ARISTOTLE'S
CRITICISMS OF PLATO

BY THE LATE

J. M. WATSON

GUTHRIE SCHOLAR IN THE UNIVERSITY OF ST. ANDREWS
HONORARY SCHOLAR OF ORIEL COLLEGE OXFORD

HENRY FROWDE
OXFORD UNIVERSITY PRESS
LONDON NEW YORK TORONTO & MELBOURNE

1909

NOTE

THIS essay is published after much hesitation; for it is certain that Watson would not have wished it to appear in print. I discussed it with him shortly before his death in 1903, and I know that he regarded it as only a sketch, which he intended to work up during the next year or two. It must be remembered that he was only twenty-four when he wrote it. Even so, however, it will be admitted that, if he has not answered the question with which he deals, he has asked it in the right way. Some readers will note stray indications of a solution rather different from the main position of the essay.

Watson's friends have decided to print his work, in order that some memorial may remain of a singularly gifted young man, to whom they were deeply attached. If he had lived, there can be no doubt that he would have been one of the first scholars of his day.

<div style="text-align: right">JOHN BURNET.</div>

ARISTOTLE'S CRITICISMS OF PLATO

FROM the days of the Greek commentators onward, it has been a standing charge against Aristotle that he did not understand his master's philosophy. Syrian,[1] for example, representing the Neoplatonists in general, says in grandiloquent language that Aristotle's criticisms ' no more affect the divine doctrines of Plato than the Thracian shafts reached the gods of heaven '. Similar reproaches are to be found in Simplicius and Philoponos. In modern times— to pass over the controversies before the eighteenth century —it has been repeatedly maintained that Aristotle first misunderstands his master's teaching and then criticizes the result of his own misunderstandings. On the other hand, champions of Aristotle have not been wanting, though they are perhaps in a minority. Hegel,[2] the founder of all modern study of Aristotle, treats the supposition that Aristotle did not understand Plato as an altogether arbitrary and unfounded assumption 'in view of Aristotle's fine deep thoroughness of mind, perhaps no one knows him better'.

The origin of this diversity of opinion is not far to seek. On the one hand, as ancient and modern commentators alike point out, Aristotle is constantly ' Platonizing[3] '. In his every work may be found, if not explicit approval or quotation of his master, at least innumerable reminiscences, conscious or unconscious, of Plato's doctrine or language. But, on the other hand, Aristotle seems to criticize Plato

---

[1] Syrian on *Met.* B. 997 b 5 sqq. (*Aristotelis opera Berol.* 1870, v, p. 849 a 32).
[2] Hegel, *Werke*, xiii, p. 189.
[3] Cf. *Aristotelis Fragmenta*, Rose, p. 432 (Teubner, 1886) ἤδη δὲ καὶ ἐν οἷς ἀντιλέγει Πλάτωνι π λ α τ ω ν ί ζ ε ι ν αὐτὸν φήσομεν κτλ.

unfairly and pedantically. He misconceives the mythical character of the *Timaeus*; he treats poetry as though it were science; he denies to Plato the credit of investigations and metaphysical discoveries in which, nevertheless, the master had at least foreshown the way to the pupil. Moreover, in his attack on the Ideal theory especially, he has been thought to set up a straw man of his own making before proceeding to demolish it. It would seem then to be well worth inquiry, (*a*) how far such charges of misunderstanding and unfair criticism are justified; and (*b*) how far the peculiar nature of Aristotle's criticisms can be naturally and rationally explained.

In entering on these questions, it would be of great service to know the exact order in which the works of Aristotle were written. Thus the chronological accuracy with which we can now [1] trace the various utterances of Leibnitz in relation to Spinoza are most illuminating for the criticisms passed by the former on his great predecessor. But in the case of the Aristotelian *Corpus* a historico-chronological inquiry is complicated by cross-references and other difficulties, and as yet the few writers who have undertaken such an inquiry have been able to arrive only at probabilities and approximations. The application of stylistic methods could hardly be so important or fruitful here as it has been in the case of the Platonic dialogues: still the researches begun by Blass [2] are in the right direction.

The dialogue *Eudemus* may be taken as one of Aristotle's earliest writings. It seems to have been thoroughly Platonic, defending indeed, in the spirit of the *Phaedo*, a doctrine of personal immortality which Aristotle in maturer

[1] Since Stein, *Leibnitz und Spinoza.*
[2] F. Blass in *Rhein. Mus.* 30. He applies to Aristotle the test of avoidance of hiatus.

years, after his physical studies, did not see his way to accepting. The *Eudemus* and the Περὶ Φιλοσοφίας were probably written, though not necessarily published, while Plato still lived, and already in the latter dialogue we find Aristotle up in arms against the Platonic theory of Ideas. It is true that he is profoundly conscious of the enormous advance made in mathematics and philosophy during the Platonic age; such progress, he thinks, had been made in a few years that philosophy in a short time would be 'absolutely complete'. But even at this early period he has definitely broken away from the Platonic position; he 'protested in the plainest terms that he could have no sympathy with this doctrine, even should his opposition be put down to a contentious spirit of rivalry'.[1] Another passage, quoted by Syrian, shows that Aristotle had also already made up his mind on the untenability of the theory of Ideal numbers.[2] Here too he decisively declared the world to be not only unending, but also without beginning in time.[3] Obviously 'the reader', 'the mind of the school', was to be no mere disciple in philosophy.

To the same period must belong the notes which were taken by Aristotle, as by other pupils, of Plato's lectures 'On the Good' (Περὶ Τἀγαθοῦ). Even Aristotle seems to have found them obscure [4] (ῥηθέντα αἰνιγματωδῶς); so we can well believe what he used to tell (ἀεὶ διηγεῖτο) of the utter perplexity with which an audience, that had come eagerly expecting to hear about happiness and human good, found itself listening to a lecture 'on mathematics, numbers, geometry, astronomy, and finally that Good was One'.[5]

---

[1] Rose (Teubner), p. 27.
[2] Rose, p. 27. This passage also is from the Second Book, which contained the criticism of Plato. The remarks on the advances in philosophy probably came in the First, though Rose gives them under the 'Protreptikos'; v. Bywater in *Journ. of Phil.* vii.
[3] Rose, p. 33.   [4] Rose, p. 41.   [5] Rose, p. 24.

Aristotle had little sympathy with the later mathematical speculations of his master.

The criticisms of Plato's Ideal theory in the *Metaphysics* would probably be less perplexing had Aristotle's Περὶ Ἰδεῶν come down to us. Syrian,[1] it is true, says Aristotle had no arguments additional to those set forth in *Met.* A and M, but the testimony of such a partisan is worth nothing ; and Alexander, commenting on *Met.* A. 9, has a different tale to tell.[2] Unfortunately little or nothing is known as to the date of this 'Critique of Idealism', though probably it too belongs to the first Athenian period.

Perhaps the first work of the Aristotelian *Corpus*, as we now have it, is the *Topics*. Here, at least in Books II–VI, we find everywhere Platonic expressions (e.g. μετέχειν) and a Platonic standpoint, not merely the Platonic soul-division, but even the Ideas (ἰδέαι) employed for the positive purpose of testing definitions.[3] But, as has appeared above, he is already the antagonist of the Platonic theory of Ideas, and we find him in the *Topics* supplying 'points' (τόποι) or 'ready arguments against the Idealists' (τόποι χρήσιμοι πρὸς τοὺς τιθεμένους ἰδέας εἶναι).[4] One of these, which occurs in the *Soph. El.*,[5] is the famous argument of the 'third man'[6] (τρίτος ἄνθρωπος) which Aristotle shows has no relevancy except where (as in the Ideal theory) the common predicate (τὸ κοινῇ κατηγορούμενον), e.g. 'man', is hypostasized into a particular (τόδε τι). Plato is mentioned by name four times

---

[1] Rose, p. 148.

[2] Vide especially on 991 a 8 sqq., where Alexander reproduces from the Second Book of the Περὶ Ἰδεῶν a number of Aristotle's arguments against the Ideal theory as held by Eudoxos. Some of these apply equally to the παρουσία of the Ideas on Plato's theory.

[3] *Top.* 137 b 3, 147 a 5.   [4] Ib. 143 b 11 sqq., 148 a 14, 154 a 18.

[5] c. 22. 178 b 36.

[6] That we have here really the familiar 'third man' and not merely a sophistic quibble against the concept in general has been shown by Bäumker, *Rhein. Mus.* 34, pp. 73 sqq.

in the *Topics*, but nowhere else in the whole *Organon*. In *Post. An.*[1] there is an explicit attack on the ἐν παρὰ τὰ πολλά, and the Ideas are once impatiently dismissed as mere τερετίσματα,[2] i. e. they have more sound than sense.

It is disputed whether the *Organon* is followed by the ethical or by the physical treatises. The former, Rose's opinion, is more probable than Zeller's, and at all events *Eth.* i. 6 reads as if it were early. Plato is referred to approvingly in the *Ethics* three times by name, twice without name,[3] while whatever may be thought of the criticism in i. 6, its intention obviously is to be conciliatory. *Met.* A. 9 is the only passage where Aristotle, in speaking of the Academy, uses the first person plural and ranks himself as a Platonist,[4] and this probably means that he had not yet developed his own system. *Met.* A. 9 is known to be a *réchauffé* of the arguments of the Περὶ Ἰδεῶν, and the latter is at all events quite early.

There is no need to dwell on the later works. Three remarks may be made : (*a*) There are no direct criticisms whatever in the *Rhetoric* or *Poetics*, though in the latter especially they might be expected. The *Rhetoric* has an interesting notice of the exasperation felt by the 'partisans of the Idea' (οἱ ἐπὶ τῇ ἰδέᾳ, sc. φιλοτιμούμενοι) at attacks on this favourite doctrine.[5] (*b*) The relation of *Metaphysics* A. 9 to its duplicate in M. 4 and 5 is still an unsolved problem. A. 9 has been thought later and more mature, because (e. g.) instead of saying that the Ideas are ' more in number ' (πλείω) than the particular things of sense, A. 9 contents itself with

---

[1] i. 11. 77 a 5.   [2] Ib. i. 22. 83 a 32.

[3] A. 4. 1095 a 32. B. 3. 1104 b 12. K. 2. 1172 b 28. Cf. E. 1. 1129 a 6 sqq., K. 9. 1180 a 5 sqq.

[4] τίθεμεν, οἰόμεθα, οὔ φαμεν, &c. : in *Eth.* i. 6 τὰ οἰκεῖα ἀναιρεῖν. The first person plural occurs also twice in *Met.* B. 997 b 3 and 1002 b 14, as if simply by reminiscence of A.

[5] *Rhet.* ii. 2. 1379 a 34.

the more guarded phrase 'just as many or at all events no fewer' (ἴσα ἢ οὐκ ἐλάττω); still, even if in A. 9 we have the criticism of the Ideal theory in its final form, this does not exclude the very early date of most of the arguments. (c) It might be thought that the references to Plato would in all probability grow sharper and more unsympathetic as Aristotle's own system took definite shape. Thus the criticism of Plato in the last chapter of Book VIII of the *Politics* is rather more direct, downright, and unceremonious than usual (e. g. 1316 b 17 τοῦτο δ' ἐστὶ ψεῦδος), and this chapter Newman thinks is of a 'somewhat later date than the rest of the book'. Nevertheless, even in the *Metaphysics*, there is no perceptible change of tone, and Plato is mentioned by name and with approval no less than four times.[1] Chronology, in short, seems able on this question to yield little definite result.[2]

A. *Aristotle's Metaphysical Criticisms*

We pass at once then to the metaphysical criticisms, which are the most numerous and the most important. The difficulties here may be resolved into the following five problems :—

(1) In *Met.* A. 6 Aristotle states as Plato's a doctrine we should never have extracted from the Platonic dialogues alone.

(2) The doctrine which Aristotle controverts is sometimes directly at variance with that of the Dialogues. Thus Aristotle says Plato made Ideas of natural things (ὁπόσα

---

[1] Γ. 5. 1010 b 12, Δ. 11. 1019 a 4, E. 2. 1026 b 14, Λ. 3. 1070 a 18.

[2] Certain methods of statistical inquiry might be useful, in answer e. g. to the questions :—(a) what is the comparative frequency of Aristotle's criticisms of Plato and of the Platonists, and also of the direct and the indirect references to Plato himself? (b) in what parts of Aristotle's philosophy is the criticism sharpest, and where, if at all, is it silent? (c) how far are the criticisms in all cases, and in all the branches of philosophy, dialectical?

φύσει)[1] to the exclusion of artificial products; he states, moreover, that orthodox Platonism [2] rejected Ideas of negations and (according to the usual interpretation) also of relations (τὰ πρός τι).[3]

(3) He attributes to Plato a doctrine of Ideal numbers, which (at least in the form stated) critics have found it hard to ascribe to Plato as a serious philosophical theory.

(4) The centre of Aristotle's attack is the transcendence of the Ideas (ἀδύνατον εἶναι χωρὶς τὴν οὐσίαν καὶ οὗ ἡ οὐσία).[4] Now it has been maintained (*a*) that Plato never held such a doctrine at all in Aristotle's sense; or (*b*) that in a later stage of his thinking he recognized this defect in his metaphysic, and himself overcame and rejected the dualistic severance (τὸ χωρίζειν *Met.* M. 9. 1086 b 4) of universal and particular.

(5) Aristotle denies to Plato the recognition of final and efficient causes,[5] which nevertheless seem in the Dialogues to be 'laid down with as much emphasis as by Aristotle himself'.[6]

The fourth problem deserves fuller statement. In the *Parmenides* the aged philosopher of that name criticizes with great earnestness a theory of Ideas which is unmistakably that of the *Republic* and *Phaedo*. The difficulties urged against it are so serious that the *Parmenides* has again and again been declared spurious,[7] on the ground that it is not given to any philosopher, however great, to overleap the limits of his own system, and that to ascribe it to Plato is to make of a single philosopher both Plato

---

[1] *Met.* Λ. 3. 1070 a 18.   [2] *Met.* A. 9. 990 b 11.   [3] 990 b 16.
[4] 991 b 1.   Cf. *De Caelo* i. 9. 278 a 16 εἴτε γὰρ ἔστιν εἴδη, καθάπερ φασίν τινες κτλ., εἴτε καὶ χωριστὸν μηθὲν τῶν τοιούτων, where the Platonic Idea and 'self-subsistence' are interchangeable terms.
[5] *Met.* A. 9. 992 a 24.   [6] R. G. Bury, *Philebus*, Introd., p. li.
[7] Notably by Ueberweg and Ribbeck, the latter of whom says the *Parm.* signifies 'den Umsturz der gesammten Platonischen Ideenlehre' (*Phil. Monatshefte* xxiii. 1887).

and Aristotle at once. But to waive this question for the moment, two points are all-important to notice for the present inquiry. (1) All the difficulties urged in the *Parmenides* arise from the absolute transcendence of the Ideas, their complete severance from the world of sense.[1] This, in the first place (*a*) makes μέθεξις impossible; for, whether participation takes place by whole or part, in either case the self-dependent unity of the Idea is sacrificed. Moreover, since αὐτομέγεθος e. g. is severed (χωρίς) from τὰ πολλὰ μεγάλα, the latter may be compared with the former, and, it is asserted, another εἶδος μεγέθους is needed to make αὐτομέγεθος great.[2] Secondly (*b*) it makes μίμησις also impossible; for, if the Ideas are a second world (χωρὶς αὐτὰ καθ' αὑτά, *Parm.* 129 d) and yet *like* the particulars, there must be a third Idea or παράδειγμα to explain this likeness, and again we get an infinite regress.[3] Thirdly (*c*) it makes knowledge impossible. A really noumenal world is *ipso facto* unknowable; i. e. we cannot know God, and moreover the converse also is true, God cannot know us.[4]

(2) The second point to be noted is the striking fact that Aristotle uses most of these identical arguments of the *Parmenides*, and yet never once refers to this dialogue, either when he reproduces its objections in *Met.* A and Z, or in the whole course of his works. He twice employs the τρίτος ἄνθρωπος argument,[5] he says the same Idea will be at once copy and type,[6] he points out by arguments similar to those of the *Parmenides* the impossibility of μέθεξις or παρουσία,[7] he asserts that the Ideas, being transcendent, do not explain knowledge.[8] His contention that the Ideas

---

[1] Cf. *Parm.* 129 d, 130 b, d, 131 b, 133 a.   [2] *Parm.* 132 a–b.

[3] *Parm.* 132 d–e.   [4] *Parm.* 133 b sqq.

[5] *Met.* A. 9. 990 b 17, Z. 13. 1039 a 2.   [6] *Met.* A. 9. 991 a 31.

[7] Z. 14. 1039 a 26 sqq.; cf. *Parm.* 131 a sqq., also Alexander on *Met.* A. 9. 991 a 8 (Hayduck, p. 97. 27–98. 23) reproducing the Περὶ Ἰδεῶν.

[8] A. 9. 991 a 12.

contribute nothing whatever as the causes of phenomena [1] is merely a summing up of Plato's conclusion that neither μέθεξις nor μίμησις is possible, if the Idea is χωρὶς αὐτὸ καθ' αὑτό. In fact, the chief Aristotelian objections are simply based on the absurdity in all its consequences of a common predicate which is at the same time substance (οὐσία), the absurdity of a '*universal thing*', a καθόλου which is at the same time χωριστόν.[2] We seem forced, then, on the horns of a dilemma. Either Plato, in spite of the 'annihilating assaults' (*grundstürzende Einwände*[3]) of the *Parmenides*, did not, in his later system of metaphysics, abandon the transcendence of the Idea, or Aristotle is not merely guilty of plagiarism, but has grossly and unpardonably misrepresented his master's teaching. It must appear in the sequel whether this dilemma is simply another instance of the dichotomous '*either . . . or*', which works so much havoc in philosophy.

Doubtless the easiest method of solving all the problems is to assert that Aristotle misunderstood Plato and that there is no more to be said. But even were this assertion admitted, it would at least be necessary, following his own constant example, to show some plausible αἴτιον τῆς ἐκτροπῆς, some reason for the 'aberrations' of an Aristotle.[4] The problem is not solved by ignoring it. We pass on then to consider various theories, which, in different ways, really attack the difficulty.

First Problem

It is natural to begin with Zeller's *Platonische Studien*, which, though published in 1839, still remains the best essay on this subject as a whole. Zeller is most helpful on the first of the problems above propounded. No one,

---

[1] 991 a 9.   [2] Vide especially *Met.* M. 9. 1086 a 31 sqq.

[3] The phrase is Ueberweg's.

[4] *Met.* N. 2. 1089 a 1. Cf. *Politics* ii. 5. 1263 b 30 αἴτιον τῆς παρακρούσεως.

even after a complete course of the Platonic dialogues, including the *Philebus* and *Timaeus*, can come to Aristotle's account of Plato's philosophy in *Met.* A. 6 without experiencing a shock of surprise, and it was Zeller's great service to show that this chapter implied no esoteric Platonic doctrine, but could be explained partly from the dialogues themselves, partly from the precise and logical character of Aristotle's thinking, which constantly strives after definite and clear connexion.

On one particular point, according to Zeller, Aristotle has misinterpreted Plato. He has identified the matter of the world of sense (Space, the Unlimited, the 'Great and the Small') with the multiplicity, the non-being, the otherness, which forms the material principle of the Idea. That is, he makes the One and the 'Great and Small' the elements (στοιχεῖα) of the Ideas, and says they are at the same time the principles of reality (ἐπεὶ δ' αἴτια τὰ εἴδη τοῖς ἄλλοις, τἀκείνων στοιχεῖα πάντων ᾠήθη (sc. Πλάτων) τῶν ὄντων εἶναι στοιχεῖα[1]). This mistake, according to Zeller, is easily intelligible for two reasons. (1) Plato himself had talked of the Unlimited or 'Great and Small' in reference to the Ideas, and had not explained how this Unlimited was related to corporeal matter. (2) Aristotle's view is meant to offer a solution of the fundamental difficulty in Plato's philosophy, viz. that, from Plato's standpoint, there is no possible way of deriving phenomena from the Ideas. But Aristotle's solution—that Idea and phenomenon are composed of the same elements (στοιχεῖα)—really cuts away the ground from under the whole Ideal theory. It renders the Ideas a superfluous second world, and makes easy Aristotle's criticisms of the transcendence of the Ideas and the 'Mathematicals' (τὰ μεταξύ). In short, 'this single alteration of Plato's doctrine once admitted, we

[1] *Met.* A. 6. 987 b 18.

have the key to unlock all the more important differences'
between the metaphysical system of the dialogues and
that of *Met.* A. 6.[1]

Dr. Jackson, in his valuable contributions towards the
understanding of Plato's later doctrine, seeks to disprove
the opinion of Zeller that 'Aristotle has somewhat mis-
apprehended Plato'.[2]   He comes to the rescue with a new
interpretation of the *Philebus*.[3]   It has long been a problem
of Platonic interpretation where we are to find the Ideas
in the division of all reality (πάντα τὰ νῦν ὄντα ἐν τῷ παντί,
Phil. 23 c) given in that dialogue.   Dr. Jackson proposes
to find them in the third class of the division—the μικτὸν
γένος, the same class as that in which the particular pheno-
menon is included.   This original suggestion is not so
paradoxical as it might at first sight appear.   The *Philebus*
states explicitly that in all being there is present Limit
(πέρας)[4] and Unlimitedness (ἀπειρία) ; these, therefore, must
appear in the Idea as well as in the sensible particulars,
and the only question is, How is Idea differentiated from
particular ?   Jackson answers that 'while the indefinite
matter (τὸ μᾶλλον καὶ τὸ ἧττον) is the same for the Idea and
the particular, the πέρας or limitant quantity (τὸ ποσόν) of
the particular differs from, but at the same time more or
less approximates to, the limitant quantity (τὸ μέτριον) of the
Idea, and the more nearly the πέρας of the particular
approximates to the πέρας of the Idea, the more closely
the particular resembles the Idea'.[5]

It will be seen that the special feature in this interpreta-
tion is the distinction (in the exposition of *Phil.* 24 C sqq.)

---

[1] Zeller, *Platonische Studien*, p. 300, pp. 291 sqq.   Also in *Plato* (E. T.),
pp. 319 sqq.

[2] *Plato* (E.T.), p. 327.

[3] Jackson's articles are to be found in *Journ. of Phil.* x–xv, xxv.   His treat-
ment of the *Philebus* comes in vol. x, pp. 253–98.

[4] *Phil.* 16 C.   [5] *Journ of Phil.* x, p. 283.

between τὸ ποσόν and τὸ μέτριον, the latter being the formal element of Ideas, and τὰ ποσά the various formal elements of the particulars. Jackson finds this reading of the *Philebus* confirmed by *Met.* A. 6. By inventive exegesis and emendation of one refractory passage, he makes out (1) that τὸ μέγα καὶ τὸ μικρόν are the equivalent of the 'more and less' of the *Philebus*: (2) that τὸ ἓν καὶ οἱ ἀριθμοί correspond to τὸ μέτριον καὶ τὰ ποσά: (3) that the ἐξ ὧν γίγνεται of *Philebus* (27 A) are the same as the στοιχεῖα of *Met.* A, and 'the elements of the Ideas are the elements of all things': (4) that the two elements are, both in *Philebus* and *Met.*, the origin of good and evil respectively. In short, 'the doctrine ascribed to Plato in *Met.* A. 6 is precisely the doctrine of the *Philebus*.'

It will be admitted that Jackson's interpretation of this, one of the most abstract chapters in the whole *Metaphysics*, is much more ingenious than convincing. In fact it is a *tour de force*, and is at once seen to be so on any investigation of all the relevant passages.[1] Still this applies only to statement (2) in the above summary, and though for it little can be said, in his other identifications Jackson is, with certain reservations, entirely justified. One result he has certainly brought out with clearness. The Idea, which is usually thought of as simple and indivisible, undoubtedly appears in the classification of the *Philebus*—if it is meant to appear at all—as a compound, a result of μῖξις just as the concrete particular is. This is precisely how the Idea appeared to Aristotle, a compound of elements (στοιχεῖα).

---

[1] In 987 b 21 he adds καὶ τοὺς ἀριθμούς after ὡς δ' οὐσίαν τὸ ἕν, bracketing τοὺς ἀριθμούς in b 23. His other emendations (*Journ. of Phil.* x, p. 294) are improvements, but the important one in b 21 contradicts the sense and the connexion. The στοιχεῖα are not the Great and Small, the One, and the numbers, but simply the Great and Small and the One (= the Idea of Good). He is further quite wrong in the assertion (x, p. 291 sq.) that the Idea in A. 6 except § 9 (988 a 10) is not the formal cause but the type of the particular.

And further, it seems incontrovertible that the *Philebus* favours Aristotle's statement that the elements of the Ideas are in some sense or other the elements of all reality.

But we must now consider Zeller's theory more directly. Several objections may be urged against it :—

1. Aristotle asserts that the elements of the Ideas were to Plato the elements of all things. But he nowhere says these elements are identical for the Ideas and for phenomena. Not one of the passages adduced by Zeller can be said to prove this ; some of them are decisively against any such supposition. Thus in *Phys.* Δ. 2, after showing that Plato identified space with matter, and remarking that the matter (ὕλη) of the *Timaeus* is different from that described in the 'unwritten doctrines' (ἄγραφα δόγματα), Aristotle proceeds : 'Plato however . . . must state why the Ideas, i. e. the numbers, are not in space. For his teaching is that the participant and space are interchangeable terms, whether the participant be the great and small' (according to the ἄγραφα δόγματα) or ὕλη, 'as he has written in the *Timaeus*'.

According to Zeller, this reproach presupposes that the matter of the Ideas is identical with the matter of the material world, i. e. space. But surely had Aristotle ever meant that space was the matter of the Ideas, he would have said so, and not taken the roundabout method of the above quotation in order to establish his point. He would not have introduced the objection in the way he does, as if it were a consideration that might have escaped Plato's notice, but would simply have said, 'Space is a στοιχεῖον of the Ideas : hence the Ideas must be spatial'. As it is, he proceeds to justify his reproach, which on Zeller's view he certainly would not require to do. His proof is as follows : Plato identifies τὸ μεταληπτικόν with space : now τὸ μεταληπτικόν participates in the Ideas ; ∴ space participates in the Ideas ; ∴ the Ideas must be spatial. In fact, therefore, this

passage, so strongly relied on by Zeller, really goes against his view. It expressly distinguishes the 'space' of the *Timaeus* from the later material principle, viz. 'the Great and the Small', which Plato had laid down in his lectures.

Similarly in *Phys.* iii. 6,[1] we read : 'If the Great and Small is the encompassing principle in the sensible and intelligible world alike, then it ought to comprehend the intelligible world'. Simplicius[2] explains quite satisfactorily. According to Aristotle, the infinite οὐ περιέχει ἀλλὰ περιέχεται, and *qua* infinite, it is ἄγνωστον. Now Plato admits that 'the Great and the Small' in the sensible world (i. e. space) περιέχει τὰ αἰσθητά, and therefore makes them unknowable. He ought to admit then that the 'Great and Small' in the intelligible world also περιέχει (sc. τὰ νοητά) and therefore makes the intelligible world 'unknowable'. This conclusion is absurd, since it is the very nature of νοητά to be knowable.

The tentative tone of both of these passages would be quite unintelligible had Aristotle believed in the identity of 'the unlimited' in sensibles with 'the unlimited' in Ideas. Consequently when in *Phys.* iii. 4,[3] we read that Plato's ἄπειρον 'existed both in the world of sense and in the Ideas', there is no reason to conclude that this ἄπειρον is for both numerically the same. In *Met.* A. 6. 988 a 10, Aristotle states that the Ideas result from two causes : formal—τὸ ἕν, material—the Great and the Small. Phenomena also arise from two causes : formal—the Ideas, material—the Great and the Small. Now, were the material cause identical for both Idea and phenomenon, this passage would mean that the Ideas, which determine the Great-and-Small, are yet themselves partly the result of that Great-and-Small, a contradiction which there is as little reason for attributing to Aristotle as to Plato.

[1] 207 a 29.   [2] *Schol.* 368 a 28.   [3] 203 a 9.

2. Further, it has not escaped notice that while Aristotle speaks of 'the Indeterminate Dyad' as the material principle of numbers, he never applies this phrase to the material principle either of geometrical magnitudes or of the physical world. Zeller, indeed, while admitting this, says the Indeterminate Dyad is simply the Great-and-Small 'numerically expressed'. But here is the whole point. Aristotle expressly distinguishes species[1] of the Great and Small; one of these species (*a*) (τὸ πολὺ καὶ τὸ ὀλίγον, *Met.* N. 1. 1088 a 19) is the material principle of the Ideal, as also of the mathematical numbers, and is otherwise called 'the Indeterminate Dyad'. Another species (*b*), the 'Great-and-Small' properly speaking, is the material element of geometrical magnitudes. As 'Great and Small' is also the generic name for the material principle, Aristotle can use the phrase both for (*a*) the indeterminate dyad, and for (*b*) the Great-and-Small of magnitudes;[2] but he never conversely uses the phrase 'the Indeterminate Dyad' in reference to both.

Still another species (*c*) of the Great-and-Small might be looked for, viz. the material principle of phenomena, the empty space (τὸ τῆς χώρας) of the *Timaeus*. But the historian of the problem of matter in Greek philosophy[3] has shown that Plato in his later thinking, under Pythagorean influence, probably subsumed the space of the *Timaeus* under the more comprehensive category of τὸ ἄπειρον, or, as he said in his lectures, 'the Great and the Small'. 'The Platonic system advances ever further in the way of

---

[1] *Met.* M. 9. 1085 a 9-12.

[2] The passage (*Met.* N. 2. 1089 a 35 οὐ γὰρ δὴ ἡ δυὰς ἡ ἀόριστος αἰτία οὐδὲ τὸ μέγα καὶ τὸ μικρὸν τοῦ δύο λευκὰ κτλ.) would be conclusive that Aristotle was careful to distinguish these two, were it not for the unfortunate ambiguity by which οὐδὲ like καὶ may merely be explicative 'that is'. As it is, therefore, we should render : 'It is not the indeterminate dyad (species) nor in short the great-and-small (genus) that can explain' &c.

[3] C. Bäumker, *Das Problem der Materie*, p. 196 sqq.

resolving the physical and the concrete into metaphysical and mathematical abstractions.'[1] In the striking phrase of one of the Greek commentators, Plato had completely 'mathematicized nature'(κατεμαθηματικεύσατο τὴν φύσιν).[2] This is why Aristotle objects to Plato's 'great and small' that it is 'too mathematical a substrate' (μαθηματικωτέρα ὕλη) ; it may explain mathematical magnitudes but not physical bodies (ὕλη ἀσώματος).[3]

Aristotle, then, cannot be charged, in his account of Plato, with annulling 'the distinction between the Un-limited in Space and that plurality which is also in the Ideas'.[4]

3. Again it should be noted that one of Zeller's main reasons for rejecting Aristotle's testimony about the de-rivation of all things from the principles of the Ideas, is simply his own preconceived theory as to the relation of particular and Idea in the Platonic system. Zeller thinks the particular is, or was meant to be, 'absolutely immanent in the Idea,' the latter being the sole reality. This, according to Zeller, enables Plato to escape such difficulties as those raised in the *Parmenides*.[5] But now comes the question: Whence the distinction of things from the Ideas ? and to this 'the Platonic system, as such, contains no answer'.[6] There is an 'inextricable contradiction' between the absolute reality of the Idea alone, and the admission, nevertheless, of 'a kind of existence that cannot be derived from the Idea '.[7]

Now this view seems but one result of the radical mis-conception which vitiates Zeller's account of the whole Platonic philosophy. He attempts, that is, to deal with

[1] Ibid. p. 197.
[2] Quoted by Gomperz, *Griechische Denker*, vol. ii (on Plato's Matter, p. 606 n.).
[3] A. 9. 992 b 2 ; A. 7. 988 a 25 ; cf. N. 2. 1089 a 32–b 1.
[4] Zeller, *Plato*, E. T., p. 332.   [5] *Plato*, E. T., p. 333.
[6] *Plato*, p. 319.   [7] *Plato*, p. 333.   Similarly in *Plat. Stud.* 296 sqq.

the dialogues as one whole, and as furnishing one fixed and immutable system. He still does not accept a later date for the great metaphysical dialogues—*Parmenides, Sophist, Philebus.* Yet in these later dialogues there seem to be various attempts made at a derivation of the sensible from the Idea, and one of these is by the method of identity of elements. We have seen this already in the case of the *Philebus*; in more abstract phraseology a similar doctrine appears already in *Parmenides* 142 D. Here Plato shows that the whole universe contains as aspects (μόρια) unity and existence (τὸ ἓν καὶ τὸ εἶναι), and so likewise does every smallest part of the universe contain these same two elements, or 'parts', of ideality and reality. This whole question belongs strictly to a history of Plato's later metaphysics; all that need here be insisted on is that Aristotle has not been proved guilty of any such fundamental misapprehension as is implied by Zeller's theory.

4. Finally, it should be noted that Xenokrates, ὁ γνησιώτατος τῶν Πλάτωνος ἀκροατῶν, accepted the doctrine of first principles which Aristotle ascribes to Plato, and derived all things from Unity and Indeterminate Duality. Speusippos, indeed, derived merely numbers from Unity and plurality, and, unlike Plato, for the explanation of everything else he set up several distinct principles. But it was precisely for this reason that Aristotle reproached him with making the Universe like a bad tragedy 'fragmentary and 'episodic' (ἐπεισοδιώδη τὴν τοῦ παντὸς οὐσίαν ποιοῦσιν).

Second Problem.

To turn now to the second main problem. Zeller, in *Platonische Studien*, had treated Aristotle's statements as to the contents of the world of Ideas as merely mistaken. Similarly Bonitz on *Met.* A. 9, where Aristotle is thought to state that orthodox Platonism did not admit Ideas of

relations, is highly indignant with Aristotle for alleged unfairness in argument.[1]   Zeller, by the time he wrote his *History*, had come to see that the only satisfactory way of accounting for Aristotle's words in the *Metaphysics* was to suppose Plato had actually made these changes.   But even there Zeller suggests no rationale of them; 'the original point of view was in these cases abandoned'; in other words, they were arbitrary modifications.[2]

Now Dr. Jackson seeks to make good this deficiency in Zeller by showing how Plato, in a 'radical reconstruction of his system' initiated by the *Parmenides*, was led naturally and inevitably in his 'second theory of Ideas' not only to the doctrine of *Met*. A. 6, and the transcendency (ἰδέαι χωρισταί) of which Aristotle complains, but also to the retrenchment and revision of his list of Ideas.   According to Jackson, in Plato's later theory there are no Ideas of relations (e. g. ὅμοιον ἀνόμοιον, &c.) 'nor presumably of ἀγαθόν, κακόν'.[3]   'Accordingly the *Timaeus* recognizes αὐτὰ καθ' αὑτὰ εἴδη of the four elements and of the several species of animal and vegetable, but of nothing else.'

That the Ideal theory of the *Phaedo* and *Republic* underwent considerable modification after the *Parmenides* can no longer be regarded as doubtful.   But as to the particular form of the reconstruction, Jackson is, in some respects, unfortunate.   We must consider briefly his two central positions (1) the substitution by Plato of μίμησις and transcendence for μέθεξις and immanence, and (2) the retrenchment by Plato of the list of εἴδη.

As to (1) at least three insuperable difficulties have been pointed out.

---

[1] Bonitz, *Metaph.* ii, p. 111.   He thinks Aristotle is refuting Plato by means of contemporary Platonism.   Really this is one among many passages which show conclusively that Aristotle is not thinking directly of Plato at all.

[2] Zeller, *Plato*, E. T., p. 275.

[3] Jackson, *Journ. of Phil.* xiii, p. 271.

(*a*) The metaphor of μέθεξις is not altogether dropped in dialogues admittedly later than the *Parmenides*.[1] It is true that Jackson's theory does allow of μέθεξις to a certain extent, but only because he makes an arbitrary and untenable distinction between εἴδη and αὐτὰ καθ' αὑτὰ εἴδη.[2]

(*b*) The substitution of the Idea as παράδειγμα or archetype does not, as Jackson supposes, avert the objections urged against the Ideal theory in the *Parmenides*. The relation between archetype and copy cannot possibly be any other than that of *resemblance*, and hence the attempted solution by μίμησις (ὁμοιοῦσθαι, ἐοικέναι, εἰκασθῆναι) lends itself (equally with the metaphor of μέθεξις) to the objection of the 'third man'. Moreover, for describing the relation of particular to universal, μίμησις is, as Hegel says, a 'more figurative, childish, and untutored expression' than μέθεξις.

(*c*) The new view of the Idea as archetype is not a theory alternative to that of μέθεξις, but is clearly described, in *Parmenides* 132 D, as merely a special case of it. Aristotle also joins them both in a single condemnation.[3]

(2) Jackson's theory that Plato restricted Ideas to 'natural kinds' is (in Aristotelian phrase) 'still more impossible'.[4] In the first place (*a*) such a theory is directly opposed to the natural interpretation of *Parmenides* 130B–E. In this, one of the most striking passages of the dialogue, Ideas of relations are postulated first in order, even before Ideas of qualities, and it is precisely with organic types (e. g. man) and the primary forms of matter (fire, water) that doubt and difficulty (ἀπορία) first arise. The explicit testimony of this passage must far outweigh a mere

---

[1] e. g. *Soph.* 255 A ; *Tim.* 51 A.

[2] It will be found stated by Jackson in *Journ. of Phil.* xi, p. 322 n. ; cf. xiv, p. 214.

[3] *Met.* A. 9. 991 a 20 τὸ δὲ λέγειν παραδείγματα αὐτὰ εἶναι καὶ μετέχειν αὐτῶν τᾶλλα κενολογεῖν ἐστίν κτλ.

[4] ἔτι ἀδυνατώτερον.

inference from Jackson's interpretation of the difficult sentence with which the *Parmenides* closes.[1]

Morover this, the natural interpretation of the *Parmenides*, is alone consonant with the whole course of Plato's Idealism. As has been pertinently said,[2] the 'Auto-bug' was not of more importance in Plato's scheme of the universe than the αὐτόκαλον or the αὐτοάγαθον. The αὐτοκολοκύντη or the αὐτολάχανον,[3] which the comic poets or a Stilpo took as examples for the ridicule or the refutation of the Ideal theory, were not, we may be certain, put by Plato on the same level as Ideas of relations and qualities.

Secondly (*b*) the dialogues later than the *Parmenides* present various difficulties on Jackson's theory. Thus in *Philebus* 15 A, besides Ideas of man and ox, we have also those of τὸ καλόν and τὸ ἀγαθόν, and in the *Timaeus* the words εἶδος ἑκάστου νοητόν (51 C) naturally mean ' an Idea for every universal'.[4]

Thirdly (*c*) there is absolutely no warrant for refusing to recognize as Ideas the categories or γένη of the *Sophist*.

Certainly not then by this theory can Plato's later doctrine be brought into line with the Aristotelian references.

The very antithesis of Jackson's view, in many ways, is that maintained by the late Professor D. G. Ritchie.[5] According to it also, the *Parmenides* ushers in a 'second

---

[1] *Journ. of Phil.* xi, p. 322.

[2] A. E. Taylor in *Mind* 1896, p. 304.

[3] Epikrates, in his amusing description of a Platonic διαίρεσις.

[4] Cf. *Parm.* 135 B εἶδος ἑνὸς ἑκάστου, 135 E ἰδέαν τῶν ὄντων ἑκάστου. It is mere dogmatism in support of a theory when Archer-Hind says of the words in the *Timaeus* ' we are to understand by ἑκάστου only every class naturally determined, τῶν ὁπόσα φύσει '. It is only a natural extension of such subjective interpretation when he thinks Ideas ought to be confined to classes of living things, and therefore says of the Idea of fire (*Tim.* 51 B) ' we have in this passage a relic of the older theory which Plato ... would have eliminated had his attention been drawn to the subject '.

[5] *Plato* in the 'World's Epoch Makers' Series. Also in a paper on the *Parmenides* in 'Bibliothèque du Congrès International de Philosophie'.

theory of Ideas'. But in this second theory the Ideas are
not cut down ; rather they are extended to the whole field
of the knowable, according to the philosophic advice of
Parmenides to 'despise none of these things' (οὐδὲν αὐτῶν
ἀτιμάζειν, *Parm.* 130 E). Further, the transcendence of the
Ideas is not increased; it is recognized as the defect of the
earlier theory, and endeavours are made to overcome it.

How then does this theory explain the hostile criticism
of Aristotle ? The answer is : (*a*) It was probably owing
to the objections of his brilliant pupil (who had come to
the Academy in 367, and to whom there is perhaps a kindly
allusion in the *Parmenides* itself[1]) that Plato was led to
reconsider his earlier theory. The criticisms in the
Parmenides were those of Aristotle to start with ; hence
he can dispense with referring to that dialogue, while using
its arguments.

(*b*) It is not Plato himself that is attacked, but disciples
of Plato, who had not advanced along with him after his
self-criticism in the *Parmenides*.

(*c*) The criticism of the Ideal numbers is directed against
Speusippos, to whose Pythagorizing tendencies Aristotle
makes express allusion.

(*d*) It is in the main not the later but the earlier form of
the Ideal theory that is attacked. As for the remark about
Ideas of relations, Aristotle has been misinterpreted.

Σκεπτέον δὲ πάλιν τί τούτων λέγεται καλῶς καὶ τί οὐ καλῶς.[2] Of
the theory as a whole it may be said, as by Aristotle on
the community of goods in the *Republic*, that it 'wears
a plausible look' and 'the student welcomes it with delight'
(ἄσμενος ἀποδέχεται). Nevertheless, though it may not, in

---

[1] v. *Parm.* 135 D, 137 B–C (ὁ νεώτατος) on the other hand, while Aristotle is
still alluded to, the words ἥκιστα γὰρ ἂν πολυπραγμονοῖ may be regarded as a fine
stroke of irony on Plato's part.

[2] *De Coelo* i. 9. 278 a 23.

Aristotle's phrase, be πάμπαν ἀδύνατος, it must be admitted to leave as many difficulties as it solves. Though at the risk of considerable digression, its main propositions have here been stated together.

The first of these (*a*) does not admit of definite proof or disproof. Aristotle's complete silence on the *Parmenides* certainly demands explanation; nor is it adequate to say either (like Apelt) that Aristotle did not attach to that dialogue the same exaggerated importance as the Neo-platonists and the moderns, or even (with Zeller [1]) that 'the writings of Plato had' not 'the same significance, as sources of his doctrine, for Aristotle as for us'.[2] Zeller's remark, as we shall see, is perfectly correct, and must always be borne in mind. But surely it is more than a mere coincidence that the only important dialogue—indeed almost the only dialogue of Plato—to which no reference can be found in Aristotle, should be precisely the work which contains several of Aristotle's own arguments against that Ideal theory of which he was the life-long opponent.

In any case, however, whatever solution of Aristotle's silence be accepted, he can at once be acquitted of any charge of plagiarism. All the ἀπορίαι against the Ideas are perfectly natural, once phenomenon and Idea are set over against each other as two independent 'things'. The τρίτος ἄνθρωπος, which is the one distinctive argument common to both *Parmenides* and *Metaphysics*, would arise inevitably among Greek thinkers, who had a horror of the infinite process and a passion for refutation by means of it. More-over, the honour of excogitating the 'third man' seems to

---

[1] *Plato*, E. T., p. 77.

[2] The criticisms in the *Parmenides* may be regarded as suggested by Aristotle, but it may be held that Plato was so far from being convinced by them that he occupies himself in this and later dialogues with criticizing his critic. v. Siebeck, 'Platon als Kritiker aristotelischer Ansichten,' in *Zeitschrift für Philosophie etc.*, vol. cvii, cviii (1896 *et sqq.*).

belong neither to Plato nor to Aristotle.[1]   Alexander, commenting on *Met.* A. 9, tells us that 'Polyxenos the Sophist' introduced this argument, and he proceeds to state it in Polyxenos' own words.   Now Bäumker[2] has shown that it is just the argument of the *Parmenides*, and that the reason why, according to Polyxenos, a *third* man must be assumed is exactly the ground which induced Plato himself to set up a *second* or Ideal man.   Polyxenos was a contemporary of Plato; the latter takes up his argument in the *Parmenides*, and shows it is valid as against one form of the Ideal theory; and the very method of allusion to it in Aristotle shows it had long been common property and a familiar argument of the schools.[3]

The second contention of the theory (*b*) is in part a familiar one.   Already Lotze had said :—'we are justified . . . in assuming that Aristotle's attack is in part directed against certain misunderstandings of the Platonic doctrine which had gained hold in the Academy at an early period '.[4] It has, however, the advantage over Lotze's view that it does not force us to ascribe to the Platonists a doctrine which their master had never held at all.[5]   It is a theory which certainly represents a part of the truth.   But as a complete explanation it is open to the insuperable objection that Aristotle himself is totally unaware of any such 'divergence between the master and his school '.   Had he

---

[1] In *Rep.* x and *Tim.* 31 A it is proved that there can be only one Ideal bed and one αὐτόζῳον because a second would involve a third, and so on.   But in the *Parmenides* (τρίτος ἄνθρωπος) it is not Ideas themselves that are spoken of but Ideas are compared with 'things '.

[2] *Rhein. Mus.* xxxiv, p. 73 sqq. (1879).

[3] Moreover Aristotle nowhere claims any of the objections as especially his own, and it is of the very essence of ἀπορίαι to be σύγκλυδες, v. *infra*, pp. 121-2.

[4] *Logic*, E. T., p. 444 (ed. 1884).

[5] Jackson finds an appeal from the Platonists to Plato in A. 9. 990 b 15 οἱ ἀκριβέστεροι τῶν λόγων κτλ.   But he does not explain (*a*) why the *Republic*, *Phaedo*, and *Parmenides* should be honoured with the description of ἀκριβέστεροι, nor (*b*) how λόγοι in the context can mean 'expositions'.

known of such, it is incredible that he could have missed the opportunity of appealing from the Platonists to Plato himself, from the εἰδῶν φίλοι to the author of the *Parmenides* and the *Sophist*. This is precisely what he does do on the question of the Ideal numbers; he commends the doctrine of the master as against those who denied the Ideas and retained only the 'Mathematicals' (τὰ μαθηματικά).[1]

The third proposition (*c*) must be rejected *in toto*. However difficult this problem of the Ideal numbers, there is no doubt whatever that Aristotle assigns the theory to Plato. It is true that in *Metaphysics* M. 4, Aristotle proposes first to examine the doctrine of Ideas by itself, without the Ideal numbers, 'in the form it assumed originally (ὡς ὑπέλαβον ἐξ ἀρχῆς) with those who first asserted the existence of the Ideas'. But this only proves that the theory belongs to Plato's later development; and from *De An.* A. 2 (where τὰ περὶ φιλοσοφίας λεγόμενα[2] have no reference to any work of Aristotle, but are simply notes of Plato's lectures, of the same nature as the ἄγραφα δόγματα) we see that Aristotle, as usual, is speaking from personal reminiscence of Plato's teaching. Not to insist on *Met.* A. 6, where Plato is compared with the Pythagoreans for making 'the numbers' (τοὺς ἀριθμούς) 'causes of the existence of other things', or on the similar passage at the end of A. 8, the *locus classicus* in *Met.* M. 8. 1083 a 32 sqq. is quite conclusive. Here Plato is mentioned by name, the Ideal numbers (οὐ συμβλητοί) are ascribed to him, and his opinion expressly distinguished from that of ἕτεροί τινες (perhaps Xenokrates) who maintained the existence simply of the mathematical numbers. Plato is named also in *Phys.* iii. 6, where it is said that though he made his Infinite (ἄπειρον) a dyad, he does not employ it as such: 'for in his numbers there is neither the infinite of diminution, the number one being the smallest, nor the

---

[1] *Met.* M. 8. 1083 a 22.   [2] 404 b 19.

infinite of increase, since he makes number go only as far as ten'. The reference here must be to the Ideal numbers. The evidence, therefore, that Plato held such a view is ample, even though there be no trace of the Ideal numbers in the dialogues.

The fourth position (*d*) as a whole falls to be examined later. Here we are only concerned strictly with Aristotle's statements about the contents of the world of Ideas. Obviously if Aristotle says his antagonists do not recognize Ideas of relations, negations or *arte facta*, it can hardly be the earlier theory of Ideas he is attacking, and Professor Ritchie's contention would fall to the ground.

(1) As to Aristotle's supposed statement, however, about Ideas of relations, the theory is justified in suggesting a new interpretation. The more this alleged dictum of Aristotle (*Met.* A. 9. 990 b 15, 16) is considered in the light not merely of the Platonic dialogues, but even more in reference to other passages of Aristotle himself, the more strange it will appear.

(*a*) The Platonic Ideal theory, after the vision of αὐτὸ τὸ καλόν in the *Symposium*, had been extended, in the *Phaedo*, to Ideas of relation. They at all periods form Plato's favourite type of example to illustrate his theory (*Phaedo, Republic, Theaetetus, Sophist*), and in the all-important passage of the *Parmenides*[1] they are selected by Socrates as examples of the first class of εἴδη, those in which he has the most implicit confidence. Moreover, since Aristotle, with his table of categories, does not avoid confusing relations with qualities,[2] it is certain that Plato would not escape this confusion, and this is confirmed by

---

[1] 130 B–E.
[2] Modern logic tends to see in qualities nothing but disguised relations; to Aristotle relations are a special kind of qualities. But he does not keep them apart, v. Zeller, *Aristotle*, E. T., i, p. 287.

the dialogues. Consequently, once reject the αὐτόισον and the αὐτόκαλον will hardly escape the same condemnation. Is it then credible that Plato or even the Platonists should ever have rejected Ideas of relation?

But (b) even greater difficulties are suggested by Aristotle's own writings. In *Categories* 7, we find as examples of τὰ πρός τι such concepts as τὸ μέγα, τὸ διπλάσιον, τὸ ἴσον, ἀρετή, ἐπιστήμη, δεσπότης, δοῦλος. To pass over the fact that Ideas of every one of these concepts are to be found in the Platonic dialogues, is it not more than strange, on the ordinary interpretation of the passage *Met.* A. 9. 990 b 16, that Aristotle after stating that the Platonists reject Ideas of relations should, only a few lines further on, take as an example of the Ideas he is combating, no other than the αὐτοδιπλάσιον [1]? Further, the object of the whole discussion from A. 9. 990 b 22 to 991 a 8 is to show that, on the basis of what the Platonists say about μέθεξις, there can be Ideas only of οὐσίαι. Had the Platonists repudiated Ideas of relations, Aristotle, as has been indicated above, would scarce have needed all this elaborate argument to show that Ideas of qualities ought to be likewise discarded.

In an interesting passage of the *Physics* (B. 2. 193 b 34 sqq.) Aristotle, discussing how the mathematician differs from the physicist, says the former uses abstractions (χωρίζει) but is justified in so doing (οὐδὲ γίνεται ψεῦδος χωριζόντων). The advocates of the Ideas (οἱ τὰς ἰδέας λέγοντες), Aristotle continues, fail to see that they too are guilty of abstraction, only without the excuse of the mathematician. They abstract, that is, the objects of Physics.[2] Now odd and even, straight and curved, number, line, &c., can be abstracted from motion and sense perception, but this

---

[1] 990 b 32.

[2] τὰ φυσικὰ χωρίζουσιν ἧττον ὄντα χωριστὰ τῶν μαθηματικῶν.

ceases to be possible in dealing with bone, flesh, man. This passage makes it almost unthinkable that the contemporary Academy had given up Ideas of relations. Moreover, it can be parallelled by at least two other passages in the *Metaphysics*. In Θ. 8 Aristotle says the Platonic dialecticians (οἱ ἐν τοῖς λόγοις) are easily convicted of philosophic ineptitude by the very fact of their positing Ideas of κίνησις and ἐπιστήμη. To crown all, in *Met.* N. 1. 1088 a 21 sqq., the Platonists are sharply taken to task for turning relations into substances. . . . 'It is absurd, nay rather it is impossible, to make the non-substantial a principle of, and prior to, the substantial; for all other categories are posterior to substance.'

These passages seem to show that in *Met.* A. 9, where Aristotle says 'Some of the more precise arguments to prove the existence of Ideas result in the setting up of Ideas of τὰ πρός τι, ὧν οὔ φαμεν εἶναι καθ᾽ αὑτὸ γένος', these last words cannot be translated (as by Jackson) 'relations, whereof we Platonists do not recognize Ideas'. The authority of Alexander[1] cannot be appealed to on this passage, as his commentary here is not only obscure and extremely doubtful otherwise, but also self-contradictory. He asserts that the Platonists denied Ideas of relations, because, whereas the Ideas were οὐσίαι and self-subsistent, relations had their being only in ἡ πρὸς ἄλληλα σχέσις. This, however, is after reproducing an argument (presumably Platonic) which 'establishes Ideas of relations', an argument, in fact, which proves the existence of an αὐτόισον, just as Plato himself might have done. The Platonists (it would seem to follow from Alexander's explanation) took no little pains to establish the existence of Ideas of relations by an ἀκριβέστερος λόγος, and at the same time extruded all such

---

[1] p. 82. 11-83. 33 (Hayduck).

Ideas from their system. Obviously a new interpretation is demanded.[1]

The clue seems to be supplied by a comparison of our passage with *Eth. Nic.* i. 6, taken in connexion with the fact known about Xenokrates that he admitted only two categories, the absolute and the relative.[2]   In *Eth.* i. 6. 1096 b 8 Aristotle 'describes a possible objection' to his previous criticisms. The objection may be represented thus : 'You overlook the fact' (the Platonists retort on Aristotle) 'that we do not acknowledge Ideas of relative goods (e. g. fire, clothing, wine) but only Ideas of absolute goods'.

Now with this passage in mind, Aristotle's argument in *Met.* A. 9, may be paraphrased thus : 'Some of the more unimpeachable and rigorous arguments (ἀκριβέστεροι λόγοι) of the Platonists to prove the existence of Ideas are forced to include, among the Ideas thus established, Ideas of things that belong to the Academic category of 'the relative' (τῶν πρός τι), and therefore, though these arguments may be perfectly correct and have at least the merit of consistency, they are in contradiction with the opinion of the main body of the 'school'.   In a dialectical argument, such as we shall see most of Aristotle's refutations are, this revelation of a discrepancy within the school is all that is required.   The passage is an *argumentum ad Platonicos*, and has no reference whatever either to Plato or to Ideas of relations.[3]

---

[1] It has been seen above that Bonitz is unsatisfactory on the passage. The interpretation here given is suggested by Professor Ritchie in his *Plato*.

[2] Like Plato, v. Zeller, *Plato*, E. T., p. 242 n. ; cf. *Philebus* 53 D.

[3] No doubt it will at first seem conclusive against the above view that Aristotle is here nevertheless held to be right in what he says of ὁπόσα φύσει.   But if even Aristotle's own use of the phrase includes 'geometrical magnitudes' (μεγέθη, e. g. lines, triangles, &c., v. *De Coelo* i. 1. 268 a 4) might not Plato's use of φύσις, especially in later life when the idea of 'Nature' grew more and more important to him, have included also qualities and relations?   Moreover, Aristotle in Λ. 3 does not say that Plato admitted Ideas *only* of ὁπόσα φύσει, but

(2) But Aristotle's remark about ὁπόσα φύσει cannot be explained on the theory that Aristotle is attacking the earlier Platonism of the *Republic* or *Phaedo*. It is said that this remark (*Met.* Λ. 3) does not necessarily imply any real divergence from the position of *Rep.* x, where there is postulated an 'Ideal bed'. There is no science of beds or houses in the same sense as there is of man or of the good, and consequently Plato cannot have placed Ideas of *arte facta* on the same level as other Ideas. But he need not have rejected them. We can think a house scientifically by thinking of the end attained by it were it perfect. Now, in Aristotle's phrase, ἡ φύσις τέλος καὶ οὗ ἕνεκα, and therefore as soon as a house attains its real end it can be included among ὁπόσα φύσει.

This interpretation, which can appeal to ἡ ἐν τῇ φύσει οὖσα κλίνη made by the φυτουργός in *Rep.* x (597 B, D), overlooks two points : (*a*) in the passage of *Met.* Λ 'natural things' (τὰ φύσει, ὁπόσα φύσει 1070 a 18, 19) are expressly distinguished from *arte facta*, e. g. house (a 14, 15) ; (*b*) there is evidence independent of Aristotle that the Academy rejected Ideas of artificial products. Xenokrates, e. g., seems to have defined the Idea as 'archetypal cause of the eternal existences of nature' (αἰτίαν παραδειγματικὴν τῶν κατὰ φύσιν ἀεὶ συνεστώτων). This view, if it was ever held by Plato, must be later than that of the *Republic*, and therefore Aristotle's remark applies not to an earlier theory which Plato had rejected, but to a later view represented in his lectures (ἔφη Λ. 1070 a 18).

(3) As to Ideas of negations, the theory we are considering suffers from an internal inconsistency ; for it admits that when Aristotle, in a *reductio ad absurdum* argument against the Platonists, implies that the latter reject Ideas of

only that 'natural things' to Plato *did* have Ideas, whereas artificial products did not, v. *infra*, p. 34.

ἀποφάσεις (*Met.* A. 9. 990 b 12), this can apply only to the 'final theory of Plato'. In the *Republic* we find Ideas of the bad and the unjust, in the *Theaetetus* of κακόν, αἰσχρόν, and βίος ἄθεος, in the *Parmenides* of ἀνισότης, in the *Sophist* of μὴ ὄν (*i. q.* ἕτερον). If he finally rejected them, it was because the perfect and the beautiful, having more of πέρας, can be known more completely than the imperfect and the ugly. The conception of evil as deviation from a type appears clearly in the *Philebus*.

It will now be possible to sum up the positive results of the discussion on the content of the world of Ideas. (*a*) There is some Platonic warrant for the rejection of the Ideas of negations, and no reason for doubting that, as Aristotle implies, Plato's followers at least discarded them. (*b*) That Plato dropped Ideas of *arte facta* is supported by the silence of all the later dialogues. (*c*) Aristotle is further right in saying that Plato's Ideas extended to all 'natural things' (ὁπόσα φύσει). These words, however, must not be interpreted more strictly than the context warrants; thus they do not exclude concepts like health, triangle, line.[1] (*d*) The statement that Plato banished from his system Ideas of relations would be very difficult of acceptance, but Aristotle does not make such a statement.

Third Problem.

In passing to the third and fourth of our problems, we must take account of the recent work by M. Milhaud, *Les Philosophes Géomètres de la Grèce*, the second book of which, dealing with Plato, is, at least in its fifth chapter, one of the most original contributions of recent years to the literature of the Platonic question. The theory of Ideal numbers has long been a mystery to students of

---

[1] In Λ. 3 Aristotle speaks of ὑγίεια as an example of 'things that come to be by art' (πᾶν τὸ κατὰ τέχνην), yet it also of course exists φύσει, and Aristotle himself gives αὐτοϋγίεια as an example of a Platonic Idea (v. Bonitz, Index, s. v. αὐτός).

ancient Greek philosophy. Aristotle's statements about these numbers may be reduced to the following: (1) The Ideas, according to Plato, are numbers. This is stated without qualification.[1] (2) As to the nature of these numbers, they are heterogeneous and cannot be added together (ἀσύμβλητοι, διάφοροι,[2] qualitatively different). (3) As to their function, they are causes of things (αἴτιοι *Met.* A. 9. 991 b 9, τῶν ὄντων αἰτίαι πρῶται M. 6. 1080 a 14).[3] Critics have not, as a rule, been ready to accept Aristotle's testimony; they regard the numbers as intended by Plato to be at most symbols of Ideas.[4] Zeller doubts whether Plato ever actually identified the Ideas with numbers; he thinks Aristotle has here allowed himself an 'inversion'(*Umstellung*) of the true Platonic doctrine. Plato regarded the numbers as 'fallen Ideas' (*depotenzirte Ideen*); Aristotle regards the Ideas as 'sublimated numbers'. Zeller modifies but does not give up this idea in his *History*,[5] and he would still agree with Bonitz in considering the Ideal-number theory in the light of a 'mere appendix'[6] to the Platonic system.

Very different are the conclusions reached by Milhaud regarding the Ideal numbers. He shows[7] how Plato in his later philosophy came more and more, like Kant, to a 'synthetic' way of thinking. That is, in seeking to solve the paradox of μέθεξις propounded in the *Parmenides*, Plato gives up all material analogies of whole and part, and after transferring the question to the world of Ideas, and show-

---

[1] *Met.* A. 9. 991 b 9 and *passim*, esp. 1081 a 12. In the difficult sentence A. 6. 987 b 22 ('out of the great and small by participation of these in the one come τὰ εἴδη τοὺς ἀριθμούς') there is no reason to dispute Alexander's interpretation, that τὰ εἴδη and τοὺς ἀριθμούς are put simply side by side in apposition.

[2] *Met.* M. 6–7.

[3] As to how they are causes, v. *Met.* A. 9. 991 b 9, N. c. 6; *De An.* i. 2. 404 b 19 sqq.; *Eth. Eud.* i. 8. 1218 a 18 sqq.

[4] 'quasi symbola notionum,' Bonitz, ii, p. 544; Zeller, *Plat. Stud.*, pp. 298, 263.

[5] v. for Plato's later theory p. 517; contrast p. 255 (*Plato*, E. T.).

[6] Bonitz, ii, p. 540. [7] Milhaud, pp. 327 sqq.

ing that there some union of specifically different kinds is absolutely essential, he finally solves his problem by the union in every Idea of the heterogeneous elements, being and non-being. The Idea is a meeting point of the finite and the infinite, the one and the dyad of Great and Small; i. e. the principle of fixity, equality, determination (ἕν), and the principle of variation, of indeterminate multiplicity (ἀόριστος δυάς). But now, corresponding with this spirit of synthesis, and helping to promote it, a great development had taken place in the conception of quantity.[1] Incommensurables cannot be explained by the old conception of number as a mere putting together of homogeneous units. In the case of two incommensurable magnitudes there is no longer identity of quantitative composition; one is not part of the other. Yet there is a relation between them; quantity can still fix their mode of dependence, though they are not only not identical but are in a sense irreducible, one to the other. In short, what has taken place is 'a radical transformation of the idea of number'; its significance has now been enlarged by the introduction of quality, the heterogeneous. It can still continue to be called 'number', no longer, however, in the sense of σύστημα μονάδων, but as fixing the mode of dependence of the most heterogeneous elements. And of this new number the only principles that can be assigned are the principle of variation and the principle of fixity; hence at once the identity of Idea and Ideal number.

Now here is the central point of Milhaud's theory.[2] The later Platonic doctrine of Ideas was expressed solely in a mathematical form; the Ideas had become Ideal numbers, 'intimate unions of quantity and quality,' 'quantities determining unique and specifically different qualities.' Aristotle 'had not in the same degree come under the influence of the new geometry';[3] he saw in number nothing but a total of

[1] Milhaud, pp. 179 sqq.   [2] Cf. Taylor in *Mind*, 1903, pp. 1 sqq.   [3] Milhaud, p. 358.

units in juxtaposition. As a natural consequence he misunderstood the Ideal numbers, and in misunderstanding them has misunderstood the whole Platonic theory. For the Idea is related to the particular in a peculiar way which can only be grasped by bearing in mind its character as an Ideal number. Once we see that Plato was thinking throughout of mathematics and mathematical analogies, the relation of Idea to particular no longer presents any difficulty.

Such, in brief, is the theory of M. Milhaud. Before criticism it will be necessary to look at the nature of Aristotle's objections to the Ideal numbers.

In *Met.* M. 6 Aristotle takes up the word 'numbers' and, treating number as a whole of units, asks in how many possible ways these units can be conceived. He answers, they may be thought of in three different ways. (1) Every unit may be combinable with every other, as in the mathematical number. (2) Every unit may be incombinable with and qualitatively distinct from every other. Aristotle admits in the next chapter that no thinker had actually put forward a theory of units thus incapable of all combination,[1] but he says that impossible though it may be, it is the theory which the Platonists in consistency *ought* to hold. (3) The units in any one number may be combinable with each other, but not combinable with the units in any other number. Thus the Ideal number two, the auto-dyad, is not reached by adding a unit to the primal one; instead of this, there are at once two fresh units produced; similarly the auto-triad is formed without the aid of the auto-dyad, the units in the former being quite different from those in the latter. This is the opinion Aristotle ascribes to Plato and the Platonists.[2]

Now obviously if the Platonists did not admit that their Ideal numbers were made up of units (μονάδες) at all, the

---

[1] M. 7. 1081 a 35 sqq.　　[2] M. 7. 1081 a 23-5. 6. 1080 a 23.

whole of this elaborate subdivision of Aristotle is entirely beside the mark. Similarly, when he asks how it is possible that the dyad should be a single essence (φύσιν τινά) existing independently of its two units, or the triad independently of its three units, and proceeds to show exhaustively that it cannot be the independent unity formed either by subject and attribute,[1] or by genus and difference, or by contact or chemical combination or position, again one is impatiently tempted to demur. If the Platonists made each number a closed concept different from every other, is it likely they would have granted that such numbers were mere wholes of units?

This is the first difficulty that suggests itself. Aristotle assumes that every number is made up of μονάδες and remains fettered in this orthodoxy[2] throughout his whole exposition. He brings to bear the whole artillery of dialectic against the absurdities which attend the postulate of qualitative differences in the unit. 'We see that a unit differs from another unit neither in quantity nor in quality';[3] units have no difference in kind. But would not Plato have admitted all this at once, merely adding that as regards the Ideal numbers such objections were entirely irrelevant?

Still graver misgivings arise on the perusal of M. 7. 1081 b 1, 12 sqq. 'Whether the units are indistinguishable or differ each from each, number must of necessity be numbered by way of addition, e. g. the dyad by the addition of another one to the unit, and the triad by the addition of another one to the two, and similarly with the tetrad. This

---

[1] 1082 a 15 sqq.

[2] So it appears to M. Milhaud. But the case of ἄτομοι γραμμαί discussed below (pp. 48 sqq.) suggests the probability that here too Aristotle is really for the first time dogmatically establishing the subsequent (Euclidean) view (cf. M. 7. 1082 b 15) which was already used by mathematicians in practice (1080 a 30). Plato, if he *did* disclaim all notion of μονάδες (*infra*, p. 41), must have been arguing against the perceptual unit of the Pythagoreans.

[3] 1082 b 4.

being so, it is impossible that the genesis of numbers should be as they describe, when they generate them out of the dyad and the one. Really when a dyad is produced it is a part (μόριον) of the number three, and this in turn a part of the number four, and so on with the following numbers.' In other words, since all number is κατὰ πρόσθεσιν, and the Ideal numbers are not, *therefore* the Ideal numbers are impossible.

Aristotle, it is true, proceeds to note an objection which might be made by the Platonists to the above argument.[1] It may be said (and this actually was their doctrine) that the Ideal numbers can be produced in a manner that does not involve addition; e. g. four is a product of the Ideal dyad and the indeterminate dyad, and not simply 3 + 1. Aristotle answers that, if so, the Platonists will have to admit the existence of three Ideal dyads instead of one, since there will be not only the original Ideal dyad but also the two dyads in the tetrad.

Even here Aristotle's commonplace notion of number seems to obtrude. He first makes as an objection against the Platonists exactly the dogma which they must have made a merit of repudiating, viz. that one number is a *part* of another; and then, in refutation of their own doctrine that the indeterminate dyad 'lays hold of the determinate dyad and produces the tetrad' (τοῦ γὰρ ληφθέντος ἦν δυοποιός), he seems to think of the tetrad as simply the dyad repeated two times, i. e. 2 + 2.

In short, to prove there are no Ideal numbers, Aristotle shows that the Ideal numbers are not arithmetical numbers; and to prove that the Ideal numbers do not come from the one and the indeterminate dyad, he reiterates that the arithmetical numbers come from addition. It is a plain case of *ignoratio elenchi* and of the futility of argument

[1] 1081 b 21.

where there is no common ground. All Aristotle can be said to show is that Plato ought not to have called his ἰδέα ἀριθμός by the name of 'number' at all. He admits that for what the Platonists wanted to prove, the ὑπόθεσις,[1] namely, that the Ideas are numbers, their substitution for addition of multiplication and derivation from first principles is sound enough.[2] Where there is no addition one Idea will not be contained in another Idea as a part. But this difficulty is avoided only at the cost of a demolition of the nature of number (πολλὰ ἀναιροῦσιν, *Met.* M. 7. 1082 b 33). The following sentence quoted by Syrian from Aristotle's early work 'on Philosophy' puts the whole question in a nutshell: 'If it is any number other than the mathematical that the Ideal numbers are, we could have no apprehension of it. Not one man of us in a thousand understands any other number than the mathematical' (τίς γὰρ τῶν γε πλείστων ἡμῶν συνίησιν ἄλλον ἀριθμόν ;)[3]

The novelty, then, of Milhaud's theory of the Ideal numbers lies not in pointing out the inadequacy of Aristotle's criticism. Bonitz[4] had shown already how unsatisfactory was the method of refutation adopted. Aristotle, according to Bonitz, ought to have pointed out at once that ἀριθμοὶ ἀσύμβλητοι is a plain contradiction in terms ; as it is, he has only darkened obscurity. Nor again was it a new suggestion to trace the identity of Idea and number to the participation by the former in unity and plurality.[5] What Milhaud *has* shown, however, is that Plato might just be the one 'man in a thousand' who *could* 'understand a number different from the mathematical number'. No other, it is true, seems to be recognized even by modern mathematics, but it is acknowledged that quantities like π, √2 cannot be expressed numerically by any combination of units, and it is

---

[1] 1082 b 32.   [2] 1082 b 24.   [3] Rose, p. 27.   [4] ii, p. 553 n.
[5] v. Zeller, p. 517 (*Plato*, E. T.). Cf. *Met.* M. 7. 1081 a 12-14.

therefore only natural if a mathematician like Plato, who was at the same time equally great as a metaphysician, should not merely have been dissatisfied with the ordinary account of number as σύνθεσις μονάδων,[1] but have made an attempt to replace it by another.

Milhaud's theory, however, is suggestive rather than final. Three points may be noted in connexion with it.

(1) Aristotle expressly attributes to his antagonists—often using the words ὥσπερ φασί—the view that number is made up of μονάδες,[2] though these are not the same as in the mathematical number. Thus in M. 7. 1081 a 23-5 he says of the units of the Ideal dyad that on the theory of Plato (ὁ πρῶτος εἰπών) their production is due to 'the equalization of the great and small by the one'. He states explicitly that all theorists, with the sole exception of the Pythagoreans, based their number on the unit (μοναδικοὺς . . . πάντες τιθέασι[3]).

The acceptance of Milhaud's theory therefore involves acknowledgement of a very serious misunderstanding on the part of Aristotle. Such total misrepresentation is not altogether unintelligible in view of (*a*) the sentence above quoted from the Περὶ Φιλοσοφίας, which shows Aristotle's perfect conviction that the only possible number was based on the unit, and (*b*) the probability or rather certainty that Plato's later mathematical speculations were mixed up with a great deal of Pythagorean fancy and symbolism.[4] Still it is very hard indeed to suppose that had the Platonists rejected all notion of μονάδες they would not have made this clear. And this objection has especial weight if we

---

[1] Cf. Euclid, Book VII, def. 2 number is τὸ ἐκ μονάδων συγκείμενον πλῆθος.

[2] So too Aristotle frequently asks : Whence, on Platonic principles, comes the Unit ? How do they derive it from the One and the Indeterminate Dyad ?

[3] 1080 b 30.

[4] This is admitted even by Milhaud, pp. 309, 320, 326. It would account for Aristotle's failing to distinguish the wheat from the chaff.

are to assign so important a place to the Ideal numbers as Milhaud would have us do. Milhaud's view, indeed, seems to come perilously near to the old esoteric theory of Platonism, unless more definite allusions to the Ideal numbers be discovered in the dialogues.[1]

(2) On the other hand, the important passage *Met.* H. 3. 1043 b 32 seems to lend support on the whole to Milhaud's hypothesis. Aristotle here asks in what sense substances can be compared with numbers, for points of comparison there undoubtedly are. His answer is, that if Ideas are in any sense numbers, they must be so as closed concepts (οὕτως 1043 b 33), and 'not, as some philosophers say, as each a number of units.' . . . 'Every substance must be an actuality and a definite thing (ἐντελέχεια καὶ φύσις τις), not, as some say, in the sense that it is a kind of unit or point.'

Now this passage shows clearly enough that Aristotle objects to the Platonic identification of substance and number simply because (as he thought) this was equivalent to making substance like a unit or point. Since στιγμαί or μονάδες are all qualitatively alike, whence on such a theory (Aristotle asks) comes the uniqueness of things? If number can have a qualitative aspect, can be in any sense ἀσύμβλητος, Aristotle's query is answered. The Idea of the Good, as described in the *Philebus*, is a unity of multiplicity, a one of heterogeneous elements; it cannot be compared (as Aristotle correctly enough points out) with the ordinary arithmetical number, but why not with an ἀριθμὸς ἀσύμβλητος? Aristotle, in his strenuous opposition to the Pythagoreanism in Plato, certainly seems to have ignored that 'synthetic' aspect of number which his master had endeavoured to elucidate.

But (3) even if Milhaud's theory be accepted, Aristotle,

---

[1] Cf. Zeller, *Plat. Stud.*, there is 'almost no trace' of the Ideal numbers in the dialogues; *History* (*Plato*, E. T., p. 254), the Ideal number theory 'has no place in Plato's writings'. Ideas of numbers are common enough; cf. ἡ τῶν ἀριθμῶν φύσις (*Rep.* 525 C).

though wrong in what he denies, is right in what he affirms. With his insistence on definite and clear cut conceptions, he will have nothing to do with any qualitative aspect of number ; and it will be granted that on trying to work out Milhaud's conception of a 'union of quantity and specific quality' many perplexities are involved. On the other hand, however, (1) Aristotle is quite sound in his own view of number, and (2) with his interest in biology and development, he is really in all his attacks on the number philosophy of the Academy—where philosophy, as he says,[1] had been reduced to mathematics—implicitly asserting that there are aspects and departments of the universe, e. g. life and mind, in which ἡ μετρητική, Plato's sovereign science of measurement, is, if applicable at all, altogether inadequate to reality. For even if we go to the opposite extreme from Aristotle, and instead of ignoring the truth of Plato's theory read into it the fullest possible significance, it is a theory which reduces all the sciences to one—that of quantity.[2] Besides pointing out that mathematics and numbers can give no account of causality,[3] Aristotle insists on their abstract nature, and holds that whereas the animate is prior to the inanimate [4] the Platonists reverse this order. At one time he seems to have been carried away by the mathematical ideal of exactness (ἀκρίβεια), but by the time he writes the *De Anima* and the *Metaphysics* [5] he sees that after all Psychology, as a 'concrete' study, has really more claim to be called an 'exact science' than mathematics.

Fourth Problem.

The investigation of the rest of Milhaud's theory leads straight to the problem of the Transcendence of the Idea in the Platonic system. We have seen above that the

---

[1] *Met.* A. 9. 992 a 32.   [2] v. A. E. Taylor in *Mind*, 1903.
[3] *Met.* A. 9. 991 b 9.   [4] *Met.* M. 2. 1077 a 20.
[5] Contrast *Post. An.* i. 27 with *De An.* i. 1. 402 a 2 and *Met.* E. 1. 1025 b 7.

weight of Aristotle's *critique* is directed against the χωριστὸν καθόλου, a universal predicate that is at the same time a particular. Aristotle could not understand how the general Idea could at the same time have all kinds of other properties—individuality, completeness, perfection. Now, according to Milhaud,[1] he would have understood, had he seen what Plato was thinking of in his Ideal theory, viz. the analogies of mathematics. Plato's Ideas are not mutilated and abstract universals, but, in one word, the 'pure essences of the mathematician'. The Ideal circle, e. g., is the circle as defined by its equation in the general form; it is at once ἐν καὶ πολλά, since it synthesizes in accord with one definite law a great multiplicity of positions. It is 'participated in' by particular circles, but this mode of participation cannot be represented by any metaphor borrowed from addition. Further, it is in a sense χωρίς, outside the world of sense, for it is never adequately realized even in the particular circles obtained by giving numerical values to the terms of the general equation, much less in the material circles of nature, which are but feeble and imperfect adumbrations of the Idea. As for the οὐσία of the Idea, of which Aristotle makes so much, it is simply the 'being' of all eternal and immutable truths; it is *a priori* objectivity. Milhaud further tries to show, in support of his identification of the Ideas with the essences of geometry, that Aristotle is wrong in placing τὰ μαθηματικὰ intermediate between the Ideas and the world of sense, and that the Platonic dialogues afford no real justification for his doing so.[2]

It will be seen that this theory is not altogether new. Lotze, as is well known, was convinced that by 'reality' Plato meant 'validity', and that when he spoke of the Ideas

---

[1] Cf. A. E. Taylor in *Mind*, 1903.

[2] The opposite view is maintained by Adam, *Republic* ii, pp. 159-62.

as χωρίς he meant 'their eternally self-identical significance '.
The εἶδος was 'valid before we thought about it, and will
continue so without regard to any existence of whatever
kind, of things or of us, whether or not it ever finds
manifestation in the reality of existence, or a place as an
object of knowledge in the reality of a thought'. Plato's
transcendence, in short, means nothing but 'independent
validity'. The advantage of Milhaud's theory is that it
explains the blunder of Aristotle in a much more plausible
way than as the result of a mere ambiguity of the Greek
language. Xenokrates told an intending pupil who had no
mathematics that he could not enter the portals of philo-
sophy—λαβὰς γὰρ οὐκ ἔχεις φιλοσοφίας. The only question
is : Can Milhaud's supposition be admitted here ? Has
Aristotle's supposed failure to follow the mathematical
thinking of Plato really led him on this question of
'transcendence' to a caricature of his master's philosophy?

(1) The answer must be, in the first place, that such a
supposition is refuted by the testimony of Plato himself.
An unprejudiced reading of the *Phaedo* or *Republic* or
Phaedrus will unquestionably confirm Aristotle in that
interpretation of Idea and particular which, with his usual
terseness, he sums up in a word or two in the early part of
A. 6 of the *Metaphysics*. The particulars of sense are
'*outside* of the Ideas', though receiving their common name
because of them (τὰ αἰσθητὰ παρὰ ταῦτα καὶ κατὰ ταῦτα λέγεσθαι
πάντα). The Ideas are 'definite natures and substances
separate from other things'.[1]

It may be granted to Lotze that even in the first draft of
his theory the οὐσία which Plato aimed at expressing was
being in the sense of 'universal and eternal validity', and
that if (in the Aristotelian phrase) [2] we look to his intention

---

[1] *Met.* I. 2. 1053 b 21 φύσεις τινὲς καὶ οὐσίαι χωρισταὶ τῶν ἄλλων.
[2] Cf. *Met.* A. 3. 985 a 5 ; 8. 989 b 5.

rather than to his words we shall not quarrel with any such conclusion. But, as Lotze himself really admits, Plato does not succeed in distinguishing Reality (*Sein*, οὐσία) from Validity (*Geltung*), and what was meant to be simply independent of individual thought becomes (notably in the *Republic*) a reality independent of all thought whatever. When Plato, therefore, talks of the Ideas as ἐν τόπῳ ὑπερουρανίῳ or as ἑστῶτα ἐν τῇ φύσει, he means precisely what Aristotle expresses in more prosaic language by οὐσία κεχωρισμένη τῶν αἰσθητῶν.[1]

It need only be noted in a sentence that the natural interpretation of the *Parmenides* is directly opposed to any such theory as that of Lotze or Milhaud. 'The unregenerate Socrates' of that dialogue, i. e. Plato himself, had previously, it is indicated, held a doctrine in which the Ideas were (*a*) αὐτὰ καθ' αὑτά, which can only mean transcendent and self-subsistent; and (*b*) χωρίς, which describes them in a negative way but means the same thing.

(2) Secondly, that Aristotle, who had the benefit of Plato's own conversation and instruction for twenty years, should never once have seen what Plato meant (according to Milhaud) by the transcendence of the Idea and the particular's participation therein, is simply incredible. Even an utter distaste for mathematics would not explain such a misunderstanding. Aristotle was the acutest mind of the school, and where the fundamental problem of μέθεξις was concerned his universal curiosity was not such as to be repelled even by the abstractions of the higher mathematics. Yet he says in explicit terms that the nature of participation

---

[1] Λ. 7. 1073 a 4, 5. It is curious that few have been found to dispute Aristotle's statement that the μόρια χωριστά of the Platonic soul-division means actual and not merely ideal severance (*De. An.* 413 b 28 χωριστὰ καθάπερ τινές φασιν), yet this 'separation' is quite as much a 'hard saying' as the self-dependent existence of the Idea.

was left by Plato 'an open question', and this is borne out by the dialogues themselves.[1]

(3) Moreover Milhaud's theory seems (*a*) unduly to depreciate the mathematical intelligence of Aristotle, and (*b*) conversely to modernize the thought of Plato to the neglect of the historical development.

(*a*) Is it so certain, as is often assumed, that Aristotle was a weakling in mathematics? The very fact of his being a member of the Academy already implies that he could not have neglected the subject. Cantor, who refers to his 'fine mathematical intellect' (*feinen mathematischen Geist*), notes his separation of Geometry from Geodesy,[2] just as Plato had previously distinguished Arithmetic from Logistic.[3] Though the specially mathematical works ascribed to him are lost, and though the *Mechanics* are spurious and the *Problems* not to be relied on as evidence, still even in the authentic works we have ample evidence that he took the keenest interest in all the problems of mathematics. Further it is curious that he seems to have understood the famous 'Nuptial number',[4] the obscurity of which has been proverbial from the days of Cicero onward. In the *Metaphysics*[5] Aristotle says the 'universal circle' or circle in general (ὁ καθόλου κύκλος) is

---

[1] *Met.* A. 6. 987 b 14. The phrase ἀφεῖσαν ἐν κοινῷ ζητεῖν is often mistranslated. It cannot be rendered (as by Ueberweg) 'omitted to investigate' (cf. Gomperz, *diese Frage haben sie unerledigt gelassen*; Bonitz *in medio reliquerunt* [Index 400 a 5; differently at 128 b 38]). It means 'they left over for subsequent inquiry'. Now this actually describes with complete accuracy what we find in the dialogues. Cf. *Parm.* 133 a ἀλλά τι ἄλλο δεῖ ζητεῖν ᾧ μεταλαμβάνει. This 'other way', however, is not to be found, and can at most only be read into the dialogues. Why indeed may not the above words of Aristotle be the missing reference to the *Parmenides*? Cf. also Plato, *Phil.* 15 b, where again the problem of μέθεξις is raised but not solved.

[2] *Met.* B. 2. 997 b 32 sqq.   [3] Cantor, i, p. 239.

[4] *Pol.* v. 12. 1316 a.

[5] Z. 10. 1035 a 33–b 2 (in a 34 we should read τις ὅς with E); cf. 11. 1037 a 2 sqq. ὁ ἁπλῶς λεγόμενος κύκλος has no ὕλη : individual circles have νοητὴ ὕλη.

a concept that has no 'matter', not even ὕλη νοητή, and this would seem to be exactly what Milhaud makes of Plato's Ideal circle, simply an algebraical equation. It is a pity M. Milhaud did not think it worth while to continue his mathematical researches as far as Aristotle.[1]

(*b*) Interpretation of the old in the light of the new is the very life of all philosophical exegesis. But where the question is an historical one, as to how far one thinker has understood another who was his contemporary, it is a primary necessity that interpretation should be as closely literal and objective as possible. Now Milhaud is not only less than just to Aristotle in his desire to make the most of Plato, but also tends to put the latter out of perspective by crediting him with mathematical concepts that are essentially modern.

We may illustrate this by means of the theory of 'indivisible lines' (ἄτομοι γραμμαί), which will show that Aristotle may be a sound critic even of Plato's geometry, and therefore unlikely to misinterpret his master's philosophy owing to alleged sciolism in Mathematics. This interesting theory is usually ascribed to Xenokrates, but Aristotle had often heard Plato himself state it to his pupils in lecture (πολλάκις ἐτίθει, *Met.* A. 9. 992 a 22). 'This genus (that of points) was one of which Plato disputed the very existence. He said the point was a geometer's assumption, and though he was ready to *call* it the starting point of the line, the real starting point, as he often used to lay down, consisted of indivisible lines.'[2]   It was a theory that was found very hard of comprehension by the Greek commentators; thus Simplicius

---

[1] A work by Görland on Aristotle's Mathematics seems unfortunately, at least to judge by Gomperz's review in *Archiv* of 1903, to be useless for purposes of objective study.

[2] The passage is a difficult one to render and difficult in itself. A very different translation and application of the passage will be found in Milhaud, pp. 340-3, whose treatment however seems far from satisfactory.

is lost in wonder that it should have been put forward by such a 'mathematical man' as Xenokrates. Aristotle brings an argument against it in the passage from which we have just quoted, and it is refuted at length in a treatise (περὶ ἀτόμων γραμμῶν) written by one of Aristotle's pupils— probably Theophrastos.

Now a modern mathematician coming to this theory might be able (in Aristotle's phrase) to 'give it an up-to-date interpretation '.[1] He might say that Aristotle and his pupil had misconceived and traduced a very important doctrine —no less, in fact, than a rough anticipation of modern infinitesimals. Just as in modern mathematics zero = a quantity smaller than any assignable quantity, so if the line be conceived as diminished till it is smaller than any assignable line, it becomes an ἄτομος γραμμή, i. e. a point ; not, however, an Euclidean point, but one from which, by taking an indefinite number of them, it will be possible to construct a line (ἀρχὴν γραμμῆς, A. 9. 992 a 22). It might be admitted that the view of Plato and Xenokrates was defective compared with that of the moderns, because while the modern view, with its phrase 'smaller than any assignable quantity', does not deny the Euclidean conception of infinity but simply dispenses with it, Plato, on the other hand, by definitely talking of 'indivisible' (ἄτομος) deliberately puts in the place of Euclid's point without parts something which actually has parts, but of which the parts are practically denied.[2]

Such a theory might quite conceivably be put forward, and would not be refuted by an appeal to the authority of Aristotle. For, it would be said, Aristotle and his pupil

[1] καινοπρεπεστέρως λέγειν, *Met.* A. 8. 989 b 6.

[2] A very close parallel might be found in Herbart, who, distinguishing *starre Linie* and *stetige Linie*, constructs the former out of points in just this non-Euclidean way (cf. Marcel Mauxion, *La Métaphysique d'Herbart*, pp. 115–16. Paris, 1894).

had not to the same degree as Plato 'come under the influence of the new geometry'. They assumed the complete validity and sufficiency of the orthodox view according to which the line is divisible *ad infinitum*. But surely Plato knew this as well as Aristotle. The latter's whole refutation consists, it would be said, in the 'appeal to Euclid'; he says the Platonists 'do not speak the language of orthodox mathematics', their views being quite 'peculiar to themselves'.[1]

Such a theory might be made very plausible. But it would undoubtedly be shattered on a careful consideration of the development of geometrical thought after the time of Zeno.[2] Zeno had shown once for all that the line was not made up of an infinite number of points : consequently it devolved on Plato to make a fresh start. He frankly accepted Zeno's results. The point was simply a 'geometrical assumption', i. e. the 'mere mathematician' may talk of the points of a line, but the philosopher sees that the line is something quite different from the point and cannot be explained as made up of them. It may be explained, however, if it is made up of something homogeneous with itself, i. e. of *lines*. Only they must be very small lines— so small, in fact, that they cannot be cut into smaller; they must be 'indivisible lines'. Plato's view was partly right, and marked a clear advance on the Pythagorean view. It contained, however, a contradiction ; for, though a line *can* be made by adding smaller lines, these smaller lines can always be divided into yet smaller. It only remained for Aristotle to point out this contradiction, and establish

---

[1] οὐ μαθηματικῶς, *Met.* M. 6. 1080 b 29 ; ἴδιαί τινες δόξαι, *Met.* N. 3. 1090 b 29.

[2] Cf. Περὶ ἀτ. γραμμ., which begins by giving some of the reasons which led to the doctrine. One of these is connected with the Ideal theory, 968 a 9 sqq. ; another is the demolition by Zeno of the Pythagorean conception of the line, 968 a 18 sqq.

thenceforward the Euclidean view—παν συνεχὲς διαιρετὸν εἰς ἀεὶ διαιρετά.[1]

As illustrating Aristotle's method of criticism, however, one of his refutations of the 'indivisible line' deserves a little examination. It is in the chapter above quoted— *Metaphysics* A. 9. Aristotle is pointing out the difficulties that attend the derivation of lines, surfaces and solids from the Platonic first principles—the one and the great and small. After showing that their attempted derivation is inconsistent with their own belief that the line 'inheres' in the surface, and the surface in the solid, Aristotle comes next to the point. How, he asks, will the Platonist derivation show that the point 'inheres in' the line? Plato, it is true, tried to evade the difficulty by saying there is no such thing as the point. The line, according to Plato, was not made up of points at all, but of 'indivisible lines', and therefore, if the line is derived from first principles, nothing more is needed.

Then follows Aristotle's objection. 'The point must exist; for lines, even if they are indivisible lines, must have an end (πέρας)[2],' i.e. a point. Bonitz says this is a *petitio principii*. So it would be, were not Aristotle all through this passage arguing from the Platonic standpoint. As he is himself careful to add, 'the same argument as proves the existence of the line proves also the existence of the point.'[3] In other words, Plato says that surface is the 'end' of a solid and the line the 'end' of a surface, therefore, he ought, in consistency, to admit that the point is the 'end' of the line. Plato had seen that lines were not made up of points, but unfortunately he had not gone on to say that similarly planes could not be made out of lines, nor solids out of planes. Aristotle's argument, therefore, is dialectical, but perfectly justified.

[1] *Physics* vi. 1, v. *passim.*   [2] 992 a 23.   [3] 992 a 24.

It is unnecessary then to consider the details of Milhaud's theory. It may be held as incontestable that Plato did at one stage of his thinking hold a doctrine of transcendent Ideas, such as we find refuted in Aristotle.[1] But now comes the problem of the *Parmenides*. If there is one thing which that dialogue attacks in every conceivable and possible way, it is just this transcendence of the Idea. And we have seen that this is the centre also of Aristotle's attack. The proposition ' Substance cannot be separated (χωρίς) from that of which it is the substance ' summarizes, according to Zeller, the whole difference between the Platonic and Aristotelian systems ; it furnishes, according to Bonitz, the ' *summum ac praecipuum Aristoteleae et Platonicae philosophiae discrimen* '. Here then we are face to face with the fundamental dilemma already mentioned— what we may call the *Parmenides*-Aristotle dilemma.

Of this dilemma it has been usual for historians of philosophy to accept the first horn—that Plato never abandoned the self-subsistence of the Idea. This view must commit itself to unnatural interpretations of the *Parmenides*[2] ; it tends to minimize either the force of the arguments there stated or the importance of the whole dialogue ; or again— an easy solution which is no solution—it declares the dialogue spurious.

Further, the *Parmenides* does not stand alone. If it did Plato might be regarded, though unwarrantably, as a ' metaphysical Ariel ', writing the *Parmenides* in an ' hour of insight '. But in the *Sophist* also Plato criticizes ' the

[1] Not of course that he consciously held it in the definite and dogmatic form to which Aristotle, with his preciser terminology, reduces it. Every philosophy necessarily suffers injustice in being thus restated.

[2] Such e. g. as that of Zeller, *Plat. Stud.*, pp. 159–94. Apelt, again, has triumphantly vindicated the genuineness of the dialogue, but he does so only at the cost of ranking its philosophical importance quite low : he calls it ' *ein wahres Arsenal von Erschleichungen und Sophismen* ', a ' dialectical witches' Sabbath ', &c.

friends of the Ideas', with their doctrine of transcendence (οὐσίαν χωρίς που διελόμενοι) and their severance of Being and Becoming (οὐσία and γένεσις), and in the declaration of the same dialogue that ' to go about to separate off (ἀποχωρίζειν) one thing absolutely from every other is the very antithesis of true philosophy', we seem to find, though the immediate reference is logical, the spirit of the later Platonic metaphysic as a whole. Plato seems to have got beyond the sharp antithesis of the *Republic* between ' seeing' and 'thinking ',[1] and to have come to recognize that the world of knowledge was not a different world from that of perception, existing independently of it.

But there are difficulties equally great in the way of accepting the second horn—that Aristotle had not the ability to understand Plato's later Idealism and attributed to him the crudest form of the theory as the form most easy to refute. Such a view might indeed appeal to the many supposed cases of unfair argument used by Aristotle in his strictures on the Ideas. It is said that he argues from his own point of view and thus unfairly attributes to opponents the result of his own deductions. But even if this were established,[2] it does not make it any the more intelligible that Aristotle should, from the very first, have

---

[1] *Rep.* vi. 507 B τὰ μὲν ὁρᾶσθαί φαμεν, νοεῖσθαι δ' οὔ, τὰς δ' αὖ ἰδέας νοεῖσθαι μέν, ὁρᾶσθαι δ' οὔ ; cf. in Bk. vii ἡ δι' ὄψεως φαινομένη ἕδρα)(ὁ νοητὸς τόπος.

[2] A very clear case might be supposed to be afforded by *Met.* Z. 6. 1031 b 15, where Aristotle says that ' if the Ideas are such as some people assert them to be, then the substrate—in other words the particular—cannot be substance (οὐσία)'. This is urged by way of objection, though it is obvious that Plato (at least in the first stage of his thinking) would not have admitted the οὐσία of the particular. But even here is it not the case that Aristotle is refuting the Platonists from their own premises? His argument is directed against that view of the Ideas which makes them like the gods of the popular religion, only differing from the men in whose image they are made in being ἀ διοι. Such a view of the Ideas might well commit itself to the assertion attributed to the Platonists by Aristotle that the 'non-sensible substances are more substantial than the sensible, *because they are eternal* ' (*Met.* Z. 1).

set himself in opposition to the 'otherworldness' of the Platonic philosophy, had it really ceased to present that character. The obscurity of Plato's later teaching drove many from his lectures,[1] and has left traces of itself in certain passages of Aristotle[2]; but surely the latter, if any one, was qualified to understand him.

Other theories finally have sought to avoid the necessity of taking either side of the antithesis. Plato *did* abandon the self-existence of the Ideas and yet Aristotle has *not* misrepresented him. Here the most attractive view is one already partly discussed—that which holds Aristotle to have been aware of Plato's disavowal of transcendence and to be attacking consequently only the earlier theory of Ideas. The criticism, it is noted, takes place within the school, and attacks a doctrine which has several different and contradictory forms.[3] The arguments are served up afresh from the περὶ ἰδεῶν, because that doctrine of exaggerated transcendence, which even Plato had found it necessary to censure in some of his pupils, was still rampant in the Academy at the time when Aristotle put together his *Metaphysics*.[4]

Now it may be perfectly correct to say that Aristotle is attacking an 'earlier theory of Ideas', but the great difficulty is just that he knows of no later theory. He constantly mentions Plato's theory of first principles (στοιχεῖα), but so far is he from the knowledge of any change of front with regard to the Ideas that, on the one hand, Platonists who might certainly be described as 'friends of the Ideas' are represented as holding the later doctrine of the One and the

---

[1] Rose, p. 24.   [2] e.g. *De An.* i. 2. 404 b 19 sqq.

[3] A. 9. 990 b 9, b 11, b 21, 992 a 32.

[4] From the Platonic side this theory has to face two difficulties : (*a*) that of the *Timaeus*, 51 C sqq., where the Ideas, regarded from the point of view of the *Parmenides*, are everything they should *not* be (51 C, E, 52 A); (*b*) the difficulties of identifying the Ideas in the *Philebus* with the class of τὸ πέρας.

Indeterminate Dyad,[1] and, on the other hand, conversely, Plato in his later philosophy of first principles is still credited with a pre-Parmenidean doctrine of Ideas.[2]

Moreover, though Plato himself is not once mentioned in the criticisms of *Met.* A. 9 and *Ethics* i. 6, it is impossible to suppose he is not included in the refutation.[3] Similarly, though in *Met.* B and Z Aristotle is clearly attacking the contemporary Academy and a crude doctrine of 'eternalized sensibles' (ἀΐδια αἰσθητά) which was never held by the master himself, yet Aristotle nowhere says anything to indicate that the Platonic view in its logical consequences would not be open to the same difficulties. He gives it explicitly as Plato's doctrine that he believed in three orders of existence (οὐσίαι),[4] and nowhere is it stated that he changed this view. In short, the theory only acquits Aristotle of direct injustice by exposing him to the same charge indirectly.

Our fourth problem then has evidently reduced itself to the problem of the *Parmenides*, which is a standing enigma in the Platonic philosophy. The interpretation here adopted of that dialogue seems the natural one, and if accepted it is impossible to suppose that Plato ever recanted his own recantation. But there is as yet no agreement as to how he modified his doctrine, nor is it certain that he ever found himself in a position to meet satisfactorily the difficulties of the *Parmenides* and the 'innumerable others in addition to them'.[5]

---

[1] *Met.* A. 9. 990 b 18.   [2] *Met.* A. 6.

[3] Aristotle begins the refutation in A. 9 with the words οἱ δὲ τὰς ἰδέας αἰτίας τιθέμενοι, but he uses the past tense ἐκόμισαν b 2, προῆλθον b 6. This may of course refer still to none but the Platonists, but it is forced, especially as it is the case that Aristotle frequently refers to Plato in the plural. Nevertheless it may be admitted that a single mention of Plato by name (for his view of the point) and a reference to a single dialogue (the *Phaedo*) are not what we should have expected had Aristotle been really attacking a doctrine of Plato's.

[4] Z. 2. 1028 b 20.   [5] *Parm.* 135 A.

So much for the *thesis*; the *antithesis* is that Aristotle's criticism cannot be adequately explained unless the antagonists he is refuting actually held a doctrine of transcendent Ideas.[1] It is meaningless except as against the theory of a noumenal world which is a timeless reproduction of the phenomenal but does not explain it, seeing that the two are 'divorced' from each other. There is no difficulty in attributing such a view to members of the Academy; for the doctrines of Speusippos and others on the separate and independent existence of numbers are obviously a heritage from, and to be paralleled with, the early Platonic theory of Ideas. But can it be attributed also to the Plato who wrote the *Parmenides* and the *Sophist* and the *Philebus*?

We have here a case of conflicting evidence, and the data seem hardly sufficient for a solution. The Aristotelian method of 'working through the difficulties'[2] has in this case led to little positive result. The dilemma above stated has of itself no necessary cogency,[3] but the difficulties which lead up to it have been neither evaded nor solved. The problem is still *sub iudice*.[4]

---

[1] On any other theory not one of his criticisms but would fall lamentably flat, and Aristotle was too keen a dialectician not to have noticed this at once. Thus take the amusing chapter (Z. 14) in the *Metaphysics* in which Aristotle turns the tables on the Platonists. The latter held the Idea was the sole definable; Aristotle, however, after showing that of particulars there can be no definition, proceeds: 'Neither then can any Idea be defined. For it is a particular, *as they say* (ὡς . . . φασι), and separable.' Nothing could be more unlikely than that Aristotle here attributes to the Platonists a mere unwarranted deduction of his own. So again in *Eth.* i. 6 it is the Platonists (as Stewart says) who confound the true with the spurious eternity—ἀΐδιον with πολυχρόνιον.

[2] *De Caelo* iv. 1. 308 a 5 ἰδόντες οὖν πρῶτον τὰ παρὰ τῶν ἄλλων εἰρημένα, καὶ διαπορήσαντες κτλ., ib. i. 10.

[3] Thus we have shown above that the talk of 'plagiarism' has no relevancy.

[4] Its solution will to some extent depend on the possibility or otherwise of extracting a consistent doctrine from the very difficult chapter A. 6 of the *Metaphysics*. Two ἀπορίαι in connexion with the chapter may be noted: (1) if the inhering principles of all things (στοιχεῖα) are the Good and Matter, why the

But whatever the solution of these difficulties, the essence of Aristotle's criticism will still be justified. There is a very fundamental difference between master and pupil in their doctrine of the real. The real had been for Plato τὰ ὄντως ὄντα, the Ideas; Aristotle surprisingly, inconsistently, and yet naturally enough, agrees that this is so in the case of the highest οὐσία, the Deity.[1] But in the concrete world the spirit of the observer and student of nature predominates over the metaphysical tendency to dualism which he had inherited from his master; and the merit of grasping firmly and clearly that 'the universal exists in and through the particular, and that the existence of the particular is in and for the universal ',[2] and of carrying this doctrine consistently through the whole phenomenal world, indubitably belongs to Aristotle.

Fifth Problem.

The fifth and last problem brings us to what Aristotle has to say on the subject of Plato's aetiology.

(1) His main charge in the indictment of Transcendent Idealism is, that it cannot furnish any explanation of the world of change and becoming (τῶν φανερῶν τὸ αἴτιον).[3] Thus, after giving his own explanation of γένεσις in the *Metaphysics*,[4] he proceeds to show that the Ideas (ἡ τῶν εἰδῶν αἰτία) do not contribute at all to bring about generation and substances. For (a) 'if the form were a self-subsistent (Platonic) Idea, and existed in *that* sense, no "this" would ever have been coming to be. The form signifies the "such" or the "what", but it is not a "this" or a "deter-

---

need of the Ideas as formal causes? (2) if this be satisfactorily solved, what is the relation between the One or the Good to the Ideas (Formal Causes)?

[1] Who is pure Form, τὸ τί ἦν εἶναι τὸ πρῶτον (Λ. 8. 1074 a 35).

[2] R. B. Haldane, *The Pathway to Reality*, p. 52.

[3] *Met.* A. 9. 992 a 24; cf. 991 a 8 πάντων δὲ μάλιστα διαπορήσειεν ἄν τις κτλ.

[4] Z. 8.

minate something " '.[1] (b) In some cases, viz. the birth of
natural objects, it is matter of plain experience that the
Ideas have nothing to do with the generation.   In nature
like is generated by like, man by man, not by the Idea of
man ; and yet, since natural objects are especially οὐσίαι, it
is here that the Ideas would be most required.   Similarly
it is the doctor, not the Idea of health, that produces health ;
the scientific teacher, not the Idea of knowledge, that pro-
duces knowledge.   And if Ideas were the causes, why are
they not constantly in operation? Aristotle sums up his case
in *Met.* Λ. 10 : ' The Ideas are not causes at all, but even
granting that they are, at least they are not the causes
of motion (οὔτι κινήσεως γε).'   In short, just as Leibnitz
misses final cause in Spinoza, so Aristotle misses efficient
cause in Plato.

Apart from Lotze's remark on the non-efficiency of the
Ideas that neither do our Laws of Nature contain in them-
selves a beginning of motion, it might be retorted to
Aristotle by the Platonists that their master had never
said the Ideas could supply an ἀρχὴ (κινήσεως) γενέσεως.   In
all Plato's later writings, at all events, the efficient cause
is soul, mind, creator.[2]   But (1) as against the *Phaedo*,
where the Ideas are made the sole efficient causes,
Aristotle's argument is valid, and (2) it is extremely
probable that Plato in his later lectures had made no
mention of efficient causes.   He seems to have used no

---

[1] Pseudo-Alexander here remarks that on the Platonic view (a) there might be
σύνθεσις, as of the bricks that go to build a house, but no γένεσις ; (b) just as this
particular wine and this particular honey, if separate existences, may make up
mead but cannot be found in any other mixture, so if αὐτοάνθρωπος is χωριστόν,
it may in combination with this particular matter produce Socrates, but can
give rise to no other individual till severed from the matter of Socrates
(Hayduck, 496. 20). With Aristotle there is a *growth* of form into matter
(= formed matter) ; he no longer, like Plato, makes the cause of phenomena
something different from them.

[2] Cf. *Laws* 896 a ψυχὴ . . . μεταβολῆς τε καὶ κινήσεως ἁπάσης αἰτία ἅπασιν.

other causes than his two first principles, the One or the Ideas, and the Indeterminate Dyad; he probably said nothing of the 'Demiurge' so often mentioned in the dialogues, nor even of soul as source of motion. Otherwise Aristotle's objection, that Plato's 'mathematical matter' cannot explain motion, would lose all its point.[1]

It is no doubt surprising to find that notwithstanding his attack on Plato, Aristotle himself reduces his four causes to two, and on the principle of always finding the 'ultimate ground' should trace back the efficient cause to the formal.[2] But though the efficient cause of a house to Aristotle is *ultimately* the form of the house in the mind of the builder, still he does not absorb the efficient cause in the formal; he recognizes the efficiency of the art of building or of the builder.

Again Aristotle is justified in the strictures he passes on Plato's use of the term 'participation'. He says that Plato cannot tell the *cause* of the 'participation'; and if we answer, with Bonitz, that 'the cause' is the efficient cause, it must be further asked: In what way is Plato's efficient cause an αἴτιον τῆς μεθέξεως? Only as a *deus ex machina*. Aristotle substitutes for the static conception of 'participation' and 'conjunction' (μέθεξις, συνουσία, *Met.* H. 6) his own idea of growth and development.

(2) After his exposition of Platonism in *Met.* A. 6, Aristotle considers it 'obvious from what he has said' (φανερὸν ἐκ τῶν εἰρημένων) that Plato recognizes only two causes—formal and material. From the Platonic dialogues themselves a very different impression results. Already Alexander asks the question why Aristotle refuses to allow to Plato efficient and final causes. But,

---

[1] *Met.* A. 9. 992 b 7 περί τε κινήσεως, εἰ μὲν . . . εἰ δὲ μή, πόθεν ἦλθεν'; cf. also *Phys.* Γ. 2. 201 b 20 ἔνιοι, ἑτερότητα καὶ ἀνισότητα καὶ τὸ μὴ ὂν φάσκοντες εἶναι τὴν κίνησιν.

[2] *Phys.* ii. 3. 195 b 21.

to illustrate Plato's recognition of them both, Alexander might have appealed to much more telling passages than those he quotes from the *Timaeus* and the Seventh Epistle. Thus (*a*) in the statement at least of *universal* efficient cause, no one could be more emphatic than Plato. In the *Sophist* the production of animals, vegetables, and minerals is assigned to 'God the Artist' (θεὸς δημιουργῶν). In the *Philebus* the cause of the mixture of Limit and Unlimitedness (τῆς συμμίξεως ἡ αἰτία) is thereby the cause also of genesis, and may be identified with active power and 'artist' (δημιουργός). *Sophist, Timaeus, Philebus, Laws* are in this respect alike.[1]

Similarly (*b*) as to final cause, not to mention the description of the Ideas as Archetypes (παραδείγματα) and of the Idea of Good in the *Republic* as not merely highest efficient but also final cause of the universe, there is to be found in the *Philebus*, where Plato completes his theory of causation, both divine and human, and indicates the four Aristotelian causes, the very closest parallel to Aristotle's description of the Deity as the final cause of the universe for which all the rest of creation yearns and strives.[2] And in Plato's latest writing, in one and the same passage along with universal efficient cause (ὁ τοῦ παντὸς ἐπιμελούμενος), we have the following explicit assertion of final cause[3]: 'Each part of the universe . . . has the whole in view. This and every other creation is for the sake of the whole, and in order that the life of the whole may be blessed. You are created for the sake of the whole and not the whole for the sake of you. Every physician and skilled artist does all things for the sake of the whole, directing his

---

[1] v. Campbell, *Sophist*, Introd., p. 76.

[2] Even here, however, it is noteworthy that the distinctive note of Aristotle's conception is wholly lacking—κινεῖ ὡς ἐρώμενον.

[3] *Laws* 903 B–C. For explicit assertion of soul as αἰτία μεταβολῆς τε καὶ κινήσεως ἁπάσης, v. 896 A–B.

effort toward the common good, executing the part for the sake of the whole.'

Aristotle then does not do justice to Plato's aetiology. At the same time, if the following considerations be taken into account, it will be seen that it is in no spirit of grudging depreciation that he finds deficiencies in his master's doctrine.

(*a*) As appears from the words φανερὸν ἐκ τῶν εἰρημένων, Aristotle is thinking not of the Platonic dialogues but of Plato's lectures—especially those 'On the Good'. Now in these the dynamical interest seems to have been entirely overshadowed by the ontological.[1]

(*b*) Aristotle does not wholly deny Plato's recognition of final and efficient causes. As to the former, Aristotle says that in a sense it was postulated by Plato, only not *qua* final. That is, Plato identifies it with the formal cause, and it is only an 'accident' of the formal cause that it happens at the same time to be good. The Ideas are final causes, not ἁπλῶς, but only κατὰ συμβεβηκός. As to efficient cause, Plato, like other philosophers, 'saw it as it were in dream.'[2] In other words, Plato wished indeed to make his Ideas efficient powers, but seeing that this is what in Aristotle's opinion they cannot be, Aristotle can on occasion deny to Plato's system the recognition of any efficient cause whatever. In a similar vein he says that no one has clearly assigned even the formal cause,[3] though the Idea-philosophers (οἱ τὰ εἴδη τιθέντες) come nearest it. This simply means that Plato's formal cause is not quite the same as his own. It will be obvious, therefore, that (1) Aristotle's account of the system presupposes his criticism of it, and (2) he refuses to recognize Plato's 'maker and father of the universe' as any scientific explanation,

---

[1] v. Alexander on A. 6. 988 a 11 (Rose, p. 42).
[2] *De Gen. Corr.* ii. 9. 335 b 8 sqq.   [3] *Met.* A. 7.

and thus eliminates efficient cause from the Platonic metaphysic.[1]

(c) Finally, it is easy for us now to see in the Dialogues, notably the *Philebus*, anticipations of Aristotle's doctrine of the four causes, but only because Aristotle himself has brought to clear and definite expression the various scattered hints of his master's teaching. Nor can it be denied that the Platonic exposition leaves much to be desired, as regards both clearness and adequacy. Aristotle feels this so strongly with reference to Plato's external, as contrasted with his own immanent, teleology that, forgetting his own concession elsewhere, he once roundly asserts that the final cause is 'not touched by the Ideas'.[2] Again, what is the relation of the Idea of the Good to other ends (Ideas) or to the special functions (ἔργα)[3] of things? Efficient causes Plato attributes at one time to Ideas, at another to soul: which is his real doctrine? and what is the relation of Idea to soul? Aristotle, therefore, while willing to admit that Plato made 'stammering' efforts in the direction of efficient and final causes,[4] was perfectly justified in thinking that he had not 'fully worked them out'.[5]

It is now possible to sum up the positive results arrived at :—

1. The evidence is against the supposition that Aristotle has misapprehended the Platonic first principles.

---

[1] If ὁ θεός is simply popular in Plato for the highest Idea (cf. Zeller, *Plato*, E. T., p. 267), then since Aristotle holds there is no efficiency in the Ideas, efficient cause will naturally in his view disappear from the Platonic system as a whole.

[2] A. 9. 992 a 32.   [3] Cf. *Eth. Eud.* i. 8. 1218 a 30.

[4] *Met.* A. 10. 993 a 15. In Aristotle's 'favourite phrase' (cf. Λ. 4. 1070 b 10) τρόπον μέν τινα πᾶσαι (sc. αἱ αἰτίαι) πρότερον εἴρηνται, τρόπον δέ τινα οὐδαμῶς.

[5] Alexander on A. 6. 988 a 11 (Hayduck, p. 59. 30-60. 2), Rose, p. 42 ἀλλ' οὐδὲ ἐξειργάσατό τι περὶ αὐτῶν.

2. Aristotle is correct in what he says of the contents of the Ideal world.

3. On the Ideal numbers Aristotle is at cross purposes with Plato. Each is right in asserting what the other denies.

4. Aristotle has exaggerated, but not caricatured, the transcendent objectivity of the Platonic Idea. The *Parmenides* problem is still unsolved.

5. Aristotle is severe on the Platonic aetiology, but not without justification.

Before completion of the inquiry, by showing how far the peculiar characteristics of Aristotle's censure of Plato admit of explanation on general principles, it will be well to consider very briefly a few of the main criticisms in the field of Physics, Ethics, and Politics.[1]

B. *Aristotle's Criticisms of the 'Timaeus'.*

As to Physics, a volume might be written on the criticisms of the *Timaeus* alone. Aristotle paid particular attention to this dialogue, not for its metaphysics and its mysticism— like the Neoplatonists—but because it contained all that Plato had to say on Aristotle's favourite subject—the natural sciences and biology. With its myths and its mystical mathematics it must have roused all the scientific spirit of Aristotle into opposition, and that no radical mis-understanding, and certainly no conscious unfairness, can be proved against him even here is strong proof of the painstaking consideration[2] which Aristotle gave to all Plato's opinions, and of the deep respect which he always paid to the memory of his great master.

[1] For Aristotle's criticism of Plato's Logic, especially of the method of διαίρεσις, v. H. Maier, *Die Syllogistik des Aristoteles*, ii. 2, chapter 1, § 3 ('Die Entdeckung des Syllogismus'), pp. 56 sqq.

[2] Bacon misconceived this when he compared Aristotle to the Turk (*more Ottomanorum*).

1. Thus it is at first surprising that Aristotle, in proceeding to discuss growth and qualitative change,[1] should say that Plato's investigations extended only to generation and destruction, and not even to all generation but only to the generation of the elements. 'As to how flesh or bones or anything of that kind came into being, he has made no investigation.' Now these latter subjects certainly are considered in the *Timaeus*,[2] and Plato has also there treated—though very briefly—of growth and decay (αὔξησις and φθίσις), but if we look at what Plato says about them Aristotle's language is easily explained. Aristotle could have no sympathy with an account which, he might have said, made marrow out of tiny triangles[3] and 'imported'[4] the Deity (ὁ θεός)[5] into a scientific explanation. In fact it is clear that Aristotle passes over Plato's account deliberately, for he goes on to say, ' Not one of these subjects (qualitative change and growth) has been treated in anything but a superficial way by any one except Demokritos . . . no one has said anything about growth which might not equally well have been said by anybody' (ὅτι μὴ κἂν ὁ τυχὼν εἴπειεν).[6] Moreover, in other works, Aristotle does note Plato's view of respiration and his theory on the absence of flesh from the cranium, both of which come in the passage of the *Timaeus* which is here overlooked. Aristotle, it is plain, never minces words, but it is only a very abstract view that can discover detraction or unfairness in this passage, and in the implied contrast of Demokritos with Plato and the Pythagoreans.

---

[1] *De Gen. Corr.* i. 2. 315 a 26.   [2] 73 sqq.

[3] *Tim.* 73 B. As Aristotle had already refuted Plato's derivation of the elements, he might well in any case think himself able to dispense with special notice of his theory here (*De Gen. Corr.* i. 2).

[4] *Eth.* i. 6 εἰσαγαγεῖν τὰ εἴδη.   [5] *Tim.* 73 B, 74 D, &c.

[6] 315 a 34 ὅλως δὲ παρὰ τὰ ἐπιπολῆς περὶ οὐδενὸς οὐδεὶς ἐπέστησεν ἔξω Δημοκρίτου κτλ. The phrase ὃ μὴ κἂν ὁ τυχὼν εἴπειεν recurs in *Meteor.* i. 13. 349 a 16.

2. As is well known, Aristotle takes the *Timaeus* literally almost throughout,[1] and an interesting passage in the *De Caelo*[2] shows him to have been perfectly aware of the reproaches that might be made against him for doing so. According to Xenokrates and other defenders of Plato (τινες), Plato's declaration that the world had 'come into existence' was intended merely 'for purposes of exegesis' (διδασκαλίας χάριν), just as a geometrical in- structor may represent the gradual 'coming into exis- tence' of a geometrical figure. Aristotle replies that the parallel will not hold. It is possible to show a geometrical figure in the making, but there all the parts can exist simul- taneously. In the question at issue, however, 'when they say that out of chaos there comes to be a cosmos, these cannot be simultaneous ; they are prior and posterior, and to separate off what are prior and posterior there must necessarily be generation and time.'[3] This objection, which is perfectly valid as against Xenokrates, only proves, according to Zeller,[4] that not only Aristotle, but even Plato's defenders as well, did not recognize the full extent of the mythical in the *Timaeus*, the chaos itself being simply part of the allegory.

Now this illustrates admirably the difficulty of ever coming to an anchor when once embarked on the sea of mythical interpretation. Every one will allow it to be mythical when the 'Demiurge' in the *Timaeus*[5] mixes various ingredients in a mixing-bowl. But soon real diffi- culties begin. Aristotle, with his usual acumen, pointed

---

[1] The one exception seems to be the δημιουργός, on whom Aristotle is silent. The word in the Platonic sense occurs only once in all his writings—in one of the early dialogues (Rose, p. 29).

[2] i. 10. 279 b 33.

[3] Whereas in the case of διαγράμματα, οὐδὲν τῷ χρόνῳ κεχώρισται. Cf. on the whole passage Simplicius (Schol. 468 b 42).

[4] *Plat. Stud.*, p. 211.   [5] 41 D.

out as a contradiction in the *Timaeus* that Plato 'generates time in time'.[1]   Xenokrates, to meet Aristotle, puts forward an attempted solution.   Aristotle refutes this and straightway others, to meet the refutation, declare that the chaos also is 'pure allegory'.   Zeller does not agree with the Neoplatonists in taking 'figuratively'[2] Plato's derivation of the elements.   Yet, as Simplicius naturally asks, When so much of the *Timaeus* must be taken metaphorically, why not this also?

In short, even had Aristotle adopted this method of criticism with full deliberation, he would still have been justified. Better the literal interpretation of Aristotle than the allegorical methods of the Neoplatonists.   Whichever method be adopted, the words are still true which Aristotle uses of the *Timaeus* on another question, that what is written there 'has no explicitness'.[3]   The *Timaeus*, as Hegel puts it, is 'the most difficult and most obscure among the Platonic dialogues', and though the authority of Aristotle need not establish *his* way of taking the *Timaeus* to be the only one, that he did take it literally is certainly no proof of his inability to read aright the strictly philosophic doctrines of Plato.[4]

3. Again, in Psychology, Plato's doctrines of the world-soul meets with no gentle treatment.   His 'probable tale' (which Plato himself had admitted might not be found

---

[1] *Physics* Θ. 1. 251 b 17 sqq.

[2] συμβολικῶς, Simplicius, *De Caelo* iii. 252 b 23 (v. Bäumker, *Das Problem der Materie*, p. 169).   Why not also 'the diremption of the soul'.

[3] οὐδένα ἔχει διορισμόν, *De Gen. Corr.* B. 1. 329 a 13 sqq.   Aristotle is saying that it is impossible to make out from the *Timaeus* whether Plato's matter can exist otherwise than in the form of the four elements.   He is thinking of the so-called 'secondary matter', which certainly does introduce a difficulty into the question Aristotle is discussing, whether matter can exist χωριστή.   Archer-Hind misconceives the passage (*Timaeus*, p. 179).

[4] Cf. Gomperz, *Griechische Denker*, vol. ii, pp. 483 sqq., on the difficulties of the *Timaeus*.   He finds Aristotle justified.

'everywhere and in all respects consistent and accurate')[1]
is taken by Aristotle with complete literalness and criticized
accordingly. 'In the first place then,' he begins, 'it is not
correct to say that the soul is a magnitude' (μέγεθος).[2]
This sounds at first extremely unfair, as we know that to
Plato the soul is immaterial. By magnitude, however, it
must be remembered, Aristotle means geometrical magni-
tude, 'quantity *qua* measurable'[3] (e. g. a mathematical
line).

Now the Platonists, as is known from various evidence,
disputed as to whether the soul was arithmetical or
geometrical, a number or a magnitude, but they had no
doubt as to its being one of the two. Zeller thinks Plato
had not expressed himself definitely in favour of one view
or the other, and left the relation of soul to his mathematical
principle (τὰ μαθηματικά) undetermined[4]; hence the diver-
gence on this question between Speusippos and Xeno-
krates, the latter defining soul as 'a self-moving number'.
Consequently Aristotle has not grossly misinterpreted
the mathematical description of the *Timaeus*, and his
'amusing literalness'[5] may, after all, be no great injustice,
though we feel that Plato does not bear at any time to be
interpreted so literally and dogmatically.[6]

Still the chapter in *De Anima*[7] is by no means open to
the charge of 'quibbling commonplaceness'.[8] It is not a
sympathetic criticism (since it does not allow for possible
development of opinion on Plato's part), but it is nevertheless
perfectly correct to point out that there is a fundamental

---

[1] *Tim.* 29 C.   [2] *De An.* i. 3. 407 a 2.   [3] *Met.* Δ. 13. 1020 a 9.
[4] v. Zeller, *Plato* (E. T.), p. 355 n.   [5] Archer-Hind, *Timaeus*, p. 114.
[6] A more indulgent critic than it was Aristotle's nature to be would have
hesitated before ascribing to a great thinker such a patent contradiction as exists
between the *Phaedrus* (245 E) and the *Timaeus* (34 B) in regard to eternal motion,
v. *Met.* Λ. 1071 b 37 sqq. He would have asked: May not Plato's *meaning* be
other than the narrative form of the *Timaeus* compels his *words* to be?
[7] 406 b 25–407 b 26.   [8] Wallace, *De Anima*, Introd., p. 36.

contradiction between the view of the *Timaeus* and that of the earlier *Phaedo*[1] in regard to the union of soul and body. When Aristotle further says on the perpetual motion of the world soul that this will be 'violent'[2] and that consequently the soul will enjoy no opportunity for 'leisure or rational amusement', but will have 'the lot of an Ixion on his wheel' ('Ιξίονος μοῖραν),[3] there is here no unfairness whatever. Aristotle is careful to exclude all Matter from his own conception of the 'transcendent mind' or of Deity, and simply makes his point here in the most vivid way at his disposal.

Further, Aristotle is strongly opposed to the Platonic view that movement is a predicate of soul, or that soul is the self-movent.[4] Again, his fundamental objection to all theories of the class to which Plato's belongs is that they assume it as possible for any soul to clothe itself in any body 'after the manner of the stories of the Pythagoreans'.[5] As well expect a carpenter, says Aristotle, to do his work with a flute. Aristotle's real criticism of Plato is simply his great conception of soul as the 'form' or 'realization' of the body, and his real difference from Plato, here as elsewhere, comes out not so much in his dialectical criticisms as in the course of his own scientific exposition. Every one, nevertheless, will acknowledge the applicability of his criticism of Plato's 'faulty psychology', however Aristotle himself may have failed to maintain the organic unity of soul.[6]

4. As to the nature of Platonic matter, Aristotle's opinion is that Plato gives space as its essential definition, i.e. identifies matter and space. This interpretation, though often called in question,[7] still holds the field.

---

[1] 407 b 1-5.   [2] 407 b 1.   [3] *De Caelo* B. 1. 284 a 27.
[4] 407 a 32.   [5] 407 b 13 sqq.   [6] 411 b 5.
[7] One of the difficulties is that Plato strenuously rejects 'the void' and so

In one passage,[1] however, Aristotle's method of reading philosophy backwards results in a considerable variation from his usual account. He says that Plato identified Matter with 'privation', i. e. the direct contrary of Form. Teichmüller stigmatizes this 'unheard-of reproach' as a 'crying injustice'[2] to Plato. But Aristotle's statement is very easily explicable, and he has himself (even in this very passage) supplied us with the means of checking his own deductions.[3] He is discussing Plato's Matter from the point of view of his own system, according to which Matter and privation are differentiated from each other. Now Aristotle is correct in saying that Plato had not distinguished these two, and the Platonic Matter, moreover, is certainly not that of Aristotle, whose conception was very different. But to say therefore that Plato identified his Matter with Aristotle's privation is —while a natural enough conclusion—plainly quite unjustifiable.

Connected with this is the question whether Aristotle means to include Plato among those who said Matter was 'the bad'. If he did, this would be another injustice to Plato, arising from the above identification. For if, in Plato's system, Matter is simply the 'privation' of the One, i. e. the Good, plainly Matter is identical with Evil. But though Aristotle states that Plato makes Matter 'the ground of evil' and refers to its 'baneful power' on the Platonic theory, it is almost certainly Xenokrates alone to whom he alludes as identifying Matter with 'the evil principle', and

---

often uses its impossibility to explain certain phenomena that he may be called the author of the theory of *horror vacui* ; v. Bäumker, pp. 179-80, on this difficulty.

[1] *Physics* i. 9.

[2] ' eine schreiende Ungerechtigkeit ' (*Studien zur Geschichte der Begriffe*).

[3] 192 a 10 μέχρι μὲν γὰρ δεῦρο προῆλθον ὅτι δεῖ τινὰ ὑποκεῖσθαι φύσιν κτλ., which means that the Platonic matter after all is more than 'non-being'.

therefore of this further misconstruction of Plato Aristotle
stands acquitted.[1]

4. Still less reason is there for impugning the value of
the authority of Aristotle on the question of Plato's deri-
vation of the elements. According to Mr. Archer-Hind,
'Plato was presumably as well aware as any one else of the
impossibility of forming solids by an aggregation of mathe-
matical planes . . . it is entirely preposterous to suppose
that the most accomplished mathematician of his time was
not fully alive to a truth which, as Aristotle himself admits,
ἐπιπολῆς ἐστὶν ἰδεῖν.'[2]   But not only have we the plain
evidence of the *Timaeus* that in this respect Plato was still
under Pythagorean influence ; the Academy after him, as
we learn from Aristotle,[3] and as we have seen above,
maintained the same doctrine, viz. that solids could be
built up out of planes. As Zeller says, 'Aristotle here
understands the Platonic doctrines quite correctly.'[4]   Even
M. Milhaud, who is not disposed to underrate the Platonic
mathematics and on this point suggests a new explanation
by taking Plato's space as '*full* space', admits that Plato's
theory is 'an extremely curious one'.[5]   Milhaud is cer-
tainly wrong, however, in saying that Aristotle in this
connexion 'confounds Demokritos with Plato'.[6]   In a

[1] A. 10. 1075 a 35 τὸ κακὸν αὐτὸ θάτερον τῶν στοιχείων ; cf. Θ. 9 ; N. 4. 1091 b 35
τὸ ἄνισον = ἡ τοῦ κακοῦ φύσις.   Bonitz (p. 588) thinks Plato alluded to as well as
Xenokrates in this last passage.   He refers in proof however merely to
A. 6 fin. (988 a 14), which says that according to Plato evil is *caused* by ὕλη ; cf.
τὸ κακοποιὸν αὐτῆς (*Phys.* i. 9. 192 a 15).   It is expressly said to be Pythagorean
to set up κακόν and ἀγαθόν as absolute opposites (*Met.* A. 5. 986 a 26).   Bäumker
(pp. 205–6) thinks this doctrine of Matter as 'the bad' can be ascribed to the
later Plato, but it has not been shown even that Plato does so.

[2] Archer-Hind, *Timaeus*, p. 202 n.   This is but one among many instances of
the partisan spirit in which throughout his edition of the *Timaeus* he champions
Plato at the expense of Aristotle.   Cf. p. 184, where Aristotle is declared to
have 'no right' to contradict the nineteenth-century hypothesis of Dr. Jackson.

[3] *Met.* A. 9. 992 a 10–23 with Alexander ad loc.

[4] Zeller, *Plato* (E. T.), p. 375 n.   [5] Milhaud, pp. 299, 320.

[6] Milhaud, p. 303.

striking passage [1] Aristotle expressly distinguishes the logical atomism of Plato and Xenokrates from the physical atomism of Demokritos. The latter, he says, put his trust in theories that were 'physical, i. e. appropriate to his subject'; Plato, on the other hand, had never been 'at home in the physical sciences'.[2]

5. Finally, a very interesting problem is presented by a passage in Aristotle's *De Caelo*. [3] Aristotle is discussing the question 'Is the earth stationary or not?' and, according to the reading of Simplicius and the best manuscripts, writes as follows: 'Some say that the earth rests on its centre and is piled up about and revolves around the axis of the universe, as we read in the *Timaeus*.' It is now universally admitted that Plato thought of the earth as stationary, and the only question is, How explain the remark of Aristotle? Has he misread the *Timaeus* and misrepresented Plato?

Gomperz [4] thinks Aristotle is alluding to Plato's conversation or lectures after the date of the *Timaeus*, and finds a confirmation of his view in a passage of the *Laws* [5] where Plato alludes in a mysterious way to the newly promulgated doctrine of the youngest Pythagoreans, that the earth revolves on its axis. The passage, however, does not support this hypothesis,[6] and had Aristotle heard the doctrine from Plato personally he would have said so. Undoubtedly the right explanation is that Aristotle is here

---

[1] *De Gen. et Corr.* i. 2. 315 b 30 sqq. With equal explicitness Plato is contrasted with Leukippos in i. 8. 325 b 25.

[2] ὅσοι ἐνῳκήκασι μᾶλλον ἐν τοῖς φυσικοῖς κτλ., 316 a 6.

[3] *De Caelo* ii. 13. 293 b 30 εἰλεῖσθαι καὶ κινεῖσθαι περὶ κτλ. The above translation would be the literal one (εἰλεῖσθαι, 'formed into a ball,' 'globed round'); but probably the two words are used synonymously, καί being explicative. The Berlin text gives ἴλλεσθαι περὶ, omitting καὶ κινεῖσθαι.

[4] *Griechische Denker*, ii, p. 609 n.   [5] vii. 821 sqq.

[6] Moreover, Aristotle says nothing about the earth's own axis, but, like the *Timaeus* (40 C), uses the phrase ὁ διὰ παντὸς τεταμένος πόλος, i. e. 'the axis of the universe'.

speaking of the interpretation given to the words in the
Timaeus by the later Platonists, who returned to the old
Pythagorean doctrine that the earth with the other heavenly
bodies revolved around the central ' fire '.   The Platonists
misinterpreted the semi-obsolete [1] word which had been
used by Plato in the *Timaeus* ; and Aristotle, whether he
made this mistake himself or not, gives to the passage the
interpretation of contemporary Platonism.

C. *Criticisms in the Politics.*

Hegel's fine remark, that Plato was 'not ideal enough ',
applies to his metaphysics when he is compared with
Aristotle, but hardly to his Ethics and Politics.   Here
we feel that of the two great philosophers the deeper
mind was Plato's.   Hence it is no mean testimony to the
fairness and ability of Aristotle as a critic that his discus-
sion of Plato's *Republic* in the second book of the *Politics* [2]
is generally admitted to be not merely the best of all his
criticisms of his master, but at the same time one of the
most interesting and trenchant passages in the whole of
the *Politics*.   The crispness of the language, the neatness
of the rejoinders, the practical common sense with the philo-
sophic penetration that goes beyond it, the judicious sanity
of its estimate of revolutionary schemes,   have made it
a model of criticism for all time.   It is a thoroughly
gentlemanly criticism, [3] and the odd nature of certain of

[1] Semi-obsolete, i. e. in the sense which Plato still gave to it.   On the
whole passage, v. *Journ. of Phil.* v, p. 206 (Campbell).   The Platonists natu-
rally took the word εἰλλομένην to mean ' rolling ' ; cf. Arist. *Meteor.* 356 a 5,
where it is used in this sense ; v. further on the passage, Zeller, *Plato* (E. T.),
pp. 380–1 n., and Archer-Hind's note on *Timaeus* 40 B (pp. 132–3).

[2] *Politics* ii. 1 sqq.

[3] Its real philosophic character may be better appreciated if it is compared
with the attitude of others who have taken it in hand to castigate Plato,
whether in the tone of rabid abuse or ridicule which Plato himself anticipated
(Rep. v) or in the narrow, prejudiced and offensive manner of De Quincey
(v. his collected works, Masson, vol. viii).

the objections, coupled with the presence of one or two at first sight inexplicable misapprehensions, admits, we shall see, of very easy explanation.

The tone of the chapter on the *Laws* is different.[1] It is occupied exclusively—apart from the question of over-population—with what are, comparatively speaking, details, and has been excellently called a 'somewhat grumbling criticism'.[2] The reason is fairly obvious; the constitution of the *Laws*—though the mathematics and religion of that work give it a wholly different appearance from the *Politics*—is really very close to that of the ideal state of Aristotle himself. He had reason enough for being dis-satisfied with the *Laws*[3] and his real criticism is the *Politics* itself. But, whereas in the case of the *Republic* he could easily point out a sufficient number of ἀπορίαι to justify him in constructing a new ideal state, this is not so easy with the *Laws*. Hence the criticisms in general are trivial and in some cases unjustified.[4]

D. *Criticisms in the Ethics.*

As for the famous criticism in *Ethics* i. 6 only three brief remarks may here be made :—

(*a*) This is one of the clearest of the cases in which Aristotle's arguments, when compared with the exposition of his own doctrine as a whole, are seen to be mere Socratic fence. There is a great difference between the two philosophers, both on the special question of teleology, and on the connexion of Ethics with Metaphysics, and morality with religion. But this is not brought out in the criticism at all.

(*b*) The contention [5] that the Aristotelian categories

---

[1] *Politics* ii. 6.   [2] Newman, ii, p. 264.   [3] Newman, i, pp. 449-54.
[4] v. Newman's notes, ii, pp. 264–81, especially on 1265 a 39, 1265 b 19 and 22, 1265 b 31, 1266 a 1, a 13, a 17.
[5] v. Burnet, *Ethics*, Introd., p. l.

were accepted by the contemporary Academy would certainly make the arguments less unreal, and bring the passage more into accordance with Aristotle's favourite method of refutation. But the evidence for such a supposition is of the smallest, and Aristotle constantly elsewhere uses his logical engine of the Categories for purposes of overthrow.

(c) It must be admitted at once that, as against the Plato of the dialogues, the criticism is a failure. The main point of the chapter seems to come, so to speak, in the postscript: the universal good is abstract and transcendent, χωριστὸν αὐτό τι καθ᾽ αὐτό. This might apply to the *Republic*: it certainly does not to the *Philebus*. But Aristotle is probably thinking little of either; he has in view the Idea of the Good as it had become in the treatment of the Platonists, or indeed in the later treatment of Plato himself, when he reduced the Ideas to Ideal numbers, and therefore naturally identified the Good with the One. To this One, Aristotle tells us, as also to the numbers, Plato attributed an existence independent of real things (παρὰ τὰ πράγματα).[1]

The only other important criticism of Plato in the *Ethics* concerns the doctrine of pleasure. Aristotle has here also been supposed unfair to Plato, but in this case without reason. For (a) Zeller,[2] who talks of Aristotle's 'perverse apprehension' of Plato's utterances on this subject, does not distinguish between Aristotle's criticism in Book X of the *Ethics* and that in Book VII. In the latter there is no reference to Plato whatever; Aristotle attacks Speusippos or other theorists who had used the arguments of the *Phaedo* or *Philebus* to support an indictment against pleasure. (b) In *Ethics* x. 3[3] Plato's theory of pleasure as a γένεσις is attacked, and Aristotle at first sight conveys

---

[1] *Met.* A. 6. 987 b 29.   [2] *Plat. Stud.*, p. 283.   [3] 1173 a 31 sqq.

the impression that in his account of the 'painless' delights of knowledge, sight, &c., he is stating an important new truth. But the explanation is that Plato had certainly attempted to explain even the 'pure pleasures' as πληρώ-σεις,[1] and so had supported the theory of pleasure as a γένεσις all along the line. The pure pleasures, though not preceded by pain, certainly are preceded by κένωσις and ἔνδεια, so long as these are imperceptible. Odours, on this theory, would be the food of the nostrils, and there *would* be pain felt at the absence of smell did not the κένωσις or depletion of the nostrils happen to be imper-ceptible. Aristotle simply asks if Plato can point out the ἔνδεια in the pleasures of knowledge, smell, sight, music, memory or hope. Plato would have to answer that it could not be shown, it was merely hypothetical, an assump-tion in order to make his theory consistent throughout. There is consequently nothing at all 'disingenuous'[2] in Aristotle's criticism. And though the other arguments are slighter, there is no excuse whatever for the remark that 'as usual, Aristotle's objections miss the point'.[3]

Conclusion.

Nothing is easier than to cry out against Aristotle's misunderstandings and perversions of his master's meaning, but it is much more profitable to try what can be done by way of explaining them. As this explanation has already unavoidably formed great part of our inquiry as to how far Aristotle has actually misrepresented Plato, it only

---

[1] *Tim.* 65 A ; cf. *Phil.* 51 B and *Rep.* 584 C.

[2] 'very disingenuous,' Stewart, *Ethics* ii, p. 417, but his note on 1173 b 13 at once explains this statement and disproves it.

[3] Archer-Hind (*Timaeus,* p. 236), who mistranslates the passage *Eth.* x. 3. 1173 b 5 (v. Burnet) and does not say a word of Aristotle's most important argument. This is one of many cases in which it might be found that Aristotle is at a much less remove from 'King and Truth' than his critics, and more correctly apprehends Plato's thought than the latter's would-be champions.

remains to sum up under a few general heads some of the main reasons which lend to the criticisms an appearance of perversity, captiousness or unfairness, which is really quite foreign to Aristotle's intention.

Fortunately there is here no question of any of the motives which actuated either Leibnitz's criticisms of Spinoza or Schelling's of Hegel.[1] There is here nothing of that acrimonious hostility which has sometimes disgraced the philosophy of the moderns; none of the systematic depreciation by Leibnitz of the arch-heretic Spinoza, to whom he owed so much; none of the bitter rancour with which Schelling pursues Hegel; none of the scurrilous abuse lavished on the latter by Schopenhauer. Of impatience in the criticisms, of causticity, of the pungency[2] which is illustrated for us by the surviving specimens of his wit, there is certainly no lack[3]; but of acrimony or personal ill-feeling a review of all the passages reveals no trace or shadow. Zeller has shown how little weight is to be attributed to the gossip of the 'little men' of a later age. Against the tales of an Aelian we have not only better evidence on the other side, we have the express testimony of Aristotle himself. In a famous sentence of the *Ethics* he tells us that Plato and Plato's friends were his friends, but not to the prejudice of the sacred claims of truth. In the *Politics*[4] he pays a graceful tribute to his

---

[1] v. Stein, *Leibnitz und Spinoza*, pp. 229, 252 sqq., &c., and for the relations of Hegel to Schelling v. Lecture on this subject included in Hutchison Stirling's *What is Thought?*, &c., pp. 249 sqq.

[2] v. the κάλλιστα ἀποφθέγματα in Diog. Laert. Bk. v. 11, §§ 17–20.

[3] τὰ γὰρ εἴδη χαιρέτω, κενολογεῖν, ἄτοπον καὶ ἀδύνατον, κενόν ἐστι παντελῶς (*De Sensu* 437 b 15): Πλάτωνι μέντοι λεκτέον (*Phys.* iv. 2. 209 b 33): *Met.* Δ 29. 1025 a 6 ὁ ἐν τῷ Ἱππίᾳ λόγος παρακρούεται: N. 3. 1091 a 10: N. 4. 1091 b 26 πολλή τις εὐπορία ἀγαθῶν.

[4] *Politics* ii. 6. 1265 a 11. We may compare one of Spinoza's references to his father in philosophy, Descartes. In his theory of the 'Affects', according to Spinoza, the 'celebrated Descartes' *nihil praeter magni sui ingenii acumen ostendit* (*Ethics* iii, Preface).

master's writings : 'All the discourses of Socrates alike are characterized by brilliancy, grace, originality and the spirit of inquiry.'

Aristotle then might at least say that he 'loved the man and did worship his memory this side idolatry as much as any'. But not only so, we have actually some evidence that Aristotle and Eudemos worshipped Plato as a god,[1] whom a bad man could not mention even in praise without blasphemy, and to whom even a worthy pupil, such as Aristotle, preferred to allude indirectly, so as not to 'take his name in vain'. For what other reason does he so often criticize Plato in the plural number or as 'Socrates', if not to avoid calling attention to the differences between himself and his revered master ? [2]

No explanation, therefore, can be accepted which refers to personal reasons, the constant sharpness or occasional unfairness of the criticisms. The theory of deliberate or purposive misunderstanding can at once be ruled out of court.

To come then to *verae causae*. (1) Aristotle, some thirteen years after Plato's death, appeared at last as the head of a new school. As against the rival Academy he had to justify himself to the world for doing so, and he is therefore inevitably concerned to find differences from his master just where there was most appearance of indebtedness or similarity. In Leibnitz's criticisms of Spinoza we find exactly the same thing ; only Leibnitz makes the assertion

---

[1] v. Wilamowitz-Möllendorf on the well known elegy to Eudemos ('Aristoteles und Athen' sub fin.).

[2] Similarly Aristotle (after the *Topics*) seems consistently to avoid express mention of Xenokrates, who was at the head of the contemporary Academy. We know that Aristotle and Xenokrates were great friends ; yet the latter is certainly not spared in attack, e. g. in *De An.* i. 4. 408 b 32 his opinion is, of all those discussed, πολὺ ἀλογώτατον. Simplicius observes (Schol. 488 b 3) that it is always simply Plato's δόξα which is the object of Aristotle's attack.

that there is no 'Spinozism' in any part of his teaching[1] :
Aristotle, on the contrary—though for the above reason
his direct expressions of agreement with Plato are fewer
than they otherwise might have been—has yet, considering
the impersonal nature of all his work,[2] rendered in the
most unequivocal terms his τροφεῖα of gratitude for the
master's teaching.

Teichmüller,[3] it is true, holds that if Aristotle had been
quite just to Plato he would have put his own services to
philosophy in the shade, seeing that his own doctrine is
nothing but a systematized Platonism.   But neither state-
ment is adequate, and certainly not the latter.   Aristotle
does advance beyond Plato, and he is *not* 'throughout his
works'—if indeed he is at any time—'a mere Eristic seek-
ing to prove these advances against his predecessor.'
Teichmüller exaggerates the element of opposition to
Plato,[4] and takes one single explanation of it as by itself
sufficient.

(2) (*a*) Aristotle is arguing against contemporaries (οἱ νῦν).
The master had been dead for over fourteen years, but his
more commonplace pupils in the Academy were living and
active, and Aristotle, the founder of the biological sciences,
had little sympathy with their Pythagorizing substitution
of mathematics for concrete philosophy.

(*b*) It is Plato's lectures rather than his written dialogues
of which Aristotle is mainly thinking in his references.
In the *Topics*,[5] e. g. he cites three instances of novelty of

----

[1] Stein, *Leib. und Spin.*, p. 230.

[2] καθάπερ καὶ ὁ γενναῖος Πλάτων φησίν in *De Mundo* 7. 401 b 24 is just one
of the indications that this work is spurious.   It is felt at once that Aristotle
could no more have written like this than Thucydides.

[3] *Studien zur Geschichte der Begriffe*, Berlin 1874.

[4] Thus it is nothing but the wish clearly to define his position that leads to
the phrase ἡμεῖς δέ φαμεν after the statement or refutation of a theory of the
Platonists or Plato (cf. *De Genn. et Corr.* 329 a 24, *Phys.* 192 a 3).

[5] vi. 2. 139 b 32.

epithet from Plato, and not one of these is to be found in the dialogues.[1]   Again, it is a very striking fact, that with all Aristotle's attacks on the Ideal theory, only a single one of the Dialogues is ever alluded to in connexion with it. This is the *Phaedo*, and here he appeals no less than three times[2] to one identical passage[3] which seems to have strongly (and unfavourably) impressed itself on his memory.

(*c*) Some of the misunderstandings are probably simply due to confused and imperfect recollection of passages which he did not trouble to refer to.   Just as in his frequent quotations from Homer he may sometimes be very wide of the mark, as when he attributes to Calypso words which are not even those of Circe but are actually spoken by Odysseus to his pilot,[4] so in quoting Plato he constantly forgets the connexion.   Thus in the sole reference that can be found in Aristotle to the *Politicus*[5] he has not only carelessly misquoted the passage, but alludes vaguely even to its author by the very extraordinary phrase 'Some one in former time' (τις . . . τῶν πρότερον).   Zeller[6] does not do justice to the strangeness of these words when he says that here 'the definite person whom Aristotle is thinking about is more distinctly and clearly referred to' than in the other anonymous mentions of Plato.   Ἔνιοι and τινες and οἱ λέγοντες are regular : τις τῶν πρότερον is unique.   The reference remains 'singular though not unaccountable'.[7]

Again we are told that Aristotle had made abstracts or

---

[1] Cf. *De Gen. Corr.* ii. 3. 330 b 16 καθάπερ Πλάτων ἐν ταῖς διαιρέσεσιν, and *De Part. Anim.* i. 2 (Zeller, *Plato*, E. T., pp. 46-7).

[2] One of these (*Met.* M. 5. 1080 a 2) is a duplicate of A. 9. 991 b 3.   The other is *De Gen. Corr.* ii. 9. 335 b 10.

[3] *Phaedo* 100 B sqq.   [4] *Ethics* ii. 9. 1109 a 31.

[5] *Politics* iv. 2. 1289 b 5 ; cf. *Polit.* 303 A, B.

[6] *Plato* (E. T.), p. 63 n.   As we have seen, Aristotle's mode of anonymous mention is not the indirectness of disparagement, as it is e. g. in Leibnitz's 'Scriptor quidem subtilis at profanus' (of Spinoza).

[7] Campbell, Introd. to *Polit.* p. 55.

epitomes of the *Republic* and *Timaeus*.[1]   If, after doing so,
he thought he might in future consult his memory in
preference to documentary evidence, we have an explana-
tion of occasional perversities of allusion.[2]   Aristotle leaves
us with the impression that he did not know the *Republic*
so well as he ought to have done.

(3) We have already seen traces of Aristotle's intense
dislike of the mythical in philosophy.   In a passage of the
Meteorologica[3] he says it is ridiculous (γελοῖον) to suppose,
like Empedocles, that one has given any explanation by
talking of the sea as 'the sweat of the earth'.   'For
purposes of poetry, no doubt, this is adequate enough
(metaphor being an adjunct of poetry), but for a scientific
knowledge of nature it is not.'   This feeling appears already
in the *Topics*,[4] where, in the censure of some metaphorical
definitions (all of them seemingly Platonic), it is remarked :
'Everything said metaphorically is obscure.'   Consequently
he has a very real objection to Plato's ' poetic metaphors '.[5]
Of Plato he might have reversed his dictum on Empedo-
kles and said he was ' a poet rather than a physicist ',[6] just
as even his language was half-way between poetry and
prose.[7]   Aristotle for the first time introduces a definite
philosophical style ;   so too he is for maintaining the
independence and severity of science.   He thought it high
time that the mythical should be banished from philosophy.
Its only *raison d'être* is that the true facts are unknown or
uncertain.   And in such a case Aristotle thinks that the
scientific procedure is to say so—οὐδέν πω φανερόν.[8]

---

[1] For the *Timaeus* v. Simplicius on *De Caelo* 284 a 27 (the passage on the
world soul), Schol. 491 b ; cf. Zeller, *Arist.* (E. T.), i. 62.

[2] e. g. *Politics* ii. 5. 1264 a 11, 36, b 15.   But v. *infra*, pp. 86 and 87.

[3] ii. 3. 357 a 24.   [4] vi. 2. 139 b 32.

[5] He missed σπουδὴ ἀποδεικτική, Λ. 8. 1073 a 22.

[6] φυσιολόγον μᾶλλον ἢ ποιητήν of Empedokles (*Poetics* i. 1447 b 19).

[7] Diog. Laert. iii. 37 (Rose, p. 78).

[8] *De An.* ii. 2. 413 b 25 ; cf. 403 a 8 and Rodier ad loc.

In spite of all this it still no doubt remains unfair to treat Plato's poetry as though it were science. But if Aristotle (conformably with his own principles) had refused to take any notice at all of Plato's 'fairy tale of science', he would have been thought still more unjust. As it is he never says of any of Plato's opinions what he does say of the Pythagorean notion of time, that it is 'too ridiculous to investigate its impossibilities'.

Parallel with the dislike of the metaphorical and the mythical is Aristotle's objection to *a priori* deductions in the field of Politics. This explains the sharpness of his criticism[1] on Plato's 'ideal history of evil' in Books VIII and IX of the *Republic*. It is not the case that Aristotle 'seems to have understood Plato's account as an attempt to describe the actual facts of Greek history'. This would be incredible in itself (for Aristotle could not suppose Plato to have been ignorant of the history of his own native Athens) and is refuted by a careful reading of the passage. Most of the objections are really on the basis of Plato's own theory, though Aristotle follows them up at once with a statement of the actual facts. Aristotle, as he admits himself, is never an 'indulgent' critic,[2] and his concrete mind is not satisfied with Plato's attempt at a 'philosophy of history'. It is sound, he thinks, neither as the one nor as the other.

(4) The great philosopher may write a valuable and excellent history of philosophy, as is proved by the first Book of Aristotle's *Metaphysics*, and by its modern parallel, Hegel's *Lectures*. But such histories will not be so reliable objectively as had they been written by lesser men; consequently we are not surprised to find the same charges made against Aristotle as have also been made against

---

[1] *Politics* v. 12.   [2] N. 3. 1090 b 14.

Hegel. Aristotle, in a word, discusses previous thinkers from the standpoint of his own system.

An excellent example is furnished by his investigation of the concept of Space.[1] Plato had nowhere in the *Timaeus* expressly discussed the nature of Space as such. But Aristotle has asked himself as usual: 'What have my predecessors taken Space to be?' And the answer is perfectly natural and inevitable: Plato identifies it with Matter (ὕλη). Zeller, therefore, is quite correct in saying that 'while Plato asks the question What is Matter? and answers Space, Aristotle asks the question What is Space? and makes Plato answer Matter'.[2] Aristotle would himself have admitted that Plato's problem after all had been different from his own; he says before beginning his inquiry, that he has no previous discussions to go upon.[3]

Aristotle more than once in this way discusses under Physics what had been given by Plato as rather of metaphysical interest. A curious and somewhat different case is where Aristotle in the *Meteorologica*,[4] after discussing why the sea does not swell in volume with the mass of river water that flows into it, roundly declares that 'what is written in the *Phaedo*[5] about rivers and the sea is impossible', and proceeds to show how. This, as has been said, is like 'testing the geography of Dante's *Inferno* by the laws and discoveries of physical science'.[6] Still in a sense it is really more of a tribute to his master than a criticism. Aristotle is aware that Plato has no scientific theory on the question he is discussing, but he thinks it worth while giving an exposition and criticism even of his mythical or probable account in the *Phaedo*.

[1] *Phys.* iv. 2.   [2] *Platonische Studien*, p. 212.
[3] *Phys.* iv. 1. 208 a 35.   [4] 355 b 34.   [5] 111 C.
[6] W. D. Geddes, *Phaedo*, p. 151.

Still another example may be taken, this time from the *Metaphysics*. Aristotle says that Plato in the *Sophist* identifies 'Not-being' with falsehood (τὸ ψεῦδος).[1] Now Plato in that Dialogue proves that *if* τὸ μὴ ὄν is existent, then such a thing as ψεῦδος (ψευδὴς δόξα, ψευδὴς λόγος) becomes possible. But Aristotle, seeking to find an answer as to which of the three (Aristotelian) kinds of Not-being Plato had been thinking of when he used the word, has naturally but wrongly been led by the words of the *Sophist* to identify Plato's 'Not-being' with his own 'not-being in the sense of the false' (τὸ μὴ ὄν ὡς ψεῦδος).

It is obvious that this 'accommodating' procedure will sometimes lend an appearance of great caprice to Aristotle's interpretations of Plato. But even yet whole histories of philosophy are written under the shadow of the fallacy that the problems of one age or thinker are present in the same way to every other.

(5) Aristotle is the analyst *par excellence*, and, aiming at definiteness and clearness of doctrine, he is not content till he has reduced every theory to the special γένος to which it belongs. This is a natural result of his subdivision and systematization of all the departments of philosophy. In Plato's *Republic* we find together (even in the same book) Physics, Psychology, Ethics, Politics, Metaphysics; Aristotle has separate compartments for all of them. The difference between the two minds comes out very clearly in a well-known passage of the *Politics*,[2] where Aristotle alludes to the 'extraneous discourses' with which Socrates has filled the *Republic*. We here, if anywhere, catch a glimpse of the real Aristotle from under his mask of impersonality, and the pupil who compiled the *Magna Moralia* reproduces the genuine spirit of his master when

[1] N. 2. 1089 a 19.
[2] *Politics* ii. 6. 1264 b 39 τοῖς ἔξωθεν λόγοις πεπλήρωκε τὸν λόγον κτλ.

he says: Plato was wrong in mixing up virtue with his treatment of the Good—οὐ γὰρ οἰκεῖον.[1]

This frame of mind will obviously not be the best for doing complete justice to Plato. Further it goes along with an attention to details and individual results, which lends to some of Aristotle's remarks on Plato an appearance of very carping criticism—what Teichmüller calls *Krittelei*. But this only means that in the words of the *Parmenides*, philosophy has now taken a 'firm grip',[2] and the philosophic thinker no longer fears the falling into some 'bottomless pit of absurdity'[3] by discussion of the seemingly trivial and unimportant. Plato in his later dialogues had himself here shown the way.

Nor again is it any discredit to Aristotle that his animadversions should often take the form of a criticism of language. Himself the creator of a technical philosophic vocabulary, he could not neglect the terminology of others. Thus his first few arguments against the *Republic* of Plato are 'footnotes' on the ambiguity of the words 'unity' and 'all'.[4] He was reproached for this tendency even in antiquity; thus Philoponus[5] says (wrongly) that in reproaching Plato for identifying space with 'the participant' and yet not locating the Ideas in space, Aristotle 'as usual, attacks the mere word' (viz. space). Similarly the modern critic, speaking of Aristotle's discussion of Plato's theory of vision, says it is 'impossible to exonerate it from the charge of ὀνομάτων θήρευσις'.[6] But if so, the case in point would prove that philosophy was nothing else than the kind of 'word-catching' which Aristotle is here accused of. The passage (*De Sensu* c. 2) is quite fair. Plato had attempted to explain why we do not see in the dark.[7] It

---

[1] *Mag. Mor.* i. 1. 1182 a 28.   [2] *Parm.* 130 E.   [3] *Parm.* 130 D.
[4] *Politics* ii. 2.   [5] Quoted in Bäumker, p. 181².
[6] Archer-Hind on *Timaeus*, p. 157.   [7] *Timaeus* 45 C sqq.

is because the light issuing from the eye is changed and 'extinguished' when the air it meets has no fire in it. Aristotle replies that 'extinction' is here a wholly irrelevant concept; it applies to fire or flame, but neither of these terms can be predicated of light.[1]   His own explanation makes no use of fire.[2]

(6) Lastly, and most important of all, comes the fact we have so often had occasion to notice, that Aristotle's criticisms are dialectical. This means strictly that they are arguments based not on true premises, but on premises admitted by the other side. But the word can be used loosely of all difficulties (ἀπορίαι)[3] that rest on popular premises in general. The 'aporetic' method proceeds on the principle that if a sufficient number of shafts be levelled at a target, some of them at least are bound to hit the mark. In the Platonic dialogues Plato contrives to let us see when his arguments are not serious; in Aristotle, however, the method has stiffened, the procedure looks more dogmatic and more of an insult to the reader's intelligence. Yet Aristotle himself tells us what to expect; his method is to register 'all possible objections' (τὰς ἐνδεχομένας ἀπορίας).[4] And that he is true to this plan is easily proved.

For (1) it is impossible otherwise to explain the frequency with which objections good, bad, and indifferent are heaped up together or jotted down in parenthesis with no regard for order and system, and no link of connexion except his favourite particle ἔτι. One excellent example among many is afforded in *Metaphysics* M, where after his main refutation of the Ideal numbers, the attack is renewed in c. 8, and a fusillade of varied objections follows, some of them of an

---

[1] 437 b 15 sqq.   [2] v. *De An.* ii. 7; *De Sensu* c. 3.

[3] Also δυσχερῆ, δυσχέρειαι, ταραχή, δυσκολίαι. Syrian (in *Met.* 1080 a 9) calls the arguments against the Ideas ἐπιχειρηματικοὶ τόποι.

[4] *Met.* A. 7. 988 b 21 τὰς ἐνδεχομένας ἀπορίας διέλθωμεν περὶ αὐτῶν. Then follows the criticism of the earlier philosophers (c. 8) and of the Academy (c. 9).

extremely questionable character. So again in the *Politics*[1]
Aristotle assumes in one passage that Plato's community
in women and children is to be limited to the guardians;
in another,[2] after propounding it as an open question
whether, according to Plato, women, children, and property
are to be held in common also by the agriculturists, he
proceeds to set forth the difficulties on either supposition.[3]

(2) Not only, for this reason, is it true that many of the
criticisms are weak and do not seem to bite; others actually
contradict Aristotle's own rulings or remarks elsewhere.
Thus one of the proposals of Plato's *Laws*—that of the
double homestead—which Aristotle criticizes in the *Politics*[4]
as fatal to domestic economy, is, after all, adopted by
himself.[5] So again he objects to the Platonists that they
make matter the source of multiplicity, for 'probabilities',
'analogies', and 'first appearances' are against such a
view.[6] At first one wonders if this passage is not a deser-
tion of Aristotle's own first principles, till it is remembered
that Aristotle need not himself believe in the validity of
the objections he presents to opponents. One more ex-
ample may be cited, from a chapter which is full of
argumenta ad homines as also *ad Platonicos*. 'The doctor
does not consider health in general, but the health of man,
or rather of this particular man; it is the individual that
the doctor cures.'[7] Aristotle's own doctrine recognizes
both the particular and the universal side of the art of
medicine, as of all arts[8]; but it is easy to see which side
will be emphasized when he is making a point against the
Platonists.

[1] 1262 a 40.   [2] 1262 a 14.

[3] There is therefore no unfairness: Plato's position is being surveyed on all
sides. Moreover the *Laws* shows Plato to have believed in communism as the
true ideal for the whole state, v. Newman, *Politics*, Introd., p. 159.

[4] 1265 b 25.   [5] 1330 a 14 sqq.   [6] *Met.* A. 6. 988 a 1–7.

[7] *Eth.* i. 6. 1097 a 11.   [8] *Rhet.* i. 1356 b 29, *Eth.* 1180 b 20, *Met.* A. 981 a 15–20.

Finally, under this head may be brought certain other arguments, of which we can only say that they are dictated by pure eagerness to score a point. We must allow for the combined pugnacity and pertinacity of Aristotle's nature; he was a very militant philosopher, and all is fair in the war against the Platonists. Thus, in reference to the Ideal numbers, he asks whence come the units that make up the Indeterminate Dyad?[1] *They* must come from a Dyad also, and, as Alexander adds, it is a strange doctrine indeed that would make one come from two instead of vice versa. So again in the *Ethics*,[2] Aristotle 'plays the Philistine' in his well-known gibe about 'the weaver and the carpenter'. Similarly, in the *Politics*,[3] Aristotle need not have been unaware of Plato's real opinion as to the happiness of the guardians. It was a point in which his opinion really differed from that of his master; and he simply yields to the natural temptation of quoting Plato in his own support.
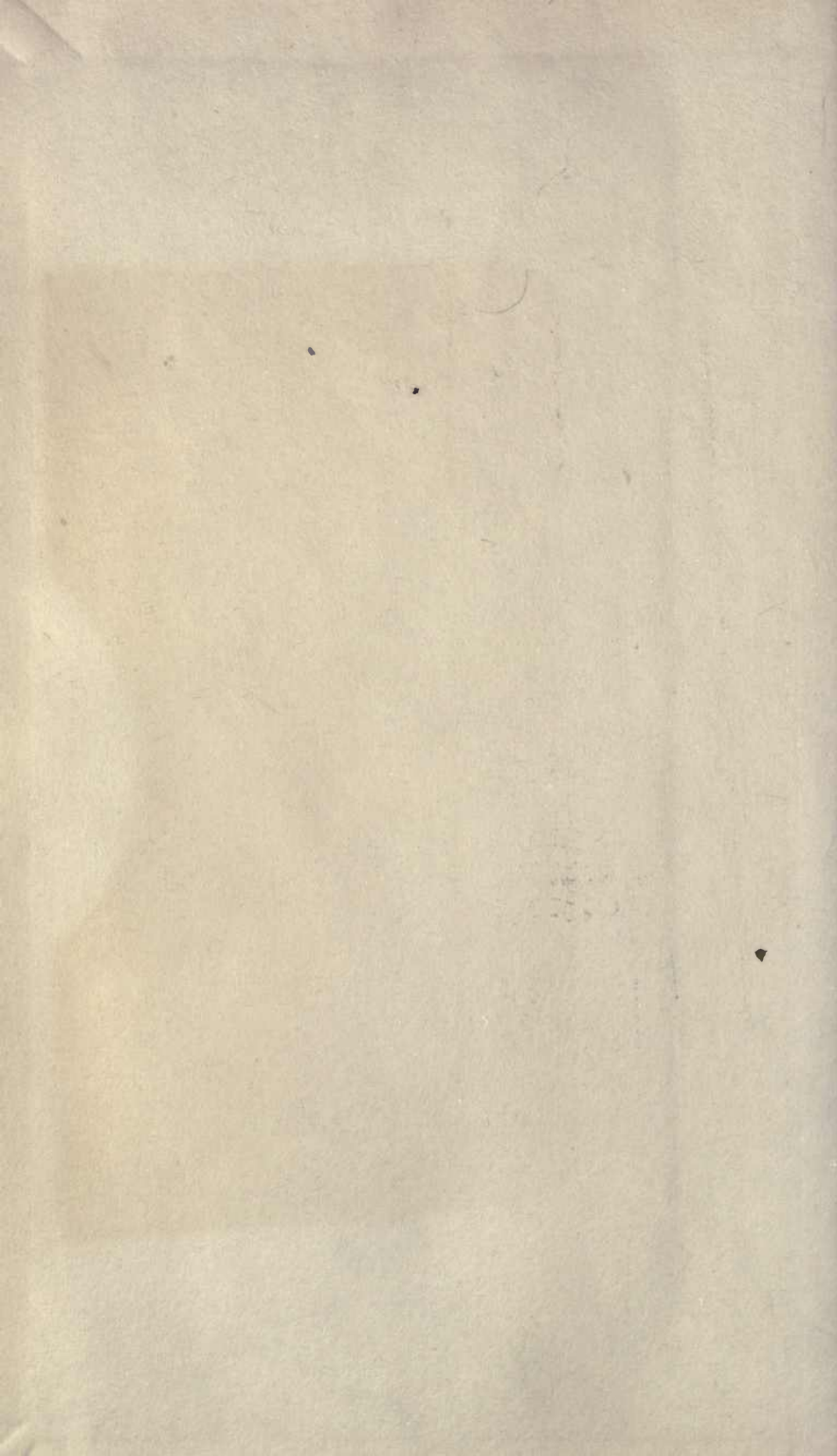
It may readily be admitted that Aristotle does not show to the best advantage in his criticisms of Plato. He is too full of his own point of view to be a sympathetic critic, and sometimes too near his master to be an effective one. Moreover, the thought of Plato refuses to be fettered within the categories of any system; the whole is more than the sum of its parts, the spirit of Platonism is more than the totality of its doctrines. But nothing could have been more wisely ordered by the 'time spirit' of Greek thought than that Plato's work should be continued and

---

[1] *Met.* A. 9. 991 b 31 with Alexander ad loc. Similarly he is perfectly well aware of the real nature of Plato's ' great and small ', but at M. 8. 1083 b 23 he treats them as though they could be separated.

[2] i. 6. 1097 a 8.

[3] *Politics* ii. 5, § 27. ' It seems incredible that any one who has read the beginning of *Rep.* Bk. iv should have so utterly misunderstood it ' (Campbell and Jowett, iii, pp. 162-3). It *is* incredible. Aristotle in his ἀπορίαι need no more be taken always *au pied de la lettre* than Plato in the dialogues.

extended by one so different in temperament, yet so like in universality of mind and enthusiasm for philosophy. It is not proved that Aristotle is guilty towards Plato of any fundamental misrepresentation; and Plato cannot be said to be fully known till he is re-read in the light of Aristotle.