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THE USE OF εἶδος AND ἰδέα IN HIPPOCRATES.

AFTER reading carefully the essay which, in his recently-published *Varia Socratica*, Part I., Prof. A. E. Taylor has written on the use of the words εἶδος and ἰδέα in the Greek literature of the Socratic and Platonic periods, I find myself on the one hand in agreement with him as to the importance of such linguistic investigations for the understanding of Plato, and on the other in frequent disagreement with him as to the meaning of the words in the passages he cites, and the inferences he draws from them. Thinking that Prof. Taylor's analysis of the use of the terms in Hippocrates is very far from final, I offer in this paper a further contribution to their interpretation, confining myself as far as possible to the question, What do εἶδος and ἰδέα mean in the Hippocratean writings?

The date of the several works is a problem into which I do not enter, assuming with Prof. Taylor that they belong as a body to the late fifth and early fourth centuries; but I am fully aware that this collective treatment is not altogether satisfactory. My citations of the text are from Kühlewein's edition (K), so far as published; for the rest of the works from Littré (L): the references are by paragraph, volume and page. I make no attempt to distinguish between εἶδος and ἰδέα, which appear to be used almost interchangeably.

Prof. Taylor's results may be thus summarized. I am not quite certain about some of the details, because of the unsystematic nature of his exposition, but believe that my summary is substantially correct.

Prof. Taylor nowhere formally classifies the meanings of εἶδος and ἰδέα, but an arrangement under four main heads may be extracted from his account. The nucleus of meaning is *form*, or *structure*.

(i.) The first meaning is taken directly from popular usage. The words are here applied specifically to human beings in the sense of bodily shape or form, primarily as it presents itself to the eye, but extended to the structure and constitution of the body as a complete thing, not as merely seen. *Physique, body, constitution* are the proper renderings of the words in this application.

(ii.) The words are also used more widely for the form of things other than the human body. This group of meanings contains, as might be expected, considerable developments. (1) Sometimes the outer visible structure is emphasized, when the words may be rendered by *shape*, 'in shape like a trough.' (2) Or the inner structure may be included: *form, nature*, like φύσις.

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THE USE OF εἶδος AND ἰδέα IN HIPPOCRATES.

AFTER reading carefully the essay which, in his recently-published *Varia Socratica*, Part I., Prof. A. E. Taylor has written on the use of the words εἶδος and ἰδέα in the Greek literature of the Socratic and Platonic periods, I find myself on the one hand in agreement with him as to the importance of such linguistic investigations for the understanding of Plato, and on the other in frequent disagreement with him as to the meaning of the words in the passages he cites, and the inferences he draws from them. Thinking that Prof. Taylor's analysis of the use of the terms in Hippocrates is very far from final, I offer in this paper a further contribution to their interpretation, confining myself as far as possible to the question, What do εἶδος and ἰδέα mean in the Hippocratean writings?

The date of the several works is a problem into which I do not enter, assuming with Prof. Taylor that they belong as a body to the late fifth and early fourth centuries; but I am fully aware that this collective treatment is not altogether satisfactory. My citations of the text are from Kühlewein's edition (K), so far as published; for the rest of the works from Littré (L): the references are by paragraph, volume and page. I make no attempt to distinguish between εἶδος and ἰδέα, which appear to be used almost interchangeably.

Prof. Taylor's results may be thus summarized. I am not quite certain about some of the details, because of the unsystematic nature of his exposition, but believe that my summary is substantially correct.

Prof. Taylor nowhere formally classifies the meanings of εἶδος and ἰδέα, but an arrangement under four main heads may be extracted from his account. The nucleus of meaning is *form*, or *structure*.

(i.) The first meaning is taken directly from popular usage. The words are here applied specifically to human beings in the sense of bodily shape or form, primarily as it presents itself to the eye, but extended to the structure and constitution of the body as a complete thing, not as merely seen. *Physique*, *body*, *constitution* are the proper renderings of the words in this application.

(ii.) The words are also used more widely for the form of things other than the human body. This group of meanings contains, as might be expected, considerable developments. (1) Sometimes the outer visible structure is emphasized, when the words may be rendered by *shape*, 'in shape like a trough.' (2) Or the inner structure may be included: *form*, *nature*, like φύσις.

(3) They may be extended to objects which are not in themselves bodies, and in this connexion may have a semi-classificatory sense: *forms* or *types* of disease, etc. But Prof. Taylor insists that they never mean *class* or *species*, as *εἶδος* does in Aristotle.

(iii.) This use is specifically medical. It emphasizes and extends the appearance-side of the meaning, till the words stand for *symptoms* of disease, the form, shape, structure, etc., of the observed body or limb as it appears to the observing physician. I gather that Prof. Taylor regards this usage as underlying the employment of *ἰδέα* by Thucydides.

(iv.) In the fourth use the bodily side of the first and popular meaning is emphasized. (1) *Εἶδος* is used of the *stuff, matter, substance*, of a thing, e.g., of the heart and kidneys. And more especially it is Professor Taylor's object to prove that it is used (2) in a highly technical metaphysical sense to denote the *ἀπλὰ σώματα*, the elementary bodies. To say that *ἀήρ* is an *εἶδος* is to say that it is one of the ultimate unanalyzable bodily constituents of the *κόσμος* (p. 228). It is thus nearly equivalent to the later *στοιχεῖον*. This meaning he supposes to have come into medicine from the *φυσικοί*; and to explain how the word *εἶδος* can advance from the meaning of form or structure to that of primitive substance, he suggests as the connecting link the Pythagorean doctrine that the difference between one kind of matter and another is that of geometrical figure (p. 246). Because the Pythagoreans regarded geometrical figures as the ultimate substances, the word was extended to mean things or substances. I am not quite sure, but I think that Prof. Taylor considers the use of the word as the matter or stuff of an ordinary empirical object to be derived from this.

Prof. Taylor distinguishes between 'popular' meanings and 'technical' meanings, i.e., those belonging to the scientific vocabulary of the day, but it is not easy to determine where he draws the line. Groups (i), (iii), (iv) present no difficulty: (i) *body* or *bodily structure* he regards as popular; (iii) *symptoms* is obviously a use technical in medical clinique; (iv) *substance* and *element* are specifically physical conceptions. But in respect of group (ii) it is hard to say whether he considers these meanings to be popular or technical, or some of them popular and some technical. When he infers from the absence of the words from many of the practical treatises that they do not belong to the language of the working medical man, except in a current non-technical sense (p. 225), he seems to imply that the whole group of meanings, found regularly in such practical treatises as *περὶ ἀνθρώπων ἐμβολῆς* and *μοχλικόν* (see p. 224), is non-technical. But on p. 243, apparently, the only current non-technical sense he recognizes is the first, *living body, physique, constitution*. His rendering of *εἶδος* as *geometrical figure* on p. 224 and elsewhere, coupled with his account of the development of meaning on pp. 243 sqq., seems to indicate that he regards the second group of meanings as technical, and primarily due to Pythagorean influence.

I believe that Prof. Taylor's most important conclusions are based on an

erroneous analysis of the data; in particular, I can find no evidence whatever for either of the meanings under group (iv), *substance* and *element*.

(i.) With his account of εἶδος as applied to the form, physique, constitution of the human body I agree in the main. He shows that in nineteen passages of the treatise *περὶ ἀέρων ὑδάτων τόπων*, as in many passages of Herodotus, the word means the form or structure of the body as a whole, not the face only. But in one or two points his treatment is open to question. In his rendering of εἶδος in this connexion as 'body,' he lays too much stress on the 'bodily' factor in the idea of 'bodily constitution.' It is true that in several passages of the above-mentioned treatise εἶδος is contrasted with ἡθεα and τρόποι, where the opposition of body and soul seems implied. But εἶδος is not a synonym for σῶμα; in *περὶ ὀστέων* II, ix. 182 L, the bones furnish the σῶμα with its εἶδος or shape. When the opposition between body and soul is explicitly put, σῶμα is used; *περὶ ἀρχαίης ἱητρικῆς* i. 11 K, *περὶ ἀέρων* i. 67 K, *περὶ τέχνης* vi. 10 L, *περὶ φυσῶν* vi. 90 L. The word lays stress rather on the *structure* element of the idea. This is especially the case in certain passages where the word has a technical rather than a popular use, as the constitution of the individual patient. In these passages the writer enumerates the special conditions which the physician must observe in his clinical practice:—

περὶ χυμῶν I, v. 476 L. συγγενὲς εἶδος ἔθος ἡλικίῃ ὥρῃ κ.τ.λ. (Not in T.'s list.)

περὶ φύσιος ἀνθρώπου 9, vi. 52 L. δεῖ τὸν ἱητρὸν ἐναντίον ἵστασθαι τοῖς καθεστειώσι καὶ νουσήμασι καὶ εἶδεσι καὶ ὥρῃσι καὶ ἡλικίῃσι.

Ibid., vi. 54 L. σκεψάμενον τοῦ ἀνθρώπου τὴν φύσιν, τὴν τε ἡλικίην καὶ τὸ εἶδος καὶ τὴν ὥρην τοῦ ἔτους καὶ τῆς νούσου τὸν τρόπον τὴν θεραπείην ποιέσθαι.

Prof. Taylor gives 'bodily constitution' as his rendering of εἶδος in this passage, but most perversely translates 'substances' in the earlier passage of the same treatise.

In this sense of particular constitution φύσις is much more frequent, as, e.g., in *περὶ γυναικείων β'* III, viii. 238 L. σκεπτέον δὲ τὰς φύσιος τῶν γυναικῶν καὶ τὰς χροᾶς καὶ τὰς ἡλικίας κ.τ.λ. This is only one among many instances of the close parallelism between φύσις and εἶδος in the corpus. In this usage the idea expressed by εἶδος is just as distinct from that expressed by σῶμα as the idea of constitution is from that of body in a modern physician's thought. Similarly when a popular lady novelist speaks of the hero's stalwart form, she does not mean the same thing as body. Hence Prof. Taylor's rendering 'body' in this group of meanings is misleading: if he uses it merely to emphasize his point that εἶδος refers to the shape and nature of the whole body and not to the face only, it would have conduced to clearness to say so explicitly; if he had in his mind the alleged extension of the word to mean bodily substance, his procedure recalls the κλέψαι introduced by Socrates into

the argument by which he makes Polemarchus admit that the just man is the best thief.

(ii.) A well-marked meaning of *εἶδος* is that of *bodily shape* as applied to parts of the body or to inanimate objects:—

περὶ κεφαλῆς τραυμάτων 5, ii. 7 K. *ιδέαι τῆς φλάσιος*: the shape of a bruise.

περὶ ἄρθρων ἐμβολῆς 3, ii. 32 K. *εἶδος τοῦ χειριζομένου*: the shape of the limb to be operated on, contrasted with its *σχῆμα*, the word regularly used in the surgical treatises for posture, position of the limb.

μοχλικόν 1, ii. 246 K. *εἶδος ῥαιβοειδέστατον τῶν ζώων*: the most crooked shape (of the ribs).

Ibid. 1, ii. 245 K. *εἶδος κονδυλῶδες*: the bones of the thigh are of knobby shape.

Ibid. 6, ii. 251 K. *ἀκρώμιον ἀποσπασθέν· τὸ μὲν εἶδος φαίνεται οἷον περ ὤμου ἐκπεσόντος*. Shape or visible appearance.

περὶ καρδίας 5, ix. 84 L. *βόθρον τὸ εἶδος εἴκελον ὄλμω*: a trough-shaped depression.

περὶ ὀστέων 4, ix. 170 L. *εἶδος καρδίας οἱ νεφροὶ ἔχουσι· καὶ οὗτοι κοιλιώδες*.

T. renders 'substance,' but the context shows that the writer is entirely taken up with the mutual relations of the organs; the only other use of *εἶδος* in this work is in the sense of *shape*: 11, ix. 182 L. *τὰ ὁστέα τῷ σώματι στάσιν καὶ ὀρθότητα καὶ εἶδος παρέχονται*.

In these cases Prof. Taylor renders by 'shape,' 'geometrical figure.' I submit that the introduction of the adjective 'geometrical' is utterly without warrant. In not one of the passages cited is there the slightest suggestion of geometrical ideas. I can understand a knobby shape, but not a knobby geometrical figure. In point of fact, the writer of *περὶ καρδίας*, who describes the depression in the heart as in *εἶδος* like a trough, does describe the heart as pyramidal in shape, and then he uses the technical geometrical term *σχῆμα* (*καρδίη σχῆμα μὲν ὀκοίη πυραμῖς, χοροῖν δὲ κατακορῆς φοινικέα* 1, ix. 80 L). This usage is very closely connected with the meaning, *bodily form* of a man. The derivation of the words shows that the idea of the form of a man is specialized from the more general idea of shape or visible appearance. As compounds with *εἶδος* are specially frequent in Hippocrates, either in the sense of *x-shaped* or the general sense of *x-like*, this idea of the intervention of geometrical notions in the development of the use of *εἶδος* is neither more nor less than absurd. Here the parallel with *φύσις* is close: the latter word is constantly used in the specific sense of human nature, individual constitution, constantly in the sense of nature, constitution of anything; there is no need to derive the second meaning from the first, as the first is a technical specialization of the second. I may be wronging Prof. Taylor here; he may include these

uses as non-technical; but if so, he must strike out his 'geometrical figure,' which can only be an intelligent anticipation of his hypothesis.

Prof. Taylor acknowledges a use of εἶδος, easily derivable from that of the nature of a thing, in which it has a classificatory suggestion: e.g., 'many other types or forms of fevers' (πολλὰ δὲ καὶ ἄλλα πυρετῶν ἐπεδήμησεν εἶδεα. ἐπιδημ. γ', 12, i. 229 K) (p. 222). But he insists that the word never means *class*, *kind*, *sort*, but always *form* or *type*. This meaning is indeed an intermediate link in the extension to the meaning of *class*, which was only arrived at later, viz., in the Aristotelian developments of Platonism (p. 221). The words used to mean *kind* in Hippocrates are τρόπος (p. 222), and ἔθνος (p. 236). I agree with Prof. Taylor that the word does not mean *logical class* in Hippocrates: but it frequently has a *classificatory use*, just as in English we speak of 'these types of character,' 'a malignant form of the disease.' Every language contains words which express a logical division and something more besides, as they contain metaphors of various sorts: e.g., in English, *form*, *type*, *sort*, *kind*, *class*, etc. In use the metaphorical origin sometimes prevails, sometimes the implied logical idea: in the former case we feel that one of the words is more appropriate than another in the context, in the latter we tend to use our classificatory words interchangeably. Now Prof. Taylor's procedure is misleading in the last degree. He will not allow εἶδος to have a purely logical meaning, but apparently assigns this to τρόπος and ἔθνος. The truth is that these words stand on the same footing of εἶδος: they do not mean *class* primarily, but have classificatory uses, in which the root-idea is sometimes strong, sometimes has practically disappeared into the division idea. There is no word in Hippocrates for a logical class; when he wishes to classify, or when classification underlies his thought, he uses εἶδος or τρόπος (very rarely and in a special context ἔθνος) according to the nature of the things classified. And this much may be conceded to Prof. Taylor, that the classification is more properly division; it is not regarded as collecting things and arranging them according to their common qualities, but rather as taking a unity (not explicitly thought as a logical unity, but ultimately analyzable into it, as Plato saw), and dividing it. Yet the classificatory idea is always near, and sometimes predominant: when we read that there are several τρόποι κατήξις, the unity of the idea of fracture is contrasted with its modes or varieties; when it is said that there are many other τρόποι κατατάσεων (genitive plural), this is not far from 'several other κατατάσεις,' and the plurality-side of the result is emphasized. If the division deals with events, acts, processes, τρόπος is used: e.g., a limb is dislocated in four τρόποι:—

ἐκπίπτει δὲ τέσσαρας τρόπους, ἡ ἄνω ἡ κάτω ἡ ἐς τὸ πλάγιον ἐκατέρωθεν.
περὶ ἄρθρων ἐμβολῆς 80, ii. 240 K.

μυροῦ ἄρθρον ἐκπίπτει κατὰ τέσσαρας τρόπους *ibid.* 51, ii. 188 K.

There is more than one τρόπος of fracture (ἦν δὲ ἡ ρῖς καταγῆ, τρόπος μὲν οὐχ εἷς ἐστὶ κατήξις *ibid.* 35, ii. 154 K), of distortion (κυλλώσις γὰρ οὐχ εἷς

τρόπος. *μοχλικὸν* 32, ii. 263 K). The word is often used for modes of treatment (e.g., πολλοὶ δὲ καὶ ἄλλοι τρόποι κατατάσιων. *περὶ ἀγῶν* 13, ii. 68 K); often for modes or varieties of disease (ὡς οὖν τοῦτου τοῦ τρόπου σφαλεροῦ ἐόντος. *προγν.* 22, i. 102 K; τὸ δὲ ἀρμόζον ἐφ' ἐκάστοισι τῶν τρόπων εἰρήσεται. *περὶ ὀξέων* 12, i. 114 K; etc.). Prof. Taylor objects that *εἶδος*, if translated by *kind*, *class* in Hippocrates, always loses some of its force; the remark applies equally well to *τρόπος*. His statement that in *περὶ φυσῶν* the word for class, *kind*, is throughout *ἔθνος* (p. 236), is most misleading; the word occurs three times in one paragraph with the same sense, in which men are said to be one *ἔθνος* of ζῶα; surely the original idea of *race* is dominant over the class-idea. The only other example is in the same paragraph, where the MSS. vary between *ἔθνεα* and *εἶδεα* (ἔστι δὲ δισσὰ εἶδεα πυρετῶν. *περὶ φυσῶν* 6, vi. 96 L); the Hippocratean usage is strongly in favour of *εἶδεα*. I may remark in passing that the Greek mode of expression, with its *τοιούτος* (or *τοιουτότροπος*, frequent in Hippocrates), often gives the idea of *kind* without its name; we have to say 'of the same kind.'

That the word *εἶδος* has a classificatory sense in Hippocrates over and over again can be easily shown. I maintain that Prof. Taylor's treatment unduly ignores this sense, and that it is just because he wrongly ignores it that he is led to the quite unfounded view that the word comes to mean stuff, matter, substance, primary body.

Observe, in the first place, how often it is conjoined with numerals in a context which plainly indicates division of a unity into varieties, kinds, forms, or whatever may best express the idea in the context. *κατ' ἡγηρήϊον* contains three examples:—

- 3, ii. 30 K. *αὐγῆς μὲν δύο εἶδεα, τὸ μὲν κοινόν, τὸ δὲ τεχνητόν.* T. 'kinds.'
 7, ii. 34 K. *ἐπιδέσιος δύο εἶδεα, εἰργασμένον καὶ ἐργαζόμενον.* There are two ways of bandaging, one after, the other during the operation. T. thinks the idea is 'figures,' as in a dance; as if the writer visualized the whole process of disposing the bandage.
 8, ii. 34 K. *ἀγαθῶς δὲ δύο εἶδεα τοῦ ἐπιδεομένου· ἰσχύος μὲν ἢ πῖξει ἢ πλήθει ὀθονίων.* The phrase is awkward; the writer means that you must either bind the bandage very tight or apply a great thickness. T. 'figures,' 'ways of construction.'

I suggest that Prof. Taylor's way of getting a meaning by a fully concrete image of the situation is mistaken. A careful but less subtle translator would see that the writer has a *formula* for dividing into kinds or sorts; the very difficulty of getting a precise meaning shows that the writer's thought is abstract, that he is thinking of the illumination and the bandaging simply as of two *kinds* (or some such very general word); i.e., that the classificatory aspect of the word is predominant. And where does Prof. Taylor find *εἶδος* used literally of a dance-figure?

περὶ φύσιος ἀνθρώπου 15, vi. 66 L. οἱ πλείστοι τῶν πυρετῶν γίνονται ἀπὸ χολῆς· εἶδεα δὲ σφέων ἐστὶ τέσσαρα. T. 'types,' 'sorts'; and he adds 'meaning, no doubt, originally geometrical figures'!

περὶ φυσῶν 6, vi. 96 L. ἔστι δὲ δισσὰ εἶδεα πυρετῶν: reading doubtful; v. 1. ἔθνεα.

περὶ γονῆς, 3, vii. 474 L. εἰσὶ δὲ τέσσαρες ἰδέαι τοῦ ὑγροῦ, αἷμα χολὴ ὕδωρ καὶ φλέγμα. T. 'figures,' i.e., types of moisture, or perhaps 'substances of the moist <kind>.'

Ibid. 11, vii. 484 L. καὶ τοῦ ὑγροῦ αὐτῷ, ἀφ' οὗ τὸ σπέρμα γίνεται, τέσσαρες ἰδέαι εἶναι ὁκόσαι ἐν φύσει ὑπῆρξαν. T. 'bodies' or 'constituents'; but surely the meaning must be the same as in the preceding passage, which is directly referred to. This is one of many instances where the neglect of a simple comparative method leads Prof. Taylor into unnecessary refinements.

περὶ νούσων δ' (by the same author as the περὶ γονῆς) 32, vii. 542 L. ἔχει καὶ ἡ γονὴ καὶ ὁ ἀνὴρ τέσσαρας ἰδέας ὑγροῦ ἐν τῷ σώματι . . . αὐταὶ δὲ αἱ ἰδέαι εἰσὶ φλέγμα αἷμα χολὴ καὶ ὕδρωψ.

T. 'substances'; but the meaning must be the same as in the two preceding passages. I will discuss them fully later.

Ibid. 57, vii. 612 L. αὐταὶ αἱ τρεῖς ἰδέαι τῶν νοσημάτων ἀπὸ τοῦ ὕδρωπος. περὶ γυναικείων α' 96, viii. 222 L (not in T.). τὸ μέλαν φάρμακον . . . ποιεῖν δύο ἢ τρία εἶδη τοῦ φαρμάκου, τὸ μὲν ἰσχυρότατον τὸ ἄνθος τριτημόριον τῆς λεπίδος, τὸ δὲ δευτέρον τεταρτημόριον, τὸ δὲ τρίτον πεμπτημόριον.

περὶ φυσῶν 2, vi. 92 L. ἔστι δὲ μία ἀπάσεων νούσων ἰδέη καὶ αἰτία (one form, and not many).

περὶ τροφῆς 1, ix. 98 L. τροφή καὶ τροφῆς εἶδος μία καὶ πολλαί· μία μὲν ἢ γένος ἓν, εἶδος δὲ ὑγρότητι καὶ ξηρότητι· καὶ ἐν τούτοιςιν ἰδέαι καὶ ποσόν ἐστι καὶ ἐς τίνα καὶ ἐς τοσαῦτα. The use of γένος as opposed to εἶδος suggests a late date for this Heraclitizing work, which is suspected on other grounds.

A comparison of these passages, except perhaps the last two, shows a common attitude of thought—that of division and enumeration. It strikes me very forcibly that the numeral and the substantive have become a single formula, expressing numerical division of a unity into forms, sorts, kinds. Suppose we asked the question, What formulæ do the Hippocratean writers use when they divide objects into groups, which they proceed to enumerate? I may remark that this procedure is infrequent in these works; the writers do not as a rule explicitly classify; they name, describe the symptoms and the treatment of ailments, but do not classify them. Many of the treatises contain no phrase corresponding roughly to 'there are two, three kinds of so-and-so.' The author of περὶ ἐντὸς παθῶν uses the simple plural: 10, vii. 188 L. τρεῖς δὲ εἰσὶ φθίσεις· πρώτη δευτέρη τρίτη: 35 vii. 252 L. ἵκτεροι

τέσσαρες : 52, vii. 298 L. τέταντοι τρεῖς. Τρόπος is occasionally used in the same sort of numerical formula ; I have cited the examples above. Once we have φύσις in ὑδρώπων δύο μὲν φύσις (περὶ διαίτης ὀξέων i. 172 K). The most detailed classification is found in περὶ τῶν ἐν κεφαλῇ τραυμάτων 4-7, ii. 6-9 K) : the writer distinguishes five τρόποι of injuries to the bone, fracture (κάτῃξις), bruising (φλάσις), etc. ; and each has several ιδέαι, according as the injury is more or less deep, affects more or less of the bone, etc. Here the idea of form is undoubtedly prominent.

These examples, I submit, show that in the Hippocratic usage εἶδος has advanced much further in the direction of the purely logical meaning of kind or class than Prof. Taylor allows. The writers are not far removed from the attitude of the modern unmetaphysical Englishman, who applies such words as 'kind,' 'sort,' 'form,' 'type,' 'class,' without very much difference, but still in a vague, unconscious manner chooses the one that he feels to be most appropriate. That is one of the reasons why I think that Prof. Taylor's frequent rendering as 'figure' is so misleading : 'form' would more accurately represent the Greek, because with us *figure* is not used in a general classificatory sense, whereas *form* is.

The same divisory or classificatory suggestion is found in the numerous examples where εἶδος or ιδέα is conjoined with πολὺς, ἄλλος, or ἕτερος, παντοῖος, or παντοδαπός. I give these examples :—

(1) With πολὺς :

- (a) περὶ ἀρχαίης ἱητρικῆς 12, i. 13 K. πολλὰ δὲ εἶδεα κατ' ἱητρικὴν ἐς τοιαύτην ἀκρίβειαν ἔκει περὶ ὧν εἰρήσεται. T. 'branches' of medicine.
- (b) περὶ τῶν ἐν κεφαλῇ τραυμάτων 4-7, ii. 6-9 K. τῶν δὲ τρόπων ἐκάστου πλείονες ιδέαι γίνονται τοῦ κατήγματος ἐν τῇ τρώσει . . . ιδέαι δὲ τῆς φλάσιος πλείονες γίνονται . . . ἐσφλᾶται δὲ τὸ ὁστέον πολλὰς ιδέας . . . ἐν δὲ τῷ τρόπῳ ἐκάστῳ πλείονες ιδέαι γίνονται . . . πολλὰι ιδέαι γίνονται καὶ τῆς φλάσιος καὶ τῆς ῥωγμῆς.
- (c) περὶ φύσιος ἀνθρώπου 2, vi. 36 L. πολλὰι μὲν ιδέαι τῶν νοσημάτων, πολλὰ δὲ καὶ ἡ ἵησις αὐτῶν ἐστί. T. 'substances.'
- (d) περὶ ἐντὸς παθῶν 20, vii. 214 L. περὶ δὲ τοῦ φλέγματος τὰς αὐτὰς γνώμας ἔχω, ὥς περὶ χολῆς, ιδέας αὐτοῦ πολλὰς εἶναι. T. 'figures' or perhaps 'symptoms.'

(2) With ἄλλος, ἕτερος :

- (e) περὶ ἀρχαίης ἱητρικῆς 15, i. 17 K. οὐ γὰρ ἐστὶν αὐτοῖς, οἶμαι, ἐξευρημένον αὐτό τι ἐφ' ἐωυτοῦ θερμὸν ἢ ψυχρὸν ἢ ξηρὸν ἢ ὑγρὸν μηδενὶ ἄλλῳ εἶδει κοινωνέον. This is one of the passages in which Prof. Taylor finds his meaning of ultimate substances.
- (f) Ibid. 23, i. 30 K. εἰ γλυκὺς χυμὸς ἐὼν μεταβάλλοι ἐς ἄλλο εἶδος, μὴ ἀπὸ συγκρήσιος, ἀλλ' αὐτὸς ἐξιστάμενος, ποῖός τις ἂν πρῶτος

γένοιτο, πικρὸς ἢ ἀλμυρὸς ἢ στρυφνὸς ἢ ὀξύς; οἶμαι μὲν ὀξύς. T. 'structure,' but this is too definite a word: *kind* seems to me the nearest equivalent because the writer evidently thinks of *χυμός* as having five εἶδεα, γλυκὺς πικρὸς ἀλμυρὸς στρυφνὸς ὀξύς. Prof. Taylor may be right in supposing that he had no clear conception of a quality; but there is no need to suppose that he was thinking of the bodily nature of things; he probably had in mind nothing more explicit than the distinctions implied in the everyday use of nouns and qualitative adjectives.

- (g) *περὶ ἀέρων* II, i. 53 K. τὰ μὲν (νοσεύματα) ἀποφθίνει, τὰ δὲ λήγει, τὰ δὲ ἄλλα πάντα μεθίσταται ἐς ἕτερον εἶδος καὶ ἐτέρην κατάστασιν. T. 'phase,' but this is inaccurate: the writer does not think of the disease as persisting in another shape, but as passing into another disease or another form of disease; see *περὶ παθῶν* 8, vi. 216 L. κρίνεσθαι δὲ ἔστιν ἐν τῇσι νοούσισιν, ὅταν αὖξωνται αἱ νοῦσοι ἢ μαραίνωνται ἢ μεταπίπτωσιν ἐς ἕτερον νοσήμα ἢ τελευτῶσιν.
- (h) *περὶ ἄρθρων ἐμβολῆς* 34, ii. 153 K. ἀλλ' οὐ βούλομαι ἀποπλανᾶν τὸν λόγον, ἐν ἄλλοις γὰρ εἶδεσι νοσημάτων περὶ τούτων εἴρηται. T. 'figures of disorders,' but adds that nothing is lost by 'kinds.'
- (i) *περὶ τέχνης* 6, vi. 10 L. νῦν δὲ δὴ φαίνονται τῶν ἱητρῶν οἱ μάλιστα ἐπαιεόμενοι καὶ διαιτήμασιν ἰώμενοι καὶ ἄλλοισί γε εἶδεν, ἃ οὐκ ἂν τις φαίη, μὴ ὅτι ἱητρός, ἀλλ' οὐδὲ ἰδιώτης ἀνεπιστήμων ἀκούσας, μὴ οὐ τῆς τέχνης εἶναι. T. 'things,' 'substances.' Why not 'other kinds of treatment'?
- (j) *περὶ ἱερῆς νόσου* 13, vi. 386 L. ὅκόσα τε ἐν οἰκήμασι κεράμια κατὰ γῆς ἐστί μεστὰ οἴνου ἢ ἄλλου τινὸς ὑγροῦ, πάντα ταῦτα αἰσθάνεται καὶ διαλλάσσει τὴν μορφὴν ἐς ἕτερον εἶδος. T. *μορφή* = *εἶδος* = *φύσις* = substance. *Εἶδος* certainly means *nature*, but does the writer think of this so definitely as substance? Cf. (f) above: the *κεράμια* ἐξίσταται ἐκ τοῦ εἶδους.
- (3) With παντοῖος :
- (k) *περὶ τῶν ἐν κεφαλῇ τρωμάτων* 4, ii. 6 K. ἰδέαι δὲ ῥωγμένων παντοῖαι γίνονται· καὶ γὰρ λεπτότεραί τε καὶ λεπταὶ πάνν, ὥστε οὐ καταφανέες γίνονται ἔστιν αἱ τῶν ῥωγμῶν. (Not in T.)
- (l) *περὶ διαίτης ὀξέων* 43, i. 130 K. διαγινώσκειν . . . ὅσα τε ἡμέων ἢ φύσις καὶ ἢ ἔξις ἐκάστοισιν ἐκτεκνοῖ πάθεα καὶ εἶδεα παντοῖα. T. 'symptoms.'
- (4) With πολλὰ καὶ ἄλλα :
- (m) *περὶ ἀρχαίης ἱητρικῆς* 23, i. 29 K. πολλὰ δὲ καὶ ἄλλα καὶ ἔσω καὶ ἔξω τοῦ σώματος εἶδεα σχημάτων. This collocation troubles Prof. Taylor greatly; he thinks the expression is pleonastic,

both *εἶδεα* and *σχημάτων* meaning 'configurations.' He seems to overlook the fact that the writer has explicitly defined *σχῆμα* as a technical term; the *σχήματα* are *ὅσα ἐνεστὶν ἐν τῷ ἀνθρώπῳ* (p. 26, 22), i.e., the head, bladder, uterus, etc. (p. 27, 16); nearly equal to *organs*, the writer considering that their shape or configuration is their essence. He explains that diseases arise *διὰ τὴν φύσιν τοῦ σχήματος* (p. 28, 11): thus wide, open organs like the stomach and lungs produce a noise when wind enters them; and there are many other *εἶδεα σχημάτων*, forms of organs which have influence on health, the size of the head, the proportions of the neck, etc. The expression is not therefore pleonastic, and its collocation with a word of originally similar meaning shows that it has become very general in signification.

- (n) *ἐπιδημίων γ' 12, i. 229 K. πολλά δὲ καὶ ἄλλα πυρετῶν ἐπέδημυσεν εἶδεα, τριταίων τεταρταίων κ.τ.λ.*
- (o) *περὶ κεφαλῆς τρωμάτων 7, ii. 9 K. καὶ πολλὰ ἄλλαι ἰδέαι τοῦ τοιοῦτου τρόπου.*
- (p) *περὶ τροφῆς 33, ix. 110 L. γάλα τροφή οἷσι γάλα τροφή κατὰ φύσιν, ἄλλοισι δὲ οὐχί, ἄλλοισι δὲ οἶνος τροφή καὶ ἄλλοισι οὐχί, καὶ σάρκες καὶ ἄλλαι ἰδέαι τροφῆς πολλὰ καὶ κατὰ χώρην καὶ ἐθισμόν. T. 'bodies.'*
- (5) With *πολλά καὶ παντοδαπά* :
- (q) *περὶ διαίτης α' 4, vi. 474 L. οὕτω δὲ τούτων ἐχόντων πολλὰς καὶ παντοδαπὰς ἰδέας ἀποκρίνονται ἀπ' ἀλλήλων καὶ σπερμάτων καὶ ζώων, οὐδὲν ὅμοιον (ὁμοίων, Kühn) ἀλλήλοισιν οὔτε τὴν ὄψιν οὔτε τὴν δύναμιν. T. 'bodies' on the strength of ὄψιν and δύναμιν; but the passage is clearly a reminiscence of Anaxagoras, fr. 4, FVS² 315. τούτων δὲ οὕτως ἐχόντων χρὴ δοκεῖν ἐνεῖναι πολλὰ τε καὶ παντοῖα ἐν πᾶσι τοῖς συγκρινόμενοις καὶ σπέρματα πάντων χρημάτων καὶ ἰδέας παντοίας ἔχοντα καὶ χροιάς καὶ ἡδονάς. Here ἰδέα = φύσις, nature or constitution, the χροιαί and ἡδοναί being δυνάμεις. Prof. Taylor gives 'shapes' in the passage from Anaxagoras.*
- (6) With *ἄλλα καὶ παντοῖα* :
- (r) *περὶ ἀρχαίης ἱητρικῆς 19, i. 23 K. μεταβάλλειν . . . ἐς χυμῶν εἶδος δι' ἄλλων εἰδέων καὶ παντοίων. T. 'structures,' apparently: why not 'body,' for the sake of consistency with his rendering of similar passages, I do not see.*

(7) I add some passages in which the classificatory notion seems more or less important :—

- (s) *ἐπιδημίων α' 20, i. 197 K. διεσφύζοντο πάντες οὓς κἀγὼ οἶδα, οἷσιν αἱ ὑποστροφαί (recurrences) διὰ τοῦ εἶδους τούτου γενοῖατο,*

οὐδὲ τῶν διανοησάντων διὰ τούτου τοῦ τρόπου οὐδενὶ οἶδα ὑποστροφὴν γενομένην πάλιν. T. 'symptoms,' but the similar phrase διὰ τούτου τοῦ τρόπου seems to show that the writer is not thinking of appearances, but of forms or fashions of disease.

- (t) ἐπιδημίων γ' 3, i. 225 K. τὰ μὲν ἐπιδημήσαντα νοσήματα ταῦτα ἑκάστου δὲ τῶν ὑπογεγραμμένων εἰδέων ἦσαν οἱ κάμνοντες καὶ ἔθνησκον πολλοί. T. again 'symptoms'; but in view of εἶδεα νοσημάτων as kinds or types of disease in περὶ ἄρθρων ἐμβολῆς 34, ii. 153 K I see no reason why this should not be the meaning here.
- (u) κατ' ἡτρήϊον 7, ii. 34 K. τὰ δὲ εἶδεα (of bandages) ἀπλοῦν σκέπαρνον σιμὸν ὀφθαλμὸς καὶ ῥόμβος καὶ ἡμίτονον. ἀρμόζων τὸ εἶδος τῷ εἶδει καὶ τῷ πάθει τοῦ ἐπιδεομένου. This is immediately after ἐπιδέσιος δύο εἶδεα and immediately before ἀγαθῶς δύο εἶδεα τοῦ ἐπιδεομένου (p. 184, above).
- (v) Ibid. 19, ii. 42 K. ἡ ἀνάλυψις, ἡ θέσις, ἡ ἐπιδέσις ὡς ἐν τῷ αὐτῷ σχήματι ἦ, διαφυλάσσειν. κεφάλαια σχημάτων ἔθεα φύσεις ἑκάστου τῶν μελέων. τὰ δὲ εἶδεα ἐκ τοῦ τρέχειν ὁδοιορεῖν ἐστάναι κατακεῖσθαι ἐκ τοῦ ἔργου, ἐκ τοῦ ἀφείσθαι. T. 'positions.' But σχῆμα, as here, is the technical term in surgery for the posture or position of a limb; surely the writer means that in general the determinants of such σχήματα are nature and habit, and that the different types or kinds of σχήματα come from different ways of using the limbs.
- (w) περὶ χυμῶν 13, v. 494 L. ὅταν οὖν καὶ ἦρ οὕτως ἀγάγη (sc. ψύχεα ἐκ θαλπέων καὶ θάλπος ἐκ ψύχεος, the characteristic of φθινόπωρος, which gives rise to ἔκτεροι, jaundice), καὶ ἦρος γίνονται ἔκτεροι. ἐγγυτάτω γὰρ αὕτη ἡ κίνησις τῇ ὥρῃ κατὰ τοῦτο τὸ εἶδος ἐστίν. Apparently = ἦν οὕτως ἀγάγη. This affection, when it takes this form, is most akin to the season. Not in T.
- (x) περὶ ἱερῆς νόσου 1, vi. 360 L. ἄνθρωποι βίου δεόμενοι πολλὰ καὶ παντοῖα τεχνέονται καὶ ποικίλλουσιν ἔς τε τὰλλα πάντα καὶ ἐς τὴν νόσον ταύτην, ἑκάστῳ εἶδει τοῦ πάθους θεῶ τὴν αἰτίην προστιθέντες. The εἶδεα are ἦν βρυχώνται, αἶγα μιμώνται, τὰ δεξιὰ σπῶνται, ὀξύτερον καὶ εὐτονώτερον φθέγγεται, κ.τ.λ. T. 'symptoms'; but here again analogy with other uses suggests that the writer is thinking of these not as appearances but rather as forms which the disease assumes.
- (y) περὶ διαίτης β' 66, vi. 582 L. περὶ δὲ κόπων τῶν ἐν τοῖσι σώμασι ἐγγινομένων ὧδε ἔχει. οἱ μὲν ἀγύμναστοι τῶν ἀνθρώπων ἀπὸ παντὸς κοπιῶσι πόνου. . . τὰ δὲ γεγυμνασμένα τῶν σωμάτων ὑπὸ τῶν ἀνεθίστων πόνων κοπιᾷ. τὰ δὲ ὑπὸ τῶν συνήθων γυμνασίων κοπιᾷ, ὑπερβολῇ χρυσάμενα. τὰ μὲν οὖν εἶδεα τῶν

κόπων τοιαυτά ἔστιν, ἡ δὲ δύναμις αὐτέων ὥδε ἔχει. Kinds, types. T. unnecessarily speaks of a suggestion of causality in the idea: it is a *classification* by causes. When the Hippocratican writers speak of the nature of a thing in a context which brings out the causal aspect of the idea, they use φύσις rather than εἶδος.

(z) περὶ διαίτης γ' 69, vi. 606 L. The author claims as a discovery of his own that the secret of good clinical practice is προδιάνγνωσις before disease and διάγνωσις during disease, determining whether there is equilibrium between the nutriment and the work done: ἐπὶ ταῦτα δὴ τὰ εἶδεα ἐπέξειμι καὶ δείξω ὅκοῖα γίνεται τοῖσιν ἀνθρώποισιν ὑγαινεῖν δοκέουσι καὶ ἐσθίουσιν ἡδέως κ.τ.λ. Types or forms of situation, the equilibrium or dominance of τροφή or πόνος.

(aa) προρρημάτων β' I, ix. 6 L. καὶ τᾶλλα τοιοῦτότροπα προρρήματα λέγεται ἐν τοιούτῳ τῷ εἶδει. 'Of this sort'; this writer seems to use σχῆμα and τρόπος in the same sense.

The passages I have cited in this section, forming as they do a large proportion of the total number of passages in which the words εἶδος and ἰδέα occur in the corpus, seem to me to establish conclusively that the words have acquired distinctly classificatory associations.

(iii.) Of Prof. Taylor's contention that the words are used in the sense of *symptoms*, I will say little. 'Sometimes, at least,' he writes, 'they mean the collective variety of the symptoms presented by the disease, as distinguished from the one hidden cause of the mischief' (p. 245). In other words, the notion of appearance is present. I doubt myself whether the words ever bear this technical meaning; in many of the passages in which Prof. Taylor renders by symptoms I have suggested another translation. I think that in his cases the writer has symptoms as his context, but does not mean symptoms by the word. In any case, the medical writers have their technical terms for symptoms, σημῆια and often πάθηα. But as this point is not of importance for the main issue, I pass on to the alleged use of the words to mean 'stuff,' 'matter,' and especially 'primary substance.'

(iv.) Prof. Taylor's most important result is that in Hippocrates εἶδος and ἰδέα have acquired the meaning of 'real things,' not merely the *real nature* of things, but the things themselves, 'substances.' And in close connexion with this, they often mean the stuff, matter, substance of a bodily organ. His case rests so exclusively on the interpretation of two or three treatises, all of which belong to the class of those in which the influence of οἱ φυσικοί is manifest, that it will be most convenient to collect the passages from each work, even at the cost of some repetition, and examine them together.

I begin with *περὶ γονῆς*, with which I join *περὶ φύσιος παιδίου* and the fourth treatise *περὶ νόσων*, as they are all by one author, and really form three parts of a continuous work.

- (1) *περὶ γονῆς* 3, vii. 474 L. εἰσὶ δὲ τέσσαρες ἰδέαι τοῦ ὕγρου, αἷμα χολὴ ὕδωρ καὶ φλέγμα. τοσαύτας γὰρ ἰδέας ἔχει συμφυέας ὁ ἄνθρωπος ἐν ἑωυτῷ καὶ ἀπὸ τουτέων αἱ νόσοι γίνονται ἢ αἱ ἐκ νόσων διακρίσιες. T. ἰδέαι (probably) = 'figures,' 'types'; ἰδέας = 'substances.'
- (2) Ibid. 11, vii. 484 L. ἐπὶ δὲ τί οἱ νόσημα προσπέσῃ καὶ τοῦ ὕγρου αὐτῷ, ἀφ' οὗ τὸ σπέρμα γίνεται, τέσσαρες ἰδέαι ἐοῦσαι ὁκόσαι ἐν φύσει ὑπῆρξαν, τὴν γονὴν οὐχ ὅλην παρέχουσιν, ἀσθενέστερον δὲ τὸ καὶ τὸ πεπηρωμένον, οὐ θαυμά μοι δοκεῖ καὶ περωθῆναι ὥσπερ καὶ ὁ τοκεύς.
- (3) *περὶ φύσιος παιδίου* 18, vii. 502 L. ἦν δὲ μὴ ὑγιαίνῃ ἢ γυνὴ μὴδὲ μέλλῃ ὑγιαίνειν, χωρεῖ δὲ ἡ κάθαρσις ἐλάσσων καὶ εἶδος πονηροτέρῃ, καὶ οὐ ταχὺ πηγνυται.
- (4) Ibid. 19, vii. 506 L. ὁκόταν δὲ διαρθρωθῇ τὸ παιδίον, τὰ εἶδεα τῶν μελέων, ἀνταμένου αὐτοῦ, τά τε ὅστέα ἐπισκληρότερα γίνεται, καὶ κοιλαίνεται.
- (5) Ibid. 21, vii. 512 L. ὁκόταν ἀφίκηται ἐς τὰς μήτρας, ἰδέην ἵσχει τοῦ γάλακτος, καὶ τὸ παιδίον ἀπ' αὐτοῦ ἐπαυρίσκεται ὅλγρον.
- (6) *περὶ νόσων* δ' 32, vii. 542 L. ἔχει δὲ ἡ γονὴ καὶ ὁ ἀνὴρ τέσσαρας ἰδέας ὕγρου ἐν τῷ σώματι, ἀφ' ὧν αἱ νοῦσοι γίνονται, ὁκόσα μὴ ἀπὸ βίης νοσήματα γίνεται· αὗται δὲ αἱ ἰδέαι εἰσὶ φλέγμα αἷμα χολὴ ὕδωρ, καὶ ἀπὸ τούτων ἐς τὸ σπέρμα οὐκ ἐλάχιστον οὐδὲ ἀσθενέστατον συνέρχεται, καὶ ἐπειδὴ τὸ ζῶον ἐγένετο, κατὰ τοὺς τοκῆας τοσαύτας ἰδέας ὕγρου ὕγμου τε καὶ νοσεροῦ ἔχει ἐν ἑωυτῷ. ἀποφανέω δὲ ὅκως ἐν ἐκάστῃ τουτέων τῶν ἰδεῶν καὶ πλείω καὶ ἐλάσσω ἐν τῷ σώματι γίνεται κ.τ.λ.
- (7) Ibid. 57, vii. 612 L. αὗται αἱ τρεῖς ἰδέαι τῶν νοσημάτων ἀπὸ τοῦ ὕδρωπος.

In (4) τὰ εἶδεα τῶν μελέων evidently means the *shape* of the limbs: in (5) ἰδέην τοῦ γάλακτος probably means *nature* rather than *appearance* (T. renders 'substance'): in (3) εἶδος πονηροτέρῃ means inferior in *character* or *nature*: Prof. Taylor gives 'inferior in quality,' but adds that the writer had probably no distinct notion of quality, and means rather 'and is of inferior stuff.' On which I would remark that the rendering of εἶδος as = φύσις, a vague word susceptible of many shades of meaning, a sense very close to the original meaning of bodily form, seems quite satisfactory; the remote derivative meaning of *stuff* is not required. There is no need to suppose that a Greek physician of this period was less capable of abstract ideas than the modern journeyman mason or gardener, who will tell you that the mortar or the manure has lost its 'nature.' In (7) αἱ τρεῖς ἰδέαι τῶν νοσημάτων is obviously classificatory: three *forms* of diseases. In all the other cases Prof. Taylor renders 'substances' 'bodies,' except that in (1) he thinks that

αἱ τέσσαρες ιδέαι means 'figures,' 'types' of moisture, though possibly it may mean 'substances of the moist (kind).' Can Prof. Taylor seriously ask us to believe that a writer could say that there are four *ιδέαι τοῦ ὑγροῦ* and in the same breath apply *τοσαύτας ιδέας* to the same objects in a new sense? Now all the other uses of *ιδέη* in these works are precisely the same: (2) *τοῦ ὑγροῦ αὐτῷ τέσσαρες ιδέαι*, (6) *τέσσαρας ιδέας ὑγροῦ*: the meaning must be governed by the first that occurs. Prof. Taylor himself gives this as 'types,' 'forms.' That this is right seems proved by (7) *αὗται αἱ τρεῖς ιδέαι τῶν νοσημάτων*, which Prof. Taylor has not thought fit to render by 'substances of diseases,' as he does the *πολλαὶ ιδέαι τῶν νοσημάτων* of the treatise *περὶ φύσιος ἀνθρώπου* (p. 229). The passages in which *εἶδεα πυρετῶν, νοσημάτων* occur as *forms* of diseases confirm this interpretation. Observe that in all these cases there is a genitive following *ιδέαι* except in the second occurrence of the word in (1), where it is easily supplied from the context. I may add that when the writer wishes to describe these four substances, without reference to the *ὑγρόν*, of which they are 'forms' according to Prof. Taylor himself ('any one of the four forms of τὸ ὑγρόν,' p. 240), but as substances in themselves, he does not use *ιδέαι* at all, but such phrases as *ἐπὶ τούτων τι τῶν τεσσάρων τῶν γινομένων τῷ σώματι ἐπέλθῃ πλέον τι μὴ πολλῷ* (45, vii. 568 L), *τέσσαρα μὲν δὴ ὑγρά ἔοντα ἀπέδειξα τὸν ἀνθρώπον σινεόμενα* (41, vii. 562 L). When he thinks of them as substances with a moist quality, he uses the simple neuter and expresses the quality by the natural use of an adjective. The main result of this examination is that *ιδέη* is only applied to the four constituents when they are explicitly connected with τὸ ὑγρόν; that the sense of 'four forms of the moist' (the moist of course thought of as a substance), a sense which has abundant parallels in the Hippocratican corpus, fits the passages admirably; and that, on the contrary, the sense of *body* or *substance* which rather excludes than requires a genitive, is quite inappropriate. Prof. Taylor seems to infer erroneously throughout that because the writer is talking about substances he must use the term *ιδέη* to express the notion of substance.

I turn to the passages from the *περὶ φύσιος ἀνθρώπου*:

- (1) 2, vi. 34 L. Some physicians assert that man, like *ὅλη φύσις*, is one; *ἐν γάρ τι εἶναι φασιν, ὅτι ἕκαστος αὐτῶν βούλεται ὀνομάσας, καὶ τοῦτο ἐν ὄν μεταλλάσσειν τὴν ιδέην καὶ τὴν δύναμιν, ἀναγκαζόμενον ὑπὸ τε τοῦ θερμοῦ καὶ τοῦ ψυχροῦ, καὶ γίνεσθαι καὶ γλυκὺ καὶ πικρὸν καὶ λευκὸν καὶ μέλαν καὶ παντοῖόν τι ἄλλο.*
- (2) Ibid. vi. 36 L. The author denies this; *πολλὰ γάρ ἐστιν ἐν τῷ σώματι ἐνεόντα ἃ, ὅποταν ὑπ' ἀλλήλων παρὰ φύσιν θερμαίνηται τε καὶ ψύχεται, καὶ ξηραίνεται καὶ ὑγραίνεται, νούσους τίκτει· ὥστε πολλὰ μὲν ιδέαι νοσημάτων, πολλὰ δὲ καὶ ἡ ἰησις αὐτέων ἐστίν. ἀξιώ δὲ ἔγωγε τὸν φάσκοντα αἷμα εἶναι μόνον τὸν ἀνθρώπον καὶ ἄλλο μηδὲν δεικνύειν αὐτὸν μὴ μεταλλάσσοντα τὴν ιδέην μηδὲ γίνεσθαι παντοῖον, ἀλλ' ἡ ὥρην τινὰ τοῦ ἐνιαυτοῦ ἢ τῆς ἡλικίης τῆς τοῦ ἀνθρώπου, ἐν ᾗ αἷμα ἐνεδὸν φαίνεται μόνον ἐν τῷ ἀνθρώπῳ.*

- (3) 5, vi. 40 L. καὶ τούτων πρῶτον μὲν κατὰ νόμον τὰ οὐνόματα διω-
ρίσθαι φημί καὶ οὐδενὶ αὐτέων τωτὸ οὐνομα εἶναι, ἔπειτα κατὰ
φύσιν τὰς ιδέας κεχωρίσθαι, καὶ οὔτε τὸ φλέγμα οὐδὲν εἰσκέναι τῷ
αἵματι, οὔτε τὸ αἷμα τῇ χολῇ οὔτε τὴν χολὴν τῷ φλέγματι. πῶς
γὰρ ἂν εἰκότα εἴη ταῦτα ἀλλήλοισιν, ὧν οὔτε τὰ χρώματα ὅμοια
φαίνεται προσορώμενα, οὔτε τῇ χειρὶ ψαύοντι ὅμοια δοκέει εἶναι;
οὔτε γὰρ θερμὰ ὁμοίως ἐστὶν οὔτε ψυχρὰ οὔτε ξηρὰ οὔτε ὑγρά.
ἀνάγκη τοίνυν, ὅτε τοσοῦτον διήλλακται ἀλλήλων τὴν ιδέην τε καὶ
τὴν δύναμιν, μὴ ἐν αὐτὰ εἶναι, εἴπερ μὴ πῦρ τε καὶ ὕδωρ ἐν τε καὶ
ταυτὸν ἐστίν.
- (4) (5) already quoted on p. 181: in both εἶδος means individual
constitution.
- (6) 15, vi. 66 L. οἱ πλεῖστοι τῶν πυρετῶν γίνονται ἀπὸ χολῆς, εἶδεα
δὲ σφέων εἰσὶ τέσσαρα . . . οὐνόματα δ' αὐτέοισιν ἐστὶ σύνοχος
ἀμφημερινὸς τριταῖος τεταρταῖος.

Thus this writer uses εἶδος in the well-attested senses of bodily constitu-
tion and of form or type (classificatory). In (2) *πολλὰ μὲν ιδέαι νοσημάτων*
seems on all fours with *εἶδεα πυρετῶν τέσσαρα*: for *μὴ μεταλλάσσοντα τὴν ιδέην*
we may compare the passage of *περὶ ἀέρων* (11, i. 53 K., quoted on p. 187),
where a disease is said *μεθίστασθαι ἐς ἕτερον εἶδος*, 'another form,' while the
contrast with *ὥρη* and *ἡλικίη* brings it into close connexion with (4) and (5),
where εἶδος means human constitution, i.e., the specific bodily nature of man
or the nature of an individual man. Prof. Taylor's 'substances' is quite
unnecessary in both cases. In the other two examples *ιδέη* is conjoined with
δύναμις. As the collocation of *φύσις* and *δύναμις* is frequent in Hippocrates
(my notes show at least ten instances), the meaning of *ιδέη* here must be nearly
that of *φύσις*, the *nature* of a thing in itself, contrasted with its *δύναμις* or
power to affect other things, nearly equivalent to properties. There is no need
to press the bodily implications of *ιδέη* or *φύσις*: both words are freely used
when body has nothing to do with it: *ιδέη καὶ δύναμις* is virtually equivalent
to the modern 'nature and properties.' Now in Prof. Taylor's remarks on
these passages he takes *ιδέη* to mean primitive elementary substance. Thus
he writes: 'When we come to the further proof "that man is many," *κατὰ*
φύσιν, we see that this is proved by the argument that the various sensible
properties of *φλέγμα χολή αἷμα* are all different. Ergo, they are distinct *ιδέαι*.
Thus the *ιδέη* means that which is not directly perceptible itself, but reveals
its nature to us through its sensible properties, a "substance," "monad," or
"thing-in-itself," and *φύσις* or Nature at large is simply the aggregate of such
εἶδη' (pp. 230-1). These words seem to me to give an unwarranted meta-
physical cast to the thought of the writer, which need be no more than
physical; however, be that as it may, I utterly fail to see what evidence there
is for the allegation that the writer called his elementary substances *ιδέαι* or
εἶδεα. It is not to be found in (1); this passage criticizes the doctrine that

in man there is one substance (observe the simple neuter, *without any είδος or ιδέα*), which changes its *ιδέα* and *δύναμις*; these are both aspects or possessions of the one substance, which the substance *has*, and not substances. In (2), where the author propounds his pluralistic theory, he does not say that there are *πολλὰ είδη έν τῷ σώματι*, but *πολλά*, again the simple neuter, and follows immediately with his inference that there are *πολλὰ ιδέαι νοσημάτων*, a phrase which no one, except in support of a theory, would seek to force into the impossible meaning of 'substances of diseases,' i.e., substances in which diseases arise (p. 229). In (3), where it is said *κατὰ φύσιν τὰς ιδέας κεχωρίσθαι*, followed by the statement that their sensible properties differ (the *δύναμις* side of the *φύσις* or *είδος*), 'natures' will do as well as 'substances'; *τούτων* evidently depends on both *οὐνόματα* and *ιδέας*. The final proof is that they cannot be one (i.e., one *substance*), because their *ιδέαι* are different; the writer cannot be arguing that they are not one substance because they are several substances, as he must if Prof. Taylor's rendering is correct; he must mean that they are not one substance because they have different natures. I cannot see the smallest ground for supposing that *ιδέα* here has any 'element' meaning; it is indeed applied to the simple constituents of complex organisms, but not one of the meanings varies from that with which the word is applied to so complex a being as man himself *in the same treatise*. The writer is speaking of simples, but the word *ιδέα* no more connotes their simplicity than it connotes the complexity of the other objects to which it is applied.

The work *περί ἀρχαίης ἱητρικῆς* contains the following examples:—

- (1) s. 7, i. 8 K. τί δὴ τοῦτο ἐκείνου διαφέρει ἀλλ' ἡ τό γ' είδος καὶ ὅτι ποικιλιώτερον καὶ πλείονος πρηγματίης, ἀρχὴ δὲ ἐκείνη ἢ πρότερον γενομένη. T. 'appearance.'
- (2) s. 12, i. 13 K. χαλεπὸν δὲ τοιαύτης ἀκριβείης εὐούσης περὶ τὴν τέχνην τυγχάνειν αἰεὶ τοῦ ἀτρεκεστάτου. πολλὰ δὲ εἶδεα κατ' ἱητρικὴν ἐς τοσαύτην ἀκρίβειαν ἤκει, περὶ ὧν εἰρήσεται. T. 'branches,' 'departments' of the art.
- (3) s. 15, i. 17 K. ἀπορέω δ' ἔγωγε, οἱ τὸν λόγον ἐκείνον λέγοντες καὶ ἄγοντες ἐκ ταύτης τῆς ὁδοῦ ἐπὶ ὑπόθεσιν τὴν τέχνην τίνα ποτὲ τρόπον θεραπεύουσι τοὺς ἀνθρώπους, ὥσπερ ὑποτίθενται. οὐ γὰρ ἐστὶν αὐτοῖς, οἶμαι, ἐξηγημένον αὐτό τι ἐφ' ἑωυτοῦ θερμὸν ἢ ψυχρὸν ἢ ξηρὸν ἢ ὕγρὸν μηδενὶ ἄλλῳ εἶδει κοινωνέον. ἀλλ' οἶμαι ἔγωγε ταῦτ' ἀβρώματα καὶ πόματα αὐτοῖσιν ὑπάρχειν οἷσι πάντες χρωμεθα. (4) s. 19, i. 23 K. πέσσεσθαι δὲ καὶ μεταβάλλειν καὶ λεπτύνεσθαι τε καὶ παχύνεσθαι ἐς χυμῶν είδος δι' ἄλλων εἰδέων καὶ παντοίων . . . πάντων δὴ τούτων ἥκιστα προσήκει θερμῷ ἢ ψυχρῷ πάσχειν. T. 'patterns.'
- (5) s. 23, i. 29 K. πολλὰ δὲ καὶ ἄλλα καὶ ἔσω καὶ ἔξω τοῦ σώματος εἶδεα σχημάτων ἃ μεγάλα ἀλλήλων διαφέρει πρὸς τὰ παθήματα καὶ νοσέοντι καὶ ὑγιαίνοντι. See p. 187, above.

- (6) s. 23, i. 30 K. εἰ γλυκὺς χυμὸς ἐὼν μεταβάλλοι ἐς ἄλλο εἶδος, μὴ ἀπὸ συγκρήσιος ἀλλ' αὐτὸς ἐξιστάμενος, ποῖός τις ἂν πρῶτος γένοιτο, πικρὸς ἢ ἀλμυρὸς ἢ ὀξύς; οἶμαι μὲν, ὀξύς. See p. 186, above.

In five cases the meaning *form* is evident: in (1) I think 'appearance' is incorrect; the word εἶδος is explained by ποικιλώτερον, i.e., its form is more complicated: in (2) the divisory notion is prominent: in (4) *form* will do; Prof. Taylor's reference to geometrical figures is gratuitous: with (5) and (6) I have already dealt.

The remaining passage, (3), forms the text of a characteristic excursus by Prof. Taylor. He renders by 'they have not discovered anything which, by itself, is hot or cold, moist or dry, and shares in no other εἶδος' (p. 214). Εἶδος he leaves untranslated, as being a technical term for a simple element: 'as the example shows, θερμὸν, ψυχρόν and the rest of the "opposites" are εἶδη, but also, each of these "opposites" is looked on as a substantial thing': 'hence εἶδος here means at once an ultimately simple *body* and an ultimately simple sense-quality, and is, as for Plato, an exact equivalent of φύσις': he represents the writer as arguing thus against the Empedoclean physicians, 'You have to prescribe just one or more of the articles with which we are all familiar, and none of these is a pure εἶδος' (p. 216). Now we look for some proof that the word is used in this highly specialized sense. Prof. Taylor himself translates all the other examples of the word in this treatise quite differently. He infers from this passage that 'the terms εἶδος, αὐτὸ ἐφ' ἑωυτοῦ (Plato's αὐτὸ καθ' αὐτό, κοινωνία already had a known and definite meaning in the science of the fifth century' (p. 215). So wide an inference from one passage is surely rash. Thus, the words 'known and definite meaning' must signify that αὐτὸ ἐφ' ἑωυτοῦ was a technical phrase *regularly* used to express a particular scientific doctrine, viz.: the independent existence of a simple substance in the Empedoclean sense. The phrase does not seem to be used more than once in this connexion by Hippocrates, and then it is used by an opponent. It and its analogous forms αὐτὸ καθ' αὐτό, αὐτὸ ἀφ' ἑωυτοῦ, etc., are common phrases in Greek, and particularly common in Hippocrates: writers who regularly used such phrases in medical prescriptions as 'this may be taken αὐτὸ καθ' αὐτό or mixed with water' (see περὶ παθῶν 51, vi. 260 L; 52, vi. 264 L; 61, vi. 270 L; περὶ νούσων γ' 17, vii. 158 L; περὶ γυναικείης φύσεως 32, vii. 358 L; περὶ γυναικείων 192, viii. 372 L; 205, viii. 394 L) might easily criticize the Empedoclean doctrine in some such terms. This being so, a single occurrence of the phrase in this context does not establish so special a meaning. In point of fact Anaxagoras does employ ἐφ' ἑωυτοῦ several times to denote the separate existence of ultimates. It occurs once in connexion with the μοῖραι of things: ὅτε τοῦλάχιστον μὴ ἔστιν εἶναι, οὐκ ἂν δύναίτο χωρισθῆναι, οὐδ' ἂν ἐφ' ἑωυτοῦ γενέσθαι, ἀλλ' ὅπως περ ἀρχὴν εἶναι καὶ νῦν πάντα ὁμοῦ. fr. 6, p. 316 FVS.² It is used three times of 'Nous': νοῦς . . . μέμικται οὐδενὶ χρήματι, ἀλλὰ μόνος

αὐτὸς ἐφ' ἑωυτοῦ ἐστιν. εἰ μὴ γὰρ ἐφ' ἑωυτοῦ ἦν, ἀλλὰ τρωι ἐμέμεικτο ἄλλωι κ.τ.λ. . . . μόνον ἔοντα ἐφ' ἑωυτοῦ. fr. 12, p. 318 FVS², where the use seems borrowed from medical clinique. In Anaxagoras this phrase is not associated with εἶδος or κοινωνία, so that it is not legitimate to infer much from its collocation with them in the Hippocratean passage. Prof. Taylor's procedure in regard to εἶδος is equally dogmatic: he simply says that the word is used in this technical sense of 'simple body.' But this is not enough; it may be that if this were the meaning, the sentence by itself would be quite intelligible; but we must surely inquire what is the usage of the same writer in other places. Now the second passage conclusively proves that the writer attaches no such meaning at all to the word. When he says that the cold and the hot least of all are liable to be changed by processes of expansion and compression into the εἶδος of χυμοί through all sorts of εἶδεα, he means by εἶδος the *form* of a thing, whether it is simple or compound, original or derived. The same meaning applies admirably to the passage in question; 'they have not discovered anything which by itself is hot, and shares in no other form or nature, viz.: cold, dry, moist.' It is the hatchet argument of Anaxagoras. Prof. Taylor calls attention to the point, remarked by Prof. Burnet, that in the time of Anaxagoras the distinction between body and quality was not distinctly felt (p. 216); that may be so, but Prof. Taylor himself holds that εἶδος is constantly used in the sense of *nature, structure*: why then is it necessary to suppose that here the writer had mainly σῶμα and ὕλη ideas in his mind?

Thus there is no evidence for εἶδος as *simple nature* in this work: we have seen a similar absence of evidence in the first group of treatises which we examined.

Lastly, I take the περὶ τέχνης: the passages are:—

- (1) s. 3, vi. 4 L. γινώσκεται τοίνυν ἤδη δεδευγμένων τῶν τεχνέων, καὶ οὐδεμία ἐστὶν ἣ γε ἐκ τινος εἶδος οὐχ ὁράται. οἶμαι δ' ἔγωγε καὶ τὰ ὀνόματα αὐτὰς (so Littré: αὐτῆς Kühn) διὰ τὰ εἶδεα λαβεῖν· ἄλογον γὰρ ἀπὸ τῶν ὀνομάτων τὰ εἶδεα ἡγεῖσθαι βλαστάνειν, καὶ ἀδύνατον· τὰ μὲν γὰρ ὀνόματα φύσιος νομοθετήματά ἐστιν, τὰ δὲ εἶδεα οὐ νομοθετήματα ἀλλὰ βλαστήματα.
- (2) s. 4, vi. 6 L. ἔπειτα δὲ καὶ πῶς οἷόν τέ ἐστι τοῖς ὑγιασθεῖσιν ἄλλο τι αἰτιήσασθαι ἢ τὴν τέχνην, εἴπερ χρώμενοι αὐτῇ καὶ ὑπουργέοντες ὑγιάσθησαν; τὸ μὲν γὰρ τῆς τύχης εἶδος ψιλὸν οὐκ ἡβουλήθησαν θεήσασθαι, ἐν ᾧ τῇ τέχνῃ ἐπέτρεψαν σφᾶς αὐτούς, ὥστε τῆς μὲν ἐς τὴν τύχην ἀναφορῆς ἀπηλλαγμένοι εἰσί, τῆς μέντοι ἐς τὴν τέχνην οὐκ ἀπηλλαγμένοι· ἐν ᾧ γὰρ ἐπέτρεψαν καὶ ἐπίστευσαν αὐτῇ σφᾶς αὐτούς, ἐν τούτῳ αὐτῆς καὶ τὸ εἶδος ἐσκέψαντο καὶ τὴν δύναμιν, περανθέντος τοῦ ἔργου, ἔγνωσαν.
- (3) s. 6, vi. 10 L. νῦν δὲ δὴ φαίνονται τῶν ἡτηρῶν οἱ μάλιστα ἐπαινεόμενοι καὶ διαιτήμασιν ἰώμενοι καὶ ἄλλοισί τε εἶδесιν ἃ οὐκ ἂν τις

φαίη, μὴ ὅτι ἡτρὸς ἄλλ' οὐδὲ ἰδιώτης ἀνεπιστήμων ἀκούσας, μὴ οὐ
τῆς τέχνης εἶναι. ὅπου οὖν οὐδὲν οὔτε ἐν τοῖς ἀγαθοῖσι τῶν ἡτρῶν
οὔτε ἐν τῇ ἡτρικῇ αὐτῇ ἀχρεῖόν ἐστιν, ἀλλ' ἐν τοῖσι πλείστοις τῶν
τε φνομένων καὶ τῶν ποιευμένων ἔνεσσι τὰ εἶδεα τῶν θεραπειῶν καὶ
τῶν φαρμάκων, οὐκ ἐστὶν ἔτι οὐδενὶ τῶν ἀνεν ἡτρῶν ὑγιαζομένων τὸ
αὐτόματον αἰτιήσασθαι ὀρθῶ λόγῳ.

In (3) Prof. Taylor gives for the first case 'things,' 'substances': this is far too materialistic: at this stage of his analysis he seems obsessed by the idea that an early Greek physician could think of nothing but bodies: 'curing with articles of diet and other substances' is an absurd rendering: something much wider is required, 'curing by modes of diet (see L and S) and other kinds (of treatment),' e.g., by the use of the *φάρμακα* mentioned below. Lower down the translation 'substances of treatments and of drugs' offends by the very different meanings of the genitive implied: *εἶδεα* surely means the specific nature or virtue (*φύσεις*) of the different modes of treatment and drugs. Hence Prof. Taylor's description of *εἶδεα* as 'specifics,' 'the healing substances contained in plants, minerals, etc.,' seems to have no basis in the text. In (2) the writer uses *εἶδος* for the specific nature of *τύχη* and *τέχνη*; he can use it therefore where no idea of body is required at all.

On (1) Prof. Taylor writes: 'It is clear here that *εἶδεα* means simply the real things or *bodies*' (italics mine) 'which are the objects studied by a science. . . . We shall catch his meaning if we say that, taking *φύσις* as a collective name for bodily reality (the only kind of reality known to the early men of science before the rise of atomism) the *εἶδεα* are the individual constituents of which *φύσις* is the aggregate' (pp. 225-6). I hardly know how to criticize these remarks as comments on the text. What the writer is trying to prove is that medicine *as an art* is real; he argues that the name presupposes an *εἶδος*; now to establish that medicine is an art through the conception of an *εἶδος*, he cannot possibly mean that there is an individual body or *σῶμα*, a kind of philosopher's stone, on the existence of which the art depends. Let *εἶδος* mean 'essence'; but it can only mean the essence *of an art*, not a bodily essence. We have only to render *εἶδεα* by 'bodies studied by a science' to make nonsense of the passage: 'I think that the arts' (including the art of medicine) 'have obtained their names on account of the bodies studied by them.' *Εἶδος* is used here in the familiar sense of the *nature* of a thing; the thing need not be a body, but may be any determinate object of thought, e.g., an art. *Εἶδος* and *ὄνομα* are regarded as *possessions* of the thing, which the thing *has*; the writer argues that if it has the one, it has also the other. Every existent art has an empirical existence (*ὁρᾶται*), is currently recognized as something; therefore, the writer urges, if it is something, it has a determinate nature (*εἶδος*). *Εἶδος* is not a 'real thing,' but the determinate *φύσις* which every real thing must have. The meaning is easily derivable from the popular one, though it is here applied in an unusual context. That this is the

meaning is proved beyond doubt by the general argument of the treatise, which seeks to show that the art of medicine has an *εἶδος*, or, as it is also expressed, an *οὐσία*, and not merely a name. He defines medicine as removing the sufferings of the sick, reducing the violence of diseases, and letting alone those who are overcome by them. This, then, is the essence or nature or *εἶδος* of the art. To the objection that success is due to *τύχη*, he replies that those patients who have submitted themselves to the physician have experience of its *εἶδος* and recognize its *δύναμις*. *Εἶδος* here = *φύσις*, and must be used in the same sense as in the earlier passage. Medicine is not a *τι* without a 'what,' as is shown by its effects (*δύναμις*). The *εἶδος* is the system of rules by which the art of medicine actually does heal. The author does not establish the reality of medicine by proving the existence of a determinate body studied by it, but by insisting that medicine *does something*.

I may add that Prof. Taylor's canon, that we must not attribute to the early men of science any but a bodily conception of reality, is not to be applied to this treatise without question, because there is internal evidence to show that its date is comparatively late. It is a rhetorical apology for medicine. The word *οὐσία*, used several times with a meaning not far removed from that of *εἶδος*, does not belong to the usual vocabulary of the medical writers (it occurs three times in this work, and elsewhere only in *παραγγελίας* 9, ix. 264 L). Both *εἶδος* and *οὐσία* are used with meanings which suggest that the work belongs to a period not far removed from that of the Platonic *Cratylus*.

If I am right in my analysis, there is no instance of *εἶδος* or *ἰδέα* in Hippocrates with the meaning of substance.

We are now in a position to examine Prof. Taylor's case as a whole. I give it in his own words. 'We may thus, I think, take it as established that *εἶδος* and *ἰδέα*, wherever they appear as technical terms, alike in rhetoric, in medicine, and in metaphysics, have acquired their technical character under Pythagorean influence' (p. 257). With the rhetorical use I do not propose to deal. What 'technical terms' in medicine are intended to include, whether the application to simple natures only or the common meaning of *type* as well, is not quite clear from Prof. Taylor's summary. How does he substantiate this statement?

'From the popular sense of *body* (especially used of the living, and still more especially of the living human organism) come alike the applications of the word to supposed simple bodies, such as the four of Empedocles, to the figures and tropes of rhetoric, and to the hyperphysical "monads"—the word is Plato's own—of the Socratic-Platonic philosophy' (ibid.). The very first words contain a *suggestio falsi* which colours the whole account. By his own showing the popular sense is not *body*, but bodily *shape*, structure, form. When the medical writers use it of the shape of an organ, when Herodotus uses it of the shape of a toy, the idea of visible structure is patent. In the

technical medical sense of individual constitution we have the idea of inner structure developed. In the generalized sense of form, type, etc., with a classificatory meaning, we have a natural extension from the *shape* meaning, which requires no intermediary of Pythagorean mathematics. The idea of shape was in existence long before the idea of a mathematical figure. If therefore εἶδος in Plato means *type, form*, and the like, the Hippocratean evidence is in favour of his having derived it from a perfectly natural extension of a common word. Here, however, I am in some difficulty as to Prof. Taylor's distinction between popular and technical meanings. He lays great stress on the difference of usage in the practical manuals and in the works which bring in cosmological topics (p. 225). The words are freely used in two exclusively practical manuals, *περὶ τῶν ἐν κεφαλῇ τραυμάτων* and *κατ' ἐλητρήσιον*, with the general sense of form, type, shape, which are apparently, therefore, current non-technical uses: on p. 257 the only popular sense is *body*. He points out the total absence of the words from many of the manuals of practical medicine. In point of fact, the whole of this argument from the distinction of practical manuals and other works is thoroughly misleading. The comparative absence of the words from the practical treatises as a whole is capable of another, and a simpler, explanation. For one thing, as I have remarked before, these treatises *do not classify*; if they do, as the manual on wounds in the head, they use the words freely in the classificatory sense. If they wish to express the popular idea of shape, they use εἶδος, as three times in *μοχλικόν*. When the writers of more scientific or philosophic treatises have occasion to use a word for *form, type* in a sense applicable to the simple bodies of physics, they use εἶδος, just as they use it for the form of anything else. The medical use suggests rather that the rise of scientific thought, whether medical or more general, brought with it the need for a word to express the idea of form in all sorts of contexts, and that the development was common to medicine and philosophy. The frequency of compound adjectives of the *θυμοειδής* type at all periods of the language is enough of itself to show that the general idea of form or nature attaches to εἶδος in popular thought; this makes the *body* factor so much emphasized by Prof. Taylor quite irrelevant and disposes of all necessity for invoking mathematical conceptions in order to explain the developments of meaning. Prof. Taylor's application of the Joint Method of Agreement and Difference to prove that the words must have come into philosophical use from the Pythagoreans, is utterly inconclusive. He tries to show that it is absent from the remains of philosophical writers not under Pythagorean influence, but found in the remains of those who were under it. Unfortunately, the line he draws is also a line of date, as he includes among the thinkers influenced by Pythagoreanism *all* physicists subsequent to Parmenides, viz.: Empedocles, Anaxagoras, Melissus, Diogenes of Apollonia, Democritus (pp. 246 sqq.). Hence his results do not exclude the explanation that the words were extended naturally and directly from a common use—in which I should certainly include the shape of a common object—to meet

the requirements of a scientific vocabulary, unless he can show that the use of the words in these writers is so remote from the popular use as to require a special explanation. Let us look at the facts. *Ἰδέα* occurs once in the fragments of Anaxagoras, where his *σπέρματα* are described as *ιδέας παντοίας ἔχοντα καὶ χροιάς καὶ ἡδονάς* (fr. 4, FVS² 315). The form or shape of a *σπέρμα* is derivable by a simple step from the popular notion of the form or shape of a man or a toy (found in Herodotus, Hippocrates and Xenophanes, fr. 15, whom Prof. Taylor classes among the writers not affected by Pythagorean terminology, p. 253). In Empedocles the word *εἶδος* occurs seven times: in five of these it is used in a sense indistinguishable from the 'popular' sense of the form of a living body (see p. 243), as Prof. Taylor himself allows in his renderings (fr. 23, 35, 71, 115, 125, quoted on pp. 250-1). In one we have *αἷμα καὶ ἄλλης εἶδεα σαρκός* (fr. 98), an instance of the classificatory use frequent in the medical writers, where Diels' 'die sonstigen Arten von Fleisch' (FVS² 200) will recommend itself to most readers rather than Prof. Taylor's 'the stuff of which flesh is made'; in the seventh (fr. 22), Hate brings together things differing *εἶδεσιν ἐκμακτοῖσιν*, shapes or forms. Thus there is no question in Empedocles of any specially technical uses of the words, and yet Prof. Taylor comments as follows: 'The *ιδέαι* are specially prominent in the philosophies of Empedocles (in whose school the term became technical for what later usage has taught us to call the four "elements"), etc. (p. 254).' This is a good example of illegitimate transitions, to put the case mildly. What does Prof. Taylor mean by the *ιδέαι*? Does he mean the elements, 'monads,' 'simple reals,' Empedocles' own four simple reals, or what? The argument purports to be based on terminology; there is not a scrap of evidence that *ιδέα* in any absolute sense was used by Empedocles, who on Prof. Taylor's own showing uses the word *εἶδος* in the 'popular' sense. The statement in parentheses rests on other evidence, which I will examine presently. Diogenes, fr. 5D, speaks of the *ιδέα* of *ζῷα*, either *shape* or *nature*, a 'popular' use; Melissus, fr. 8D of *πολλὰ καὶ ἄδια καὶ εἶδη τε καὶ ἰσχὺν ἔχοντα*, where the common opposition of *φύσις* and *δύναμις* is meant. Can we then regard the physicists of this period as giving a highly technical meaning to the words, mediated by mathematical ideas?

As for the supposed extension of the words to mean substance, thing, independent entity, I deny that there is any ground for it, either in the medical writers or in the fragments of the physicists. They are indeed applied in connexion with *στοιχεῖα*; but the application is sometimes classificatory, sometimes the specific nature or form is meant, which everything, simple or compound, is supposed to have. There is no case in which the word is an absolute name; it always requires a dependent genitive to complete its meaning. There is no passage justifying such language as that *φύσις* is composed of a number of *εἶδεα* in the sense of simple natures. The root-meaning of form implies something that has the form, and this implication is

never lost. It is true that in one treatise εἶδος acquires through opposition with ὄνομα the idea of reality; but when it is argued that the existence of a name establishes that of an εἶδος, the connecting link is the something named; if *it* has a name, *it* has a positive character of its own; this positive character need not be a 'body,' it may be the positive character essential to the idea of such a thing as an art. When a writer describes the four substances which enter into the composition of the human body, he uses the simple neuter, and immediately follows with the four εἶδεα of diseases therefrom proceeding. When the author of another work attacks the Empedoclean doctrine of the four elements, he does not say that they have not discovered an εἶδος, but a τι; when he goes on to describe it as hot or cold or sharing in no other εἶδος, whether εἶδος means form (substantial) or nature (referring to ὑγρόν, etc.), there is nothing to show that it means *simple form*. If I am right, there is no need to seek for an explanation of the way in which εἶδος came to mean bodily element, because it never had that meaning.

But even if we suppose that it had such a meaning, Prof. Taylor's importation of Pythagoreanism is unsupported by any evidence. 'The link of connexion, in the case of the εἶδη which are physical "elements" or "opposites" conceived as primary kinds of "stuff," lies ready to hand in the notion that the δυνάμεις or properties of a body flow in the last resort from its geometrical structure' (p. 257). He has to show that this link was actual. To this end he collects the examples of the words in Empedocles, Anaxagoras, Melissus, Democritus. In no example from these, *except Democritus*, is εἶδος or ἰδέα ever used with the meaning of 'monad,' 'simple body': in Empedocles and Anaxagoras it means the shape or form of any object. Prof. Taylor in his interpretation of Hippocrates paints for us a highly imaginative picture of the early physicists discussing their fundamental problems under the form that φύσις manifests itself in many εἶδεα or simples; simple substances in the pluralism of Empedocles, simple 'qualities,' vaguely conceived as 'stuffs' in monistic theories. The echoes of the discussion have penetrated into medicine from the philosophers. When we turn to the fragments of these philosophers we find no trace whatsoever of such a terminology. Prof. Taylor's remark on p. 254 that in the school of Empedocles the term ἰδέα 'became technical for what later usage has taught us to call the four "elements"' seems to rest on the authority of a passage in the *Iatrica* of Menon (*Fragmente der Aerzte*, Wellmann, i. 110). Philistion the Siceliot physician οἶεται ἐκ τεττάρων ἰδεῶν συνεστάναι ἡμᾶς, τοῦτ' ἐστὶν ἐκ τεττάρων στοιχείων· πρὸς αἶρος ὕδατος γῆς. But this citation, away from its original context, is not enough to establish the point; the gloss στοιχείων may be misleading; ἰδεῶν may be used in some such general sense as γενῶν in Plato, *Timaeus* 82A τεττάρων γὰρ ὄντων γενῶν, ἐξ ὧν συμπέπηγε τὸ σῶμα, γῆς πρὸς ὕδατός τε καὶ αἶρος, where στοιχείων might be substituted without spoiling the general sense, but would not be an equivalent. Is γένη technical for the four elements in Plato? Moreover, a vague assertion of Pythagorean influence is of no value for Prof. Taylor's

conclusions; what he has to establish is the right influence. It is intrinsically improbable that either Anaxagoras or Empedocles should have taken over from that system a name for simple bodies implying a theory of these bodies not held by them; in point of fact, there is no evidence that they did. The medical writers, who are alleged to use the words in this sense, are well acquainted with Empedoclean and Ionian (Anaxagorean) views of matter; the Pythagorean element is inconspicuous, being mainly limited to such unscientific notions as the importance of seven and its multiples in human life. That Democritus called his elements *ἰδέαι* 'shapes,' is certain. But with him *ἰδέα* is not a general word for *στοιχείον*; it is a word expressing his own peculiar view of the nature of the *στοιχεία*. And however much he may have been under Pythagorean influence, his technical application of *ἰδέα* is just as near to the common meaning 'shape of a *solid* body' as it is to the meaning 'geometrical figure,' which includes figures of two dimensions. The evidence of these *φυσικοί* is really against Prof. Taylor's interpretation: *ἰδέα* is used by Democritus for *his own στοιχεία*, it is *not* used in the extant fragments of Empedocles and Anaxagoras and the other *φυσικοί* of the time in the sense of 'elements,' 'monads,' 'simple bodies.'

The result of this examination is to show how unfounded is Prof. Taylor's contention that Plato found the words already in current use with the specific technical sense of 'simple beings,' 'monads,' 'things-in-themselves,' and merely applied them to a new kind of hyperphysical monad. It leaves without tangible proof the supposed universal influence of the Pythagorean idea of mathematical figures. I may point out that if the words did pass so completely into the current philosophical terminology as Prof. Taylor makes out, Plato's own use of them cannot be held to show any special dependence on Pythagorean doctrine; he proves too much. My examination seems to indicate that in the time of Socrates the words *εἶδος* and *ἰδέα* show two trends of meaning in the general vocabulary of science. The first is mainly physical, but without mathematical associations: including many gradations of meaning from the popular to the technical: the *form* of a bodily object—occasionally used for the bodily object itself, like our own words *form* and *shape*, but always distinct from *σῶμα*: sometimes the outer visible form or *shape*: often the inner form, the structure, nature, *φύσις*, a specially physical conception: often extended to the nature of objects other than bodily: in one treatise of rhetorical character passing, by an easy transition, nearly, if not quite, into the metaphysical notion of essence. The second is semi-logical, classificatory; used especially in such contexts as 'there are four forms, kinds' of anything, whether a substance like the 'moist' or a disease or whatnot. Thus in Thucydides *πάντα ἰδέα* has become so much a formula that it does not matter whether we translate *form*, *mode* or *kind*. In this line of development the later meaning of *species* is but a single step further. Prof. Taylor seems to have made out a case for the employment of *εἶδος* in the Pythagorean mathematics in the sense of geometrical 'pattern' or 'figure.' But there is

no evidence whatsoever to show that this highly specialized meaning was a determining factor in the other developments; it seems to have been a collateral growth, and εἶδος soon gave place to σχῆμα as the technical term for a geometrical figure. The technical uses of εἶδος by Isocrates in rhetoric (the examples are collected in *Varia Socratica*, pp. 201-211) seem to me explicable by the current scientific uses, without calling in the aid of mathematical conceptions; what I have called the classificatory or divisory meaning is marked in many of the instances.

In conclusion I must touch very briefly on the question, what light my results may throw on the origin of the Platonic usage of εἶδος and ἰδέα. It must at least be admitted that their meanings in the Platonic writings show much greater affinity to the current scientific usage in both its tendencies than to the specialized mathematical meaning. If the development of scientific use was independent of Pythagorean mathematics, as I maintain that it was, then the linguistic evidence, so far as it goes, bears out the statement of Aristotle (*Metaph.* i. 987 a 31 sqq.) that the Platonic εἶδη were derived from another source than Pythagoreanism. Can we say why Plato gave the name of εἶδη to his principles? Not, according to the evidence of the associations of the word in current usage, because they were ultimate simple beings, but presumably to mark their specific character. Aristotle tells us (*l.c.*) that they were in their origin primarily the objects of definition, an aspect of them prominent in the dialogues themselves: were they called εἶδη because of this logical function? I think not. The key to the name is to be found, I believe, in *Cratylus* 386E sqq. In this passage we have two formulae equated with each other. The first, αὐτὸ δ' ἔστι κερκίς, represents the object of defining thought as opposed to the object of sense (Aristotle, *Metaph.* 987 b 5): it can be easily shown to have arisen from the dialectical question τί ἔστιν; in this aspect the 'idea' is derived from τὴν ἐν τοῖς λόγοις σκέψιν, as Aristotle puts it (*ibid.* 987 b 31). The second formula, τὸ τῆς κερκίδος εἶδος, uses εἶδος in the sense of nature, form, φύσις (a frequent synonym for it in the *Cratylus*), thus bringing it into close connexion with the scientific conception of εἶδος as form. We may perhaps express the difference thus: the 'idea' is αὐτὸ δ' ἔστιν ἑκαστον or οὐσία primarily in its *epistemological* and *ontological* aspects, εἶδος primarily in its *scientific* aspect as cause of the particulars, conceived on the analogy of causation in the arts. Thus the name εἶδος has nothing to do with the doctrine that the ideas are numbers, a doctrine which Aristotle, our only authority for it, always treats as concerned with the relation of the ideas to their elements.¹

¹ This result seems to be in agreement with that obtained by Ritter from his examination of the uses of the words in the Platonic dialogues themselves: see his *Neue Untersuchungen ueber Platon*, p. 323. He there treats the logical and

metaphysical meanings as developed from the original 'outer appearance, form' (äusseres Aussehen, Gestalt) through the intermediate meaning of 'inner structure' (inneres Verhältnis, Verfassung, Beschaffenheit).