ἀλλ’ αὐτὸ τὸ ἀπειρὸν και αὐτὸ τὸ ἐν οὐσίαν εἶναι τούτων ὑπὸ κατηγοροῦνται, διό καὶ ἀριθμὸν εἶναι τὴν οὐσίαν πάντων (Met. 987a13-19). Aristotle furthermore
associates to this, let us say, “mathematization” of reality, the beginning of the systematic search for definitions of the essential nature of things (καὶ περὶ τοῦ τί ἐστιν ἡρῴαντο μὲν λέγειν καὶ ὀφιζεσθαί, 987a20-21), although their treatment was simplified (λίαν δ’ ἀπλῶς ἐποραγματεύθησαν, ibid.). The simplicity of their definitional procedure consisted, according to Aristotle, first in that their definitions were touching superficially the real essence of things, and secondly, and particularly, in that they took the first term of a series as the essence of the common character of the series (Formulacishly put, the essence of F, or of F-ness, in the F-series F₁, F₂, F₃, ..., Fₙ, ... is F₁): ἥρῴζοντο τε γὰρ ἐπιπολαίως, καὶ ὤ πρῶτῳ ὑπάρξειν ὁ λέξεις ὅρος, τούτ’ εἶναι τὴν ὑσίαν τοῦ πρᾶγματος ἐνομίζον, ἀντίπερ εἰ τις οἰστο ταύτον εἶναι διπλάσιον καὶ τὴν δυᾶδα διότι πρῶτον ὑπάρχει τοῖς δυοὶ τὸ διπλάσιον. ἀλλ’ οὐ ταύτον ἰσως ἐστὶ τὸ εἶναι διπλασίω καὶ δυᾶδι (987a22-26). The bearing of this on the theory of forms, esp. in connection with the difficulty of explaining their relationship to existents in space and time, is evident. As it is its relevance to the Aristotelian notion of πρῶς ἐν λέγεσθαί, as a means of avoiding such difficulties in some appropriate cases.

By employing here the above Aristotelian understanding of fundamental Pythagoreanism, I accept the implication that this was the relevant and dominant form of Pythagorean Philosophy in the 5th century, although I have argued elsewhere that such a construal is inapplicable to (or, at least, seriously misleading for), 6th century Pythagoreanism (and also explained how the transformation came about).
In his account of the PrePlatonic (and not Presocratic) philosophy, Aristotle lays the leading emphasis on the Pythagoreans. The Eleatic singularity is fully acknowledged (986b8 – 987a2): but he highlights the fact that Parmenides, the more penetrating Eleatic (μᾶλλον βλέπων 986b 28), was obliged to postulate himself dualism in his theory of the sensible world (ἀναγκαζόμενος δ’ ἀκολουθεῖν τοῖς φαινομένοις 986b 31). Aristotle recapitulates the point and significance of Pythagoreanism (987a2-28) just before he turns his analytic attention to what he clearly considers as a new phase in philosophy, Plato (and his Academy).

Μετὰ δὲ τὰς εἰρημένας φιλοσοφίας ἡ Πλάτωνος ἐπεγένετο πραγματεία, τὰ μὲν πολλὰ τούτοις ἀκολουθοῦσα, τὰ δὲ καὶ ἰδία παρὰ τὴν τῶν Ἡλλήνων ἑχούσα φιλοσοφίαν (987a29-31). Who the “Italics” are is clear from what follows. Aristotle seems to ascribe implicitly to the Platonic “systematic treatment of things”, (πραγματεία is significantly used in this connection to differentiate the Platonic “system” from the preceding philosophical endeavours), a certain eclecticity. Many characteristics of it were taken up, we are told, or were elaborate follow ups, from those previous philosophies, while its peculiar tenets came from the “Italics”. These Italics are identified afterwards as Pythagoreans (987b11; b23; b31; and, definitively, 988a26, where the “Italics” are credited with making the ἀπειρον principle of reality). For one reason or another, and probably because he did not thought of it as such a cardinal contribution to the history of philosophy, Aristotle discounts, in this respect, too, the Eleatics.
The peculiar identity (τὰ ἰδία) of Platonism is, then, according to Aristotle, its Pythagoreanism. Furthermore, Aristotle is crystal clear about the basic structure of that system, as well as of its historical genesis: here again the essence of the system and its origination (growth) reveal the same reality from alternative points of view, one systematical, the other historical; both points of view combine in the concept of φύσις.

The general structure of the Platonic system is described by Aristotle in two fundamental doctrines (with one substantial corollary):

1) There are separate ideas of particular things exhibiting a common character (“Theory of Forms”). In terms of the series-model that I used above, there is an F per se for every series F₁, F₂, ..., Fₙ, ..., and this F (not F₁) is the essence of all F’s. (There are certain qualifications to this general proposition, but they do not affect its fundamental significance).

2) The ideas are (ideal) numbers. The principles of numbers are the principles of reality. Pythagorean Dualism provides these two principles, with a Platonic qualification (the second principle is itself dual rather than unitary) and a complication (the “matter” of the sensible things is the same second principle as the substratum for the ideas, 988a11-14; ct. Physica 209b11-16).

The significant corollary from (1) and (2) is that the numbers as causes of being cannot for Plato be the mathematical numbers, for these are many of a kind. Thus in between ideas = ideal numbers and material reality, there lie the mathematicals (through which ideas
shape the sensible world by imposing form and order on “matter” =
on the second principle of being). The necessity for the existence of
these intermediate entities is clear: ἐτὶ δὲ παρὰ τὰ αἰσθήματα καὶ τὰ εἴδη
tὰ μαθηματικὰ τῶν πραγμάτων εἶναι φησὶ μεταξὺ, διαφέροντα τῶν
μὲν αἰσθήματῶν τῷ αἴδια καὶ ἀκίνητα εἶναι, τῶν δὲ εἰδῶν τῷ τὰ μὲν πόλλ᾽
ἀττά ὅμως εἶναι τὸ δὲ εἴδος αὐτὸ ἐν ἑκαστὸν μόνον, 987b14-18.

To this structural account of the Platonic system, there exactly
corresponds its genetic explanation. This is also basically binary:

1*) Heracleitianism + Socratic quest for definition, which
means for the common universal (τὸ καθόλου), ⇒ theory of forms
[987a32-987b1: Heracleitean influence via Cratylus. 987b1-9: Socratic
contribution].

2*) Pythagoreanism explains the identification of ideas with
(ideal) numbers and the theory of first principles (987b18-25).

There is in fact such an explicit nexus of cross-inferences in
Aristotle’s account of the Platonic system, that his reconstruction
appears thoroughly deliberate. Thus, because of (1), and,
correspondingly, (1*), numbers and their principles are separate
from things, unlike what is the case according to the Pythagorean
theory. Τὸ μὲν οὖν τὸ ἐν καὶ τοὺς ἁρπτοὺς παρὰ τὰ πράγματα ποιήσαι
(sc. Plato), καὶ μὴ ἀποπερ οἱ Πυθαγόρειοι, καὶ ἢ τῶν εἰδῶν εἰσαγωγὴ διὰ
τὴν ἐν τοῖς λόγοις ἐγένετο σκέψιν (οὶ γὰρ πρότεροι διαλεκτικῆς οὐ
μετέίχον), 987b29-33. And, conversely, we may add, because of (2),
and (2*), the essence of things and their sensible constitution, have
ultimately to be interpreted mathematically, as in Timaeus. Finally,
(1*) and (2*) lead to:
3*) The conjunction, and synthesis, of Heracleiticism +
Socratism on the one hand and Pythagoreanism on the other leads to
the Platonic peculiarity of mathematical intermediacy, a doctrine
which introduces into the system heavy additional complications
according to Aristotle, and which, significantly was abandoned by
Speusippus (οἱ λέγοντες ἀριθμὸν πρῶτον τὸν μαθηματικόν, 1075b37).
The Old Academy reverted then to purer Pythagoreanism after
Plato.

Now the crucial (for our purpose here) question in Aristotle’s
account of the Platonic system is whether he understood (1*) and (2*)
as two distinct temporal phases in the formation of the system, or
rather as two steps in the logical construction of the system, two
“steps” reflecting the two moments (1) and (2). And the answer to
this question depends heavily on Aristotle’s meaning in the passage
where he critically re-examines the Theory of Forms in M, 4-5. He
starts this inquiry in the following way: περὶ δὲ τῶν ἰδεῶν πρῶτον
αὐτήν τὴν κατὰ τὴν ἰδέαν δόξαν ἐπισκεπτέον, μηθὲν συνάπτοντας
πρὸς τὴν τῶν ἀριθμῶν φύσιν, ἀλλ’ ἐς υπέλαβον ἐξ ἀρχῆς οἱ πρῶτοι τὰς
ἰδέας φήσαντες εἶναι (1078b9-12). Who are these πρῶτοι τὰς ἰδέας
φήσαντες εἶναι μηθὲν συνάπτοντες πρὸς τὴν τῶν ἀριθμῶν φύσιν? I
think Plato (and not, e.g., some other Socratic φίλοι τῶν εἰδῶν).

In support of this thesis I shall simply mention here that the
argumentation in M parallels closely the corresponding one in A,
where Plato is obviously the object of inquiry. In particular, the role
of the Socratic quest for definition of the essential καθόλου is
highlighted, again in the context of dominant Heracleitianism.
Socrates is here, moreover, explicitly denied the patronage of the Theory of Forms: ἀλλ’ ὁ μὲν Σωκράτης τὰ καθόλου οὐ χωρίστα ἐποίει οὐδὲ τοὺς ὀρισμοὺς· οἱ δ’ ἐχώρισαν, καὶ τὰ τοιαῦτα τῶν ὄντων ἰδέας προσηγόρευσαν (1078b30-32). In fact, Socrates is equally explicitly credited with two things (δύο γάρ ἐστιν ἀ τις ἀ ποδώφη Σωκράτει δικαίως, 1078b27-8), τοὺς τ’ ἐπακτικοὺς λόγους καὶ τὸ ὀρίζεσθαι καθόλου (1078b28-29), both pertaining to scientific knowledge (ταῦτα γάρ ἐστιν ἀμφότεροι περὶ ἀρχήν ἐπιστήμης, 1078b29). And Socrates’ interest was restricted even in this respect to the moral excellences (virtues), πέρι τάς ἡθικάς ἀφετάς πραγματευομένου (1078b17-18); cf. 987b1-2: Σωκράτους δὲ περὶ μὲν τὰ ἡθικὰ πραγματευομένου περὶ δὲ τῆς ὀλίγης φύσεως οὐθέν etc.

That Plato is primarily meant in this criticism of the Theory of Ideas in M, 4-5, is further evidenced by the fact that near the end of the entire argumentation the Phaedo is mentioned by name (1080a2). And this again replicates what is said about the same Phaedonian point in A, 991b3 sqq.

Finally, on a different count, that Plato actually underwent a fundamental evolution in thinking according to Aristotle, seems also to be suggested by the way in which he temporalises his account of the constitutive influences on Plato’s formation, in the very introduction of his examination of Platonic philosophy. Thus Plato ἐκ νέου τε γάρ συνήθης γενόμενος πρῶτον Κρατύλῳ καὶ ταῖς Ἡρακλείτειοις δόξαις (987b32-33), inferred that there can be no science of the sensible reality as this is found in continuous flux. Ταῦτα μὲν καὶ ὅπερ τον οὕτως ὑπέλαβαν (987a34-b1): i.e. he retained
this Heracleitean influence in the latter and maturer phases of his thinking. Then comes the Socratic factor, and finally Pythagoreanism is introduced. The sequence is of course repeated in the latter treatment (M, 4-5).

In conclusion, therefore, Aristotle provides us with an analytical and genetic description of the fundamental structure of the Platonic system, which admits of a two-stage pattern in Platonic development: the stage before and the stage after some decisive exercise of Pythagorean influence. The stage before is dominated by Heracleiteanism (sensible reality is in permanent flux) and Socratism (definition and science is of the universal). These parameters continued to operate into the second phase of Pythagorean Platonism, but now under the overarching influence of Pythagoreanism, which in effect gave the key to the knowledge logically demanded, but not discoverable, within the framework of the first phase. But more on this, in the third section below.

Let me mention here (what will be elaborated in an Appendix) that Aristotle’s account of Platonic development, also squares nicely with the historical evidence, as this can be elicited from the critical shifting of our sources.

II

Pythagoreanism in the Meno will be analysed here under the following seven headings:

1) Socrates’ example of a proper definition: shape, colour and their intimate connection (74b4-76e9).
2) The doctrine of reincarnation (specifically in its Pindaric form).
  Who are the ἄνδρες καὶ γυναῖκες σοφοὶ περὶ τὰ θεία πράγματα?
  (81a5-c4).
3) Ἀνάμνησις (81c5 sqq.).
4) The kinship of nature and the cohesion of knowledge (81c9-d4).
5) The mathematical demonstration with the slave and inferences from it concerning ἀνάμνησις (82b9-86c2). The meaning of ἀεὶ ἤ ἄλληθεια τῶν ὄντων ἐστὶν ἐν τῇ ἔσχε (86b1-2).
6) Argumentum ex hypothesi (86d3-87c2).
7) Ἀρχιοσμός αἰτίας (98a3-4).

1) Wanting to give an example of what he means by a proper definition of the essence of a thing, Socrates proposes shape as object of investigation (τί ἐστιν σχῆμα; 74b5). A mathematical entity is thus focused upon. And in immediate succession to the question, colour (χρώμα) is introduced (74c5). Then without much ado (apart from generalities that do not relate directly to the particular case under discussion), the following statement is given as an answer to the τί ἐστιν question: ἐστω γὰρ ἡ ἤμιν τούτο σχῆμα, ὁ μόνον τῶν ὄντων τυγχάνει χρώματι ἀεὶ ἐπόμενον (75b9-11). Now that the existence of colour entails the existence of a (coloured) surface is an important point that could be developed philosophically in important ways. One should expect here pregnant explanatory analyses on the relationship of surface, boundary of a solid thing and colouration. Nothing, however, of the sort is being attempted here. The development is blocked by Meno’s objection that this is to define unknowns by things more unknown (75c2-7). On the other hand, it
was a characteristic Pythagorean tenet to essentially associate surface with colour; in fact, Aristotle seems to indicate that the Pythagoreans identified surface and colour: τὸ γὰρ χρώμα ἤ ἐν τῷ πέρατὶ ἐστὶν ἢ πέρας (διὸ καὶ οἱ Πυθαγόρειοι τὴν ἐπιφάνειαν χρῶν ἐκάλουν), *Parva Naturalia*, 439a30-31 = 58DK B42. (Doxographic attestation in - *Plut.Epit.* I, 15, 2 = Stobaeus *Ecl.* I, 16, 2 = Diels DG p. 313.6-7: οἱ Πυθαγόρειοι χρωίαν ἐκάλουν τὴν ἐπιφάνειαν τοῦ σώματος, where it is made explicit that a surface is the boundary of a body. And so Psellus, *de omnit. Doctr.* 64: χρώμα ἐστὶν ὀρατή ποιότης τῆς τῶν σωμάτων ἐπιφανείας, where the force of the Pythagorean conception is rather scholastically lost or diluted). In the *Theolog. Arithm.* the doctrine (p. 22.5 de Falco) appears in conjunction with the Pythagorean emphasis on the surface as fundamental element in the geometry of space (and, thus, in the constitution of solids mathematical or physical is the same thing for the Pythagoreans). As Aristotle mentioned with reference to some thinkers (including the Pythagoreans), boundaries and limits of bodies are substances, and more so than bodies and solids (*Met. 1028b16 = 58 DK B23*). – Χρόα, χρούα (and χρώς) meant also the skin esp. of the human body and its complexion, as well as colour. The essential association of bounding surface and colour was felt even in the prephilosophical understanding of the world reflected in language and common thinking.

Furthermore. We know something about how, according to the Pythagoreans, colour entered into the very first cosmogonical step. Aristotle comments on what he deems a difficulty on their part
to account for the generation of the first one from the ultimate dual principles of reality, πέρας καὶ ἄπειρον. This first one is an extended unit by means of which space (in itself an infinity) is organized into finite order. But ὡς δὲ τὸ πρῶτον ἐν συνέστη ἐχον μέγεθος, ἀπορείν ἔοικασιν (Met. 1080b20-21 = 58 DK B9). An intimation of the different approaches which the Pythagoreans utilised to overcome this difficulty in effecting the first step towards the world creation, is given by Aristotle: φανερῶς γὰρ λέγουσιν ὡς τοῦ ἐνὸς συσταθέντος, εἴτ’ ἐξ ἑπιπέδου εἴτ’ ἐκ χροίας εἴτ’ ἐκ σπέρματος εἴτ’ ἐξ ἀν ἀποροῦσιν εἰπεῖν, εὐθὺς τὸ ἐγγίστα τοῦ ἀπείρου ὅτι εἶλκετο καὶ ἐπεροϊντο ὑπὸ τοῦ πέρατος (Met. 1091a 15-18 = 58DK B26). Cf. Philolaus (44DK B7):

tὸ πρῶτον ἀρμοσθέν, τὸ ἐν, ἐν τῷ μέσῳ τὰς σφαίρας ἐστί καλεῖται.

[[The passage continues: ἐστὶ <γὰρ> τὰ ἀνω τοῦ μέσου ὕπεναντίως κείμενα τοῖς κάτω. τοὐς γὰρ κατωτάτω τὰ μέσα ἐστίν ὡσπερ τὰ ἀνωτάτω καὶ τὰ ἄλλα ὡσαντως. πρὸς γὰρ τὸ μέσον κατὰ ταύτα ἐστὶν ἐκάτερα, ὅσα μὴ μετενήνεκται. This idea is explicitly mentioned (without organic need) in Socrates’ description of the underworld (inside the “real earth” which is vastly larger than what we think “our earth” and extends to the heaven, is, in fact, the entire world) in Phaedo’s myth (112d6-e3). Philolaus held that the moon was γεώδης and inhabited καθάπερ τὴν παρ’ ἡμῖν γῆν (44DK A20). He also called Ὁλυμπον τὸ ἀνωτάτω μέρος τοῦ περιέχοντος, ἐν ὃ τὴν
eἰλικρίνειαν εἶναι τῶν στοιχείων (44 DK A16) – of all elements presumable and, of earth above all, just as in the Phaedonian myth (109b4-c2; 109d6-110b2; cf. 110b sqq.; 114b6-c2). This extremely characteristic conception of a World-Earth is ascribed by Plato to someone specifically: εἰςίν δὲ πολλοὶ καὶ θαυμαστοὶ τῆς γῆς τόποι, καὶ αὐτὴ οὐτέ οὐ τέ οὐθε δοξάζεται υπὸ τῶν περὶ γῆς εἰωθότων λέγειν, ὡς ἐγὼ ὑπὸ τίνος πέπεισμαι (Phaedo, 108c5-8). This “one” must have been then Philolaus, who is also mentioned explicitly in the dialogue (61e), in connection with the prohibition of self-slaying resulting from the doctrine of the soul’s incarceration in the bodily life of this world (cf. 44DK A15 and A14).

[The idea of World-Earth, with its multitude of deeper or shallower, broader or narrower, interconnected cavities (ἔγκοιλα, Phaedo 111c5), one of which is our οἰκουμένη, this idea goes back in all likelihood to Phyrecydes (v. 7DK B6; cf. A10). The Philolaean lengthy and elaborate recension of the idea (ό βίος μοι δοκεῖ ό ἐμός, ὡ Σιμμία, τῷ μῆκε τοῦ λόγου οὐκ ἔξαρχείν, Phaedo 108d8-9) must have been impressive and influential. Clesarchus (the Peripatetic) seems to have used it in recounting the death-experience (Er-like) of Cleonymus (Fr. 8, p. 11.35 sqq. Wehrli): τὴν μὲν οὖν αὐτῶν ψυχὴν φάναι παρὰ τὸν θάνατον οἶον ἐκ δεσμῶν δόξαι τινῶν αφειμένην τοῦ σώματος παρεθέντος μετέφων ἀρθῆναι, καὶ ἀφθείσας ὑπὲρ γῆς ἰδεῖν τόπους ἐν αὐτή παντοδαποῖς καὶ τοῖς σχήμασι καὶ τοῖς χρώμασι καὶ ἐρυμματα ποταμῶν ἀπρόσοπτα ἀνθρώπως καὶ τέλος ἀφικέσθαι εἰς τον χώρον ἰερὸν τῆς Ἑστίας etc., where the souls undergo punishment
and purification (as in the Acherusian lake of the Phaedonian myth).

It is significant that the Phaedonian myth lays extraordinary stress on the colouration of the real earth and its parts, as it is seen from the purity of the celestial sphere: 110b7-e2. The emphasis on colour as a fundamental cosmogonical factor may have been characteristic of Philolaus. It was remarkably reflected in Zeno the Stoic: Ζήνων ὁ Στῶικός τὰ χρώματα πρώτους εἶναι σχηματισμοῦς τῆς ὕλης Plut. Epit. I, 15, 6 = Stobaeus I, 16.6 = Diels DG p. 313.19-20).]

Aristotle, we saw, mentions planes, colour-surfaces and semen as ways which different groups of Pythagoreans endeavoured to invoke in order to explain the beginning of the world-ordering, the genesis of the first extended monad out of the two principles of reality. I have argued elsewhere [Origin and Nature of Early Pythagorean Cosmogony, in K. Boudouris (ed.), Pythagorean Philosophy, 1992, pp. 126-162, esp. pp. 135 sq. with notes] in favour of an original form of Pythagoreanism that would employ biological symbolism (semen) in its cosmogonical processes. Planes, on the other hand and at the other end, seem to refer to a construction of (regular geometrical) solids out of plane figures, like the elementary triangles in Plato’s Timaeus. Colour-surfaces (in between the two extremes conceptually and chronologically), may well reflect the idea that it is the boundaries of bodies which constitute them as distinct entities, with unorganized space or the vacuum separating them one from another: εἶναι δ’ ἔφασαν καὶ οἱ Πυθαγόρειοι κενόν, καὶ ἐπεισέναι αὐτῷ τῷ οὐρανῷ ἐκ τοῦ ἄπειρου πνεῦμα τε ὡς ἀναπνέοντι καὶ τὸ κενὸν, ὁ
According to such a construal, it is boundaries of things that we perceive as shapes and as colours. These colour-surfaces even have a certain metaphysical priority over their bodies: they define them as existing, distinct and separate entities. This account would fit well to the Orphic doctrine of Protagonos-Eros’ birth (with its portentous light-imagery that accompanies him right from the beginning, as in Aristophanes’ *Aves*). Light (of Phanes, according to Orphism) brings to existential “appearance” the multifarious hues which constitute the variegated spectacle of reality. This could also explain the apparent definitional precedence of colour over surface in both the Pythagorean and the Menonian accounts: οἱ Πυθαγόρειοι τὴν ἐπιφάνειαν χρώαν ἐκάλουν. And: σχῆμα ἐστὶν ὁ μόνον τῶν ὄντων τυγχάνει χρώματι ἀεὶ ἐπόμενον. (This would come from a phase of Pythagoreanism preceding the fully mathematicised one, with its stress on surfaces, *Timaeus*-like, in the constitution of sensible reality).

[Such an Orphic connection would square with the cosmogonical content of (the reputed Philolaus’) *Βάκχαι* (44DK B17-19). We should always bear seriously in mind the Herodotean pronouncement (even if it is given with reference to a particular observance): ὀμολογεύοις δὲ ταῦτα τοῖς Ὄρφικοῖς καλεομένοις καὶ Βακχικοῖς, ἐσόν δὲ Αἰγυπτίοις καὶ Πυθαγορείοις (II 81). Maybe the
Phaedonian myth comes from the Philolaean system of cosmology and eschatology].

After the repudiation by Meno of the proposed definition, Socrates agrees that in a dialectical encounter perhaps one should state only what the person questioned admits of knowing. There follows then the geometrical definition of shape: στεφεού πέρας σχήμα εἶναι (76a7). Meno presses on for a definition of colour. Socrates obliges with the Gorgonian (basically Empedoclean') account: ἔστιν γὰρ χρώα ἀπορροφή σχημάτων ὑψεί σύμμετρος καὶ αἰσθητός (76d4-5). If σχημάτων is right, we probably have a Platonic elaboration of Empedocles – Gorgias view. Χρημάτων is attested as a variant in T, while σωμάτων is read in Alexander de sensu p. 24.8 (Wendland). If the definition is Gorgias’, χρημάτων should be probably restituted, as Diels-Kraunz saw. Πόροι played an important generally role, it seems, in Gorgian Physics, cf. 82 DK B5.

Socrates makes clear that he is not satisfied with this definition of colour (76e6-9). He ascribes Menon’s enthusiastic endorsement of it to the fact that he is accustomed to it (76d8) or that it is framed grandiloquently (e3-4) in Gorgian rhetorical manner. Socrates means probably to object that it does not give the essence of colour, but only, at most, supplies an account of the mechanism through which colour is seen. (This is exactly what he clarifies in the methodological

Theophrastus (de sensibus,§7 = Diels DG p. 500.19 sqq.) ascribes the view to Empedocles. Aristotle ascribes to him variation of opinion (de sensu, 437b23 – 438a5: Ἐμπεδοκλῆς δ’ έδικε νομίζοντι ὅτε μέν ἐξάντος τοῦ φωτός, ὡσπερ εἴρηται πρότερον, βλέπειν ... ὅτε μέν οὖν οὕτως ὀργάν φησίν, ὅτε δὲ ταῖς ἀπορροήσεις ἀπὶ ταῖς ἀτό τῶν ὀρωμένων).
passage of *Phaedo*). Besides, the Pythagorean factor operating here would demand definitions of shape and colour exhibiting the necessary coimplication, if not virtual identity, of their respective objective essences.

2) The doctrine of transmigration and reincarnation of the souls was peculiarly Pythagorean. Furthermore, here we have to do with a specific form of it encapsulated in the Pindaric passage (Fr. 133 Maehler). According to this, the incarnated souls are giving penance for wrongs done of old, for ancient mourning and “pristine woe” (ποινάν παλαιῶν πένθεως). The primeval grief is Persephone’s (as Rhode saw) primarily – her is the πένθος, and therefore she is entitled to receive, accept or refuse, atonement. In the Pindaric text we meet therefore by implication with the abominable deeds of the Titans committed upon Zagreus, the Mysterious Dionysus, son of Persephone. The full Orphic account of the story of this Original Sin had the Titans struck by Zeus’ lightning. From their ashes came the human race, Τιτανικῶν σπέρμα. In the Pindaric fragment we see also part of the Orphic-Pythagorean eschatology. It concerns those that are relieved from the bondage of necessity: κύκλων δ’ ἔξέπταν βαρυπενθέως ἀργαλέως, as the gold leafs of the dead had it. They are the εὐσεβεῖς and ὀλβιοί of Fr. 129. (The Orphic tenor of the doctrine is confirmed by Fr. 131α: ὀλβιοί δ’ ἀπαντες αἰων ἀναπήδων τελετάν). In Fr. 130 we encounter the damned souls, the ones condemned to the Tartarean Erebus. There remains the third part of souls, of the middling life on earth, who, chastised for their defects for a set
period of time, are thrown back to the cycle of innerworldly necessity to prove whether the chastisement was really atonement and purgation. This triple destiny is paralleled in *Olym.* II 56-78.

Now the structure of this Pindaric (Orphico-Pythagorean) Eschatology is identical with that of the Phaedonian myth. And, so far as we can judge, the cosmology that goes with such Eschatology is also very similar. (See, e.g., the ποταμοί in Fr. 130). We saw reason above to support a Philolaean source for Phaedo’s myth. But the Pindaric eschatology, (which is by no fortuitous accident that Plato invokes in the *Meno*) leads us way back, to 6th century Orphico-Pythagorean doctrine.

It cannot be without significance that relatively minor, but characteristic, details appear in common among these various cosmologico-eschatological accounts, strengthening thereby the case for a single, definite source, esp. as they form an interlapping net like “family resemblances”. In the second Ὀλυμπιονίκης (addressed appositely to a Sicelian victor), Pindar holds that to those souls is salvation delivered who would live a life of purity *three* consecutive times on earth and three in the realm of ded: *Ol.* II 68: ὅσοι δ’ ἐτόλμασιν ἐς τῶς ἐκατέρωθι μείναντες ἀπὸ πάμπαν ἀδίκων ἔχειν ψυχάν etc. Now *thrice* must they choose to live the pure life those that will be transferred to the Islands of the Blessed, beyond the hold of the Cycle of Necessity, in the cognate to the Phaedonian _Phdrus_myh_ 249a: ἔἀν ἐωνταὶ τῶς ἐφεξῆς τὸν βίον τούτον etc.

The Orphic version emphasised the specific primeval atrocity perpetrated. We can well imagine that the philosophical
Pythagoreans would generalize the delict involved to any violation of cosmic order committed when the soul lives its independent, purely spiritual, life. In Empedocles we have probably both an allusion to the Titanic abominations (31 DK B124:

\[ \omega \ \pi\nu\rho\circ \iota \omega, \ \omega \ \delta\epsilon\iota\lambda\nu\ \theta\nu\eta\iota\tau\circ\nu\ \gamma\epsilon\nu\omega\varsigma, \ \omega \ \delta\upsilon\sigma\alpha\nu\omega\lambda\beta\upsilon\nu \]

to\iota\nu\circ \varepsilon\kappa \ \xi\epsilon\iota\delta\iota\nu\circ \varepsilon \ \kappa \ \tau\epsilon \ \sigma\tau\omicron\nu\alpha\chi\omega\nu \ \epsilon\gamma\epsilon\nu\nu\epsilon\sigma\theta\epsilon\nu \]

and to the general principle (B115). Once fallen, the souls enter the cycle of transmigration (cf. B127), where they should lead a life of purification (\nu\iota\sigma\tau\epsilon\uomicron\varsigma\sigma\iota \ \kappa\kappa\alpha\kappa\tau\omicron\tau\eta\tau\circ\varsigma, \ B 144) and wisdom (B 132) in order, at the end of an ascending ladder of transformation, that they might finally become what they were before the fall (B146). The same pattern, more philosophically expressed, we see in *Phaedrus* 248a-249d, esp. 248c-d. Very appropriately DK append to Empedocles the *Phaedrus* passage as C. Anklang. [Notice that if the \tau\omicron\varsigma \ \mu\omicron\omicron\iota\upsilon\alphai \ \varsigma\omicron\alphai of Empedocles B 115.6 refer to seasons, and if we accept the early reckoning of three seasons in the year, the grand period of transmigration is the same in Empedocles and Plato (*Phaedrus*: 248e9, \ \epsilon\tau\omicron\varsigma \ \mu\omicron\omicron\iota\omicron\upsilon\nu)].

But whatever the possibilities open, and whatever the significance of an outlook which would emphasise that imprisonment protects (as well as punishes) the culprit from his worst predictable excesses (on which more in a moment), the corporeal “dressing” of the soul, to which she is bound, is a serious “testaceous” impediment to its divine function: initially souls were by themselves following the litany of Zeus and the other gods, \kappa\alpha\theta\alpha\rho\omicron\iota
Incarnated souls are here for a punishment. This World is part of the purification procedure, as much as Hades. In fact, according to the Phaedonian myth, our inhabited earth is just one of the cavities of the world-earth, others (more awsome) being the Acherusian lake and Tartarus itself, all bound in a network of communications. The ideas could within such an outlook naturally arise of the soul, first, really dying when being incarnated (being removed from the fullness of its true and divine life); and, second, of the soul being incarcerated in the body of its worldly existence. The former idea we discover, I think, in Empedocles (B 125):

ēk μὲν γὰρ ζωῶν ἐτίθει νεκρὰ εἰδὲ ἀμείβων

(which fragment follows immediately upon B118:

κλαῦσά τε καὶ κῶκυσα ἰδὼν ἀσυνηθέα χώρον).

Both ideas are connected especially with Philolaus, who also draw the corollary that, as a consequence of that state of affairs, self-dying is a wrong which aggravates the condition of the soul. And this corollary is explicitly ascribed to Philolaus in Phaedo, 61d7; e7. The secret reason given is that we are here somehow incarcerated: ὁ ἐν ἀπορρήτως λεγόμενος περὶ αὐτῶν λόγος, ὡς ἐν τινι φρονρά ἐσμὲν οἱ ἄνθρωποι (62b2-6). V. 44 DK B15. These views were ascribed by Clearchus to some Pythagorean Euxitheus (Fr. 38 Wehrli): ἐλεγεν ἐνδεδέσθαι τῷ σώματι καὶ τῷ τῆδε βίῳ τὰς ἀπάντων ψυχὰς τιμωρίας χάριν, καὶ διείπασθαι τὸν θεὸν ᾧς εἰ μὴ μενοῦσιν ἐπὶ τούτοις, ἐως ἂν ἐκὼν αὐτοὺς λύση, πλείον καὶ μείζον εἰμπεσοῦνται τότε λύμας etc.
Cicero goes back to Pythagoras himself (de senect. 20): vetat Pythagoras injussu imperatoris, id est Dei, de praesidio et vitae statione descendere. (But on φροθρά as praesidium see in a moment). Philolaus meant probably to ascribe the doctrine to Orpheus when he wrote (B14): μαρτυρέονται δὲ καὶ οἱ παλαιοὶ θεολόγοι τε καὶ μάντιες, ὡς διὰ τινας τιμωρίας ἡ ψυχὴ τῶ σώματι συνέζευκται καὶ καθάπερ ἐν σάματι τούτῳ τέθηκται. Plato in Gorgias assigns the σώμα - σήμα theory to some unspecified wise men: ἧκουσα τῶν σοφῶν ὡς νῦν ἡμεῖς τέθναμεν καὶ τὸ μὲν σώμα ἐστὶν ἡμῖν σήμα (493a2-3). What follows has significant implications regarding the true upholder of these views: τῆς δὲ ψυχῆς τούτου ἐν ὦ εἰπθυμίαι εἰσὶ τυχανείν ὁν ὅνων ἄναπειθεῖσθαι καὶ μεταπίπτειν ἀνω κάτω, καὶ τούτῳ ἄρα τις μυθολογῶν κομψὸς ἄνηρ, ἵσως Σικελὸς τις ἢ Ιταλικός, παράγων τῷ ὄνοματι διὰ τὸ πιθανόν τε καὶ πειστικόν ἀνόμασε πίθον, τούς δὲ ἀνοίητους ἀμυήτους, τῶν δ’ ἀνοίητων τούτο τῆς ψυχῆς οὗ αἱ ἐπιθυμίαι εἰσί, τὸ ἀκόλαστον αὐτοῦ καὶ οὗ στεγασών, ἡς τετρημένος εἰν πίθος, διὰ τὴν ἀπληστίαν ἀπεικάσας. Τούναντίον δὴ οὕτως σοι, ὦ Καλλίκλεις, ἐνδείκνυται ὡς τῶν ἐν Ἄδου -τὸ άϊδες δὴ λέγων -οὕτω ἄθλιωται ἀν εἰέν, οἱ ἀμυητοί, καὶ φοροίεν εἰς τὸν τετρημένον πίθον ὡδωρ ἐτέρῳ τοιούτῳ τετρημένῳ κοσκίνῳ. Τὸ δὲ κόσκινον ἄρα λέγει, ὡς ἔφη ὁ πρῶς ἐμὲ λέγων, τὴν ψυχὴν εἶναι τὴν δὲ ψυχὴν κοσκίνῳ ἀπήκασεν τὴν τῶν ἀνοίητων ὡς τετρημένην, ἀτε οὗ δυναμένην στέγειν δι’ ἀπιστίαν τε καὶ λήθην (493a3-c3). If we substract from this passage the implication of some elaborate theory of the division of soul in distinct parts or faculties (ἐπιθυμητικοί etc.), what remains ought to be ascribed to some one “Westerners”, a definite one, who is explained metaphorically (allegorizing) by Plato’s immediate
informant. (He, the author of these views, says, ἄς ἔφη ὁ πρῶς ἐμὲ λέγων. Cf. also the οὖτος in b3 etc.). Furthermore, in the formula κομψός ἀνήρ, ἱσος Σικελός τις ἡ Ιταλικός, the Σικελός κομψός ἀνήρ is proverbial, as forming a verse in a poem of Timocharis the Rhodian (Fr. 4 Diehl). Hence, Plato means in all probability someone from Magna Graecia (Ἰταλικός). Now it was part of the Orphic symbolic imagery to picture the damned souls as exerting themselves in something miserably self-defeating. Carrying water in a sieve is exemplary in this respect. So Musaeus and Orpheus (according to Plato, Rep. 363c-e) τοὺς ἀνοσίους εὗ καὶ ἀδίκους εἰς πηλὸν τίνα καταφύγουσιν ἐν Αἰδοῦ καὶ κοσκίνῳ ὑδαρ ἀναγκάζουσι φέρειν ἐτι τε ζῶντας εἰς κακῶς δόξας ἀγαντες. Differing pictures could have been used to convey the same meaning; Polygnotus painted in the Delphic Λέσχη two women φέρουσαι ὑδαρ ἐν κατεγόσιν ὀστράκοις, over which he wrote an inscription to the effect εἶναι σφάς τῶν οὐ μεμυημένων (Paus. X, 31). To aggravate the force of the initial similitude by making the unjust and unholy ones carry water in a sieve to a perforated jar (τετρημένος πίθος) is natural to the multidynamism of symbolic thinking. This picture may well have occurred in Philolaus’ description of the Earth-World and its eschatological dimensions, not improbably in his Βακχικά (where they his in fact). And Philolaus is presumably meant in the Gorgias just before this passage on πίθος and κόσκινον and ἀμύητοι = ἀνόητοι – where Plato mentions the σώμα - σήμα theory.

To the negative emphasis on incarnation as incarceration according to the σώμα - σήμα theory, there corresponded
complementarily the more positive outlook involved in the σῶμα - σώζω account. The body, like prison, protects the culprit from exhausting his depravity and thus aggravating his condition beyond remedy, if he is left unprotected and unbound to himself. The daemonic nature running, so to speak, amok, needs the restrictive bounds of corporeal existence to limit its (self-)wrongdoing. This more constructive attitude to incarnation does not alter the basic metaphysical and eschatological structures of the general theory, as is evident from Plato’s testimony: δοκοῦσι μέντοι μοι μάλιστα θέσθαι οἱ ἀμφὶ Ὀρφέα τοῦτο τὸ ὀνόμα (sc. σῶμα) ὡς δίκην διδοῦσις τῆς ψυχῆς, ἢν δὲ ἔνεκα δίδωσιν, τούτων δὲ περίβολον ἔχειν, ἵνα σώζηται, δεσμωτηρίου εἰκόνα. εἶναι οὖν τῆς ψυχῆς τοῦτο, ὡσπερ αὐτὸ ὄνομαζεται, ἦς ἂν ἐκτείση τὰ ὀφειλόμενα, σῶμα, καὶ οὐδὲν δεῖν παράγειν οὐδὲ ἐν γαρμμα (Cratylus, 400b-c). The reference is to Zagreus’ passion, the Titanic descent of man, atonement for old abominations and all. That Plato here ascribes this aspect of the common basic theory to Orphism, while differentiating it from the more regular one (καὶ γὰρ σήμα τινὲς φασιν αὐτὸ εἶναι (sc. τὸ σῶμα) τῆς ψυχῆς, ὡς τεθαμμένης ἐν τῷ νῦν παρόντι), may indicate a fundamental bifurcation of life-attitudes: a sterner, cathartic, ascetic Pythagorean one contrasted to a more life-accepting, mystic-therapeutic (perhaps popular) Orphic one, the latter in the spirit of what Plato condemns in Rep. 364e (= 1DK B5). Such a spirit had also respectable philosophical exponents: see eps. Olympiodorus in Phaed. B, β; B, ν; B, isLoggedIn; and A, 3 (pp. 2.30-3.5 Norvin). But Plato, his source (Philolaus) and mainstream, orthodox doctrine, conceived of φυσικά as a place
of chastisement even if for the prisoner’s benefit as well. *Gorgias*, 525a6-b4: ἰδὼν (sc. Rhadamanthes) δὲ ἀτίμως ταύτην (sc. the vicious soul) ἀπέπεμψεν εὐθὺ τῆς φρουρᾶς, οἱ μέλλει ἐλθοῦσα ἀντλήναι τὰ προσηκοντα πάθη. προσήκει δὲ παντί τῷ ἐν τιμωρίᾳ ὄντι, ὡς ἄλλου ὀρθῶς τιμωρουμένῳ, ἢ βελτίως γίγνεσθαι καὶ ὀνίσσον ἢ παραδείγματι τοῖς ἄλλοις γίγνεσθαι, ἵνα ἄλλοι ὀρθότες πάσχοντα ἄν πάσχῃ φοβοῦμενοι βελτίως γίγνονται.

To conclude then this part of the inquiry. Who are the ἄνδρες καὶ γυναῖκες σοφοί περὶ τὰ θεία πράγματα in *Meno*, 81a? Socrates explains that they are τῶν ἱερέων τε καὶ τῶν ἱερείων ὀσίως μεμέληκε περὶ ὁν μεταχειρίζονται λόγον οίος ὁ ἕνας διδόναι (ibid.). Σοφοὶ thus concerning divine things are those who are able to explain them, to reason about them. They make an advance upon the μεμηγμένοι theologians of Aristotle (*Met.* 1091b8-9), who merely do not employ the pure mythological way alone (such as Pherecydes). Given an Orphic-Pythagorean framework, these sacred persons who are able to reason concerning the mythoritualistic apparatus of religion (and we may well assume, particularly the mytho-logical symbolism of its mystic aspect), must be Pythagoreans. The emphasis (twice) on men and women points in the same direction. ἱερεῖς and ἱερείαι need not be taken strictly in the connotations of modern priests and priestesses. The rites of ancient religion were open to private citizens, public administrators functionaries of religious or other associations, prophets and soothsayers, holy men, itinerant, even vagabond, initiators and so on.
On the other hand, the double occurrence of the male/female antithesis (one of the cardinal Pythagorean opposites), may allude to the ultimately prophetic descent of Pythagorean wisdom. Aristoxenus maintained that Pythagoras took his doctrines (or, at least, the “moral” ones) from Themistoclea from Delphi: D.L. VIII, 21: ο δ’ αὐτός φησιν (sc. Aristoxenus), ...καὶ τὰ δόγματα λαβεῖν αὐτὸν παρὰ τοῖς ἐν Δελφοῖς Θεμιστοκλείας. And §8: φησὶ δὲ καὶ Αριστόξενος τὰ πλείστα τῶν ἡθικῶν δογμάτων λαβεῖν τὸν Πυθαγόραν παρὰ Θεμιστοκλείας τῆς ἐν Δελφοῖς. Themistoclea is another, and “previous”, Diotima.

3) In Orphism, the religious significance of remembrance (Μνημοσύνη) is heavy, esp. in an eschatological context. In general, as in every doctrinal religion, salvation depends on truth and knowledge of truth. Such knowledge has to be actual, in order to be active, not merely potential. And this condition is expressed by memory: one knows the truth, when one recognises it in being, and, thus, when one remembers it. Recognition is of the essence of knowledge, and this is why remembrance is the criterion of its possession. (This is, in fact, the source of the Phaedonian development of the doctrine of ἀνάμνησις).

This experience of remembrance as constitutive of the knowledge of truth is found symbolised in Orphism within the context of the powerful imagery regarding what happens to the soul upon the death of man. We possess a few variants of this representation in the gold leaves discovered appended to the corpses
in burials from various places in Italy and Greece. These gold leaves provide the ritualistic confession of a soul on the process of divinization. When she leaves the light of sun (Ἀλλ’ ὀπόταμ ψυχή προλίτη φάος Ἀελίσιο, Α4 1 (Zuntz)) and comes before the palaces of Hades, she will find (B1 and B2 Zuntz and cf. B3-8) two sources of water, one to the left by a white cypress, the other further on to the right, coming from the Lake of Remembrance. (There is a complication in that B2 from Pharsalus seems to locate the first spring to the right as well - ἐνδὲξια –, but I think the basic pattern should be the one I indicated above). The initiated soul should refrain from drinking water from the former source. But the soul is dry from death and suffers having been cut off from the juices of life. Before the right source there stand Guardians who ask her to identify herself. They want one answer: “Τής παῖς εἰμι καὶ Οὐρανοῦ ἀστερόεντος αὐτάρ ἔμοι γένος οὐράνιον τόδε δ’ ἑστε καὶ αὕτοι”. The Zagreus story is implicitly contained here, as is evidenced by the entire extant corpus of similar leaves. Drinking from the water of Mnemosyne the soul clears her intellectual vision, sees truth in its wholeness and is saved: she escapes from the cycle of necessity and enters divine Elysium. She is free from the bondage of rebirth and redeath.

The Pythagoreans elaborated this basic religious, eschatological experience into their systematic and “logical” treatment of reality.

First, it is memory of previous reincarnations that comes into the picture, closer to the religious domain. To remember one’s
previous lives on earth, is a titanic feat of remembrance. Pythagoras was conscious of them. There are two known chief accounts of Pythagoras’ preincarnations. One was given by a group of Pythagoreans and writers on Pythagoreanism: Androcydes, Eubulides, Aristoxenus, Hippobotus and Neanthes. *Theol. Arithmeticae*, pp. 52.8-53.10 = 14DK A8. They held that the reincarnations of Pythagoras’ soul were observing a period of 216 years = $6^3$, a number expressing psychogonic revitalization. They further reckoned that this fits well with the widespread notion that Pythagoras had lived before as Euphorbus during the Trojan war. The other account, reported by Heracleides Ponticus (Fr. 89 Wehrli – followed probably by Dicaearchus (Fr. 36 Wehrli) and Clearchus (Fr. 10 Wehrli)), gives a more continuous series of multiple incarnations, starting with Aethalides, the son of Mercury. The god of λόγος granted him memory of all things acquainted with: τὸν δ’ Ἐμμὴν εἰπεὶν αὐτῷ ἔλεόθη οἶτ’ ἄν βούληται πλὴν ἀθανασίας, αἰτήσασθαι οὖν ζῶντα καὶ τελευτώντα μνήμην ἔχειν τῶν συμβαινόντων. ἐν μὲν οὖν τῇ ζωῇ πάντων διαμνημονεύσαι, ἐπεὶ δὲ ἁποθάνοι, τηρήσαι τὴν αὐτὴν μνήμην. The soul of Aethalides thus knew ἡς περιεπολήθη καί εἰς οὕτω φυτὰ καί ζώα (notice the plant-incarnations as in Empedocles) παρεγένετο καί οὕτα ἡ ψυχή ἐν τῷ Ἄιδῃ ἐπαθε καί αἱ λοιπαί τίνα ὑπομένουσιν. After a stated sequence of transmigrations, the soul γενέσθαι Πυθαγόραν καί πάντων τῶν εἰσαγμένων μεμνήσθαι. Here we have the initial formulation of the cruder idea, memory of all particular things and events with which the soul had been acquainted on Earth and in Hades: ἀτε οὖν ἡ ψυχὴ ἀθάνατος τε οὕσα
καὶ πολλάκις γεγονυῖα, καὶ ἐνωρίκνια καὶ τὰ ἐνθάδε καὶ τὰ ἐν Ἁιδοῦ καὶ πάντα χρήματα, ὥστε ἐστίν ὅτι οὐ μεμάθηκεν, Μένο, 81c5-7. (The particularity of the memory and reminiscence in this first Platonic formulation of the doctrine is, therefore, explicable).

Second, such particularism in knowledge was early sublated, within the framework of the Pythagorean systematic and "principled" thinking, to more general formulations. "The whole truth about souls" was a first step towards such generalizations. So, again Heracleides Ponticus reports the story of Empedotimus, of whom it is said that θηρώντα μετ' ἄλλων ἐν μεσμηρίᾳ σταθερά κατά τινα χώρον αὐτὸν ἔρημον ἀπολειφθέντα λέγων τῆς τε τοῦ Πλούτωνος ἐπιφανείας τυχόντα καὶ τῆς Περσεφόνης καταλαμφθῆναι μὲν ύπὸ τοῦ φωτός τοῦ περιθέοντος κύκλω τῶν θεῶν, ιδεῖν δὲ δι' αὐτοῦ πάσαν τὴν περὶ ψυχῶν ἀλήθειαν ἐν αὐτώπτοις θεάμασιν (Fr. 93 Wehrli). Empedotimus gave a cosmology as well to suit his revealed psychology; cf. Fr. 95-96 Wehrli. (No wonder the soul-light theory was Heracleides').

Third. Particularism in memorizing was cultivated to a phenomenal degree, and systematized, by specific practices. Such a method consisted in trying to remember every morning, before rising from the bed of sleep, what exactly happened the day before in the sequence in which every singular event occurred. And the same endeavour was attempted for the serial happenings of the previous day, and the one before, and so on. Iamblichus Vita Pyth. §165 (= 58DK D1 p. 467.23 sqq.): Πυθαγόρειος ἀνήρ οὐ πρότερον ἐκ τῆς κοίτης ἀνίστατο ἢ τὰ χθές γενόμενα πρότερον ἀναμνησθεὶς.


Pythagoreans laid primary stress on the power of memory. Its exercise was pursued through various techniques. They considered it the greatest asset for scientific knowledge and expertise and practical wisdom (applied knowledge). Op. cit., §166: καὶ ἐπὶ πλέον ἐπειρώντο τὴν μνήμην γυμνάζειν· οὐδὲν γὰρ μείζον πρὸς ἐπιστήμην καὶ ἐμπειρίαν καὶ φρόνησιν τοῦ δύνασθαι μνημονεύειν. They soon would develop a theoretical account for such an emphasis on memory and mnemonic techniques in the pursuit of higher science. The main point was the recognition on the part of the thinking subject that it is one and the same faculty in man which possesses knowledge and keeps right judgement on the one hand, and which learns and remembers on the other. By cultivating therefore the power of remembrance you ipso facto cultivate the power of knowing and judging correctly. Op. cit. 164: ὡσποδ᾽ ἐδείκνυα καὶ διασώζειν ἐν τῇ μνήμῃ πάντα τὰ διδασκόμενα τε καὶ φραζόμενα, καὶ μέχρι τοῦτου
Knowledge was intimately associated to learning. They secured knowledge as permanent possession in human soul by (in the words of Iamblichus they would not leave the object of learning till they have achieved) the firm and certain comprehension of what exactly constituted the initial learning of it. (This was speculatively extended to the vicissitudes of soul in her eternal life).

Iamblichus testimony stems from Aristoxenus’ Pythagorean works (Πυθαγορικοὶ ἀποφάσεις and Περὶ Πυθαγορικοῦ (or Πυθαγορείου) βίων).

**Fourth.** Finally, in the theorization of mnemonic particularism which the Pythagoreans cultivated as a way to certain knowledge, there was a last stage which was grounded on the ultimate bringing together of the two most characteristic tenets of Pythagoreanism. Thus Porphyry (drawing from Dicaearchus): μάλιστα μέντοι γνώριμα παρὰ πάσιν ἐγένετο πρῶτον μὲν ὡς ἀθάνατον εἶναι φήσει τὴν ψυχήν, εἴτε μεταβάλλουσαν εἰς ἄλλα γένη ζώων, πρὸς δὲ τούτοις ὅτι κατὰ περιόδους τινὰς τὰ γενόμενα ποτὲ παλιν γίνεται, νέον δὲ οὔδεν ἀπλῶς ἐστι, καὶ ὅτι πάντα τὰ γινόμενα ἐμφάνη ὁμοιεῖν δεὶ νομίζειν. φαίνεται γὰρ εἰς τὴν Ἑλλάδα τὰ δόγματα πρῶτος κομίσαι ταύτα Πυθαγόρας (Porphyry, *Vita Pyth.*, 18 = DK 14 A 8a. In Wehrli’s *Dicaearchos* there appears §18 of Porphyry’s *Vita Pyth.* as Fr. 33, but unaccountably the
following passage §19 is ommitted). The doctrine of the eternal recurrence of identical world-cycles is early Pythagorean on good evidence. Besides Dicaearchus, Eudemus also elaborates on it, Fr. 88 Wehrli (from Simplicius quoting verbatim the old Peripatetic: εἰ δὲ τὶς πιστεύειε τοῖς Πυθαγορείοις, ὡστε πάλιν τὰ αὐτὰ ἀριθμῶ, κάγω μυθολογήσω τὸ φαβίκον ἔχων ὑμῖν καθημένοις οὕτω, καὶ τὰ ἄλλα πάντα ὁμοίως ἔξει, καὶ τὸν χρόνον εὐλογὸν ἔστι τὸν αὐτὸν εἶναι etc. Theopompus and Eudemus ascribed to the idea a Magian origin (Eudemus Fr. 89 Wehrli): ὁς (ss. Θεόπομπος) καὶ ἀναβιώσεσθαι κατὰ τοὺς Μάγους φησὶ τοὺς ἀνθρώπους καὶ ἀθανάτους ἔσεσθαι, καὶ τὰ ὄντα ταῖς αὐτῶν περικυκλήσεις διαμενεῖν ταῦτα ἔδε καὶ Εὐδημος ὁ Ρόδιος ἱστορεῖ. (autoν περικυκλήσεις rather than autoν ἐπικυκλήσει as in Jacobi Fr.Gr.H. 115 F64). Temporal sequence is not accidental: it repeats itself in its entirety sempiternally, and this must be for some reason. We are here moving into the arcaic antecedens of Stoicism. Elsewhere I have proposed a candidate for the Pythagoreo/Heraclitean fusion required to generate the conception of a World unfolding itself according to a fixed law of development constituting a cyclic pattern. (A.L. Pierris, The Origin of Stoic Fatalism, esp. pp. 27-30, in Chypre et les Origines du Stoicism, Actes du Colloque Paris 12-13 Mai 1995, Publications du Centre Cultural Hellénique de Paris, 1996, pp. 21-30).

4) We have reached, in the previous section, the stage, where it appears that the idea of an ordered pattern of things is indeed implicated in the Pythagorean “Memorism”. But there is much more
in Pythagoreanism by way of cohesiveness and systematicalness
than this rather loose implication. In the midst of Socrates’
application of the doctrine of transmigration to the question of the
possibility of learning (and thus of the possibility of real knowledge),
we meet an unprepared, strong statement of the “kinship of nature”:
άτε γὰρ τῆς φύσεως ἀπάσης συγγενοῦς οὐσίς etc. (Meno, 81c9-d1). The
statement is a crucial link in the demonstration that there can be
learning and scientific knowledge of diverse things. For the fact that
all truth is implicit in the soul (because through the eternal recycling
she has “seen” visually and mentally everything of this and the other
world) is not by itself sufficient to establish the real possibility of
actual knowledge. What Socrates achieves by his invocation of the
“kinship of all nature” doctrine is to show that once a single
individual truth has been secured, all truth can in principle be
obtained: άτε γὰρ τῆς φύσεως ἀπάσης συγγενοῦς οὐσίς, καὶ
μεμαθηκείας τῆς ψυχῆς ἄπαντα, οὐδὲν καλύπτει ἐν ἀναμνησθέντα -ο δὴ
μάθησιν καλούσιν ἄνθρωποι -τάλλα πάντα αὐτῶν ἀνεφείν, ἐὰν τις
ἄνθρωπος ἢ καὶ μὴ ἀποκάμη ἡμῶν τὸ γὰρ ἔσται ἄρα καὶ τὸ μανθάνειν
ἀνάμνησις ὅλον ἐστίν (81c9 – d5). It is now only a question of
perseverance – and time, if not one life’s then of more. The point is of
immense consequence: either no actual knowledge, or, in principle, absolute
knowledge of reality.

[The thesis is made the object of a brilliant burlesque in the
Euthydemen. 293b1-297b1. The two sophist-brothers engage in an
exhibition of negative dialectics, or eristics, the offspring of Eleatism.
Plato wants to show what havoc “strict thinking” can effect in the
human quest of truth, if strictly pursued and applied. Euthydemus and Dionysiodorus argue on eristical grounds that εἰπερ ἐν ἑπίσταμαι, ἀπαντά ἑπίσταμαι (293d5); moreover, that πάντες πάντα ἑπίστανται, εἰπερ καὶ ἐν (294a10); furthermore, that not only one knows everything, if he knows anything, but also he always (καὶ ἀεὶ) knew everything (294e8; 295a8); and finally we reach in this crescendo the remarkable view that καὶ πρῶν αὐτὸς γενέσθαι, καὶ πρῶν οὐχανόν καὶ γῆν γενέσθαι, ἡπίστω ἀπαντά, εἰπερ ἀεὶ ἑπίστασαι. καὶ ναὶ μᾶ Δία, ἔφη, αὐτὸς ἀεὶ ἑπιστήσῃ καὶ ἀπαντά, ἂν ἐγὼ βούλωμαι (296d1-4).

Eristics is founded on Eleatic thinking absolutism, giving the wrong turn to it. the general pattern of inference can be put thus: if x is A, x is. If x is, x is Y (where Y is any (putatively) real content of being). Socrates repeatedly intimates the error of this procedure, in the course of the above argument. But he also explains the point of such eristics: it is preliminary preparation of the ground for the serious and important thing (277d1-278e1). This projected estimate on the part of Socrates, is offered after another show of “logical” derivations of puzzling absurdities, earlier in the dialogue, by the expert brothers. Interestingly enough, among that set of ἀτοπα is the demonstration that one has to negate both alternatives to the question πότερον οἱ μανθάνοντες μανθάνουσιν ἡ ἑπίστανται ἢ ἡ μὴ ἑπίστανται; (276d7-8 and sqq.).]

The cohesion of knowledge is clearly grounded on the kinship of nature: ἄτε γάρ τῆς φύσεως ἀπάσης συγγενοῦσαν οὐσία etc. - because nature is in its entirety kindred etc. Now kinship connotes common progeny, the same (pro)genitors. That the natural world has all of it
the same “ancestors”, means philosophically that it proceeds from
the same ultimate duality of principles, which function in biological
terms as the primeval conjugation of male and female. This all
assumes its most forceful significance in connection with the
Pythagorean theory of world-formation out of the conjunction of the
two primary opposites, πέρας and ἀπειρον. Thus, e.g., in Philolaus,
44DK B1: ἄ φύσις δ’ ἐν τῷ κόσμῳ ἀμορμοχή έξ ἀπειρον τε καὶ
περαιόντων, καὶ ὁλυς <ὁ> κόσμος καὶ τα ἐν αὐτῷ πάντα. Philolaus
explained that the dissimilar and alien natures of the two principles
needed a supervening harmonious mixture or conjugation in order
to bring forth the κόσμος, ordered existence: ἐπεὶ δὲ ταὶ ἀρχαὶ
ὑπάρχον νῦν ὁμοία οὐδ’ ἀμορμοχή ἔσοσαι, ἢ ὁ ἀδύνατον ἢ καὶ ἀὑταῖς
κοσμηθῆναι, εἰ μὴ ἀρμονία ἐπεγένετο ὡ τινῶν ἀδε ὄρτω ἐγένετο. τὰ
μὲν ὄν ὁμοία καὶ ἀμορμοχή ἀρμονίας οὐδὲν ἐπεδέοντο, τὰ δὲ ἀνόμοια
μηδὲ ἀμορμοχὴ μηδὲ ἀσταγὴ ἀνάγκα τὰ τοιαύτα ἀρμονία
συγκεκλείσθαι, οἴχ μέλλοντι ἐν κόσμῳ κατέχεσθαι (44 DK B6). This
harmonious conjugation brings integration and unity into the
outcome: ἔστι γὰρ ἀρμονία πολυμεγέων ἔνωσις καὶ δίχα φοινεόντων
συμφρόνησις (B10). Number (the carrier of harmony) makes things
related (kindred) to each other and knowable. Kinship and
knowability of reality go hand in hand in Pythagoreanism: γνωμικά
γὰρ ἄ φύσις ἄ τῶ ἀριθμῶ καὶ ἤγεμονικά καὶ ἰδιασκαλικά τῶ
ἀπορουμένω παντός καὶ ἀγνουμένω παντί. οὐ γὰρ ἢς δῆλον οὐδέν
οὐδὲν τῶν πραγμάτων οὕτε αὐτῶν ποθ' αὐτὰ οὕτε ἄλλο πρός ἄλλο, εἰ
μὴ ἢς ἀριθμὸς καὶ ἄ τοῦτο ὑσια. νῦν δὲ οὕτος κατὰ τοῦς φυχὰν ἀριθμῶν
αἰσθήσει πάντα γνωστά καὶ ποτάγορα ἀλλάλας κατὰ γνώμονας φύσιν
ἀποργάζεται σωματών καὶ σχίζον τοὺς λόγους χωρίς ἕκαστος τῶν
πραγμάτων τῶν τε ἀπείρων καὶ τῶν πεπερασμένων (B11, which see, the whole of it). Thus number is the conquering and self-subsisting cohesion of the eternal stay of things temporal and this-worldly alike: ἀριθμὸν εἶναι τῆς τῶν κοσμικῶν αἰώνιας διαμονῆς κρατιστεύοισαν καὶ αὐτογενή συνοχήν, B23 (deemed spurious by Diels-Kranz, but which sounds Philolaean in substance if not in phrasing). Αὐτογενή may even here mean kindred, as in Aeschylus, Suppl. 8, if indeed this is the right reading there. The idea finds a similar, in fact parallel, expression in another reputedly spurious fragment (B21), which again, however, seems to preserve, in the relevant part at least, sound Philolaean doctrine: the world is indestructible and eternal; ἀλλ’ ἦν ὁ δὲ ὁ κόσμος ἐξ αἰώνος καὶ εἰς αἰώνα διαμενεί, εἰς ὑπὸ ἑνὸς τῷ συγγενέος καὶ κρατίστω καὶ ἀνυπερθέτῳ κυβερνώμενος. This kindred and most powerful principle is immanent in it, the principle of harmony, that is divine number.

Talk of kindredness refers to the biological (“hylozoistic”) model of conceiving reality in protorationality. Thus male and female form indeed one of the ten fundamental expressions of the primal contrariety in the list of Pythagorean syzygies according to Aristotle (Met. 986a22-26).

Plato utilises the same biological terminology to clarify the constitution of this world of becoming from its principles: ἐν δ’ οὖν τῷ παρόντι χρή γένη διανοηθήναι τριτά, τὸ μὲν γιγνόμενον, τὸ δ’ ἐν ᾧ γίγνεται, τὸ δ’ ὅθεν ἀφομοιούμενον φύεται τὸ γιγνόμενον. Καὶ δὴ καὶ προσεικᾶσαι πρέπει τὸ μὲν δεχόμενον μητρί, τὸ δ’ ὅθεν πατρί, τὴν δὲ
μεταξύ τούτων φύσιν ἐκγόνῳ etc. Timaeus, 50c-d. Nature that grows out of its principles is like the offspring of its parents. All (natural) existence is thus kindred: it comes from the common couple of ancestors, πέρας and ἀπειρον, directly or through intermediation. In Philebus, similarly, natural reality is described as an offspring of πέρας and ἀπειρον, the becoming into substance (i.e. the φύσις) of things: ἀλλὰ τρίτων φάθι με λέγειν, ἐν τούτῳ τιθέντα τὸ τούτων (sc. of πέρας and ἀπειρον) ἐκγόνον ἄπαν, γένεσιν εἰς οὐσίαν ἐκ τῶν μετὰ τοῦ πέρατος ἀπεργασμένων μέτρων (26d7-9).

Behind, and at the root of, all this lies as usual a religiously formulated experience. Thus Pindar (again) Nem. VI, 1-7:

ἐν ἀνδρῶν, ἐν θεών γένος· ἐκ μιᾶς δὲ πνεόμεν
ματρὸς ἀμφότεροι διεγείρει δὲ πᾶσα κεκριμένα
dύναμις, ὡς τὸ μὲν οὐδέν, ὁ δὲ
χάλκεος ἀσφαλές αἰεν ἔδος
μένει οὐρανός. ἀλλὰ τι προσφέρομεν ἐμπαν ἢ μέγαν
νόον ἤτοι φύσιν ἀθανάτοις etc.

Common maternal parenthood between gods and men, means the origin of both from Earth (and Heavens). We meet once more in these ideas of kindrednesses the account of the Titanic origin of manhood, i.e. OrphicoPythagorean wisdom.

5) But the real point of all this context – analysis is what bearing it has on Platonic dialectics. The Pythagorean “kinship of nature” doctrine is founded on the “mathematical” derivation of all reality from the dual principles of πέρας and ἀπειρον. On its turn,
the doctrine grounds the "cohesion of knowledge" conception. This again entails that truth can, in principle, be unfolded methodically in its entirety, once a single piece of certain knowledge has been established. But the paradigm case of indubitable knowledge is mathematics. Hence the process of philosophical learning (i.e. of dialectics as the road to absolute truth) must start at mathematical theory. This is why Socrates in the *Meno* provides and example of proper essential definition (and as an example it was explicitly adduced: ...πειρω εἰπεῖν, ἵνα καὶ γένηται σοι μελέτη πρὸς τὴν περὶ τῆς ἀρετῆς (and of everything else) ἀπόκρωσιν, *Meno*, 75a8-9) by asking the τί ἐστιν question of shape (and, furthermore, associates with it the apparently non-mathematical concept of colour, which, however, was somehow reduced in Pythagoreanism to, (or, alternatively, was the reduction-basis of, or, at any rate, was essentially connected to) surface bounding a solid form, i.e. to shape). And this is, more importantly, why Socrates here gives an example of learning by "demonstrating" a mathematical theorem – and one in fact which is directly related to the (in)famous Pythagorean discovery of the incommensurability of the diagonal of a square with its side. Demonstration consisting in the eliciting of truth out of the learner’s mind through an appropriate framework of questioning. Thus we have in effect the essence according to Plato of the *Socratic probing*. *Elenchus* consists in the methodical way of rendering knowledge explicit, of activating truth out of its slumbering status in human mind. In this elenctic process, the mind of the learner passes from a condition in which it thinks it knows but in reality is ignorant, to a
state of ἀποφθα in which it recognizes its ignorance. Then elenchus turns positive, the mind having been cleared from its false beliefs and rendered receptive to truth: now truth can be recognized as such and the state of knowledge achieved (84a3-d2). Certainly, in order for such truth to be stabilized as an exact and permanent possession of mind, repeated and systematic testing is necessary: καὶ νῦν μὲν γε αὐτῷ (i.e. in this first awakening of truth in the slave-boy’s mind) ἠσπερ ὅναρ ἄρσε ἀνακεκίνηται αἱ δόξαι αὐτοὶ εἰ δὲ αὐτῶν τις ἀνερήσεται πολλάκις τὰ αὐτὰ ταύτα καὶ πολλαχῇ, οἶοθ’ ὅτι τελευτῶν οὐδενὸς ἦττονάκριβῳς ἐπιστήσεται περὶ τούτων (85c9-d1). This is very close to the Pythagorean insistence on repeated checking with a view to secure comprehension of what was involved in the first awakening of (a given) truth in the mind: ἐν τῇ τῷ μανθάνειν οὐ πρῶτον ἀφιέντες τὸ διδασκόμενον, ἔως περιλάβοιεν βεβαιῶς τὰ ἐπὶ τῆς πρώτης μαθήσεως (88 DK, D1 [from Aristozenus] p. 467.21-2). Through the positive questioning, what the mind contained as latent knowledge and, at most, actual true belief (Ἀλήθεις δόξα), becomes scientific knowledge: ἐνεσονται αὐτῷ (sc. τῷ ἀνθρώπῳ) ἀλήθεις δόξαι, αἱ ἐρασθεὶς ἐπεγερθείᾳ ἐπιστήμαι γίγνονται (86a7-8). This rousing of truth in the mind by means of appropriate examination implies that the truth of being exists always in the soul: ἀεὶ ἡ ἀλήθεια ἡμῖν τῶν ὀντόν ἐστὶν ἐν τῇ ψυχῇ (86b1-2). [Which again can be used to prove the immortality of the soul (86b2), - something announced in anticipation to the full development of the idea in the Phaedo, a dialogue to which Meno is clearly meant to serve in this respect as a preliminary].
Having now reached this stage, we may drop, if we feel inclined to do so, the ladder by which we ascended as far: the religious roots and formulations of these doctrines can be left out of the picture on suspension: καὶ τὰ μὲν γε ἄλλα οὐκ ἀν πάνυ ὑπὲρ τοῦ λόγου δύσχειρωσαίμην (86b6-7). So much, however, is clear: with secure anchorage in mathematics, all truth of being can in principle be revealed (in substance, b7-c2).

6) Mathematical truth is not only the best starting point from which to elicit the entire truth of being. It also provides the methodology to do this. In the Meno (86d3-87c2), the pattern is taken from the mathematical solution of geometrical problems. The question is to determine whether a given, particular object has the property A. And one shows that x will be A if x is B. This procedure depends on establishing the relationship B → A. In the Phaedo it is this drawing of conclusions from premises which are taken for granted in the given connection, that is called argument ex hypothesi. In this respect Phaedo stands to Meno in the same relationship as regards this systematically ambiguous employment of the terminology “hypothetical reasoning”, as with the utilization of the doctrine of ἀνάμνησις; here it is coloured by particularism, while in the Phaedo it is refined into the recollection of the idea of things which we perceive as (more or less) determined by the idea (as instances of the idea).

Hypothetical argument in the generalized sense relies on the principle of logical (and ontological) coherence. Phaedo 100a3-7: καὶ
υποθέμενος ἕκάστοτε λόγον ὃν ἂν κρίνω ἐφρωμενέστατον εἶναι, ἀ μὲν ἂν μοι δοκῇ τούτῳ συμφωνεῖν τίθημι ὡς ἀληθῆ ὑπάρχει, καὶ περὶ αὐτίας καὶ περὶ τῶν ἄλλων ἀπάντων [ὄντων], ἀ δ' ἂν μὴ, ὡς ὄν ἀληθῆ. The hypothesis of one argument, may become the conclusion of another, which goes more deeply into the nature of reality. But one should exhaust first all relevant inferences from the given hypothesis (Phaedo, 101d1-e3): ...ἐχόμενος ἐκείνου τοῦ ἀσφαλοῦς τῆς ὑποθέσεως, οὔτως ἀποκρίνατο ἂν. εἰ δὲ τις αὐτῆς τῆς ὑποθέσεως ἔχοιτο, χαίρειν ἐώς ἂν καὶ οὐκ ἀποκρίνατο ἐως ἂν τὰ ἀπ' ἐκείνης ὀρμηθέντα σκέψαι εἰ σοὶ ἀλλήλοις συμφωνεῖ ἡ διαφωνεῖ ἐπειδή δὲ ἐκείνης αὐτῆς δέοι σε διδόναι λόγον, ἀσεβῶς ἂν διδοίχη, ἄλλην αὐτῷ ὑπόθεσιν ὑποθέμενος ἢτις τῶν ἀνωθεν βελτίστη φαίνοιτο, ἐως ἐπὶ τι ἵκανόν ἐλθοίς, ᾧμα δὲ οὕτως ἂν φύσοις ὡσπερ οἱ ἀντιλογικοί περὶ τή τῆς ἀρχῆς διαλεγόμενος καὶ τῶν ἐξ ἐκείνης ὀρμημένων, εἰπερ βούλιοι τι τῶν ὄντων εὑρεῖν. Of course, one should test again and again to clarify the (logical) relationships, and make them certain (Phaedo, 107b).

The hypothetical argumentation is, however, described by Socrates in the renowned methodological excursus of Phaedo as δεύτερος πλοῦς (99c9-d1), something one embarks at having failed to comprehend the causal working of the principle of Goodness (τὸ ἁγαθόν) in the world. Since this argumentation involves also the postulation of the full-blown ideas, it follows that the theory of ideas cannot be Plato’s ultimate explanation of reality. In the Republic, we are told in detail what is missing. First, it is a question of moving in the reverse direction from that of a genuinely philosophical (i.e. dialectical) investigation: instead of drawing conclusions from premised
hypotheses, one must ascend the ladder of logical and ontological presupposition towards the absolutely ἀνυπόθετον. ΣΤ, 510b4-9: ἢ τὸ μὲν αὐτοῦ τοῖς τότε μιμηθέοις ὡς εἰκόσιν χρωμένη ψύχη ζητείν ἀναγιάζεται ἐξ ὑποθέσεων, οὐκ ἐπὶ ἀρχὴν πορευομένη ἄλλῃ ἐπὶ τελευτήν, τὸ δ᾽ αὖ ἔτερον - τὸ ἐπὶ ἀρχὴν ἀνυπόθετον - ἐξ ὑποθέσεως ιούσα καὶ ἄνευ τῶν περὶ ἐκεῖνο εἰκόνων, αὐτοῖς εἰδεῖς δι᾽ αὐτῶν τὴν μέθοδον ποιομένη. The conjunction of downwards inferential movement with the use of images is not necessary, as I have indicated above; and similarly with the upwards movement and pure thought. On the other hand “dialectics” cannot essentially utilize exemplification and instantiation. In fact dialectics consists in the thought-process through which one ascends to the ἀνυπόθετον principle of being and then descends orderly in all articulate variation of reality: ...ὁ λόγος ἀπτεται τῇ τοῦ διαλέγονθαι δυνάμει (sc. the intelligible in strict sense), τὰς ὑποθέσεις ποιούμενος οὐκ ἀρχάς ἄλλα τῷ ὄντι ὑποθέσεις, οίον ἐπιβάσεις τε καὶ ὄρμας, ἢν μέχρι τοῦ ἀνυπόθετου ἐπὶ τὴν τοῦ παντὸς ἀρχὴν ἴων, ἀφάμενος αὐτής, πάλιν αὐ ἐχόμενος τῶν ἐκείνης ἐχομένων, οὗτος ἐπὶ τελευτήν καταβαίνῃ, αἰσθητῶ παντάπασιν οὐδενὶ προσχωμένος, ἄλλῃ εἰδεῖν αὐτοῖς δι᾽ αὐτῶν εἰς αὐτά, καὶ τελευτᾶ εἰς εἰδή, 511b3-c2 (cf. c4-d2).

Secondly, and chiefly, in book Z, Plato offers a first level description of dialectics. The foundation is provided by the mathematical “sciences” (not strictly science, ἐπιστήμη, yet not mere true belief, ὀρθὴ δόξα, but intelligence in between, διάνοια). This is developed in 525a-531c. One should then concentrate on what is common to the various mathematical branches (531c9-d4). If this is
done with a view to reaching to the ἀνυπόθετον, we have dialectics (cf. 531d5-532a5) esp. 532a5-b4: οὖτω καὶ ὅταν τις τῷ διαλέγεσθαι ἐπιχειρή ἀνευ πασῶν τῶν αἰσθήσεων διὰ τοῦ λόγου ἐπὶ αὐτὸ ὅ ἔστιν ἔκαστον ὀρμάν, καὶ μὴ ἀποστῇ πρὸν ἀν αὐτὸ ὅ ἔστιν ἁγαθόν αὐτῇ νοήσει λάβῃ, ἐπὶ αὐτῷ γίγνεται τῷ τοῦ νοητοῦ τέλει, ὡσπερ ἕκείνος τότε ἐπὶ τῷ τοῦ ὀρατοῦ (referring back to 507c10-509c2). -

Παντάπασιν μὲν οὖν, ὕφη. -Τι οὖν; οὐ διαλεκτικὴν ταῦτην τὴν πορείαν καλεῖς; Mathematics becomes dialectical when it searches for first principles (533b1-e2); esp. 533c7-d7: ἡ διαλεκτικὴ μέθοδος μόνη ταύτη πορεύεται, τὰς ὑποθέσεις ἀναιροῦσα, ἐπὶ αὐτὴν τὴν ἁρχὴν ἵνα βεβαιώσῃται ... ἃς (sc. mathematical disciplines) ἐπιστήμας μὲν πολλάκις προσείπομεν διὰ τὸ ἔθος, δεόνται δὲ ὀνόματος ἄλλων, ἐναργεστέροι μὲν ἡ δόξης, ἀμυνδοτέρου δὲ ἡ ἐπιστήμης -διάνοιαν δὲ αὐτὴν ἐν γε τῷ πρόσθεν ποιεῖ σῶμα etc. Once the ἀνυπόθετον has been reached and the idea of goodness made the pivot of mathematics, elenchus takes up its positive aspect: ὃς ἂν μὴ ἔχῃ διορίσασθαι τῷ λόγῳ ἀπὸ τῶν ἄλλων πάντων ἀφελῶν τὴν τοῦ ἁγαθοῦ ἱδέαν, καὶ ὡσπερ ἐν μάχῃ διὰ πάντων ἑλέγχων διεξιών, μὴ κατὰ δόξαν ἄλλα κατ’ οὐσίαν προθυμούμενος ἑλέγχειν, ἐν πάσι τοιοῦτοι ἀπτοῖ τῷ λόγῳ διαπορευέται, etc. (534b8-c3). Thus dialectics is the θριγκός τοῖς μαθημασίαις and their τέλος (534e2-535a1).

I have maintained and argued for elsewhere the essential coherence between the programatic description of higher philosophy in the Republic and the Laws on the one hand, and between that programme and the reputed carrying it out in the Unwritten Doctrines (and in the discourse τερι τοῦ ἁγαθοῦ) on the other. [V. A.L. Pierris, The Metaphysics of Politics in the Politeia, Politikos and
7) In the final section of the *Meno* we have the inimitable daedalic similitude: true beliefs exist side by side with false ones in the soul of the unphilosophical (= undialectic) vulgar. For as long as they are entertained by the mind (for as long as they lay hold of it), no harm is being done by the fact that they do not still constitute proper scientific knowledge: καὶ γὰρ αἱ δόξαι αἱ ἀληθεῖς, ὅσον μὲν ἀν χρόνον παραμένωσιν, καλὸν τὸ χρῆμα καὶ πάντ' ἀγαθὰ ἐργάζονται (97e6-98a1. Cf. 97a9-c10). [It is a different matter, whether the condition of true belief is empirically distinguishable from the state of real knowledge. The answer lies, for Plato, in the affirmative. For true beliefs lack the systematical cohesion and ultimate dependence on first principles that scientific knowledge possesses].

True belief, however, is not permanent possession of mind, being intrinsically unstable – exactly by virtue of its lack of systematic cohesiveness in a “body” of knowledge organized in ramified articulation with a single (or dual) dependence on ultimate “beginning(s)”, on ἀρχὴ (or ἀρχαῖ): This is how the point is being put in the relevant Menonian passage: true beliefs do not last for long in the mind, but tend to flee in time away from it, and so are not of great value, ὡστε οὐ πολλοῦ ἄξιαί εἰσιν, ἐως ἂν τις αὐτὰς δήσῃ αἰτίας λογισμό. τούτῳ δ’ ἐστὶν, ὥ Μένων ἔταϊρε, ἀναμνησίς, ὡς ἐν τοῖς πρόσθεν ἢμῖν ὀμολόγηται. ἐπειδὰν δὲ δεθῶσιν, πρῶτον μὲν ἐπιστήμαι
γίγνονται, ἑπεὶ διὰ ταύτα δὴ τιμωτερον ἑπιστήμη ὀρθῆς δόξης ἐστίν, καὶ διαφέρει δεσμῶ ἑπιστήμη ὀρθῆς δόξης (98a3-8). True beliefs become permanent scientific acquisitions of mind by being “bound” to it. And this fixation is being effected by adducing the λογισμὸς αἰτίας, the thought-connection to the cause, the calculus which starts with principles. Now the transformation of true belief into knowledge has been affirmed before (ἐν τῆς προσθεν ἡμῖν ὠμολογηται) to be the work of ἀνάμνησις (as essential learning). “Before” refers to 86a7-8: ...ἐνέσονται αὐτῷ (sc. to man) ἀληθεῖς δόξαι, αἱ ἐρωτήσει ἐπεγερθείσαι ἑπιστήμαι γίγνονται. The awakening of what is lumbering in the soul, the arousing of what is latent, by means of dialectical questioning, constitutes precisely the process of ἀνάμνησις. Now at the end of the dialogue this is identified with λόγον διδόναι and indeed λόγον τῆς αἰτίας. It is a step forward: to the doctrine of the kinship of nature, and its conjugate tenet on the cohesion of knowledge, it is here summarily but explicitly added that kinship and cohesion, the systematic connectedness of reality and truth, is due to the fact that being and intelligibility proceed from principles (causes), and, ultimately, from ultimate principles (causes). Αἰτία is left (deliberately) generally meant in the Meno: it can refer to the (mediate) causality of the ideas, according to the classical Theory of Ideas as in the Phaedo; it can also refer to the final causality of the Idea of Goodness as in the Republic; it can further refer, to the category of (efficient) causality as in the Philebus and the Timaeus; and it can finally refer equally well to the ultimate causality of the Principles of Being as in the Unwritten Doctrines, the περί
τὰ γαθοῦ seminar and the Aristotelian testimony. By introducing, as
if accidentally, this notion of aιτία at the end of the dialogue, Plato
points to the reason of being’s cohesiveness and, ipso facto, to the
reason of the possibility of scientific knowledge: this reason
consisting in being’s (and thereby truth’s) dependence on – or
analysis in – first principles. Given the Pythagoreanism of the
setting, these principles have to be the principles of number, πέρας
and ἀπελευθ. On this reading, we have already here presupposed the
doctrine of the mathematical structure of reality, of the mathematical
constitution of being.

It is so very alluring, on closer analysis, to discover intriguing
traces, dispersed providentially by Plato, the creator of his own
work-world, all over the corpus, of a complete “system”, whose
differing aspects and parts are expressed in the various dialogues
according to a magisterial plan, a feat of calculativeness.

III

The Platonic dialogues appear to be pieces of a gigantic
teaching programme. They provide examples of what they profess to
illustrate, dialectical (philosophical) elenchus. Their interpretation is
greatly facilitated, if we will take Plato on his word: he handles
problems in the way he says they should be handled.

A Platonic dialogue is an act of teaching as Plato understood
it. This explains why he is dissatisfied with the written word
(Phaedrus, 274c-275c-275d-278b), in favour of the oral, living and
ensouled word of him who knows (276a8-9; cf. 276a5-7). Plato is for
the awakening-theory of learning, against the transmission-theory. Knowledge involves the principle of its (theoretical and practical) self-validation in all conceivable connections and circumstances; it is not something that can be put in a code and fully expressed by a mechanical rule incapable of “growing” responses in accordance with the encountered situation.

Learning consisting in recollection, the teacher should simply help methodically in the arousing of truth in the learner’s mind. This method and process of awaking (on the higher level of truth in the realm of scientific (= philosophical) knowledge) is dialectics. The Platonic dialogue endeavours to reproduce the dynamic life of an oral questioning, guided by the knowledge of the teacher but attentive to the sensibilities of the learner: hence its employment of (philosophical) symbolism, of (philosophical) rhetoric, of (philosophical) artistry, of (philosophical) disputativeness, of (philosophical) love, each and all of them according to the needs and merits of the case.

A Platonic dialogue may restrict itself chiefly to the negative results of elenchus (the early, “Socratic” dialogues) concentrate on the road to genuine knowledge out of the state of ἀποφία resulting upon the application of negative dialectics (the “middle” dialogues), or develop themes of positive dialectics (always on the lesser side of ultimate sufficiency, even in the latest works). Such an understanding provides the rationale for the traditional division of the Platonic corpus, without in the least invalidating the
fundamental classification according to the existence, and the degree
of elaboration, of Pythagoreanism in a Platonic work.

In the *Meno* the awakening worked up has first of all to do
with awakening itself. We have the first written-word exposure of
the doctrine of ἀνάμνησις. As to the proclaimed subject of the
dialogue (virtue and its teachability), important steps have been
taken in its proper understanding. *First*, excellence (virtue) is
intrinsically connected with the truth of things. *Second*, excellence
(virtue) appears to exist as moral and civic virtue unconnected to
proper scientific knowledge of reality, and hence unteachable. *Third*,
in such an empirically observable condition, excellence (virtue) can
only involve true belief (ὁθὴ δόξα) and be a matter of, in effect,
divine grace. *Fourth*, applying the recollectin-procedure to that
common excellene (virtue), we can transform its associated pattern
of true beliefs into real scientific knowledge. *Fifth*, this
transformation can only be elected by going thoroughly and deeply
into the essential nature of excellence (virtue). (Which means
forming a coherent system dependent on first principles, in which
excellence (virtue) possesses its natural position).

So, clearly at the end of the dialogue: ἐκ μὲν τοῖνυν τοῦτον τοῦ
λογισμοῦ, ὡς Μένων θεία μοίρα ἦμιν φαίνεται παραγιγνομένη ἡ ἀρετή
οίς ἂν παραγίγνηται τὸ δὲ σαφές περὶ αὐτοῦ εἰσόμεθα τότε, ὅταν πρίν
ὡς τρόπῳ τοῖς ἄνθρωποις παραγίγνεται ἀρετή, πρότερον
ἐπιχειρήσωμεν αὐτὸ καθ’ αὐτὸ ζητεῖν τί ποτ’ ἐστιν ἀρετή, νῦν δ’ ἐμοὶ
μὲν ὡς ποι ἵντι etc. (100b2-7). The presumably promised enterprise
to define excellence (virtue) is carried out in the *Republic*. 
I have furthermore suggested above the preliminary character of the *Meno*, vis-à-vis the *Phaedo*, not least with regard to the development of the theory of ἀνάμνησις. Thus we discover a learning Platonic triad: *Meno – Phaedo - Republic.*