

Ια5: the Metaphysics and its constituent books

My discussion in the remainder of this book will contain sections corresponding to most of the books of Aristotle's Metaphysics, in roughly their transmitted order, examining in detail the aims and argument-structure of each book and the contribution that each makes to the overall argument of the Metaphysics--where by "argument" I mean both the whole series of arguments for particular conclusions, and the overall project of determining more precisely, by means of such arguments, what wisdom is and (equivalently) what the ἀρχαί are. There is no other way to grasp the argument-structure of the Metaphysics: we cannot do it (as Fârâbî seems to have tried in On the Aims of the Metaphysics) simply by describing the subject-matter of each book in sequence and then saying how these subject-matters might be related to each other and to the overall aims of the science. Nonetheless, when we take this approach, there is a danger either of losing sight of Aristotle's overall plan in the details, or of losing patience with the mass of details that we must confront. So it may be helpful if I give here, by way of anticipation and without supporting argument, an outline of how I see the functions of the individual books of the Metaphysics within the overall argument.¹

As we have seen, A1-2 begin with an ethical characterization of wisdom as, roughly, the kind of knowledge intrinsically most worth having, and infer that it is knowledge of the ἀρχαί, and that these will be known as first causes: in the process, Aristotle also argues for other characterizations of wisdom, notably that it will be a universal knowledge (in the sense that the ἀρχαί will be known, so far as possible, as universal causes, i.e. as causes of everything), that it will be a knowledge of the good as a cause, and that it will be in both senses "divine science." To begin the process of specifying what kinds of causes we should be seeking, and to argue that they remain to be sought, i.e. that earlier philosophers have not already found them, Aristotle in A3-7 examines the things that earlier philosophers have posited as ἀρχαί, and, in particular, in what ways they have used them as causes: he concludes, both that there is no need to investigate any further kinds of causes besides the four discussed in the Physics, and that earlier philosophers, even those who posit a good-itself among the ἀρχαί (Anaxagoras' νοῦς, Empedocles' Love, Plato's one-itself), do not use it as a final cause and therefore do not use it as a cause quâ good; therefore the expectation of wisdom as the knowledge of the good as a cause has not been fulfilled, and we should continue to pursue it. The remaining chapters of A raise more particular objections against earlier philosophers' accounts of the causes of things, criticizing the physicists and Pythagoreans but concentrating on showing that the Platonists in positing Ideas as the causes of sensible things (and higher ἀρχαί as causes of the Ideas) have succeeded no better. Thus the search for a wisdom that will meet the expectations sketched in A1-2 remains open.

Metaphysics B is closely connected with A, to which it explicitly refers back three times (995b4-6, 996b8-10, 997b3-5), in such a way as to leave no doubt that A and B are intended as parts of a single treatise beginning with A.² B presents itself as a further step in determining what wisdom is and how we should approach it: the aporiai constitute a collective ἴδιον of wisdom (wisdom is whatever allows us to solve these aporiai) and a program for how to proceed (think

¹think about adding a table/graphic representation (e.g. in tree form, Γ and MN as separate branches out of B, EZHΘ and Iota as separate branches out of Γ, etc.)

²A is cited as ἐν τοῖς πεφρομισμένοις, πάλαι, ἐν τοῖς πρώτοις λόγοις--cite Frede-Patzig on πάλαι, and note Jaeger on ἐν τοῖς πρώτοις λόγοις (unless I am misremembering, this instance contradicts his theory on this). note: I seem not to cite all of these cross-refs in Iβ1: I should

through each of these aporiai). The aporiai are not simply questions which wisdom might be expected to answer (in the sense in which, for instance, solid geometry might be expected to answer the question how many regular polyhedra there are), but questions whose answers will determine what wisdom is (i.e. what it will be knowledge of), with arguments for each incompatible answer, or difficulties against all of them. Some aporiai ask whether wisdom will be a science of this or that kind of cause, or of causes of this or that effect, or whether these questions do not arise, because there is a single science of both (i.e., because neither can be known without the other, so that the ἔξις of knowledge of them is the same). Other aporiai ask whether the ἀρχαί are this or that (or are causes of this or of that, or causes in this or that way), where it is equivalent to ask whether wisdom is a knowledge of X, or whether X is an ἀρχή; others ask of some X whether it is an οὐσία, where this is a necessary condition for X to be an ἀρχή, and where, if this condition is satisfied, X will be a plausible candidate to be an ἀρχή or at least a step in the direction of the ἀρχαί. In formulating these aporiai, Aristotle indicates a number of different paths by which we might discover wisdom (e.g. by looking for this kind of cause of that effect): each path will have to be separately investigated and, in order to discover wisdom, we must either show how, on some one of these paths, to overcome the difficulties which Aristotle has indicated as obstructing each path, or else find some new path beside these.

Later books of the Metaphysics refer back more or less explicitly to aporiai from B, and all of the aporiai are indeed solved in later books; these references, together with the references to Δ, are the most striking outward sign of the unity of the argument of the Metaphysics. Books Γ and E explicitly contribute to further determining the science which was described in A, and whose content was disputed in B. In particular, when the beginning of Γ announces that "there is a science that considers being qua being and the things that belong to it per se" (1003a21-2), it is not starting a new discussion, but proposing an answer to some of the questions raised in B about what wisdom will know the causes of: "since we are seeking the ἀρχαί and the highest causes, it is clear that they must be [causes] of some nature per se" (1003a26-8). Aristotle proposes that wisdom will be knowledge of being qua being and of its per se attributes, i.e. causes, to the things that are, of the facts that they are, that they are each one, that they are severally many, and so on. The knowledge of being is proposed here not as desirable in itself, but as a means to knowledge of the ἀρχαί: presumably the implicit reason for thinking that these will be found as causes of being, rather than of some other effect, is that causes of more narrowly extended effects will be more low-lying causes, while the highest causes will be found as causes of the most widely extended effects, namely being and whatever attributes are coextensive with being. (In Γ3-8 Aristotle argues that the science of being and its attributes will also know certain universal truths assumed in the other sciences, such as the principles of non-contradiction and excluded middle, which pertain to being as such, in something like the way that the truths of universal mathematics pertain to quantity as such rather than to discrete or continuous quantities; he also argues that the knowledge of these truths is bound up with knowing that there are things eternally in motion, the heavenly bodies, and things eternally unmoved, their movers.) However, "cause" and "being" and "one" and so on are each said in many ways, and we can only plunge into confusion if we try to find the first causes of being or unity without first drawing the relevant distinctions; and so Γ2 1004a16-31 calls for a study of the many senses of "one" and "many" and "same" and "other" and "contrary" and so on as well as of "being"--that is, it calls for Metaphysics Δ, which deals with these terms as well as with "ἀρχή," "cause," and other terms whose senses must be distinguished for the investigation of the ἀρχαί to be carried out successfully. Γ's claim is not that wisdom will be the knowledge of all the causes of all the

senses of being and unity and so on (E2-4 deny that wisdom will be a knowledge of causes of being per accidens or of being as truth), but rather that, on the basis of Δ , we should distinguish the different causal chains, and explore each of them separately, to examine whether each of them leads to the desired $\acute{\alpha}\rho\chi\alpha\acute{\iota}$, and thus to wisdom, or not.

The subsequent books EZHΘI do in fact systematically carry out this program, and so contribute to further determining the science described in ABΓ, by helping to determine what kinds of causes, of what senses of being and unity and so on, wisdom will be knowledge of. These books (and the remaining books of the Metaphysics as well) address and resolve a series of aporiai from B, determining whether the difficulties raised against each possible path to the $\acute{\alpha}\rho\chi\alpha\acute{\iota}$ can be overcome, or whether these paths are necessarily blocked; very typically they resolve these aporiai by drawing on distinctions from Δ . $\Delta 7$, on the senses of being, plays a crucial structuring role in the closely connected block EZHΘ; Iota too draws crucially on Δ 's account of unity and the other attributes of being.

From ABΓ it might not be clear how any upward causal chain could fail to reach $\acute{\alpha}\rho\chi\alpha\acute{\iota}$ which would be among the objects of wisdom (except perhaps by leading to an infinite regress, a possibility that Aristotle is concerned to address in $\alpha 2$). E1 makes this clearer by further determining the concept of wisdom, picking up on things said about it in ABΓ. To be a cause, even to be a "first" cause in the sense of being, say, a material cause which has no further material cause or a formal cause which has no further formal cause, is not sufficient for being an $\acute{\alpha}\rho\chi\eta$ in the sense in which the $\acute{\alpha}\rho\chi\alpha\acute{\iota}$ are the objects of wisdom. For something to be an $\acute{\alpha}\rho\chi\eta$ in this sense is for it to be first, in the sense of having nothing prior to it: thus for something to be an $\acute{\alpha}\rho\chi\eta$ it must have existed from eternity (since otherwise it would have come-to-be out of something prior) and it must exist separately, not necessarily in the sense of existing separately from matter, but existing $\kappa\alpha\theta' \alpha\upsilon\tau\acute{o}$ and not as an attribute of some other underlying nature (since otherwise that underlying nature would be prior to it).³ So Aristotle has argued in B, and the physicists, mathematicians or dialecticians who lay claim to wisdom will all say that their $\acute{\alpha}\rho\chi\alpha\acute{\iota}$ are eternal and separate in this way; and so any causal chain that does not lead up to such separate eternal causes will not lead to the $\acute{\alpha}\rho\chi\alpha\acute{\iota}$ we have been seeking. E1 draws on these premisses to give preliminary arguments (which will be supported by further considerations later in the Metaphysics) that neither physics nor mathematics is wisdom, mathematics because (Aristotle claims) its objects do not exist separately, physics because its objects are essentially in motion. Since a thing might be moved and yet be eternal (as Empedocles and Democritus and so on will claim for their $\acute{\alpha}\rho\chi\alpha\acute{\iota}$, and as Aristotle will admit for the heavenly bodies), this is not sufficient to show that physics (or some highest part of physics) is not wisdom, but Aristotle thinks that if there are also eternally unmoved things, then these will be prior to all moved things (even the eternal ones), so that if there are eternally unmoved things, wisdom will be neither mathematics nor physics but a further discipline of "first philosophy" or "theology" which will grasp causal chains leading up to these eternally unmoved things. This "first philosophy" might be Platonic dialectic, if formal causality leads up to separate eternally unmoved forms: Aristotle does not, of course, believe this, but at this stage of the argument it remains to be investigated. (Aristotle also raises and rejects the possibility that wisdom or first philosophy might be neither physics nor mathematics nor theology but a universal discipline standing to all of these as universal mathematics does to arithmetic and geometry; rather, it will be a science of a particular object or domain of objects, and will be universal only in the sense that this object is a cause of being universally.)

³cross-references to other discussions

Thus the subsequent investigations must determine whether the various causal chains leading up from the various senses of being and unity (and so on) lead up to separate eternal causes or not. EZHΘ devote themselves to examining the causes of being; Iota, of its attributes. Beginning in E2, EZHΘ are structured around the four senses of being distinguished in Δ7, being per accidens (discussed E2-3), being as truth (discussed E4 and again Θ10), being as divided into the categories and said primarily of οὐσία (discussed in ZH), and being as actuality and potentiality (discussed in the main body of Θ, Θ1-9). Being per accidens and being as truth are quickly dismissed as not leading to the kinds of causes we are seeking, and so are the categorial senses of being other than οὐσία; being as οὐσία, actuality, and potentiality are the serious candidates. Being in these different senses will also have causes in different senses. The cause of being as οὐσία will be the οὐσία of the thing; the cause of being in potentiality [δυνάμει] will be an active or passive δύναμις or the thing that has such a δύναμις; the cause of being in actuality will be the actual exercise of such a δύναμις, or the thing actually exercising such a δύναμις.

Aristotle speaks indifferently of Y as being the "cause of οὐσία" to X or of Y as being "the οὐσία of X," i.e. the answer to the question "τί ἐστὶ X." One possible way to try to reach the ἀρχαί, beginning from the things manifest to us, is to look for causes of being in this sense, i.e. to begin with some manifest object X, to ask "τί ἐστὶ X," and, if the answer is Y, to ask "τί ἐστὶ Y," and to continue in this way until we reach some ultimate stopping-point. Aristotle in B attributes to all three of the contending disciplines, physics and dialectic and mathematics, this way of looking for the ἀρχαί.⁴ So it will need to be investigated, both whether the ways these disciplines suggest of giving the οὐσία of the manifest things are correct, and (of more specific importance to wisdom) whether they succeed in reach οὐσία existing separately and prior to the manifest things and indeed (when we reach the ultimate οὐσία) from eternity. Metaphysics Δ8 distinguishes three ways in which Y might be said to be the οὐσία of X: as the underlying nature of which X is predicated; as the essence, what is signified by the definition of X; or as one of the parts referred to in the definition of X, whether a genus or differentia or a physical part or mathematical boundary that might be referred to in the definition. Metaphysics Z examines each of these in turn, and argues that none of these ways of looking for the οὐσία of the manifest things lead to ἀρχαί separate from and prior to the manifest things.⁵ This is a purely negative result (but a result Aristotle is fully committed to, not a merely preliminary or aporetic result), and it has nothing to do with the function that, notably, Frede-Patzig attribute to Z within the Metaphysics, of determining what candidates within the sensible realm best meet different and prima facie conflicting criteria to be an οὐσία: I argue that this conception of the task of Z results from a misreading and cannot do justice to the actual argument either of the book as a whole⁶ or of individual chapters, which can be given much simpler and more satisfying readings if we drop the "criteria and candidates" or "search for substance" reading of the overall aim. (Strictly, I do not claim that Z has a purely negative function within the Metaphysics, but only that Z1-16 do. In the course of arguing that physical and dialectical definitions do not lead to the ἀρχαί, Aristotle had raised an aporia which seems to tell against the possibility of giving any definition

⁴have I said enough about this here, or only later? if not, stick in something in the accounts of A and/or B above. note where B does this, and note the apparent oddity of the claim about mathematics

⁵my ways of dividing up how many τρόποι of οὐσία are distinguished, both in Δ8 and in Z, and how they correspond, are controversial and will be argued for in Part II

⁶note, as probably above, on what F-P do the book; this doesn't come e.g. from their thesis about individual forms, but from their unargued assumption about the skopos of the book. the Burnyeat approach is different, and in my view closer to the truth, but still leads e.g. to regarding Z7-9 and Z12 as later interpolations (and Z12 as badly textually damaged), whereas on my reading they make simple natural sense as and where they are

at all of any οὐσία--either the parts mentioned in the λόγος are not οὐσίαι, in which case non-οὐσίαι will be prior to οὐσίαι and οὐσίαι will arise out of non-οὐσίαι, or else the parts are οὐσίαι, in which case many οὐσίαι will be collectively a single οὐσία, and Aristotle maintains that both of these are impossible. Since science is impossible without definition, and since Aristotle has raised the aporia, it is incumbent on him to solve it, and since it belongs to the first philosopher to raise the aporia in assessing arguments which, if they succeeded, would belong to wisdom, it also belongs to the first philosopher to solve the aporia, and this is what Aristotle does in Z17-H, showing how to give a λόγος τῆς οὐσίας in a way that overcomes the difficulty. Such λόγοι lead to science, but not to wisdom; they do not give a path to separately existing eternal ἀρχαί.)

Metaphysics Θ belongs to the block EZHΘ dealing with the senses of being and their causes, but is quite separate from the investigation of οὐσία, which it refers back to as already completed; the concern now is with being in potentiality and being in actuality and their causes. Since, as noted above, these senses of being have different causes, which will lead to different ἀρχαί, the investigation of being in potentiality and in actuality will be closely bound up with the investigation of the ἀρχαί, and in fact Θ, after a programmatic announcement that it will deal with these senses of being, spends more time on discussions of ἀρχαί (Θ, drawing on Δ, defines δύναμις as a certain kind of ἀρχή) than on senses of being. A cause of being δυνάμει will be an active or passive δύναμις or the thing that has such a δύναμις, and many past philosophers have more or less explicitly conceived their ἀρχαί as such δυνάμεις. But Aristotle argues that such ἀρχαί can only explain being δυνάμει, and will be insufficient to explain the actual existence of anything beyond themselves (a housebuilder or the art of housebuilding, together with bricks and stones which can be made into a house, will explain only the possible existence of a house, not its actual existence); we must also posit among the ἀρχαί activities [ἐνέργεια] or actually acting causes (like housebuilder housebuilding rather than like housebuilder), and Aristotle argues that ἐνέργεια is in several senses prior to δύναμις, with the implication that the ἀρχαί in the strictest sense, the first of all things, are ἐνέργεια rather than δύναμις. (He also argues as a corollary that evils are always posterior to goods and therefore cannot be among the ἀρχαί.) Θ thus leads to positive as well as negative results about the ἀρχαί.

Metaphysics Iota stands outside the block EZHΘ which investigates the senses of being and their causes. Indeed, because Iota says almost nothing about being, it has sometimes been regarded as isolated from the main argument of the Metaphysics; but in fact it is quite well integrated into the overall plan, with many connecting references. Iota, like EZHΘ, develops one branch of Γ's program for investigating the causes of being and its *per se* attributes; both Iota and EZHΘ are largely structured by distinctions drawn in Δ. But where EZHΘ investigate various senses of being, Iota investigates attributes of being such as unity, plurality, sameness, otherness, difference and contrariety; these attributes are especially important for various Academic theories which posit as ἀρχαί a one-itself and an ἀρχή contrary to the one which is responsible for the pluralization of beings (sometimes itself described as plurality or otherness or as a first pair of contraries such as the great and the small). The results of Iota are negative and make sense only as a series of responses to Academic opponents, arguing that unity and contrariety and so on cannot exist separately, and that the causes of pluralization within any one genus must be inseparable from that genus, so that there cannot be single universal causes of unity and pluralization which might be the objects of wisdom. But the results of Z are equally negative and reactive, and Iota is no more marginal to the project of the Metaphysics than Z is.

Metaphysics MN are also books with negative results, directed against Plato and other Academics, which have often been regarded as at best an appendix to the Metaphysics. But they too are bound by backward and forward references, including to aporiai of B which they answer (and which are not answered anywhere else in the Metaphysics). They stand outside the project announced by Γ, and carried out in EZHΘI, of investigating the senses of being and of its attributes and their causes. But this is not the only possible approach to wisdom. While Aristotle proposes to find the ἀρχαί, the highest causes, as causes of the most widely extended effects, being and its attributes, it would also be possible to seek these highest causes as causes of the highest effects, i.e. not of all beings universally, but of the highest domain of beings, eternally unmoved beings such as mathematical or Forms, assuming such things exist separately and independently of sensible things. Aristotle has raised such a possibility in B; it will be attractive to all Academics, and especially to Speusippus, who denies that the different domains of beings are connected enough that they would have a common cause, and who therefore proposes his highest ἀρχαί, the one and plurality, as causes of mathematical numbers rather than of all beings. One consequence of this approach is that, since unmoved beings do not have efficient or final causes, the ἀρχαί will instead be found as στοιχεῖα or immanent constituents (material or formal) of their effects; and, as Aristotle argues briefly in A and B and at greater length in N, this implies that there will be no good ἀρχή, or at least that it will not be used as a cause quâ good (Speusippus will accept this conclusion, Plato will try to resist it). So Aristotle needs to investigate this approach to wisdom, and he does so in MN, arguing that neither mathematical nor Forms exist separately from or prior to the sensibles, and that, even if they did, they could not be derived from the kinds of ἀρχαί that the Academics propose, and indeed that essentially unmoved beings cannot have a part-whole structure and so cannot have στοιχεῖα, thus can have neither constituent (material or formal) nor non-constituent (efficient or final) causes.

Metaphysics M seems to refer forward to Λ (it is certain that it is not intended to be read after Λ), and Λ seems to draw on some results of N. Λ seems to be intended as the culmination of the argument of the Metaphysics. It gives a systematic and positive account of the ἀρχαί, and, especially in its concluding chapter Λ10, makes repeated references to aporiai from B and also to expectations of wisdom raised in A, claiming that our account has shown how to solve these aporiai and to fulfill these expectations, and that competing accounts of the ἀρχαί cannot; the effect is to mark the closure of the project of the Metaphysics as begun in AB. In particular, Λ claims to establish the existence (and some attributes) of separately existing eternal unchanging οὐσίαι, thus to yield a "first philosophy" as described in E1 (it also argues that these things are gods, so as to satisfy A2's promise of "divine science" or E1's of "theological science"); and it claims to establish a separately existing good (without a contrary evil) as the first of all things and as the first cause to everything else, and specifically as a final cause. This picks up discussion in A as well as in the first aporia of B, and is intended to show that Aristotle can deliver on the promise of wisdom as a knowledge of a good ἀρχή as final cause, against Anaxagoras and Empedocles who (Aristotle says) use it only as an efficient cause and Plato who (Aristotle says) uses it only as a formal cause, as well as against Speusippus who gives up on positing a good ἀρχή at all. Now while enough references in earlier books show that the Metaphysics was supposed to lead up to a "theology" or an account of eternal unmoved οὐσίαι, a common view since Bonitz has been that Λ is not the intended "theological" culmination of the Metaphysics, indeed that Λ is neither an intended part of the Metaphysics, nor specifically theological. Rather, Λ is said to be a short independent treatise summarizing Aristotle's overall theoretical philosophy, or more precisely his overall account of οὐσία, with Λ1-5 on sensible

οὐσία as a shorter parallel version of ΖΗΘ, and Λ6-10 on non-sensible οὐσία as a shorter parallel version of the lost or never-written theological culmination of the Metaphysics. (For Patzig, Frede, and Owens, as noted in Ια1 above, the complaint is not just that Λ is short and sketchy--which it certainly is--but also that it merely gives a survey of the different kinds of οὐσία that there are, and does not show that God is or has the primary mode of being from which all other things' modes of being are derivative.) I argue that Λ is not an independent treatise but the theological (better "archeological") culmination of the Metaphysics that it appears to be, using rather than paralleling earlier parts of the Metaphysics, and that Λ1-10 is not a survey of sensible οὐσία followed by a survey of non-sensible οὐσία but a single connected investigation of the ἀρχαί of sensible οὐσία: it argues first that a chain of material, formal, or conspecific efficient causes does not lead up from the manifest sensible things to a numerically single eternal ἀρχή separate from and prior to the sensible things (but only to an eternal type of individually non-eternal causes, inseparable from the sensible things), and then that a chain of non-conspecific actual efficient causes, to the heavenly bodies which are responsible for the eternally inexhaustible coming-to-be of the species of corruptible things, and then to the movers which are responsible for the eternally actual motion of the heavenly bodies, leads to (some small finite number of) numerically single eternal οὐσία which are essentially ἐνέργεια, and the first of which is the good-itself and ultimate final cause of all things. Λ1-5 thus gives negative results, Λ6-10 positive results for the project of wisdom. The causal connection between the first ἀρχή and the sensible world is "thin," but Aristotle had not promised to discover causally sufficient intelligible ἀρχαί from which the sensible world could be deduced, only to find some path up from sensible things to intelligible ἀρχαί, and he thinks that the richer causal connections which Plato and others claim to draw between intelligible and sensible worlds are spurious. The description of the first ἀρχή in Λ does not shed much light on the nature of being as such, but Aristotle had not promised that it would; the promise was rather that an investigation of being would give a path to the first ἀρχή. While Aristotle undoubtedly could and would have filled Λ out with more detail, more argument, and more explicit connections between its parts and to earlier books of the Metaphysics and other treatises, there is no reason to think that its doctrinal or conceptual content would be significantly different from what we have now. The ideal of an ontotheological culmination of the Metaphysics is a mirage arising from misreadings of what Aristotle says about the project of wisdom in the earlier books, and the absence of such an ontotheology should not be blamed on Aristotle himself or on the accidents of transmission (as by Patzig and Frede and Owens), or on the essentially infinite and uncompletable nature of his task (as by Aubenque).

How much unity should we attribute to the Metaphysics?

The question naturally arises, when I speak of an overall argument of the Metaphysics and of the contribution of individual books to this argument, how much unity am I presupposing: quantitatively, how many of the books of the Metaphysics am I assuming to belong of this overall plan, and qualitatively, how unified am I assuming them to be?

The short answer is that I am not presupposing anything: any theses about unity are the results and not the presuppositions of research. But it will be helpful here to summarize briefly what I take those results to be, and also what kind of unity I think it is reasonable to expect in an Aristotelian treatise (and in the Metaphysics in particular), as a regulative ideal awaiting confirmation. One reason that it will be helpful to do this now, rather than simply waiting until

the results are in, is to defuse what may be the impression that my position on the question of unity is radically different from that of the main current of recent scholarship (or even that I am naively ignoring or repudiating a result supposedly established by modern critical scholarship). In fact my position here is well within the mainstream of at least Anglophone and German scholarship from Brandis and Bonitz to the present (some French and Italian scholarship of the last few decades has taken a rather different approach); while my proposals on the Metaphysics in this book are in some ways radical against this scholarly background, they are not radically unitarian, and this is not where the emphasis should be placed. However, while the views of the great figures in the history of scholarship, such as Bonitz and Jaeger and Ross, are generally clear enough, many recent writers have not been fully explicit about how much unity, quantitatively or qualitatively, they are attributing to the Metaphysics; and it is worth making the issues explicit, especially in a book dealing with the Metaphysics as a whole. It is also worth addressing another and connected issue, the relation between the transmitted written text and Aristotle's oral performances: as the question is most often put, is the Metaphysics (or any other Aristotelian treatise) Aristotle's "lecture notes," and, if so, notes in what sense--his own notes written before the lecture, a student's notes taken down during the lecture, Aristotle's later writeup of what he had said? Reflection on the relation between written text and oral performance transformed what had been a stalemated dispute between analytic and unitarian readings of the Homeric poems, and it might perhaps have similar benefits in studying Aristotle.

Some things are relatively clear and others are more controversial. It is clear enough that Aristotle intended to write a treatise on wisdom, that is, on the ἀρχαί (or, equivalently, on first philosophy, since according to E1 first philosophy is the science of the first things):⁷ this would be clear, if nothing else, from Aristotle's references in works outside the Metaphysics.⁸ It is also clear enough that Aristotle intended at least most of the texts we now have in the Metaphysics as contributions toward such a treatise: A is certainly the introduction to a treatise on wisdom, B refers back to A as the introduction to the same treatise that B is part of (ἐν τοῖς πεφρομισμασμένοις, B1 995b5), the ζητούμενη (or ἐπιζητούμενη) ἐπιστήμη of B is wisdom, and B poses a series of aporiai which this science which must address, many (in fact, all) of which are addressed in later books of the Metaphysics, often with more or less explicit back-references to B (there are no such references to B elsewhere in Aristotle).⁹ In particular, Γ is not a new start but a further determination of the science described in AB (explicitly referring back to B, ἐν ταῖς ἀπορίαις or ἐν τοῖς ἀπορήμασιν, Γ2 1004a31-4); EZHΘ, which are clearly intended as a systematically organized block, carry out Γ's project of investigating the different senses of being and their causes, explicitly referring back to Δ (καθ' ἕνα διειλόμεθα πρότερον ἐν τοῖς περὶ τοῦ

⁷(i) if you take this as contradistinguishing first philosophy from physics (so that if there were no unmoved οὐσίαι there would be no first philosophy), then "first philosophy" and "the science of the ἀρχαί" are coextensive but intensionally different; (ii) if you take this the way Aristotle seems to in E1, so that if there were no unmoved οὐσίαι, physics (or perhaps some part of physics, e.g. the study of the heavenly bodies or of atoms and the void) would be first philosophy, then "first philosophy" and "the science of the ἀρχαί" are necessarily the same

⁸e.g. "about the formal principle, whether it is one or many, and what it is or what they are, it is the task of first philosophy to determine precisely, so let [the question] be set aside until that occasion" (Physics I,9 192a34-b1); "there are three disciplines [πραγματεῖαι], one about unmoved things, one about things that are moved but incorruptible, and one about corruptible things" (Physics II,7 198a29-31); "[to know whether motion is eternal] will contribute not only toward the contemplation of nature, but also toward the discipline concerning the first principle" (Physics VIII,1 251a6-8); "about that which is moved first and eternally, in what way it is moved, and how the first mover moves it, has already been determined in the [books] on first philosophy" (De Motu Animalium 700b8-9); these and other relevant texts are collected in the appendix to Ia1

⁹perhaps collect these here, or refer to someplace else where you do so: ἐν τοῖς ἀπορήμασιν or διαπορήμασιν etc.

ποσαχῶς, Z1 1028a10-11) for the structuring distinction of the senses of being. Also Iota and MN explicitly refer back to B (ἐν τοῖς διαφορήμασιν, Iota 2 1053b10 and M2 1076a39-b1 and M10 1086b15-16, ἐν τοῖς ἀπορήμασιν, M2 1076b39-1077a1; Iota also refers to Δ, ἐν τοῖς περὶ τοῦ ποσαχῶς, Iota 1 1052a15-16), and more generally we have seen that they are carrying out important parts of the program announced in B, which otherwise would not be carried out anywhere in the Metaphysics. However, these observations leave open a broad range of possible relations between the Metaphysics as we have it and the treatise on wisdom that Aristotle intended to write. Our Metaphysics might fail to reflect Aristotle's intentions because copyists and editors have added other Aristotelian texts or even non-Aristotelian texts to the books he intended to be part of the treatise (conversely, they might have detached from the treatise parts that he intended to belong, whether or not those parts are now separately transmitted) or because they have put the parts in the wrong order; because they have added, intentionally or unintentionally deleted, intentionally or unintentionally altered particular passages; or simply because Aristotle died before completing the work to his satisfaction, either because there were major parts still missing or because he had not finished revising and filling out the existing parts and integrating them with each other; indeed, there might be intrinsic difficulties that he would not have overcome no matter how long he had lived. And, strictly, there is no one text which is "our" Metaphysics: codex E does not have the same text as codex J, neither is the same as Christ's Teubner or Jaeger's OCT, and so on.

It is clear enough that "our" Metaphysics is not identical with what Aristotle intended us to read, for three reasons: first, he cannot have intended us to have two books called alpha (i.e. called Book One),¹⁰ a bizarre and unparalleled circumstance which presumably means that someone added one of these books to a treatise already containing the other thirteen books, without relabeling them; second, M4-5 are an almost verbatim doublet of A9 990b2-991b9, which Aristotle cannot have intended us to read twice within a single treatise; and third, K1-K8 1065a26 are a shorter version of BΓΕ, not nearly as close as M4-5 are to A9 990b2-991b9 but close enough that Aristotle cannot have intended us to read both texts within a single treatise.¹¹ Furthermore, while we could solve the first and third problems by simply excising α and K from the Metaphysics, the second problem cannot be solved so easily: as noted above, MN refer back to B (and solve aporiai from B that otherwise would not be addressed in the Metaphysics), and B refers back to A as the introduction to the treatise. Aristotle intended ABMN as parts of the same treatise, but he had not finished revising it: if he had, he would certainly have deleted either A9 990b2-991b9 or M4-5, whatever else he might have done. For these reasons, it is necessary to posit some difference between the treatise Aristotle intended to write and "our" Metaphysics. The question is how much difference to posit, and how much, in interpreting the Metaphysics, we should allow ourselves to reconstruct a treatise differing from the transmitted one (i.e. differing from the common archetype of the extant manuscripts) and make that the object of our interpretation. We are doing this whenever we emend the archetype, but obviously, as with emending, we should do so as little as possible. Not all discrepancies we could posit have the

¹⁰we symbolize them as A and α, coming from a habit of referring to them as ἄλφα μεῖζον and ἄλφα ἔλαττον (already I think in Alexander), but these names are much earlier than the distinction between majuscule and minuscule letters. perhaps note the case of Physics VII (I think Simplicius speaks of τὸ ἕτερον ἦτα): but not really comparable

¹¹also the verbatim duplication between the rest of K and the Physics; even if these are different treatises, it is very unlikely that Aristotle meant us to read both (the duplication between Physics II,3 and Metaphysics Δ2 does not seem like so much of a problem). ancient commentators were aware of these difficulties, give summary of my "Editors" article

same weight. To reconstruct how Aristotle would have filled in some sketchy argument is a necessary part of any interpretation (though obviously we should not confuse our reconstruction with the transmitted text); to say, as many scholars do, that α was a separate short treatise by Aristotle is a relatively small change; to say, as many scholars also do, that Aristotle intended the Metaphysics to culminate, not in Λ , but in another theology centering on doctrines nowhere attested in the extant works (e.g. that only immaterial οὐσίαι are οὐσίαι in the primary sense, other things only derivatively), is a very serious change.

Different scholars have taken different positions on the quantitative question of how many of the transmitted books of the Metaphysics belong to the intended treatise (there have also been some proposals to reorder these books, never very radically). Brandis, in 1834, began the modern scholarly discussion of the question: he accepts the authenticity of all the books, but he thinks that α is an introduction to physics rather than to metaphysics, and that K is an early draft of what became BΓE, separately preserved (with someone else copying excerpts from the Physics at the end): he sees ABΓEZHΘΛ as a connected sequence (although he thinks that Λ is sketchy and missing intended parts--more surprisingly, he also thinks Γ is missing intended parts); he sees Iota and MN as separately written although belonging to first philosophy (with Iota possibly intended as an introduction to Λ , MN as a different way of continuing B than the one finally adopted in the main Metaphysics); Δ is a philosophical study of synonyms with some relation to first philosophy but equally to physics. Bonitz says that he accepts Brandis' conclusions for the most part, but he makes one major change, in that he thinks the main connected sequence is only ABΓEZHΘ (with slight doubts about whether ABΓ connect immediately to the block EZHΘ), without Λ : cross-references convince him that Aristotle intended to connect Iota and MN somehow to the main body of the Metaphysics, although Aristotle never actually did so, but Λ is an entirely separate (probably earlier) treatment of first philosophy, rooting its conclusions in physics (rather than in anything in the other books of the Metaphysics) and concentrating heavily on the first unmoved mover.¹² For these writers, Metaphysics ZHΘ, investigating the modes of being of sensible things, are near the heart of the project of the Metaphysics, and Iota and MN are problematic because they are not obviously related to this investigation. Jaeger in his 1912 Studien zur Entstehungsgeschichte der aristotelischen Metaphysik tried to reverse the perspective, arguing that ABΓEIMN form a "main lecture course" [Hauptvorlesung], which Aristotle was at least working at integrating into a connected treatise, unified by a pursuit of wisdom as a science of immaterial substances and also by the aporiai of B, and that ZHΘ are not part of this project, but pursue a separate project of an ontology of sensible things; Jaeger thought that ZHΘ had been inserted into the unfinished treatise ABΓEIMN by Peripatetic editors (presumably soon after Aristotle's death), thus yielding something like what Bonitz thought Aristotle had intended, and then that $\alpha\Delta K\Lambda$ (although all by Aristotle) had been added even later. Jaeger's instinct was sound in stressing the centrality of B and in recognizing that B is more interested in immaterial substances than in the modes of being of sensible things, and that its program is followed at least as closely in the "marginal" IMN as in the "central" ZHΘ. But the attempt to separate ABΓEIMN from ZHΘ led to absurdities (in particular, E makes no sense as

¹²note some other 19th century views: Bonitz has a review of scholarship II,31-5. most important other ideas are (i) reordering MNA (Michelet, Ravaisson--I think this is correct, and Bonitz' reason for rejecting the reordering, while interesting, turns on a misunderstanding of the aims of MN); (ii) attempts to see an early short Metaphysics, AKΛ, replaced by a longer Metaphysics (this goes back to Petit's identification of MNA with the De Philosophia; Michelet defends this, and says MNA was the first version, then replaced by AKΛ, then by the Metaphysics; Brandis successfully refuted the attempt to identify the De Philosophia with any part of the Metaphysics). also note some other deviations of Bonitz from Brandis: notably, he is doubtful of the authenticity of α .

anything but an introduction to ZHΘ), which Jaeger at least partly resolved in his 1923 Aristoteles by saying that, although Aristotle originally wrote ZHΘ as part of a separate project, he himself later integrated them into the main body of the Metaphysics, producing the present version of E in the process. Thus Jaeger 1923, like Bonitz, has Aristotle composing an imperfectly unified and incomplete ABΓEZHΘIMN, with later editors adding αΔΚΛ from Aristotle's shorter works or unpublished papers. Ross in his commentary of 1924 takes essentially the same position (Ross puts Iota after MN, where Bonitz and Jaeger had left the order indeterminate), and this has remained the standard view, followed notably by Frede-Patzig.¹³ Thus on this quantitative issue of how many of the transmitted books of the Metaphysics belong to Aristotle's intended treatise, the standard view is ten out of fourteen, ABΓEZHΘIMN, whereas my view is twelve out of fourteen, to be ordered ABΓΔEZHΘIMNΛ-- which is neither quantitatively a major difference, nor a major difference of principle (and I am in agreement with Tricot on Λ, and up to a point with Owens on Δ). The issues about the belonging or non-belonging, and about the intended place, of each book, can only be taken up when we treat each book in turn (except that since I will not have full treatments of α or K, I will say something about their status below). The reader should not expect any dramatic confrontation between unitarian and "analytic" readings of the Metaphysics, still less that I will be making a grand argument for unitarianism. My overall goal is not to argue for controversial theses but simply to understand the Metaphysics (that is, to understand what Aristotle intended-- and the only evidence is what he wrote, and the only evidence for that is what is transmitted); and while I have controversial and even radical theses, a radical unitarianism is not among them. This is not to say that the issues about which books belong are unimportant. Perhaps nothing

¹³but note some peculiar hypotheses of Frede-Patzig about how it got to the 10-book state. the most important variations on this view are those of Tricot and Berti: (i) Tricot sees ABΓEZHΘIMN as more-or-less unified (reflecting a lecture course, continually revised) and leading up to Λ; thus he is in some ways going back to the French tradition of Ravaisson and Michelet; (ii) Berti sees αN as belonging to an earlier project (and Λ as a shorter version of that earlier project), but all the other books except Δ and K as belonging together to the mature intended Metaphysics: the result is again similar to that of Bonitz, Jaeger 1923, and Ross, except that N has been cut off from the final intended Metaphysics (and in fact this is not far from Jaeger 1923 who thought that Aristotle had intended to replace an early N and M9β-10 with a mature M1-9α). Owens claims on the one hand that each book of the Metaphysics is an independent treatise (except α, which is a fragment, ZH, which he combines into one treatise, and E, Θ and M, each of which he breaks into two [grossly unequal] "treatises"), but on the other hand that Aristotle intended most of them to be read in a logical sequence, which winds up being with several complications ABΓEZHΘIM (note the complications, and note his points about Δ, which are correct as far as they go); αΛN are independent of this sequence, although ΛN are related to each other perhaps in the logical sequence NΛ; the result is thus not so far from Berti. Reale apparently defends the entire transmitted order AαBΓΔEZHΘIKΛMN as, if not exactly Aristotle's, at least well-founded in Aristotle's own indications about the logical sequence of his writings. see discussions, later, of individual books, for reviews of arguments for expelling or reordering them. it is hard to tell exactly what Aubenque thinks, but he thinks Aristotle was trying to write a treatise on first philosophy (indeed, as shown by E1, a treatise which would unite first philosophy with ontology, although Aubenque thinks this ambition could never be fulfilled), and presumably that all or almost all of the transmitted books (except K, which Aubenque thinks is spurious--I'm not entirely sure what he thinks about α) were at least relevant material for this project; and he thinks that Aristotle accepts systematic responsibility for everything he has said. however, he seems to say almost nothing about what logical sequence there might be among the different books; and because he thinks that no sequence would ultimately work, perhaps he thinks that searching for backward and forward references and the like is pointless. Aubenque, like everyone else, thinks that Aristotle was working on a treatise on first philosophy and never finished it to his satisfaction (how big a gap you see between the actual and the intended treatise depends mainly on what you think about the relation of Λ to the other books); what distinguishes Aubenque is that he thinks that the treatise was essentially unfinishable, and that this unfinishability is itself expressive of something about the object

enormous turns on the issues about $\alpha\Delta\text{KN}$ (although the idea that Δ is an independent work has led some scholars to underestimate its value in interpreting the other books); that $\text{ZH}\Theta$ belong to the project governed by the *aporiai* of B is important, but perhaps no one seriously disputes it anymore (although many scholars underestimate the value of B in interpreting these books); but the issue about Λ is controversial and important. Everyone agrees that the Metaphysics was supposed to culminate in a theology, and everyone agrees that Λ is short and sketchy; the issue is about how close or far Λ is from Aristotle's intended ideal.¹⁴ This will depend partly on how we read Λ (though how we read Λ will also depend partly on whether we think it is a self-contained treatise), but it will also depend on what we think the other books imply about the function that the theological culmination of the Metaphysics is supposed to serve. If Λ more or less serves this function, then we know more or less what the Metaphysics was supposed to look like; if Λ fails to serve this function, then we will have to imagine a quite different completed Metaphysics, or else conclude, with Aubenque, that this completion is impossible.

Equally important, and more delicate, is the qualitative question: how unified are these books of the Metaphysics--how far are they united in the way we would expect them to be in the finished treatise? Are the books intended to be read in a determinate sequence, do the later books in this sequence presuppose the earlier ones, and do they assume their readers will go on to read the later ones (do they, for instance, raise questions intending to resolve them in later books)? To what extent do the books "refer" to each other? When Aristotle says "we have said earlier" or "we will investigate later," is he referring to passages in earlier and later books? And when he does not use such explicit phrases, but merely (for instance) asserts a proposition without argument, or with only a quick sketch of an argument, when he has argued for it fully in an earlier book, should we assume that he intends to "refer" to that earlier passage? These questions might not cause much difficulty if we were sure that Aristotle had prepared the text for publication in the form in which (apart from scribal errors) it has been transmitted. Instead, the suspicion arises that "editors" (sometime Andronicus of Rhodes is named, sometimes they are left anonymous) may be responsible for structural features of the treatise, including the ordering of its parts, and thus the appearance of cross-references forward and back. Indeed, despite the views of Brandis, Bonitz, Jaeger, Ross and so on that I have reviewed above, according to which Aristotle intended perhaps 10 or 11 of the transmitted books as a connected treatise (with some connections loose, perhaps with the position of I or MN in the whole left undetermined), it seems impossible to shake the persistent conviction of non-specialists that the Metaphysics is fourteen different treatises that Aristotle wrote independently, and which someone, probably Andronicus, put together into a single treatise centuries afterwards. (Michelet in 1836 says that this is the common view in his time--apparently it goes back to Samuel Petit's Miscellanea of 1630; a more moderate view, where there are only two treatises, one on ontology and one of theology [plus α , a fragment of physics], goes back to Francesco Patrizi's Discussiones Peripateticae of 1581. Michelet himself rejects the view, and I have not found any modern scholar who has argued in support of it, which is unsurprising, since there is no evidence on which an argument could be based.¹⁵ But something like this view is stated without argument by Joseph Owens, who says that

¹⁴including the issue about whether the "non-theological" parts of Λ correspond to something that would be in the ideal culmination of the Metaphysics, or whether they are simply a shorter version of $\text{ZH}\Theta$ (in perhaps something like the way K1-K8 1065a26 are a shorter version of BΓE)

¹⁵{update or replace this note using your Zeller article} give references to Petit and Patrizi, noting the reprint, Franciscus Patricius, Discussiones Peripateticae, Nachdruck der vierbändigen Ausgabe Basel 1581, hrsg. Zvonko Pandžić, Böhlau Verlag, Köln-Weimar-Wien, 1999 {volume 1, which contains the here relevant bits, had been published separately earlier, Venice 1571: I have not seen this edition}; also note the possible connection Petit-

Jaeger has proved it, and in recent popular expositions of the Metaphysics by Donini and Politis.¹⁶ Other writers, including Aubenque, implicitly encourage this way of thinking when they refer to the books of the Metaphysics as "writings" or "treatises" by Aristotle, when apparently they would not use such terms for the books of the Physics.)

These problems are not peculiar to the Metaphysics (despite the popular view blaming the Metaphysics in particular on Andronicus), but are common to all of Aristotle's writings.¹⁷ What seems to show most clearly that most of the books of the Metaphysics are intended as parts of a single treatise are what seem to be more or less explicit backward and forward references among them, and such backward and forward references, including the most explicit type ("we have determined earlier," "it was said ἐν τοῖς περὶ X," "we will investigate later") are standard features of Aristotle's writing. Bonitz collects these passages in his Index Aristotelicus, under the somewhat surprising heading Ἀριστοτέλης, where he first collects the different formulae Aristotle uses to refer to what he has said or will say elsewhere, then collects in each extant work of Aristotle its references to other works (extant or not), then collects for each work (extant or not) the references to it in the extant works. These cross-references have been studied by many scholars,¹⁸ and some things have become clear, notably that the backward and forward references are not to the chronological order of composition of the different treatises, but rather to an intended "logical" order in which the treatises are supposed to be read, or the corresponding lectures to be listened to.¹⁹ This is, in a sense, obvious and uncontroversial, but it raises a problem: how can Aristotle, in treatise X, refer to treatise Y, if he may not yet have written treatise Y? The answer must be that there was no single datable moment when he wrote treatise X, or when he wrote treatise Y; at the first moment when he wrote the particular passage of treatise X containing the reference to treatise Y, some version of treatise Y existed, but not

Sorbière-Hobbes, and in addition to the bit from Leviathan you cited in the Burnyeat review, note the longer parallel in Thomas White's De Mundo Examined. Petit and Patrizi are still cited by writers of the early 19th century. Petit notes the absence of the Metaphysics from DL's list, and argues that later editors put the Metaphysics together, in the wrong order, from monobiblia or shorter treatises (such as the De Philosophia) which are on DL's list; although he thinks that Aristotle "published" these shorter treatises, and not any single big treatise on first philosophy, Petit still thinks there is a correct order of all of Aristotle's books on first philosophy, namely the order in which Aristotle wrote or published them, which he does not distinguish from Aristotle's intended order or a logical or pedagogical order, and which he thinks can be determined from Aristotle's forward and backward references: he winds up with ΔΙΓΑΒΕΖΗΘΜΝΑΚ, and he seems to be encouraging future editors to print them in this order. Patrizi (pp.103-8 with p.23 and p.62) had held that there were two treatises, ΑΒΚΛΜΝ on wisdom or first philosophy or theology and ΓΔΕΖΗΘΙ on "philosophy" in the Γ-sense of ontology (plus α which belongs in the Physics) which were left in a scrambled condition at Aristotle's death, wound up in Neleus' cellar, and were not correctly sorted out by Apellicon (he seems not to mention Andronicus except on p.62, in connection with the title rather than the assembly, and even then with hesitation). Michelet thinks that Aristotle himself late in life put the Metaphysics together out of short treatises, but it wasn't published, DL's catalogue reflects the works which were published in Aristotle's lifetime and found their way to Aristotle, the Metaphysics wound up with the rest of Neleus' collection, then Apellicon and Tyrannion and Andronicus published it

¹⁶Düring also says something like this in his Aristoteles, ref. (criticizing inter alios Jaeger for excessive faith in the unity of the Metaphysics), of course without argument; d check Christ

¹⁷there is no evidence of any kind linking Andronicus specifically to the Metaphysics; no ancient source mentions Andronicus and the Metaphysics together. perhaps here note on whether the commentators are aware of something particularly suspect about the Metaphysics, cite the evidence collected in "The Editors of the Metaphysics"--the complaints are about the two books alpha and about the duplications between Δ2 and Physics II,3, between K1-K8 1065a26 and BΓE, between the rest of K and passages from the Physics, and between M4-5 and A9 990b2-991b9

¹⁸see most recently Burnyeat's discussion, Map p.114ff

¹⁹contrary to what Ross seems to have thought. note some references on the cross-references: Burnyeat, Rashed, what else? (I'll say some things about Jaeger coming up)

necessarily the version that is transmitted to us. There is of course a chronological order of Aristotle's various acts of writing and rewriting (whether or not we will ever be able to determine it), but the different treatises also form a synchronic system, with each part subject to updating, and thus with the possibility that a reference in treatise X to treatise Y will cease to match up correctly with treatise Y (indeed, it may never have matched up correctly with treatise Y, if this Aristotle added this reference to treatise X in the intention of changing something in treatise Y, rather than in response to having already changed something in treatise Y). What is transmitted to us is generally just a single temporal cross-section of each treatise (and of course we have no cross-section at all of e.g. the Selection of Contraries, On Philosophy, and On Plants which Aristotle refers to in extant treatises); it is not necessarily the final temporal cross-section, and even if it is, this means only that Aristotle then ceased working on the text, which may be for purely extrinsic reasons (e.g. perhaps he died soon thereafter) and not because the text had reached a satisfactory final form. So it is not surprising if, in the transmitted corpus, sometimes the links fail to work. (Notoriously, the reference at De Interpretatione c1 16a8-9 to the De Anima cannot be matched with anything in the transmitted De Anima, and this is why Andronicus concluded that the De Interpretatione was spurious.)²⁰

It seems to be very important for Aristotle that this synchronic system is an ordered system, that cross-references are either forwards or backwards, marked by tense and often by words like ὕστερον, πρότερον, ἐν τοῖς πρώτοις λόγοις (and even without explicit cross-references, the formulation of an aporia looks forward to its solution). If we try to use these forwards and backwards references to reconstruct the intended order of the whole corpus, we will stumble on inconsistencies (notably there are inconsistencies in the cross-references in the psychological-physiological-zoological corpus which seem to imply two different orders through these texts, although many things remain constant, e.g. it is always important to Aristotle that the Parts of Animals comes before the Generation of Animals;²¹ also the back-reference to the Metaphysics at De Motu Animalium c6 700b8-9 is anomalous). But such inconsistencies are rare; and even if Aristotle changed his mind on how the treatises should be ordered, or if (like Galen later) he envisaged different orders for different classes of readers, it remains true that he is always trying to impose a logical order of before and after, on the whole corpus or on large stretches of it, that sometimes he thinks it is very important to make determinations about X before you can pass scientific judgment on Y. Editors both ancient and modern have made use of Aristotle's cross-references, as well as of less explicit signs of logical order, in trying to reconstruct the "correct" order of the treatises, where this means in the first place the correct order for a student to study them in. This concern with correct order drives texts like the lost treatise of Adrastus of Aphrodisias On the order of Aristotle's treatises (Simplicius In Physica 4,11-12, In Categoriais 18,16-17) or On the order of Aristotle's philosophy (In Categoriais 15,36-16,4), and is present in the extant neo-Platonic commentaries on particular works of Aristotle, which always discuss (on a more-or-less fixed list of introductory issues) the τάξις of the particular treatise, i.e. its correct place in the curriculum.²² The treatise preserved in Arabic and attributed to a Ptolemy al-

²⁰references from Moraux Aristotelismus I,117

²¹references to the primary evidence and to secondary treatments, esp. Rashed, but the problem had been noted before

²²for discussion of the introductory topics, and of the arguments about τάξις in particular, see Mansfeld Prolegomena. the issues, including the issue of τάξις, are not peculiar to Aristotle, but arise for any scientific author: notable extant texts on τάξις are Galen's On the Order of his own Books and Porphyry's On the Life of Plotinus and the Order of his Books; Porphyry cites Andronicus as a model for his own procedure

Gharīb,²³ although it gives no arguments, presents a list of Aristotle's works in an order that clearly has much thought behind it.²⁴ Ptolemy is probably in large part summarizing the conclusions of Andronicus' Πίνακες of Aristotle's books, and since Ptolemy cites Andronicus' Book V, Andronicus' work was not a mere list of titles, but also contained arguments, presumably about the order of Aristotle's books as well as about their authenticity and correct titles and extents. Indeed, it is clear that even before Andronicus there was a tradition of arguing, using explicit or implicit cross-references in the texts, about the logical order of the treatises, since Andronicus said that the Postpraedicamenta (Categories cc10-15) had been added by someone who wanted to call the Categories the Before the Topics (Simplicius In Categoriais 379,8-12).²⁵ whether the Postpraedicamenta are or are not part of this treatise would have different implications for the order in which Aristotle intended us to read his logical writings. And Bekker and other modern editors continue, rightly, to be guided by similar concerns.

However, this talk of explicit or implicit references of one treatise to another, and of a correct order of the treatises, again raises a problem, about the identity conditions of treatises: when treatise X refers to treatise Y, e.g. when it says "ὡσπερ ἔφαμεν ἐν τοῖς ἀναλυτικοῖς", what does the cited phrase ("τὰ ἀναλυτικά") refer to? Since treatise Y can be modified while remaining treatise Y, Aristotle is not simply referring to a text, either the extant text or a lost one. But at the same time, he is not referring simply to a subject-matter ("whenever we talk about analytical questions"). Τὰ ἀναλυτικά, τὰ φυσικά or περὶ φύσεως, τὰ περὶ κινήσεως, οἱ ἠθικοὶ λόγοι, τὰ περὶ τῆς πρώτης φιλοσοφίας, τὰ περὶ τοῦ ποσαχῶς, οἱ περὶ τῆς οὐσίας λόγοι and so on are things that occupy places in a system ordered by before and after, and they are also themselves divided into parts ordered by before and after (larger units and their smaller constituents can both be referred to by phrases of the form τὰ περὶ X, οἱ περὶ X λόγοι: τὰ περὶ μίξεως are part of τὰ περὶ γενέσεως καὶ φθορᾶς which are in turn part of τὰ φυσικά),²⁶ and these order-relations will remain throughout many expansions or contractions or changes of detail, even if Aristotle sometimes changes his mind about the correct order, or prefers different orders for different purposes. So we can say that when Aristotle refers to a treatise, i.e. to something named by a phrase like τὰ περὶ X or οἱ περὶ X λόγοι, he is referring to a node in an ordered system,²⁷ his ideal intended treatise on X. In many, perhaps most cases we have one and only one transmitted text (up to scribal errors and the like) corresponding to this ideal treatise, and then we can loosely

²³variants on the title. this Ptolemy may or may not be identical with the Ptolemy Chennos referred to in other connections in some Greek sources (see Moraux Listes for the argument), but is certainly the same as the Ptolemy cited at Vita Aristotelis Marciana 43 {ref in Düring} and the person cited as "Ptolemy Philadelphus" at Elias In Categoriais 107,11-14, whether the error is Elias' or a scribe's (the usual guess is that at some stage it said Πτολεμαῖος ὁ φιλόσοφος); see Moraux Listes, maybe Aristotelismus, Düring, and Hein for discussion of Ptolemy and the complicated Arabic transmission of his work

²⁴cp. the other extant lists of Aristotle's works (in Diogenes Laertius and the Vita Menagiana), and the διαρρέσεις of his works in some of the neo-Platonic prolegomena (references in Moraux Listes): the main concern is often with the main divisions of Aristotle's works (e.g. into private and public, exoteric and acroamatic and hypomnematic), but certainly there is order among these divisions, and more or less care in establishing the internal order esp of the acroamatic section. see Moraux Listes for discussion. the lists in Diogenes Laertius and the Vita Menagiana go back to a common Hellenistic Peripatetic source (sometimes identified as the Alexandrian Hermippus, sometimes as the Athenian scholarch Ariston of Ceos); the list in Ptolemy goes back, with modifications, to Andronicus

²⁵also supplementary texts from Ammonius and Boethius cited in Moraux Aristotelismus I,99-100n12: Simplicius and Ammonius and Boethius are all drawing on the same passage of Porphyry. also cite the texts from the various prolegomena to the Categories talking about the order of the treatise, whether it is specially connected with the Topics, and the issue about the title

²⁶for this and similar references see Bonitz Index Aristotelicus Ἀριστοτέλης III

²⁷taking "node" loosely, since it might in turn be decomposed into smaller "nodes"

say (and I, like everyone else, will talk this way) that e.g. when Aristotle in a particular passage refers to what he has said ἐν τοῖς περὶ τῆς οὐσίας λόγοις he is "referring to Z7-9," or whatever the case may be. In some cases we have no transmitted text corresponding to the ideal treatise, and in some cases we have two or even three: the Nicomachean and Eudemian Ethics and Magna Moralia are not three nodes within the same system, so that we could ask which of them is supposed to be read first, but rather three versions of the same node (or series of nodes) in the system, and likewise Metaphysics K1-K8 1065a26 and Metaphysics B7E are not two nodes but two versions of the same node (or series of nodes), of which B7E is surely closer to Aristotle's intended ideal, but even B7E is not identical with the ideal, and on some particular points K may be closer to the ideal than B7E.

Written and oral versions

Aristotle's intended ideal system may be thought of as an ideal written text De omnibus, a sort of proto-Bekker, each section of which would be imperfectly instantiated by a series of texts that Aristotle wrote at different different times in his life, adding to or reworking old texts and occasionally starting afresh. But it is also clear that the ideal is not just a written text, and that sections of it can have oral as well as written instantiations. The treatises are not just written texts but also lecture-courses: witness, for instance, the titles transmitted for the Physics (Φυσικὴ ἀκρόασις, or, by a confusion, Περὶ φυσικῆς ἀκροάσεως or the like) and Politics (given in Diogenes Laertius as Πολιτικὴ ἀκρόασις), and the concluding address of the Sophistical Refutations, where "you who have watched/listened" [θεασαμένοις ὑμῖν, 184b3; ὑμῶν [ἢ] τῶν ἠκροαμένων, b6] are asked for a favorable judgment on the preceding μέθοδος, meaning the Topics as well as the Sophistical Refutations--and the Topics and Sophistical Refutations as transmitted are among the least lecture-like parts of the corpus.²⁸ So we can also think of the ideal intended system as an idealized lecture-course, what the ideal student should take for a perfect education: back-references will be references to the prerequisites, what you should have taken before taking the present course. (And thus there will be continuity between Aristotle's concern, in what order the student should attend his lectures, and the commentators' concern, in what order the student should attend lectures on the corresponding written texts.) But this order is not the real chronological order in which the lectures were given. It is not as if Aristotle gave the De Caelo course just once, and the Generation and Corruption course just once, after that; he will surely have given each of the courses many times, and a student turning up at the Lyceum will not always have been able to start at the intended beginning. Indeed, it is perfectly possible that no student was ever able to listen to the full intended sequence of lectures--especially since, as we have noted, Aristotle occasionally contradicts himself on what the proper order is supposed to be. But Aristotle is always referring to this ideal. The nodes in the system, the objects of the forward and backward references, cannot be simply identified either with any

²⁸Ross brackets the manuscript ἢ between ὑμῶν and τῶν ἠκροαμένων, but it is also possible that ἢ τῶν ἠκροαμένων is a gloss, so we cannot put much weight on the implications of ἠκροαμένος (even apart from Burnyeat's argument that this can mean "reader," Map 115n60). however, as Dorion points out ad locum, θεασάμενος means "watching" rather than "reading," and in any case the second person address is ineliminable. remarkably, this passage gives the only second-person plural pronouns in the Aristotelian corpus, apart from quotations (mostly of Solon in the Constitution of the Athenians, and in sample bits of speeches from the Rhetoric); this was pointed out by Philip van der Eijk, "Towards a Rhetoric of Ancient Scientific Discourse," in Egbert Bakker, ed., Grammar as Interpretation (Brill, 1997), pp.77-129, at p.118 (I have verified it by a TLG-search)

written version or with any oral version: no two oral performances of a given *πραγματεία* will be exactly the same.

Thus in some sense the common description of the transmitted treatises as "lecture notes" can be accepted. But since most Greek literature, in verse or prose, was intended for oral performance, it is not very surprising or informative that this should be true of Aristotle's texts as well. And the question whether these were Aristotle's notes written before the lecture (which he might expand on more or less freely in speaking), or a record afterwards (by Aristotle, by a student, by an officially designated secretary, Aristotle's official corrected version of someone else's notes) loses much of its force: there is no reason to suppose that a single written version corresponds especially to a single oral performance. Some parts of some of the treatises, particularly extended hiatus-avoiding passages such as Eudemian Ethics I,1-7 and the conclusion of the Sophistical Refutations (esp. c34 183a37-184b8),²⁹ may have been very close to what Aristotle actually said in lectures given both before and after he wrote the version of the text that has been transmitted. Other passages, such as Metaphysics A9 and much of the Topics, consist of long strings of brutally truncated arguments for the same conclusion, connected by no more than "ετι": in oral performance Aristotle would probably have selected only some of these, and he would have connected them better. But the texts allow a variety of oral performances, some shorter and some longer, according to the time available or according to audience interest. We often seem to have "optional expansions" in the transmitted texts, where the text is ABC but where it would also be possible to read AC smoothly without B, where B gives a supplementary argument for the conclusion of A, or gives further details or corrections or replies to objections to A (Metaphysics Z5 seems to be such an expansion on Z4, and Θ6 1048b18-34 on Θ6 1048a25-b17). Some of these expansion-passages, in the Metaphysics, are texts which Jaeger put in his distinctive double-brackets, meaning that they are later additions to the text by Aristotle himself;³⁰ this is possible (although we need to ask, later than what exactly?), but it is also possible that the shorter and longer options had been copresent from the beginning.

However, consistently with all this, there are different ways of conceiving the relation between written and oral versions of the treatises. One model is suggested by Thomas Cole in The Origins of Rhetoric in Ancient Greece³¹ as a way of thinking about Attic writers of the fifth and fourth centuries, supported most explicitly by Alcidamas' On the Sophists. Here the written text is merely an aid to oral performance, which will be improvised more or less freely on the basis of the written text (again, perhaps selecting some parts for presentation rather than others, and certainly amplifying some parts to whatever length the occasion demands); the written text, consulted or memorized, serves the author himself and his circle of students as a prompt and guideline in performance, while it can also be read by those at a distance, as a poor substitute for the author's oral performance, and as an advertisement, a protreptic, to encourage those at a distance to come to Athens to hear the great man and join his school. (As Cole says, reading the text at home when there was an opportunity to see the public epideixis instead would be like "staying home from an opera or concert in order to read the score," p.115.) On this model, while the transmitted written text may be before some oral performances and after others (some performances may have been given without a written text, or they may have been based on an earlier version of the written text than the one that is transmitted), it is more accurate to say that the written text consists of "lecture notes" in the sense of the lecturer's notes taken before the

²⁹actually hiatus-avoidance seems to start before that, think where you'd want to demarcate

³⁰likewise in Kassel's edition of the Rhetoric

³¹bibliographical data

lecture, looking forward to the lecture and serving as a means to it. A single written text might serve as the basis for many varying oral performances, but every once in a while, if the author's oral performances had changed enough, he might update the written text as well, and perhaps both the earlier and the later written version might be transmitted; this might explain the relation between the Eudemian and Nicomachean Ethics (and might explain the identity EE IV-VI = NE V-VII, if Aristotle did not update this portion of the text). A further implication of Cole's model is that the written text is directed, not so much to a public of readers, as to "a public of speakers, or prospective speakers" (p.75), who would use the teacher's text as a model for their own performances. It is possible that some of the texts transmitted in the Corpus Aristotelicum are neither Aristotle's notes before or after a lecture, nor simply a student's notes taken at a lecture, but rather a student's transformation of his notes for purposes of his own teaching, before or after his own lectures: I would guess this to be the case for the Magna Moralia and for Metaphysics K1-K8 1065a26 (on K, see further below).

A second model for thinking about the relation between written text and oral performance is attested mainly from later writers, and is explicitly applied to Aristotle's texts by the Greek commentators (and probably implicitly by earlier writers who list and classify Aristotle's writings), who assume, whether correctly or to some degree anachronistically, that he follows the same practices that are attested for later writers. Ammonius, for instance, gives an elaborate classification of Aristotle's writings: among the writings which are "universal" in the sense that they "investigate the nature of things," as opposed to his private letters and his histories, some are hypomnematic and others are syntagmatic; syntagmatic writings again are divided into the exoteric and the acroamatic. "Those are called hypomnematic in which only the main points/headings [$\tau\acute{\alpha}$ κεφάλαια] are written out [$\acute{\alpha}$ πογράφονται]: for you should know that formerly, if someone decided to write something up [σ υγγράψασθαι], they wrote out in the form of main points/headings [κ εφαλαιωδῶς] the things they had individually discovered which would contribute to proving their thesis, and they also took many thoughts from the books of older writers, in order to confirm what was right and to refute what was wrong; but afterwards, having imposed some order on these [main points/headings], they wove their treatises [σ υγγράμματα] by polishing them with beauty in the formulations [λ όγοι] and with care in the narration [$\acute{\alpha}$ παγγελία].³² And thus the hypomnematic are distinguished from the syntagmatic writings by order and by beauty of expression" (Ammonius In Categorias 4,5-13),³³ Elias adds that hypomnematic writings, containing only κεφάλαια, do not have introductions or epilogues (In Categorias 114,2-3), and Simplicius (In Categorias 4,19-20) adds that Alexander says that hypomnematic writings are collections not directed toward any single σκοπός. Within the class of syntagmatic writings, the distinction between exoteric and acroamatic is drawn differently by different writers (some wrongly assuming that all the exoteric writings were dialogues), but all

³²(i) it looks as if we extract things from the books of older writers in order to confirm or refute them, but perhaps we use things in the books of older writers to confirm and refute other things (in this case, however, I'm not sure why refutation would be mentioned separately); (ii) I'm guessing that $\acute{\alpha}$ παγγελία means the connected sequence of thoughts, so making sure that they're in the right order and that the transitions work; but it might just mean "diction" (a possible meaning according to LSJ), in which case it would be more-or-less synonymous with the foregoing

³³this is part of a longer discussion of the classification of Aristotle's writings. as Moraux noted, we have three other such discussions in later commentators, generally parallel to Ammonius' and largely dependent on him but with some material from elsewhere: the texts are Ammonius In Categorias 3,20-5,30, Elias In Categorias 113,17-117,14, Olympiodorus In Categorias [or, says the TLG, Prolegomena] 6,9-8,28, Simplicius In Categorias 4,10-5,2 {also note the Philoponus parallel, left out by Moraux; it probably doesn't add anything, but I don't see that Olympiodorus does either}

are clear that the exoteric writings are intended for a wider circle of readers, the acroamatic for philosophers or for Aristotle's own inner circle. Simplicius cites a forged correspondence between Aristotle and Alexander the Great (which we know was cited already by Andronicus), in which Alexander complains about Aristotle's publishing his acroamatic λόγοι and thus undermining Alexander's educational superiority, and Aristotle defends himself by saying that they are "published and not published, since they are comprehensible only to those who have heard us" (Simplicius *In Physica* 8,28-9; by mentioning "hearing" the letters give an etymological justification for the classification "acroamatic").³⁴ Simplicius paraphrases this by saying that "in the acroamatic writings [Aristotle] practiced unclarity in order to shake off the slacker readers, so that in comparison with [the exoteric writings] these seem not to have been written [γεγράφθαι] at all" (*In Physica* 8,18-20). Here γράφειν, like συγγράφειν in the text cited above from Ammonius, is the process of turning a series of ὑπομνήματα into a publishable book, by selecting and ordering them, adding connecting passages and an introduction and epilogue, and expanding them and decking them out in appropriate language. This process has been carried through to some extent for all syntagmatic writings, but only partially for the acroamatic writings, more fully for the exoteric writings, with the result that the acroamatic writings, in comparison with the exoteric, "seem not to have been written [= written up] at all." Elsewhere Simplicius explains the "ἀκρόασις" in the title "Φυσικὴ ἀκρόασις" by saying that "it has been worked up [ἡσκημένη] to precision to the point where it can be put forward for others' hearing/reading [ἀκρόασις]" (*In Physica* 4,10-11)--it has been worked up beyond the ὑπομνήματα stage to the point where someone other than the author can make sense of it, certainly not everyone, but the author's inner circle.

When Ammonius and the other commentators attribute to Aristotle this process of writing by working up ὑπομνήματα, they are referring to a process of composition that is well attested (in varying forms) for writers of especially the first century BC to second century AD (especially well attested for the elder and younger Plinies, also Philodemus, Cicero, Plutarch, Arrian, Lucian, Pamphila, Aulus Gellius; all discussed by Tiziano Dorandi in *Le stylet et la tablette*). You take brief notes, ὑπομνήματα, on potentially useful things that you discover in your reading or conversations or listening or simply in your own thinking; you write these on tablets or on loose sheets of papyrus or parchment, and then at some stage you reclassify them, bringing ὑπομνήματα on the same general subject together, perhaps in a bundle of tablets or the like filed in the same box or tied with a string, perhaps by copying them out together on a papyrus scroll with transitional passages added so that they become something like a rough connected book (this latter method is dangerous--what do you do with later ὑπομνήματα you take on the same subject?--but one solution was to copy them onto the normally blank back of the scroll). Then,

³⁴Aulus Gellius XX,v quotes the letters in Greek and gives his own Latin translation; he says he's taking them "from a book of Andronicus the philosopher." the letters are also cited, as Simplicius notes here, by Plutarch, *Alexander* c7, presumably Plutarch is also taking them from Andronicus. Simplicius isn't simply taking them from Plutarch, since Plutarch quotes Alexander's letter and paraphrases Aristotle's reply, while Simplicius (like Gellius) quotes both. perhaps Simplicius is taking them from Porphyry, who seems to be his usual source for information about Andronicus. Plutarch adds that, indeed, ἡ μετὰ τὰ φυσικὰ πραγματεία is unintelligible except to those who have already been trained, so he seems to think take Aristotle's letter as referring specifically to this treatise; Simplicius reports this as Plutarch's view but does not endorse it. note that Ziegler's Teubner Plutarch (which is the edition available, minus its apparatus, on the TLG) writes ἡ περὶ τὰ φυσικὰ πραγματεία, following the Renaissance editor Xylander, against all the manuscripts (which have either ἡ μετὰ τὰ φυσικὰ πραγματεία or ἡ μετὰ φυσικὰ πραγματεία) and Simplicius--I have no idea why he would do such a thing. the Budé, correctly, keeps the transmitted text

later, if you want to write a σύγγραμμα on X, you use your collected ὑπομνήματα on X (rather than, say, the original books from which you may have excerpted many of these) as the basis, selecting and ordering and expanding and elevating the diction and adding connecting passages and so on. This is straightforward enough in the case of an encyclopedic collection like the elder Pliny's Natural History (our best-attested case), but an original philosophical treatise will not be produced by simply stringing things together in this way. Nonetheless there is good reason to believe that Aristotle too used something like ὑπομνήματα. In Topics I,14 he recommends to the dialectician: "you should also make selections from written discourses, and make compilations [διαγραφαί] about each genus, putting each of them separately, e.g. on good, or on animal; and about every good, starting from what-it-is [i.e. from the category of substance]. You should also mark on the side [παρασημαίνεσθαι] the opinions of individuals, e.g. that Empedocles said that the elements of bodies are four: for someone would posit [i.e. a respondent in a dialectical exchange would be likely to accept] what has been said by someone famous [ἔνδοξος]" (105b12-19).³⁵ Whatever form these διαγραφαί may have taken (piles of tablets tied together? columns in a gigantic table? a continuous scroll, with transition-formulae between the different extracts?),³⁶ they serve the function later attributed to collections of classified ὑπομνήματα: here they are intended (when consulted or rather memorized) to be of use to the dialectical questioner, but they can similarly be of use to someone composing or improvising a rhetorical speech (indeed the Rhetoric gives long lists of opinions about particular subjects that might be useful premisses for arguments, and Rhetoric II,1 1378a26-9 calls this process διαγράφειν τὰς προτάσεις). But these and similar classified collections of notes might also be useful in composing philosophical treatises, and Aristotle's references to the "selection of contraries" and the "written divisions,"³⁷ and his programs for using the collected Πολιτεῖαι in his Politics and the History of Animals in the Parts and Generation of Animals, and Metaphysics Δ in later books of the Metaphysics, seem to show that he did in fact proceed this way; the many collections of premisses, objections, definitions, divisions, and so on, listed in the three ancient lists of Aristotle's works, and the extracts from Plato and Archytas which are also listed, all "hypomnematic" rather than "syntagmatic" writings, would have served as raw material both for oral performances (whether dialectical or monological) and for written treatises.³⁸ Simplicius would say that the "acroamatic" writings--including the large majority of the transmitted texts--are still partly in the raw: and the best evidence for this comes from texts like Metaphysics A9, whose barely connected series of shorthand arguments (each just enough to jog memory if you already know what the argument is) remains very close to the hypomnematic state, while the hiatus-avoiding sections are worked up almost to the point of being publishable. An acroamatic writing is a writing in process of being properly written up, and the ἀκρόασις, the lecture, is an important stage in the process. Certainly "ἀκρόασις" in titles like "Φυσικὴ ἀκρόασις" and "Πολιτικὴ ἀκρόασις" does not mean simply "reading," either for whoever originally gave the titles (for then what would "ἀκρόασις" add?) or for Simplicius (whose only other mention of "ἀκρόασις" in the Physics commentary, besides the passage explaining the title that we have already cited, and besides merely mechanical citations of the title, is a reference to "Plato's ἀκρόασις on the good," which

³⁵I agree with Brunschwig *ad loc.* that what we should mark on the side is the author of the opinion we have noted in the main διαγραφή.

³⁶note Brunschwig's note on what a διαγραφή might be

³⁷references (from Bonitz' Ἀριστοτέλης)

³⁸the first explicit reference to Aristotle's ὑπομνήματα ("commentarii") is in Cicero De finibus III,iii,10 and V,v,12, as the first explicit reference to his acroamatic writings is in Andronicus (as reported by Aulus Gellius)

"Speusippus and Xenocrates and the others who were present ... all wrote up [συνέγραψαν]," 151,10-11). Rather, an acroamatic writing is a writing which can be a basis for an oral performance;³⁹ and this lecture can in turn be further "written up," whether by the author (taking into account the audience's critical response, and whatever inspirations strike the author on the occasion of performance) or by auditors on the basis of the ὑπομνήματα they take at the lecture. (For examples of auditors "writing up" lectures, besides Simplicius' reference to the write-ups of the Lecture on the Good, including Aristotle's own Περὶ τὰγαθοῦ, the character Euclides in the Theaetetus, having heard Socrates narrate his conversation with Theaetetus, goes home and writes ὑπομνήματα, and then expands them afterwards from his memory and corrects them by checking with Socrates, until he "has almost the whole λόγος written" (142c8-143a5), and the subsequent dialogue is supposedly this text that Euclides has written up. From a later date, Arrian in the letter to Lucius Gellius that serves as the proemium to his Memorabilia of Epictetus says that he had written these things as ὑπομνήματα to remind himself of Epictetus' thought and free-speaking, and had not written them up [συγγράφειν--it is not clear whether he had intended to], when someone took a copy and published them without Arrian's knowledge or consent; so they will sound like the sort of things someone might spontaneously say to another, not like the more carefully worked out things someone would συγγράφειν for future readers. To return to an example from above, it is plausible to think of the Magna Moralia and Metaphysics K1-K8 1065a26, and perhaps Eudemus' Physics as Simplicius reports it, as such writings-up by auditors of Aristotle's lectures.) So on this model, even if the written acroamatic text is a means to an oral performance, that performance in turn is a means to a further written text; and the intended system of Aristotelian πραγματεῖαι is not so much an ideal lecture-course as an ideal written text to which the acroamatic texts and the corresponding oral performances are approximations.

A single treatise or an ordered sequence of treatises?

To return to the case of the Metaphysics in particular. The problems of the Metaphysics are, by and large, no worse than the problems of any other Aristotelian πραγματεῖα. It is a node or series of nodes within the intended system of πραγματεῖαι, whether we think of this intended system as written or oral; the Metaphysics as we have it is not in its final intended form, but it is clear enough (as we will see in detail in talking about individual books) that all of the books except α and K are intended to fill particular places within the πραγματεῖα, and the intended sequence of these books is also clear enough. (As we have seen, K1-K8 1065a26 are a second written version of the same node in the system of which we have a version in BGE, not a distinct node; more on α below.) There is in general no reason to suspect major editorial intervention in any of these books (except perhaps for an auditor who "wrote up" K), although there are often reasons to suspect that Aristotle had not finished "writing up" these books to his satisfaction.

But did Aristotle really write the Metaphysics as a single treatise, or merely as a series of shorter treatises? To the extent that it is a single treatise, did it become so after leaving Aristotle's hand, through the work of editors, not necessarily intervening within individual books, but bringing shorter treatises together into a larger one? If Aristotle himself produced it as a single treatise, why does it have two books called alpha or Book One, why the problematic K, why the peculiar plural title τὰ μετὰ τὰ φυσικά (if Aristotle himself gave the treatise this title, why does

³⁹and when Aristotle refers e.g. to "written divisions" there is a contrast with what he is now doing, which must be at least notionally oral. deal here with Burnyeat Map p.115 n60; some of what he says is right, some not, and what he says can be learned from Schenkeveld is not fully supported by Schenkeveld's article

he always use refer to it by other descriptions? if he gave it some other title, why did later Peripatetics substitute this one? if he gave it no title, why not?), and why do the different ancient lists report the treatise with different numbers of books?⁴⁰ If Aristotle wrote it as a single treatise, with ΛΜΝ in the order ΜΝΑ, how did they wind up in the order ΛΜΝ?

These are the kinds of questions that make people think about Andronicus, despite the complete lack of any ancient testimony connecting Andronicus and the Metaphysics (we are told something about Andronicus and the Categories, Andronicus and the De Interpretatione, Andronicus and the Physics, Andronicus and Aristotle's letters, but nothing about Andronicus and the Metaphysics),⁴¹ relying on Porphyry's comparison, in On the Life of Plotinus and the Order of his Books, of what he is doing in classifying Plotinus' writings into six groups of nine books ("enneads"), each united by a broad subject-matter or discipline (and each internally ordered, and the six enneads themselves put in a logical order of disciplines), to "Apollodorus of Athens and Andronicus the Peripatetic, of whom the former collected Epicharmus the comic poet and distributed [his works] in ten volumes, and the latter divided the [works] of Aristotle and Theophrastus into πραγματεῖαι, collecting kindred ὑποθέσεις together" (Life of Plotinus 24,7-11).⁴² Porphyry himself will likewise "distribute kindred things to each ennead" and order each such collection beginning from the easier problems (*ibid.* 24,14-16). It should immediately be said, both that this has nothing more to do with the Metaphysics than with any other Aristotelian treatise, and that Porphyry is not thinking of Andronicus as "assembling" treatises like the Metaphysics out of heaps of individual books: the Metaphysics and other Aristotelian treatises are full of internal cross-references forwards and backwards, whereas Porphyry's enneads are collections of independent treatises (sometimes stretching over two or three of the nine books of an ennead, usually just one) with no such cross-references between them. (Plotinus does occasionally have a forward or backward reference, but these do not correspond to Porphyry's order: the forward and backward references are Plotinus', not Porphyry's, and Porphyry presumably thinks that the forward and backward references in Aristotle's texts are Aristotle's, not Andronicus'.) It should also be said that the Porphyry passage just quoted is our strongest evidence for Andronican editorial intervention in the texts of Aristotle. Asclepius' story of Aristotle sending the Metaphysics to Eudemus, Eudemus advising against publishing it, and the text suffering damage when under the control of Eudemus or his successors (In Metaphysica 4,4-16), does not mention Andronicus, and neither does Strabo's story (Geographica XIII,1) of Aristotle's library coming to Theophrastus and Neleus and being buried, and the unearthed texts being corrected and published by Apellicon and Tyrannion; and Theophrastus; the only source beside Porphyry that refers to anything like editorial activity by Andronicus (apart from Ptolemy al-Gharib's mention of certain "letters [of Aristotle] which Andronicus found") is Plutarch's version of the Neleus story, in which "it is said ... that Andronicus of Rhodes, acquiring the manuscripts from [Tyrannion], made them public [εἰς μέσον θεῖναι] and wrote up the now

⁴⁰Diogenes Laertius not at all (MorauX argues that it and four other titles fell out mechanically), the Anonymus Menagii twice, once with ι books (meaning 10 in the alphanumeric system? 9 in the Homeric system?), once with κ books (meaning 10 in the Homeric system? 20 in the alphanumeric system?), Ptolemy al-Gharib with 13 books. it should be said that, apart from the ambiguities of interpretation, numbers are very easily corrupted in the manuscripts. it is likely enough that Ptolemy's list is the present 14 with one of the alphas missing or with both alphas counted as a single book, but beyond this I will venture no guesses; the point remains that all this is at least at first face puzzling if Aristotle himself wrote it as a treatise in some determinate number of books

⁴¹for a review of the evidence on Andronicus, see MorauX Aristotelismus {volume and page refs} and Barnes in Philosophia Togata II

⁴²

current Πίνακες" (Sulla 26,1,8-11). No ancient writer shows any sign of knowing or believing that the texts of Aristotle he is now using go back to an Andronican edition, or that Andronicus has had any more influence or authority over the texts than anyone else who has expressed opinion about the proper order and titles of Aristotle's works. What later writers do know, directly or indirectly, is Andronicus' Πίνακες, and this is surely the Πίνακες that Porphyry is referring to too, and comparing his own On the Life of Plotinus and the Order of his Books.⁴³

I am not trying to minimize Andronicus' work. He was undoubtedly doing something important in the Πίνακες. As noted above, the fact that Ptolemy al-Gharīb cites something from the fifth book of the Πίνακες shows that the work cannot have been a mere list of titles (although Ptolemy does say that Andronicus lists the "numbers" [of lines?] and the incipits of the texts he discusses; Porphyry also lists incipits as well as titles and the chronological and systematic orders of Plotinus' texts). Rather, Andronicus gave arguments about the order, authenticity, titles and extents of Aristotle's texts, as when he argues that the Postpraedicamenta are not really part of the Categories and that the Categories are not correctly entitled Before the Topics or placed immediately before the Topics, that the De Interpretatione is spurious, and that the first five books of the Physics are the Physics proper while the remaining three are the On Motion. All of these were controversial questions, and Andronicus was intervening in the scholarly debates within the Peripatetic school of his time. And the way Andronicus tried to resolve these issues was by carefully examining the references to Aristotle's treatises (what titles are cited, what texts do these titles seem to refer to, can we infer how many of the books fall e.g. under the title Physics, can we infer which treatises come before and which come after), in Aristotle's treatises themselves and in his letters and in the treatises and letters of the early Peripatetics.⁴⁴ Andronicus did not think he was creating an order among the treatises, much less creating treatises themselves, where none had existed before; he thought he was using scholarly evidence to resolve the controversies about what order Aristotle had intended his texts to be read in and what titles he had intended them to bear. And by comparing Ptolemy's catalogue, which probably mostly reflects Andronicus' conclusions (although it includes the De Interpretatione),⁴⁵ with the earlier Peripatetic catalogue reflected in Diogenes Laertius and the Anonymus Menagii, we can see that Andronicus' usual tendency, at least among the acroamatic works, was to accept longer treatises, where some earlier Peripatetics (but not, so Andronicus would have argued,

⁴³I hope I've discussed the Eudemus and Neleus stories before, if not insert some references; for the Eudemus story see my "The Editors of the Metaphysics," it was also certainly from Andronicus' Πίνακες that Ptolemy learned that Andronicus claimed to have discovered certain letters; I quote the text from Hein. I am not denying that Porphyry also "edited" Plotinus' texts, in the sense of telling a slave to copy them out in the order indicated in On the Life of Plotinus and the Order of his Books, and checking his work and making corrections where necessary (which is more than Plotinus himself did--Porphyry says that he wrote himself by hand and never looked at his texts again to correct them). presumably Andronicus did something like this with Aristotle, but there is no reason to think that the texts thus produced play any particular role in the ancestry of later manuscripts of Aristotle. to the extent that later editions follow Andronicus' order (and of course they don't entirely, if they include the De Interpretatione) they are more likely to be guided by his Πίνακες than by manuscripts produced under his supervision. this is especially true because Andronicus worked before the codex, and a scroll can't hold that much; if a collection of scrolls of Aristotle produced under Andronicus' supervision had an intended order, that would have to be inferred from the Πίνακες rather than from the scrolls themselves. of course Andronicus would be important in the history of a given text if he had discovered a text that was previously not in general circulation, but the only case in which we know that is (some of) the (genuine or spurious) letters

⁴⁴cite sources for all of this: everything can be found in Moraux and Barnes ... note esp. Andronicus' use of the correspondence between Theophrastus and Eudemus to support the claim that Physics V is part of the Physics

⁴⁵careful! see Hein's note on this

Aristotle himself or his immediate disciples) had used titles to refer to shorter stretches of text (Andronicus also brought the acroamatic works together and put them in a logical order, where the earlier catalogue intersperses them among other Aristotelian texts). Moraux in Les listes anciennes des Ouvrages d'Aristote has given many examples of this tendency: a nice example is that Diogenes Laertius lists an Art of Rhetoric in two books, presumably our Rhetoric I-II, and separately an On Diction in two books, presumably our Rhetoric III (which would fall naturally into two books, III,1-12 and III,13-19), where Ptolemy (but also the Anonymus Menagii) combine these into our present Art of Rhetoric in three books. In the majority of cases Andronicus' preferences won out (not necessarily because he held them, and he was often clearly not the first person to have held them), but not always: a nice example is the treatise cited by Ptolemy On Memory and Sleep, which presumably included the On Memory, On Sleep and Waking, On Dreams, and On Divination in Sleep.

Since Ptolemy lists a Metaphysics in thirteen books while the Anonymus Menagii lists (twice, following two different sources) a Metaphysics in what is probably ten books, it is plausible that here too Andronicus argued that the title covered something more extensive than some earlier writers had admitted. But the main point to recognize here is how little such disputes matter. The order of the acroamatic texts, approximating the idealized complete lecture-sequence or idealized treatise De Omnibus, is important, and probably this was Andronicus' (as also Adrastus') main concern. But how finely we divide this sequence of nodes within the system, and what titles we give to these longer or shorter subsequences, are not nearly so important: what does it matter whether we admit one treatise On Memory and Sleep or four On Memory, On Sleep and Waking, On Dreams, and On Divination in Sleep, if the sequence within the system is the same? Aristotle is perfectly capable of referring to the same thing both as what he has said ἐν τοῖς περὶ X and as what he has said ἐν τοῖς περὶ Y, where τὰ περὶ Y are a part of τὰ περὶ X;⁴⁶ he is also capable of using the same phrase τὰ περὶ X either narrowly, for only the discussion of X proper, or broadly, to include the discussion of Y.⁴⁷ From outside τὰ περὶ X it is often convenient to refer to anything treated there as ἐν τοῖς περὶ X; while from within τὰ περὶ X, if Aristotle wants to refer to something he has said in another part of τὰ περὶ X, it is helpful (since he cannot say "in Book Two" or "in chapter 5") to be able to refer to it by a more specific title, ἐν τοῖς περὶ X or perhaps a description such as ἐν τοῖς πεφρομισασμένοις, ἐν τοῖς πρώτοις λόγοις (or just ἐν τοῖς πρώτοις), ἐν τοῖς ἀπορήμασι. If we are currently inside τὰ περὶ X, and more specifically inside τὰ περὶ Y which are a part of τὰ περὶ X, then "we have said ἐν τοῖς πρώτοις [λόγοις]" can mean either that we said it at the beginning of τὰ περὶ Y or further back at the beginning of τὰ περὶ X; "we have said previously ἐν ἄλλοις" can mean either that we said it before the beginning of τὰ περὶ X or that we said it, within τὰ περὶ X, before the beginning of τὰ περὶ Y.⁴⁸

⁴⁶e.g. things in Physics VI and VIII are cited both as ἐν τοῖς περὶ φύσεως or ἐν τοῖς φυσικοῖς and as ἐν τοῖς περὶ κινήσεως, so evidently τὰ περὶ κινήσεως are part of τὰ περὶ φύσεως: references in Bonitz (and Ross Physics ed. maj. pp.2-3)

⁴⁷e.g. Physics VIII,10 267b20-22 says "that no magnitude can be infinite has been shown before ἐν τοῖς φυσικοῖς", referring to an argument in Physics III, so there is a strict sense in which Physics VIII does not belong to τὰ φυσικά {I take it that the Greek can't mean just "in an earlier part of the Physics"--treatises don't cite themselves by title in this way}; Physics VIII,5 257a34-b1 says "it has been shown before ἐν τοῖς καθόλου τοῖς περὶ φύσεως that everything that is moved per se is continuous," referring to a result of Physics VI, so here Physics VIII does not belong to the universal part of τὰ περὶ φύσεως, but might still belong to τὰ περὶ φύσεως

⁴⁸for ἐν τοῖς πρώτοις [λόγοις]: AnPost II,12 96a1 {Ross says ref to AnPr II,5}, Physics VIII,8 263a11 ἐν τοῖς πρώτοις λόγοις τοῖς περὶ κινήσεως {=Physics VI}, DC I,3 270a17 {Moraux says ref to Ph I,7}, IV,3 311a11 {ref to Phys VIII,4}, PA 682a3 {Louis says ref to HA IV,7}, GA 778b2 {reference apparently to PA I,1}, Metaphysics B

Aristotle did not give his acroamatic treatises "titles" except in this sense, in which larger units and their subunits can equally have titles (and in which the same title can sometimes be used both for a larger unit and for one of its subunits), nor did he demarcate his acroamatic treatises from each other except in this sense, in which one treatise (probably opening with a shorter or longer programmatic introduction, and perhaps closing with some sign that the program has been completed) can also be part of a longer treatise.⁴⁹ And this is why scholars like Andronicus, even when they were able to reach agreement on the proper order of Aristotle's works, could still disagree on their proper titles and extents, and could cite references from Aristotle and his immediate disciples on both sides of these disagreements. And while we are on treacherous ground in speaking of Andronicus and others as "editing" Aristotle, certainly people who followed different views of the proper order, titles, and extents of Aristotle's works (and who may be guided e.g. by Andronicus' Πίνακες in forming these views) will copy Aristotle's works into codices in different orders, and will insert what they think are the appropriate titles at what they think are the appropriate places.

Where does this leave the Metaphysics, the treatise and its peculiar title τὰ μετὰ τὰ φυσικά? Most of the books of the Metaphysics (as I will argue, all except α and K) stand in a determinate sequence, determined by many cross-references and by explicitly or implicitly programmatic statements made in earlier books and fulfilled in later books.⁵⁰ As we have seen, B refers back to A as the introduction to something (a "treatise" in some sense) that includes B, and many of the later books refer back to B; in a broader sense, B refers ahead programmatically to the treatments of the various aporiai in the later books. Γ announces the more particular program of investigating the causes of being qua being and of its per se attributes; Γ also sketches the program of Δ; E announces the program of studying the causes of being in the four senses distinguished in Δ7, systematically carried out in EZHΘ, with back-references to the program and to the distinctions of Δ7; there are many other back-references in later books of the Metaphysics to Δ, and references ahead to an account of eternally unmoved οὐσίαι. There are also many other cross-references which help to determine the intended order of the books (thus H and Θ and Iota refer back to Z, and Λ to Θ). But what makes the Metaphysics one treatise is not just the sequence of the books, but the program of searching for "the desired science" of wisdom, announced already in A1-2 and made progressively more determinate in B, in Γ1-2, and

997b4 (referring to A), Θ1 1045b32 (referring to Z1), NE IV,4 1125b2 {ref to NE II,7}, IV,4 1125b13 {also NE II,7}, Politics III,18 1288a37-8 {ref Pol III,4}, IV,7 1293b2 {refback controversial, Pol III or Pol VII, looks to me like the latter}, IV,10 1295a4-5 {ref to III}, VII,3 1325a30-1 {ref to I}, Rhetoric II,25 1403a3 {ref to I,2}

Jaeger 118-19 ἐν ἐτέροις πρότερον; 159-60 (and thereabouts) ἐν τοῖς πρώτοις [λόγοις], but there he admits ambiguity (which seems to undermine his case elsewhere); note Michelet's example that "we said κατ' ἀρχάς" in the treatise on friendship NE VIII-IX can mean either the beginning of NE VIII-IX or the beginning of the NE; see your discussion below {some is/was in the discussion of Z7-9 = IIγ2, but I think I brought it up to the discussion of Δ in Iγ1}

Ross Physics pp.2-3 (probably copying Bonitz) lists ways Aristotle refers to the Physics, and things he calls ἐν τοῖς φυσικοῖς or ἐν τοῖς περὶ φύσεως; everything up to Book VIII can be called by these latter names, but at least anything from VI to VIII can also be called ἐν τοῖς περὶ κινήσεως; something in VI is once cited as ἐν τοῖς περὶ χρόνου καὶ κινήσεως {ref is at DC 303a23}; something in III as cited as ἐν τοῖς περὶ τὰς ἀρχάς {DC I,7 274a21}; and something in the DC is cited at least once as ἐν τοῖς περὶ φύσεως (Metaphysics A8 989a24)

⁴⁹ maybe list some cases: a clear case is the Sophistical Refutations, which is also part of the Topics. maybe see what you can collect on Aristotle's use of "πραγματεία" and "μέθοδος" as count-nouns. for non-demarcation, note cases where there's a μὲν .. δέ or μὲν οὖν ... δέ transition from one treatise to another, e.g. from DC to GC

⁵⁰I hope I've given references at the beginning of this section for everything I'll say in the next few sentences; if not, add documentation, and references ahead

in E (both in the program of going through the senses of being distinguished in Δ7, and in the specification of wisdom as a "first philosophy" dealing with separate unmoved things if any such exist). As we saw in Ια2 above, to determine what wisdom is we must determine what the ἀρχαί are, and the process will be complete only when we have precisely determined the ἀρχαί, that is, when we have acquired wisdom. But it is just this process that Aristotle is looking back on in Λ10, claiming that his account of the ἀρχαί, and only his account of the ἀρχαί, can solve the aporiai raised in B, and deliver on expectations of wisdom (notably as knowledge of the good-itself as first cause) elaborated in A. Since the Metaphysics as a whole is pursuing this determination of wisdom and of the ἀρχαί, there is a strong sense in which the Metaphysics is a single "treatise" beginning in Α1-2 and reaching its intended goal in Λ10 (and we will see in detail how it works as we examine each individual book): this is stronger than the sense in which the Physics, De Caelo, On Generation and Corruption and Meteorology are a single treatise, since, although those texts are certainly pursuing an overall agenda, it is not all directed toward a climactic moment at the end of the Meteorology. But this is not to deny that we can also speak of smaller "treatises" within the Metaphysics which can be referred to by their own "titles": this is the case, by internal references within the Metaphysics, for B, the ἀπορήματα or διαπορήματα {refs}, for Δ, the περὶ τοῦ ποσαχῶς {refs}, and for ΖΗ, the περὶ τῆς οὐσίας λόγοι (Θ8 1049b27-8) or περὶ οὐσίας καὶ περὶ τοῦ ὄντος λόγοι (Iota 2 1053b17-18), and it is not hard to imagine similar titles for Θ or Iota or MN or Λ or for EZHΘ as a larger unit. It is not impossible that in some cases Aristotle wrote, or presented orally, some version of these "treatises" before reconceiving them as parts of the longer sequence pursuing wisdom,⁵¹ but there is in general no reason to believe it, and the texts as we have them do not make sense except as parts of the larger project. (The most plausible exception is Δ--it is no surprise that this is the only separate part of the Metaphysics that can be plausibly recognized in the ancient catalogues of Aristotle's writings, and someone may well have been moved to copy it separately, and it may have existed as a written reference-text before the rest of the Metaphysics was in written circulation--but even here the selection and sequence of terms cannot be explained without reference to the larger project.)⁵²

What then of the title? Of course Aristotle did not give the treatise the title "τὰ μετὰ τὰ φυσικά", nor did he give it any other title which later scholars or editors would have suppressed in favor of the new title; but this is completely unsurprising, since he did not give titles to any of his acroamatic writings, except in the sense we have described. He does "refer" (with the usual cautions about this concept) to the Metaphysics, by a number of descriptions: he speaks of a πραγματεία about unmoved things or a μέθοδος about the first principle, of a "philosophy" or an "investigation" "other and prior" to physics, he says that it is the ἔργον of first philosophy rather than of physics to answer certain questions, or that certain things have been or could be shown διὰ τῶν ἐκ τῆς πρώτης φιλοσοφίας λόγων (De Caelo I,8 277b9-10, referring to the arguments for the uniqueness of the heaven in Metaphysics Λ8) or ἐν τοῖς περὶ τῆς πρώτης φιλοσοφίας (De Motu Animalium c6 700b8-9).⁵³ These phrases are for the most part naming or describing a discipline (this is clearly true in context even for the reference to πραγματεία, Physics II,7 198a27-31); the closest to a title is τὰ περὶ τῆς πρώτης φιλοσοφίας, taking the same form as other Aristotelian "titles" like τὰ περὶ φύσεως or τὰ περὶ τοῦ ποσαχῶς, but it is a contingency that he did not in any extant text say something like τὰ περὶ τῆς πρώτης ἀρχῆς instead, and there

⁵¹so Petit etc., and in his way Michelet too accepts this

⁵²references, on the lists, to the treatment of Δ below

⁵³all these from the appendix to Ια1

is no reason why later Peripatetics would be bound to use one of these "titles" rather than others.

The title "τὰ μετὰ τὰ φυσικά" probably comes from sometime in the Hellenistic Peripatos, since it is in the Anonymus Menagii.⁵⁴ "Τὰ μετὰ τὰ φυσικά" is in the first instance the name of a text (of Aristotle or Theophrastus) and only derivatively becomes the name of a discipline, ἡ μετὰ τὰ φυσικά [ἐπιστήμη etc.]--even in this derived form the phrase "τὰ φυσικά", rather than "ἡ φυσική", retains the reference to a book-title. But as a book-title there is nothing especially strange about it. One sometimes hears it said that the plural title betrays the desperation of Peripatetic scholars ("editors" or "librarians") faced with a plurality of disparate treatises, but all titles of this form are plural, even of monobiblia like τὰ περὶ τοῦ ποσαχῶς or τὰ πρὸ τῶν τοπ[ικ]ῶν (whether this is the Categories or, as some think, Topics I), even of less-than-monobiblia (ἐν τοῖς περὶ μίξεως = GC I,10, cited De Sensu c3 440b3-4 and b13). The persistent idea that the title comes from a "library catalogue" is presumably a distorted memory of Andronicus' or Hellenistic Alexandrians' Πίνακες, but obviously whoever gave the treatise this title was making a claim about its disciplinary classification and the intended order of reading. And the claim is that the discipline here treated does not fall under any of the standard three parts of philosophy, logic and physics and ethics, but that it goes together with physics as a kind of theoretical philosophy, a kind distinct from physics and after it in the order of learning. And whatever Peripatetic scholars are making this claim are drawing it from what Metaphysics E1 says about first philosophy, and, for the order of learning, from the references ahead to first philosophy in the physical works, the references back to physics in the Metaphysics (A7 988a21-2, A10 993a11, M1 1076a9), and the heavy reliance on Physics VIII in Metaphysics Λ's proof of an eternally unmoved mover. ("Τὰ μετὰ τὰ φυσικά" might also cover mathematics, although more likely mathematics is prior to physics in the order of learning, but anyway Aristotle has no texts on mathematics that would need to be classified.) It is sometimes claimed (notably by Reiner) that there are two radically different interpretations of the title "τὰ μετὰ τὰ φυσικά", as meaning "what comes after the physical works in the order of learning" or as meaning "the study of things beyond the natural realm," which would lead to contradictory interpretations of the text and the science it pursues: Reiner thinks that the latter is a distinctively late-ancient, post-Hellenistic, understanding of metaphysics, which would do violence to the breadth of the Metaphysics and reduce the whole treatise to the theology of Λ.⁵⁵ But whoever proposed the title

⁵⁴see above for this. the title is both in the main body of the list in the Anonymus Menagii and in the supplement. the supplement is apparently intended to correct one version of the main list, but not quite the version we have, hence the duplication, see Moraux Listes for discussion. Moraux thinks the absence from DL is due to mechanical error, that it was in the original source. in any case there is no sign of Andronican influence on the Anonymus Menagii, in general or in this particular case (the number of books in the Metaphysics is different here than in Ptolemy al-Gharīb). note also Burnyeat's point (from Jonathan Goldstein) about alphabetic reference system. the first attestation of the title is either in Nicolaus of Damascus (unless Silvia Fazzo is right in denying his identification with Herod's court historian and redating him to a later time; but Averroes' reference to his reordering the books seems to be taken from Alexander, and would refer to the same treatise as the scholion on Theophrastus' Metaphysics) or else in Plutarch Alexander c7 (repeat warning: Ziegler's Teubner bizarrely emends ἡ μετὰ τὰ φυσικά πραγματεία--supported by all the manuscripts {the only variation Ziegler reports is ἡ μετὰ φυσικά πραγματεία} and by Simplicius 8,20-30 discussed above--to ἡ περὶ τὰ φυσικά πραγματεία; people who consult the TLG will be led astray)

⁵⁵references to Reiner (and note the reprint in the Wege der Forschung series). Reiner for some reason thinks that everyone has overlooked the "later in the order of learning" interpretation (this is silly, it's even in Zeller), and, when they reject the excessively theological interpretation, have settled for a merely accidental order of a library catalogue. (note that his history of the scholarship, while useful, is incomplete and misleading; cite the Hobbes passage from your Burnyeat review, which falsifies the lessons Reiner wants to draw from the history.) Frede (in the

"τὰ μετὰ τὰ φυσικά" was interpreting the treatise through E1's description of first philosophy (and through the references to first philosophy in the physical works, as the study of eternally unmoved things or of the first principle coming after the study of physics), and so they were taking the σκοπός of the treatise to be the things beyond the natural realm. It is, again, sometimes thought that the advantage of the title "τὰ μετὰ τὰ φυσικά", over other titles that might be extracted with less effort from Aristotle's own references, was that it was broader than, for instance "first philosophy," and could cover both theological and ontological "treatises." This is unlikely, because the same title was used for Theophrastus' Metaphysics, which has no ontological sections,⁵⁶ and because there is no reason why the study of being, if not understood as aiming at a knowledge of ἀρχαί beyond the natural realm, would be methodologically after physics. Certainly some titles that might be extracted from Aristotle's references, like "περὶ τῶν ἀκινήτων", might seem too narrow for the whole Metaphysics. But "πρώτη φιλοσοφία" or "σοφία", while good names for the discipline, are not really possible titles for a text; it would have to be something like περὶ πρώτης φιλοσοφίας, as in De Motu Animalium c6 700b8-9. And this title, while not impossible, is unsatisfying, because it makes the treatise second-order, about the discipline, when a περί-title should come rather from the object that the discipline is about. And a title like "θεολογικός [λόγος]," while it might seem too narrow for the Metaphysics, is more importantly too broad, since it might refer to a part of physics (the heavenly bodies studied in the De Caelo are also divine, and the Stoics will pursue theology as a part of physics), and might also be an interpretation of the gods of the poets or of civic religion. If I personally were entering into this dispute, at a time when the treatise did not yet have a generally agreed title, I would opt for "περὶ ἀρχῶν" (the title which Laks-Most propose for Theophrastus' Metaphysics). But this too might refer to a part of physics, since "Adrastus, in the On the Ordering of Aristotle's Writings, reports that the treatise [sc. the Physics] was entitled by some 'Περὶ ἀρχῶν', and by others, 'Φυσικῆς ἀκροάσεως', and that yet others entitled the first five books 'Περὶ ἀρχῶν', and the remaining three 'Περὶ κινήσεως'" (Simplicius In Physica 4,11-15 {at least partly cited above}). Simplicius adds that "Aristotle himself evidently often refers to [these books] in this way" (4,15-16), and it is at any rate true that De Caelo I,7 274a19-24 refers to something from Physics III (and not just the more obviously "archeological" Physics I) as having been said ἐν τοῖς περὶ τὰς ἀρχάς. Of course we can say that "ἀρχή" has a stricter and a looser sense, and that only the Metaphysics is concerned with the ἀρχαί in the strict sense. But referring to the treatise as τὰ μετὰ τὰ φυσικά, rather than τὰ περὶ ἀρχῶν, avoids these complications and removes the ambiguity about which treatise we are referring to.

general and special metaphysics paper) says without argument that of course no one in the Hellenistic period could have taken the title as meaning the study of things beyond the natural world; but just look at the opening sentences of Theophrastus' Metaphysics. Aubenque distinguishes between "first philosophy" (= theology) and "metaphysics" (= ontology), claiming that first philosophy would have to be before physics even temporally, and rejecting attempts to harmonize the two senses of the title. Aubenque concludes that first philosophy, if it exists among humans, would have to be historically earlier than physics, but that it does not exist among humans; it seems to follow, on his grounds, that no science exists among humans. but he has no real ground for his claim that first philosophy would have to be temporally prior to physics--it depends on the assumption that the principles of physics must be derived from first philosophy in order to be scientific, an idea which admittedly is fairly old and may be in Alexander, but has no Aristotelian justification. much of the argument of Aubenque's book seems to collapse without this assumption

⁵⁶what may well be the first attestation of the title, in Nicolaus of Damascus, is in fact for Theophrastus' treatise. there does not seem to be any reason to think that the title was first used for Aristotle's treatise and only afterwards for Theophrastus'

On Metaphysics K

I will not devote any particular chapter or section of this book to Metaphysics K, because K is not a node of its own, distinct from BΓE, in Aristotle's intended plan for the Metaphysics; rather, Metaphysics K1-K8 1065a26 (the part of K that is not a series of extracts from the Physics) and Metaphysics BΓE are two versions of the same node or series of nodes. So I will discuss K, not on its own, but in discussing BΓE, in cases where its variations from the longer text of BΓE shed useful light on what Aristotle is doing; in practice, it is only in B that K's variations are significant enough to be helpful. However, because the authenticity of K is contested, it is important to say something here about the legitimacy of using K as evidence for Aristotle's intentions.

As noted above, the authenticity of K was debated by scholars throughout the nineteenth century, being notably defended by Brandis and attacked by Natorp. Jaeger took K as giving evidence of a phase of Aristotle's thought earlier than the parallel versions in BΓE (the differences being most significant in B);⁵⁷ more recently, authenticity was defended by Merlan, attacked by Augustin Mansion, and then, in the Symposium Aristotelicum volume Zweifelhaftes im Corpus Aristotelicum, defended by Décarie and attacked by Aubenque.⁵⁸ I will focus here on the article of Aubenque, and on the article of Mansion whose arguments Aubenque repeats and extends, since most scholars for the last thirty years seem to have accepted Aubenque's article as decisive (an important exception is Madigan in his Clarendon of B and K1-2). Aubenque was motivated to expel K from the Metaphysics because he thought that K represented, and had helped to encourage, the systematizing tendency in the interpretation of the Metaphysics that he had attacked in Le problème de l'être chez Aristote, overhastily identifying ontology with theology by presenting divine immaterial being as the primary sense of substance and thus of being. (Aubenque also, wrongly, connected this tradition with an impulse to bring the many senses of being closer to univocity than Aristotle intended, and to "reduce" all the senses to one or to derive them all from a single primary sense.) This issue is connected with, but distinct from, the issue of whether K offers a "Platonizing" and "theologizing" interpretation of Aristotle's metaphysics, which had driven Natorp's earlier attempt to expel K, and which had also motivated Jaeger's attempt to retain K as a witness to an early stage in Aristotle's development. That issue had been chiefly about K's conception of wisdom. Aubenque does indeed say that K1-2 "develop ... a Platonizing and theologizing conception of wisdom" (p.323), i.e. a conception of wisdom as a science of immaterial substances, and this is with some qualification true (it would be more accurate to say that the author conceives wisdom as the science of the ἀρχαί, where these must be eternal and separately existing, and that he believes that the ἀρχαί are also unmoved and separate from bodies, although the science of the ἀρχαί would still be wisdom if the ἀρχαί were bodies); but, as Aubenque (p.323) and Mansion (p.213) recognize, this cannot show the inauthenticity of K, since Aristotle develops the same conception in B and other certainly authentic texts. The issue now is not whether K gives a theological rather than ontological

⁵⁷note, as in the Zeller paper, some precursors of Jaeger here, esp. Titze and Michelet

⁵⁸references. the Augustin Mansion piece is the "Appendice: Le livre XI ou K de la Métaphysique," pp.209-21 of his article "Philosophie première, philosophie seconde et métaphysique selon Aristote" (Revue philosophique du Louvain 56 [1958], 165-221). also note the single footnote in Suzanne Mansion's article Les apories de la métaphysique aristotélicienne pp.160-61 n67 (reprinted in her Etudes aristotéliciennes, preserving the original pagination)

interpretation of wisdom but whether it gives a theological interpretation of ontology, by glossing "science of being quâ being" as meaning "science of divine immaterial being." Merlan and Mansion and Aubenque all think that K understands "being quâ being" this way: Merlan, taking K to be authentic, takes this to justify what he insists on calling a "neo-Platonic" reading of Aristotle, and Aubenque in denouncing K as a tissue of confusions is taking aim above all at Merlan (imagined as the culmination of a long and deplorable interpretive tradition). If Merlan and Mansion and Aubenque were right about what K meant by "science of being quâ being," it would indeed be grounds for thinking that K is not only un-Aristotelian but badly confused; but, as we will see, they are misreading K.

Mansion and Aubenque agree that, after Jaeger, we cannot show that K is inauthentic simply by showing that it contradicts some other work of Aristotle; they try instead to show that K contradicts itself, or (as Aubenque also argues) that it is parasitic on BGE in such a way that it cannot be understood without them, but that it at the same time misunderstands them.⁵⁹ Mansion's arguments turn on K's understanding of "being quâ being" and "separate," and these remain Aubenque's main arguments, although he adds many side-complaints about other passages in K; in what follows I will consider and reply to these main arguments, adding replies to Aubenque's further complaints in a brief appendix. First, however, let me lower the tension by pointing out the debate as nowhere near as polarized as especially Aubenque suggests, and will not have enormous consequences for the interpretation of the Metaphysics. In part this is because K is no more "Platonizing" or "theologizing" than other parts of the Metaphysics, and because it does not conflate ontology and theology as Mansion and Aubenque say it does. But, also, the question of authenticity is not a simple yes/no question. Almost nobody thinks that K as we have it is from Aristotle's hand (Aubenque wrongly attributes this view to Jaeger).⁶⁰ And almost everybody, including Aubenque, agrees that the author of K, whether or not he drew on the extant versions of BGE, (also) drew on Aristotelian sources, oral or written, for which he is now our only witness; the dispute is about how extensively he drew on lost sources, how far he may have misunderstood Aristotle, and how far he allows us to reconstruct a stage of Aristotle's thought earlier than BGE.⁶¹ I have been able to find only one issue where it seems fairly clear

⁵⁹Aubenque often speaks as if it were sufficient to prove that K cannot be understood without reference to the parallels in BGE. It is indeed sometimes true that K's presentation is so abridged that we have difficulty understanding it without referring to the longer versions in BGE, but this does not show that the author is abridging BGE, since it does nothing to exclude the view of Aubenque's opponents, that K is abridging (as notes from a lecture) a perhaps earlier oral parallel to BGE (which we don't have, which is why we need to look at BGE)

⁶⁰Aubenque p.321 says that Jaeger 1912 thought K was from Aristotle's hand, and that Jaeger 1923 made a major concession in granting that K depended on student notes, but in fact Jaeger had said this already in 1912 (pp.86-9) ... reference in Jaeger 1923

⁶¹everyone agrees that K is too different from the extant BGE to be simply someone's summary of that text. Aubenque, rather than admit the obvious solution that (the relevant part of) K is a student's record or rewriting of Aristotle's lectures corresponding to BGE, speaks of it drawing on Metaphysics N (so pp.329-33; but why integrate materials from N into a version of BGE?); elsewhere "j'en conclurai ... ou que l'auteur de K connaissait la texte des Topiques VI 4, ou, plus probablement, qu'il avait sous les yeux, en même temps que B, un autre catalogue aristotélicien des apories, probablement antérieur à celui du livre B" (p.334), "Dans les chapitres 1 et 2 en particulier, il paraît avoir utilisé, outre B, un catalogue d'apories antérieur à B. Il semble connaître en outre A, Λ et MN de la Métaphysique, ainsi que la Physique" (p.343)--as we'll see, the connections with N and the Topics are completely unjustified, and if Aubenque is willing to posit this earlier version of B, why not go with Jaeger (and the possibility Augustin Mansion leaves open p.220) that the author is developing an earlier version of Aristotle's lectures corresponding to BGE? Aubenque dismisses this obvious solution p.324 n28, his only cited reason being that "on imagine mal que ce disciple ait pu ne pas avoir connaissance de la version autrement élaborée fournie entre-temps par Aristote avec les livres BGE." but this argument would apply equally to the MM, which uses an older

that the author misunderstood Aristotle, and which is therefore evidence that he is not Aristotle;⁶² and while the issue is important, it is not nearly as important as Aubenque thinks, because Aubenque misunderstood what K was saying on the issue; and even where K is unreliable as a guide to Aristotle's thought, it is completely innocent of the tendency of interpretation that Aubenque attributed to it. Overall I think K reflects fairly well, although with some distortion and certainly in a shortened and simplified form, a version of BΓE different from and probably earlier than the transmitted version, and that it can and should be used, with caution, to show the range of ways that Aristotle could work out the thoughts he needs at a very important node in the argument of the Metaphysics. The likely explanation for this state of affairs is that K is the work of a student of Aristotle, using and revising a set of Aristotle's lectures corresponding to BΓE for his own lecture-course on the same subject: this is what Eudemus did in his Physics, which very closely followed the order of Aristotle's Physics, and this apparently also explains the Magna Moralia, which seems to draw on a version of Aristotle's lectures on ethics earlier than the Eudemian and Nicomachean versions.⁶³ And while this student may make mistakes in interpreting Aristotle (fewer mistakes than Aubenque makes, or probably any other modern scholar including myself), he is not stupid, and Aubenque is quite wrong in trying to show that he was. Aubenque's article is in fact a remarkable exercise in malicious reading. Aubenque is convinced that K is not by Aristotle, and also convinced that K represents an overall mistaken tendency in the interpretation of the Metaphysics, and so he denies K the charity that he would automatically extend to a "great" philosopher; he would read the text very differently if he thought it were by Aristotle, and if he treated other Aristotelian texts in the same manner as K they too would look like the work of incompetent impostors.

The central argument is made more clearly by Mansion; Aubenque adds subsidiary arguments but does not add much in his presentation of the main argument (I will note some of his comments below). To recall the structure of K: K1-2 are a shorter parallel, with significant differences, to Metaphysics B; K3-4 are a closer parallel to Γ1-2 on the universal science of being, and K5-6 to Γ3-8 on the principle of non-contradiction and connected issues; K7 is parallel to E1, and K8 through 1065a26 to E2-4 (almost all about being per accidens, with just a quick dismissal of being as truth, although E4's dismissal of being as truth is also all-too-quick). The remaining 13 lines of K8 are extracts or summaries from Physics II on chance and

version of Aristotle's ethics lectures rather than the EE or NE, and Aubenque himself says (p.343) that the author of K makes no use of ΖΗΘ either because he didn't know them or because he chose not to (and he says that Theophrastus' Metaphysics also makes no use of these books). but there would be nothing surprising in a student choosing to work from his own lecture-notes rather than from a published version, we don't know whether the published version was yet available, and we don't know whether it was available if the author wasn't in Athens

⁶²there are also some stylistic peculiarities of K which give some evidence that it is not by Aristotle, but the stylistic differences between K and BΓE are not obviously much greater than between other uncontestedly authentic works of Aristotle. the main point is the use of the particle-combination γε μήν (noted Jaeger 1912 pp.86-7, from Spengel) also common in Xenophon (also the Laws, more often as μήν ... γε) and evidently a Doricism; see Décarie "L'authenticité" pp.296-8 has a good discussion of the distinctive stylistic features of K, concluding that not much can be inferred from them. the most interesting stylistic feature is a general avoidance of hiatus, which (whatever else it may imply) shows that the book is not notes taken on the spot, but something revised with literary ambitions; the use of καθάπερ rather than ὡςπερ links the book with early Aristotle (the Topics) and late Plato

⁶³that K is such a reworking was proposed by Aubenque, as noted above; Jaeger thinks that it is simply a student's notes from Aristotle's lectures. notes on Eudemus' Physics and the MM, noting the controversy on the latter; note Cooper's paper; note clinchers like the reference to "Socrates the elder" (also the account of pleasure in MM II,7, not discussed by Cooper); note the quasi-impersonation of Aristotle (giving a history of ethics via Pythagoras, Socrates and Plato but not Aristotle), which is not an attempt to deceive

spontaneity, designed to complete the argument of the first part of K8 that the causes of being per accidens do not give a path to the ἀρχαί. Then the remaining chapters K9-12 consist of extracts from the Physics, K9 from Physics III on motion (apparently intended to show that the first ἐνέργεια is not a motion), K10 from Physics III on infinity (arguing that there is no infinite καθ' αὐτό or infinite body, and that the infinity of time is dependent on the infinity of motion) and K11-12 from Physics V, mainly on the classification of change and motion and a bit on contact and succession and continuity (perhaps to support the claim that the only infinite continuous motion is rotary locomotion). While notably Natorp had argued that K1-2 develop a more "Platonizing" conception of wisdom, as a science of divine immaterial things, than B, Mansion recognizes that K here is not far from what Aristotle says in uncontroversially authentic texts. In K3-4, however, he finds a contrasting conception of wisdom, as a science of being quâ being; the conflict may be no greater than between B and Γ, but since K1-K8 1065a26 seem to have been written as a single continuous text, it would be more disturbing if the author had not noticed or tried to resolve the conflict here. Mansion notes, however, that while K3-4 agree with Γ1-2 in describing the present science ("philosophy") as concerned with τὸ ὄν ἢ ὄν and in saying that being is not univocal but rather said πρὸς some one primary sense, K3-4 do not describe this primary sense as substance, but rather as τὸ ὄν without qualification or as τὸ ὄν ἢ ὄν. Mansion does not conclude, as Merlan had, that K3-4 interpret "τὸ ὄν ἢ ὄν" as meaning divine immaterial being; as he points out, K3 1061a8-10 says that motion is called a being because it is a κίνησις τοῦ ὄντος ἢ ὄν, which would be nonsense if τὸ ὄν ἢ ὄν were immaterial. (Mansion also rightly notes a number of passages in K3-4 which make clear "que cette même expression ἢ ὄν ne fait pas corps avec τὸ ὄν qui précède et qui indique l'objet d'étude (ce qui est, ce qui existe), mais qu'elle indique le point de vue sous lequel cet objet est étudié" [p.217], by contrast with physics, which studies τὰ ὄντα quâ moved, and mathematics which studies them quâ continuous or quâ so-much.) So far, although K's usage seems peculiar, it is not clear that the difference from Γ is more than terminological. But, Mansion says, where K7 ought somehow to reconcile the K1-2/B account of wisdom as a science of immaterial things with the K3-4/Γ account of a science of being quâ being, it instead shows its lack of comprehension, speaking of an ἐπιστήμη τοῦ ὄντος ἢ ὄν καὶ χωριστόν (1064a28-9), a science of being quâ being and quâ separate;⁶⁴ and, Mansion says, the subsequent lines show that "quâ being" and "quâ separate" do not indicate two different aspects under which something can be studied, but are meant as synonyms, picking out a single way of knowing which only something "separate and unmoved" (1064a33-6) can satisfy, everything else being discarded from the investigation. So, Mansion concludes, K7 must, contradicting K3-4, be taking "ἢ ὄν" to pick out "l'être au sens fort, ou l'Être premier auquel tout le reste doit être rapporté" (p.219), i.e. divine immaterial being.⁶⁵ Mansion

⁶⁴for some reason this passage is often taken to mean "a science of being quâ being and [of a being which is also] separate," so that χωριστόν would be parallel to ἢ ὄν rather than to ὄν: but then it would have to be χωριστόν.

⁶⁵Mansion also says, *ibid.*, that the pseudo-Alexander paraphrases our passage in this sense, citing 660,40-661,2 (but complaining that further down, at 661,19-22, the pseudo-Alexander takes the science of being quâ being to be the universal science). but I don't think this is what pseudo-Alexander is saying. the passage in question paraphrases K as saying "since it has been shown that there is a science of being quâ being, and τὸ κυρίως ὄν is both separate and entirely immaterial, will the physicist or the mathematician investigate and examine this ἀρχή?": if τὸ κυρίως ὄν here is not equivalent to "being quâ being" but rather is the ἀρχή of being quâ being, there is no difficulty and no inconsistency when a few lines later pseudo-Alexander contrasts the universal science of being quâ being with mathematics and physics which consider some portion of being. Aubenque will make much of the influence of K7 on the commentators, because he wants it to explain what he sees as the great corruption, ontotheology. thus he asks "dans quelle mesure, chez le ps.-Alex et chez saint Thomas en particulier, l'interprétation théologique de l' ὄν ἢ ὄν, ens qua ens, comme être divin, s'appuie à titre privilégié sur le livre K" ("Inauthenticité" p.320 n9). this is

also notes that, where E1 asks whether first philosophy is universal (1026a23-32), K7 asks instead whether the science of being quâ being is universal (1064b6-14), answering of course that it is universal because first: Mansion says that if the author took "τὸ ὄν ἢ ὄν" in its obvious sense, the science would be obviously universal and the question would never have arisen.

In evaluating Mansion's argument (and Aubenque's central argument) the main issues to address concern the meanings of "τὸ ὄν ἢ ὄν" (or of ἐπιστήμη, κίνησις, etc., τοῦ ὄντος ἢ ὄν) and of "χωριστόν"; the most important issue added by Aubenque is whether K is more "Platonizing" than B on the object of wisdom, and whether it is so in a way that involves misunderstanding the argument of B. Mansion thinks that "τὸ ὄν ἢ ὄν" changes meaning from K3-4 to K7; Aubenque thinks that it always means "l'être pris universellement et non selon une de ses parties" (p.341, cf. p.343), but that K3-4, misunderstanding Γ2, incoherently makes being-taken-universally (rather than οὐσία) the primary meaning of being to which the others are related (p.340), and that K7, misunderstanding E1, incoherently assimilates being-taken-universally to divine being where E1 identifies the science of divine being, as the cause, with the science of being-taken-universally, as the effect (p.342). Aubenque says "Tout le monde et d'accord sur le fait que K7, 1064 a 28-29 assimile l'être en tant qu'être et l'être 'séparé', i.e. l'être divin. Χωριστόν signifie, comme dans la totalité des autres passages de K où le terme intervient: 'séparé de la matière, immatériel'. Les Idées étant éliminées, Dieu est le seul être véritablement séparé. L'interprétation de χωριστόν ne soulève pas de difficultés particulières et est conforme à l'usage du terme en E1" (p.341). But it is possible to save the coherence of what K says about the science of τὸ ὄν ἢ ὄν, including K7 on the ἐπιστήμη τοῦ ὄντος ἢ ὄν καὶ χωριστόν, and what K says about τὸ ὄν ἢ ὄν as the primary sense of being, and to see that the book does not assimilate being-in-general to divine being.

K distinguishes "the science of being quâ being universally and not with regard to some part [κατὰ μέρος]" (K3 1060b31-2) from other sciences such as the mathematical disciplines and physics, which "having marked out some genus, concern themselves with it as existing and being [ὡς ὑπάρχον καὶ ὄν], but not quâ being" (K7 1064a2-3, close to E1 1025b7-10).⁶⁶ Physics "considers the attributes and ἀρχαί of beings quâ moved and not quâ beings" (K4 1061b28-30, cf. K3 1061b6-7), and the mathematical disciplines consider things "not quâ beings but quâ continuous," or specifically as 1-, 2-, or 3-dimensionally extended (K4 1061b21-5), or "quâ so-much [ποσά] and continuous" (K3 1061a34-5). So the sciences other than the first science study beings (there is nothing else to study), not quâ being, but under some other description superadded to being. This superadded description might be the differentia that demarcates some genus of being, or it might be an accident: "moved" and "so-much" might be taken either way. When we study the white quâ white, we are studying being, not inasmuch as it is but inasmuch as it is white; to study it quâ being is to consider the underlying thing-that-is rather than the accident of whiteness that belongs to it. As we know from Γ2 and from Posterior Analytics I,4, the white is called a being, or said to exist, because it belongs to and is predicated of something that exists, i.e. of a substance. So to consider the beings quâ being and not under some other

historically nonsense. while Asclepius (following Ammonius' lectures) does interpret the phrase this way in his commentary on Γ (conceivably influenced by K, but there's no special reason to believe it), I have not found any other commentator who does--except Merlan. Thomas emphatically does not, and he explains the K7 passage away as saying that metaphysics must do two different things, investigating being quâ being and investigating beings separate from matter: "Dicit ergo primo, quod est quaedam scientia de ente in quantum est separabile; non enim solum pertinet ad hanc scientiam determinare de ente in commune, quod est determinare de ente in quantum est ens; sed etiam pertinet determinare de entibus separatis a materia secundum esse" (In Met. #2259)

⁶⁶compare also Γ1 1003a23-6, "none of the other [sciences] investigates universally about being quâ being, rather they cut off some part of it and consider its attribute, like the mathematical sciences"

description means, in the first instance, to consider the underlying substances rather than their accidents, and it is in this sense that K3 can say that "every being is said in the same way [sc. that all healthy things are said through having some relation to health]: for each of these is called a being because it is an affection or a state or a disposition or a motion (or one of the other [accidents]) of being quâ being" (1061a7-10), where the Γ2 parallel says that "some things are called beings because they are substances, others because they are affections of substance or because they are a transition to substance or corruptions or privations or qualities or productive or generative of substance or of one of the things said in relation to substance, or negations of one of these or of substance" (1003b5-10). (The point in K3 is not exactly that "being quâ being" means substance, but that we will in any case be considering substances, and that to consider them quâ being is to consider them quâ substances rather than quâ quantified or qualified.) But, also, to consider the beings quâ being and not under some other description means to consider what is common to all substances rather than the differentiae that demarcate the various genera of substance. We can compare mathematics on both points. For a science to consider quantified things quâ quantified means to consider in (for instance) natural things only their quantitative attributes and not their dispositions to motion, and this is what makes it mathematics rather than physics; but it also means to consider only the attributes common to all quantified things, not whether they are discrete or continuously extended or in how many dimensions, and this is what makes it universal mathematics rather than arithmetic or geometry.

From this point of view we can also make sense of K7's formulation of an ἐπιστήμη τοῦ ὄντος ἧ ὄν καὶ χωριστόν, a science of being quâ being and quâ separate. Mansion and Aubenque assume without any real argument that "χωριστόν" in K means "separate from matter," and they are wrong. (Aubenque says, speaking of K7 1064a28-9, "Χωριστόν signifie, comme dans la totalité des autres passages de K où le terme intervient, 'séparé de la matière, immatériel.'" No one could seriously maintain that K8 1065a21-4, in the parallel to E4, contrasting being as truth with τὸ ἔξω ὄν καὶ χωριστόν, is speaking of "immaterial" being.⁶⁷ So too K2 1060a21-2, οὐσία is not καθόλου but τότε τι καὶ χωριστόν, does not mean that it is immaterial, cf. Z3 1029a26-30 where an ordinary sensible composite is τότε τι καὶ χωριστόν.)⁶⁸ Rather, in K as elsewhere in

⁶⁷this use of χωριστόν is all the more striking in that the word is not in the parallel, E4 1028a2

⁶⁸Mansion never gives any defense of his reading χωριστόν as "immaterial", and Aubenque gives it only a hopelessly inadequate footnote (p.341 n55, and cf. n56), although at least Aubenque knew that Merlan (in "Metaphysik: Name und Gegenstand," ref.) had denied it, and even though a quick survey of Aristotle's uses of the term (or a look at Bonitz' Index, s.v. "χωρίζειν, χωριστός") would have shown them that this is not what the word normally means in Aristotle. while Aubenque in Le problème de l'être (ref.) had accepted Schwegler's famous emendation in E1, which would imply that χωριστά there means "independently existing" and that natural substances are χωριστά, he now rather astonishingly takes it back, deferring to Décarie's article (ref.), apparently for no other reason than that this admission would weaken his case for the incompetence and thus the inauthenticity of K, against Décarie who was defending its authenticity at the same Symposium. but there are plenty of uncontested passages where χωριστόν has the same meaning, see the next note. for the record, χωριστόν occurs in K at 1059b13, 1060a8, a12, a19, a23-4, a26-7, b1-2, b13-14, b16-17, b20-2, b28, 1064a28-9, twice in 1064a33, 1064a35, b12, 1065a24, and 1066b1-2 (in the Physics extracts). none of these occurrences require the meaning "separate from bodies" or "separate from matter" or "separate from the sensibles," except of course when the text explicitly adds a genitive, χωριστόν τῶν σωμάτων or the like. some texts, which could in isolation be taken either way, can be seen from comparisons to be the usual meaning of χωριστόν as existing καθ' αὐτό: thus K2 1060a36-b3 "if someone posits the ἀρχαί that seem most of all to be unmoved, being and the one, then, first, if these do not signify a this and an οὐσία, how will they be separate and καθ' αὐτάς? But we expect the first and eternal ἀρχαί to be of this kind [i.e. separate and καθ' αὐτάς]" and 1060b12-17, where points, lines and surfaces "are not οὐσίαι χωρισταί" but rather cuts and divisions and limits of higher-dimensional things, "and all these exist [ὑπάρχει] in others and none of them is χωριστόν" ... note the K2 example with not matter, not form, therefore no separate eternal οὐσία ὅλος

Aristotle, X is χωριστόν or exists χωρίς if it exists καθ' αὐτό in the sense of Posterior Analytics I,4, that is, if X exists because something exists whose nature is just to be X, rather than because something with some other underlying nature exists and is X.⁶⁹ In this sense, every (actual individual) substance is separate, and to consider something quâ being, i.e. to consider the underlying thing-that-is rather than its attributes, is to consider it as existing separately; as opposed, for instance, to the way we consider a natural body in solid geometry, where we consider only its size and shape, and abstract away from its underlying nature. K1, in the very first sentence (1059a18-20), says that it has now been established (in Metaphysics A or something very like it) that wisdom is a science of ἀρχαί; it is because the ἀρχαί must be separate (so most explicitly K2 1060a36-b3, presumably on the usual ground, that if they were predicates of some other underlying nature that nature would be prior to them, see Iβ4) that wisdom must be a science of separately existing things. This does not imply that they must be separate from matter. Mansion and Aubenque take K1-2 to say, many times over, that wisdom must be about things separate from matter, but some of the passages cited say merely that the objects of wisdom must be separate or eternal (which is consistent with their being bodies), and others say that these things must be unmoved or separate from bodies if we take one horn of a dilemma.⁷⁰ Mansion (p.214) says that the object of wisdom is "supposé être une réalité séparée des choses sensibles et impérissable" at K1 1059b12-14, but that passage says "the science we are now seeking is neither about the mathematical, since none of them is separate; nor is it about sensible οὐσίαι, since they are corruptible." Here mathematical and sensibles are rejected for two different and complementary reasons, mathematical because they are not separate, sensibles

... note the text-issue at K10 1066b1-2: M agrees with E (neither has αἰσθητόν anywhere) against the agreement of J and A^b and also against the (quite different) Physics parallel. this apparently shows that A^b has here switched to following an exemplar in the α family (presumably δ subfamily as afterwards), that the reading it shares with J arose somewhere around hyparchetype γ, and that the archetype had the reading of E and M. if so, Ross' emendation is wrong, and the question is whether the parallel with the Physics is enough to justify Jaeger's emendation, to which I think the answer is clearly no: there are quite a number of small differences from the Physics in the vicinity; and χωριστόν in its usual meaning makes excellent sense here. (this is about two pages earlier than Silvia's dissertation p.69 proposes that the switch in A^b happened)

⁶⁹see Iβ4 for discussion and argument. Aristotle standardly describes ordinary matter-form composites as χωριστά, and asks whether matter is χωριστόν, which would make no sense if "χωριστόν" meant "separate from matter"--d refer to a standard list of passages on χωριστόν, which d locate at some one place in the book, probably Iβ4

⁷⁰So Mansion cites K2 1060a27-b3 as saying that the object of wisdom is "un principe unique vis-à-vis tous les êtres, qu'ils soient éternels ou corruptibles" (p.214): it's not clear the text does endorse that answer, but if it does that doesn't imply immateriality. He cites 1060a23-7 as saying that this object is "une substance éternelle, séparée des choses sensibles et existant en soi, et à ce titre principe de l'ordre des choses"; but this text--saying that if (as he has argued aporetically 1060a19-23) neither matter nor form is the desired ἀρχή, then "there will be no eternal οὐσία, separate and καθ' αὐτήν, at all; but this is absurd, for almost [all] the most refined [thinkers] seek on the assumption that there is such an ἀρχή and οὐσία; for how will there be order if there is nothing eternal and separate and abiding?"--does not say that this ἀρχή must be separate from sensible things. Indeed, one of the two possibilities that had to be excluded to conclude that there is no separate eternal οὐσία was that the ἀρχή is matter, in which case it is explicitly said that it would be "not separate from bodies" (1060a19)--matter could still exist separately, as the separately existing substratum of bodies, a view Aristotle considers in various discussions of matter (see Iβ4 and IΙβ) {note the point about ὅλως}. Mansion cites K2 1060a10-13 as saying that the object is "surtout l'existence d'une substance distincte des substances d'ici-bas, et subsistant en soi à l'état séparé," and the text does say that (with a qualifying εὐόικαμεν), but it is exploring just one branch of the aporia announced 1060a7, whether we should posit an οὐσία existing separately from the sensible οὐσίαι or whether we should rather say that wisdom is about the things here. Mansion also cites K1 1059b14-19 (better, -b21) as saying that the object of wisdom is the matter of mathematical things, but the text says only that it belongs to the present science, rather than to another science, to investigate this matter, without the implausible suggestion that this is the only thing the present science investigates.

because they are (supposedly) all corruptible: if "separate" here meant "separate from matter," then the single reason non-separateness would be enough to reject both candidates. Similarly Aubenque says that at K2 1060a20-4, where we are looking for a separate eternal substance, the two candidates, matter and form, are both rejected, matter because it is not separate, form because it is not eternal (Aubenque p.337), but in fact this text says not that matter is not separate but that it is potential: if "separate" here meant "separate from bodies" (as Aubenque explicitly affirms), matter would be an obvious non-candidate, and there would be no need to argue that it is potential. Again K7 1064a28-b14, which argues that neither physics nor mathematics is wisdom, says not that physics deals with non-separate things but that mathematics deals with non-separate things and physics with moved things, so that if there is a separate and unmoved οὐσία, the science of it will be the best theoretical science, i.e. wisdom, whereas if there is no such οὐσία, physics (presumably a part of physics dealing with eternal bodies, e.g. atoms or the heavens) will be wisdom. At most it might be argued that because physics "considers the attributes and ἀρχαί of beings quâ moved and not quâ beings" (K4 1061b28-30, quoted above), it does not study beings quâ separate; but if this is so, it is because motion is an accident, or because susceptibility-to-motion is a differentia demarcating one genus of substance from others (if there are eternally unmoved substances), not because physics is about material things.

To sum up: against Mansion and Aubenque, K is internally consistent in the way that it speaks about a science, ἀρχαί, or attributes of being quâ being; and "being quâ being" never entails a restriction to divine being. K does diverge from Γ in speaking of accidents as "an affection or a state or a disposition or a motion ... of being quâ being" (K3 1061a8-10, quoted above), rather than of substance; in Γ the attributes of being quâ being seem to be not accidents of substances but attributes such as unity which apply to things across the categories.⁷¹ It seems that K is here misunderstanding Γ or (rather) lectures corresponding to Γ, and this is the one serious piece of evidence I know that K is not from Aristotle's hand. But, considering K's usage rather than Γ's, K7 is justified in speaking of a science of being quâ being and quâ separate, i.e. a science which considers substances, as all sciences do, but which considers them quâ substances rather than as with having certain accidents (such as particular quantities or motions) or differentiae (such as being extended or mobile), and which aims to discover their ἀρχαί quâ being, rather than quâ moved or quantified. It remains that K7 is frustratingly brief on how the description of wisdom as a science of being quâ being relates to the description of wisdom as theology or as a science of separate unmoved substance; but so is the parallel E1. It is clear that both texts conclude that mathematics is not wisdom because it deals with inseparable things. We might object to this inference by saying that wisdom will know the ἀρχαί as causes of some more manifest things, and that the ἀρχαί will have to be separate (and in that sense wisdom will be a science of separately existing things), but that it does not follow that the things of which the ἀρχαί are causes will also be separate: after all, the ἀρχαί will also have to be eternal, and it does not follow that the things of which they are causes are eternal. Presumably Aristotle will answer that mathematics, in investigating causes of inseparable or abstracted mathematical things, will find only inseparable or abstracted causes; wisdom will have to start by investigating some domain of

⁷¹thus in Γ the science of being quâ being seems to be a science that applies universally to beings in all categories, thus extending more broadly than substance; but even in Γ there can be a common science of things in different categories only because they are all called beings πρὸς ἓν (e.g. whiteness exists because it belongs to a substance which primarily exists, i.e. because some substance exists and is white), not simply because unity and other such attributes belong analogically to beings in all categories, i.e. the unity of a substance is to the substance as the unity of a quality is to the quality and so on

things quâ substances or separately existing, in the hope that their causes might lead to the ἀρχαί. But then why shouldn't physics be wisdom? Physical things are in motion (or are liable to be in motion), and most of them are non-eternal, but why shouldn't physics, by investigating their causes, discover eternal unmoved ἀρχαί? K suggests the answer that, if not all substances are movable, physics is only investigating the causes of one genus of substances, and only causes to those substances of an attribute that belongs only to things in that genus, namely motion; whereas the science of being quâ being, by investigating causes of being to all substances without restriction, should be able to reach the highest causes (something like this thought is also at A8 988b22-6). This answer may not be entirely convincing, since it seems that the way Aristotle actually proceeds to discover the ἀρχαί, in Metaphysics Λ, is to find them as unmoved causes of motion to the heavens and thus to sublunar things. But, as Aristotle says in Physics II,7, such causes "no longer belong to physics: for they move, not by having motion or an ἀρχή of motion within themselves, but by being unmoved" (198a27-9); and so, while Physics VIII proves that there is such an unmoved cause and that it is not a body or a power in a body, physics does not give positive determinations of this cause. Metaphysics Λ, going beyond Physics VIII, gives a positive account of the ἀρχή by recognizing it as the first cause of being-as-ἐνέργεια and thus as itself pure ἐνέργεια, and these concepts are beyond what physics investigates. In any case, from the position of Metaphysics E1 or K7, we need to start by distinguishing the different senses of being and investigating the causes of each one to see whether it leads to the ἀρχαί, and this demands a discipline beyond physics, the science of being quâ being, even if the route that ultimately succeeds looks rather like physics and finds the ἀρχαί as causes of physical things.

There remains the complaint of Mansion and Aubenque that K7 asks whether the science of τὸ ὄν ἧ ὄν is universal--although if ὄν ἧ ὄν has its normal meaning the science is obviously universal--when the E1 parallel asks the much more reasonable question whether first philosophy is universal. However, it is clear that both in K7 and in E1 the author is thinking about universal mathematics, the science of the quantum quâ quantum, which has no special object existing alongside the different species of quantity, numbers and figures and so on, which are the objects of the particular mathematical sciences. We can take K7 as asking whether the science of being quâ being is also universal in this way, or whether it is universally applicable rather in the way that arithmetic is, which has its own proper domain, the first among the species of quantity, and then also applies to all the other species of quantity as well; K7, like E1, will answer that this science is universal only in the way arithmetic is, by being first, i.e. having the first ἀρχή as its distinctive domain but applying to everything else as well. Or we can recall Γ2 1003b21-2, "to consider all the species of being quâ being belongs to a science which is generically one, and the species [of being belong] to the species [of the science]" (likewise K2 1061b14-17): from Γ1-2 or K3-4 we might well think that the science of being quâ being is itself a universal, that it is just the genus of specific sciences such as theology and physics, and no more to be identified with the first of those species than with any other.⁷² Against this background, K7 and E1 are asserting, in somewhat different terminology, that the science of being quâ being is identical with the first of these specific sciences (because the first ἀρχή of beings exists separately as its own species of

⁷²reference to other discussions of Γ2 and E1 on the relations between universal mathematics and the particular mathematical sciences, or between arithmetic and the other particular mathematical sciences, as models for the relation between wisdom and the other philosophical disciplines (Iβ2b, Iγ1?). universal mathematics is certainly Aristotle's model for the assertion of a science of being quâ being and of universal axioms. Γ2 introduces "first philosophy," but without E we would never guess that this is the same as the science of being quâ being, and indeed Aubenque in Le problème de l'être, and Leszl and Stevens, deny that it is

being), thus that this too is a specifically single science, universal only by being first. The argument is not fully developed in K7, nor is it in E1, but there is nothing here unworthy of Aristotle.

On Metaphysics α

I will also not devote a special chapter or section to Metaphysics α , since it, like K, does not represent a separate node in the intended structure of the Metaphysics, although it is not a duplicate of any other part of the Metaphysics, at least not in the straightforward way that K1-K8 1065a26 are a duplicate of B7E. α and K are the books of the Metaphysics that have most often been considered dubious (thus they are the two books of the Metaphysics discussed in the Symposium Aristotelicum volume Zweifelhaftes im Corpus Aristotelicum), and while almost everyone now rightly considers α to be authentic, there are peculiarities which have long given rise to doubts whether it can be an intended part of the Metaphysics, especially in its present place. Most obviously, the fact of two books called alpha (i.e., called Book One) is without any parallel in Greek literature, and seems to imply a peculiar text-history, perhaps that two rival introductions to the treatise were in circulation, or that one of them was added later to a treatise already circulating (either possibility could explain why Ptolemy al-Gharīb, presumably following Andronicus' Pinakes, lists a Metaphysics with only 13 books). The story, reported in the commentaries of Asclepius (4,17-35) and the pseudo-Philoponus and in a scholium in codex E (and other manuscripts derived from it), attributing α or A to a nephew of Eudemus named Pasicles or Pasicrates of Rhodes, is an attempt to explain the existence of two books alpha, and, like several other stories, to blame the peculiarities of the Metaphysics on a time when it was in the custody of Eudemus and his school on Rhodes; and while Jaeger used these stories to suggest that α was Pasicles' notes of a lecture by Aristotle, Gudrun Vuillemin-Diem and Myriam Hecquet-Devienne have shown that the story originally attaches not to α but to A.⁷³ But deleting A to leave an original Metaphysics beginning α B has no plausibility. B refers back to what is clearly A, not α , as preceding it ($\epsilon\nu$ τοῖς πεφορμισασμένοις 995b4-6; $\epsilon\kappa$ τῶν πάλαι διωρισμένων, specifically A2, 996b8-10; $\epsilon\nu$ τοῖς πρώτοις λόγοις, specifically A9, 997b3-5), and particularly the first aporia, whether wisdom is knowledge of the formal, final, or efficient cause--the context of the first two back-references--develops arguments from A. (The last line of α 3 as we have it, 995a19-20, gives a clause intended to lead into the first aporia of B, and intended to supply the reference of 995b4-6, but in an extremely clumsy way having no connection with the argument that α 3 has in fact been developing.)⁷⁴ And even apart from these connections, α would not make a plausible introduction to B and the subsequent books, because the last lines of α 3

⁷³for Asclepius, and as Vuillemin-Diem (in Zweifelhaftes) and Hecquet-Devienne have shown also for the scholium (probably drawn from Asclepius) it is about A and the name of the author is Pasicles; for the pseudo-Philoponus {note identification by Alexandru}, in Patrizi's Latin translation (Ioannis Philoponi enarratio in omnes Aristotelis libros quos metaphysicos appellant, Ferrara, 1583, reprinted in Commentaria in Aristotelem Graeca, versiones latinae temporis resuscitatarum litterarum, v.2, Stuttgart-Bad Cannstatt, 1991), p.7, it is about α and the author's name is Pasicrates ... Vuillemin-Diem gives a full description of the scholia, and also p.171 cites the Greek of the still unpublished pseudo-Philoponus ... is "this book" the book before or the book after, connection with Theophrastus scholium ... for the other stories blaming Eudemus, see my "The Editors of the Metaphysics"

⁷⁴so noted already noted by Alexander 174,25-7, who says $\tau\upsilon\nu\epsilon\varsigma$ add the aporia there: so in his time there were some manuscripts of α that did not have this last line, and he himself interprets without it

(apart from the tacked-on clause) are motivating a discussion of physics rather than of wisdom,⁷⁵ and because $\alpha 2$ assumes the theory of the four causes without explanation, implicitly presupposing either Physics II or Metaphysics A3-7 (by contrast, A1-2 carefully avoid any assumptions about what causes there are, and then A3-7 develop the kinds of causes by reference to the Physics and to earlier philosophers). Nor is the presently transmitted combination $\alpha A B$ plausible, again because of the problematic transition $\alpha 3-B$, and because $\alpha 1$, which would on its own make a perfectly good $\pi\rho\omicron\omicron\iota\mu\iota\omicron\nu$ to a discussion of wisdom, does not really have this function if it comes after A, and partly duplicates A1-2 (compare esp. $\alpha 1$ 993b7-11 and b23-31 with A2 982a30-b4 on the first causes as most "true" [as $\alpha 1$ puts it] or intrinsically most knowable and therefore intrinsically most worth knowing). There are no such objections to reading AB in sequence.⁷⁶

I think the right solution to these difficulties is to say, not exactly that α is an alternative introduction to wisdom or to the Metaphysics, but that it is a collection of material that could have been used in an introduction to wisdom, but in what seems to have been Aristotle's final intention was not so used. The Metaphysics was sometimes transmitted without it (thus the 13-book Metaphysics reported by Ptolemy al-Gharîb, whose book-numbering remains in our version), but no one had the heart to simply throw away Aristotle's texts, and they were ultimately transmitted (to Alexander and to us) as a kind of appendix tacked on after A, rather as K was transmitted as an appendix tacked on after the whole non-theological part of the Metaphysics.⁷⁷ This is related to, but distinct from, the view that α is an introduction to something other than the Metaphysics, either an introduction to theoretical philosophy in general (as Alexander says 138,6-9 and more tentatively 169,21-6), or, as Enrico Berti has proposed, an introduction to physics in a broad sense, at a time when Aristotle had not yet drawn a distinction between physics and first philosophy.⁷⁸

To recall briefly, α is in three chapters. $\alpha 1$ is clearly an introduction to something, described

⁷⁵995a17-19 "therefore we should investigate first what nature is: for in this way it will also be clear what things physics is about"; with the contrast just before between physical and mathematical method. Alexander tries 169,15-170,4 to find a way that this could be leading into a discussion of metaphysics instead, but he is going out on a limb and he knows it

⁷⁶the basic points are made already by Alexander pp.137-8

⁷⁷this leaves open the question whether α was written by Aristotle as a single piece. Alexander 137,2-5 says that it just a part of a book. Berti (in Zweifelhaftes) tries to trace out a single continuous argument through all three chapters, but I am not convinced that this works for $\alpha 3$ (see below). also the fact that in Alexander's day some manuscripts began $\alpha 1$ with $\omicron\tau\iota$ (138,26-8) implies, as he says, that they thought it was a continuation of something. such a $\omicron\tau\iota$ is also found at the beginning of the ps.-Aristotle Physiognomica, and cp. the two $\mu\epsilon\tau\grave{\alpha}$ $\tau\alpha\upsilon\tau\alpha$ $\omicron\tau\iota$'s in $\Lambda 3$. this might indicate excerpts, someone's notes from a lecture or from reading, Aristotle's own notes; in any case, something not fully worked up (see above on $\upsilon\pi\omicron\mu\eta\mu\alpha\tau\alpha$ as a stage in a process of composition). there are some other much later examples, e.g. Damascius' Phaedo and Philebus commentaries: excerpts, student notes? (check Westerink)

⁷⁸cite Enrico Berti, "La fonction de Métaphysique Alpha Elatton dans la philosophie d'Aristote," in Paul Moraux and Juergen Wiesner, ed., Zweifelhaftes im Corpus Aristotelicum, Berlin, 1983, pp.260-94, and "Les livres M et N dans la g n se et la transmission de la M taphysique" in Andreas Graeser, ed., Mathematics and Metaphysics in Aristotle, Bern, 1987, pp.11-31, esp. pp.28-31 ... the first of these papers is a patient, lucid and very useful attempt to read straight through the argument of α , with useful remarks also on its relations to other texts, esp. the Protrepticus; the problems are (i) that I think he has to squeeze $\alpha 3$ to make it fit, and (ii) that he is too concerned with trying to assign α to a particular stage of Aristotle's development, and esp. one before the physics/first philosophy distinction (the parallels with the Protrepticus themselves don't imply any particular dating; all of these uses of the Protrepticus would have been possible for Aristotle at any stage of his career) ... for this broad sense of "physics" note the Topics passage on the three kinds of problems, and compare Xenocrates ... note on Berti on esp. Λ as not having drawn this distinction: perhaps here just a crossref to III β

rather vaguely at the outset as "the study of truth" (993a30); it has a protreptic and encouraging function, arguing not so much (like A1-2) that this knowledge is supremely desirable, but that it is not entirely beyond our powers. While the study is in some ways difficult, it is in other ways easy, (i) because while we may not get the truth exactly we also will not miss it entirely, and even those who have erred in some ways have nonetheless made a contribution to the ongoing investigation; (ii) because while the object we are seeking is difficult for us to know, it is not intrinsically difficult to know, but on the contrary is the source of "truth" or intrinsic knowability to other things. The second argument is, like the parallel in A2, adapted from the argument of Protrepticus B32-7 that knowledge of "truth" and of the "first things" is possible. The first argument situates the proposed study within a theory of the progress of the arts or sciences, where the discoveries of the "first inventors," though crude, have enabled steady progress beyond them;⁷⁹ the implication is that, while we should be grateful to our predecessors, we are justified both in criticizing them (while still praising them) and in believing that we can make progress beyond them. (Compare A, which looks for first inventors--the Egyptians were the first to discover the mathematical arts owing to the leisure of the priestly class [A1 981b20-25], did Anaxagoras or Hermodotus or Hesiod first posit something like $\nu\omicron\delta\varsigma$ as a cause of order [A3 984b15-A4 984b25], Empedocles was the first to divide this cause into two [A4 985a29-31]--and where Aristotle undertakes to satisfy their aspirations to wisdom better than they themselves could.) Even the talk of a source of difficulty within our souls, deriving ultimately from the Republic on the sun ("as bats' eyes are to the light of day, so is the $\nu\omicron\delta\varsigma$ of our soul to the things which are by nature most manifest of all," $\alpha 1$ 993b9-11), contains implicitly the encouraging thought that we can accustom ourselves to the light until we can look at the sun, "from what is more knowable to each person, [making] what is knowable by nature knowable to him" (Z3 1029b7-8).⁸⁰ Then, at the end of $\alpha 1$ (993b19-31), Aristotle argues that if X is the cause to Y of Y's being true, X is "truer" than Y, and therefore that "the $\acute{\alpha}\rho\chi\alpha\acute{\iota}$ of the things that always are" (993b28) are the truest of all: the implication is that they will be intrinsically most knowable and will best satisfy the aspirations of the "study of truth" which we are pursuing. But this presupposes that there are such $\acute{\alpha}\rho\chi\alpha\acute{\iota}$, i.e. first causes, and $\alpha 2$ supplies an extended argument for the missing premiss that "there is an $\acute{\alpha}\rho\chi\eta$ and the causes of the things that are are not infinite" (994a1-2). The argument gets rather intricate ($\alpha 2$ is twice as long as $\alpha 1$), but, fundamentally, Aristotle goes through the four kinds of cause (taking the list for granted without even a reference to the Physics--this suggests that $\alpha 2$ was not originally written for an introductory text), arguing in each case that an infinite regress is impossible. In some cases infinite cycles are possible, but Aristotle seems to argue that these presuppose something eternal: something from whose corruption something else comes-to-be (as air comes-to-be from water) must be non-eternal and so must itself have arisen from something else in the same way, but all these things must come-to-be out of a first eternal $\acute{\alpha}\rho\chi\eta$, not as out of its corruption but as out of a persisting $\acute{\upsilon}\pi\omicron\kappa\epsilon\acute{\iota}\mu\epsilon\nu\omicron\nu$.⁸¹ And, in any kind of per se causal sequence, the first cause is the truest cause of

⁷⁹ cite the Phrynis/Timotheus bit, Eudemus, Zhmud's book; some of this cited in a note in I α 3

⁸⁰ also the Topics VI,4 passage; undoubtedly discussed elsewhere, give ref

⁸¹ so Aristotle seems to be arguing at 994b6-9, building on the discussion of examples like air and water (since 994a30), but the structure of the argument is not clear, and there may be something wrong with the text: I would be tempted to delete the $\gamma\acute{\alpha}\rho$ in b7 (putting a comma rather than a colon before the $\acute{\epsilon}\pi\epsilon\acute{\iota}$), and to write a $\delta\acute{\epsilon}$ after $\acute{\alpha}\nu\acute{\alpha}\gamma\kappa\eta$ in b8; alternatively, see Ross' suggestion for how to construe the passage as elliptical. note also there seems to be some lack of fit with $\alpha 1$, since at the end of $\alpha 1$ we were looking for " $\acute{\alpha}\rho\chi\alpha\acute{\iota}$ of the things that always are" (e.g., presumably, of the heavenly bodies)--this would make it much easier to exclude an infinite regress, but $\alpha 2$ never

all the others, and if there is no first term in the sequence none of them will have a sufficient cause (994a11-19).⁸² Aristotle also adds (994b27-31) that there cannot be infinitely many kinds of causes, since then scientific knowledge would be impossible (since we cannot know a thing scientifically without grasping each of its causes); so any given thing will have only finitely many causes leading up to finitely many ἀρχαί.

Thus far α1-2. The short α3 seems rather different, and not directly continuous with α2. It is about how to listen to lectures, and in particular how much precision to demand in them; it builds up to saying that "mathematical precision cannot be demanded in all things, but [only] in those which do not have matter. For this reason the τρόπος [i.e. the mathematical demonstrative method] is not φυσικός [i.e. is not appropriate to arguments in natural science]. For presumably [ἴσως] all nature contains matter. Therefore we should investigate first what nature is: for in this way it will also be clear what things physics is about" (995a14-19). As noted above, this seems to be designed as an introduction to a discussion of physics, probably something very much like Physics II.⁸³ The discussion of how to listen to lectures and how much precision to demand is reminiscent of other introductions, especially Parts of Animals I and Nicomachean Ethics I (esp. I,3). Presumably α3 is where it is because Aristotle, or someone, thought it could be adapted to serving that sort of function in an introduction to wisdom: α1 would talk about the objects of wisdom, the "truest of all things," which are in a way hard and in a way easy to know, α2 would assure us that such things do indeed exist, and α3 would discuss the appropriate τρόπος or method for talking about them.⁸⁴ However, α3 as we have it says nothing about wisdom or about its objects the ἀρχαί: α3 is introducing physics, even if it could have been adapted to introducing wisdom. The point is not, as Berti suggests, that α is an introduction to physics taken in the broad Xenocratean sense, coextensive with theoretical philosophy, prior to a distinction between physics and first philosophy. α3 is talking about physics in the narrow Aristotelian sense, if "presumably all nature contains matter," and it is only physics in the narrow sense that could be clarified by investigating what nature is.⁸⁵ Nor do α1-2 seem to be conceiving themselves as an introduction to physics in the broad sense, or to theoretical philosophy as such, but rather as an introduction to wisdom. (α2 may not originally have been intended as an introduction to anything, but when it is joined to α1 it serves to support the missing premiss in α1's argument for the possibility of wisdom, namely that there are ἀρχαί.)

mentions this restriction on the things we are looking for ἀρχαί of. this suggests α2 was originally written for something else

⁸²this is quite close to the argument at the beginning of Physics VIII,5 against an infinite regress of moving causes. but there the first mover in such a sequence can be something like a soul, which is not eternal and which can be moved per accidens (but which nonetheless can initiate a new causal sequence of motions). it is not clear whether α2 994a11-19 would allow that the first cause at the head of such a sequence could be non-eternal

⁸³in fact, it seems entirely possible that α3 was the original introduction to Physics II, and that Aristotle detached it when he decided to replace it with the much longer introduction Physics I ... it would thus be an "extract from the Physics" like the end of K, except that it's not also transmitted in the Physics

⁸⁴note on παιδεία and the τρόπος ἐπιστήμης at 995a12-14, and parallels on παιδεία, notably in the first paragraph of the De partibus animalium, and on ἀπαιδευσία EE I,6 1217a7-8, Metaphysics Γ3 1005b3, Γ4 1006a6, more incidentally H3 1043b24

⁸⁵add criticism of some things Berti says "Fonction de Métaphysique Alpha Elatton" pp.289-90 (and note on the idea that he's distinguishing mathematics from the rest of theoretical philosophy, i.e. physics-in-the broad-sense: but the dividing line is immateriality, so first philosophy would be on the mathematics side, not the physics side); I find myself in agreement with Slezák in the same volume p.245 n47--incidentally, should go through Slezák's paper for other points, I agree with a fair amount of what he says esp. about the different functions/styles of the three chapters and their relations with A

Admittedly, $\alpha 1$ starts with a reference to "the study of truth" [η $\pi\epsilon\rho\iota$ $\tau\eta\varsigma$ $\acute{\alpha}\lambda\eta\theta\epsilon\acute{\iota}\alpha\varsigma$ $\theta\epsilon\omega\rho\acute{\iota}\alpha$, 993a30] as the enterprise we are engaged in, and it comes back to this description in 993b16-31, where it is cited apparently as a definition of philosophy that it is "knowledge [$\acute{\epsilon}\pi\iota\sigma\tau\acute{\eta}\mu\eta$] of truth" (993b19-20). The meaning is explained in the following lines: "it is right to call philosophy knowledge of truth: for the goal of theoretical [knowledge] is truth, and of practical [knowledge] is a work. For even if practical people investigate how things are, they do not consider [$\theta\epsilon\omega\rho\epsilon\acute{\iota}\nu$] the cause in itself, but rather relatively [$\pi\rho\acute{\omicron}\varsigma$ $\tau\iota$] and at the present moment" (993b19-23). Thus "the study of truth" means theoretical as opposed to practical investigations, the pursuit of knowledge for the sake of knowledge rather than for action. (The contrast is with practical people, who are concerned with truth only incidentally and not for its own sake: the orator must know what is lawful and what is unlawful, but if he is speaking before Athenian courts he needs to know only what is lawful at Athens, not what is lawful at Sparta, and he does not need to know the causes on account of which these things are lawful, or whether they are just by nature or only by convention.) When Aristotle speaks of "those who have expressed themselves about truth" (993b17), he means those who have spoken about theoretical philosophy, as when at A3 983b1-3 he calls as witnesses "those who have come to the investigation of the things that are and philosophized about truth before us": this usage seems to follow the titles or quasi-titles, of books or parts of books, of Parmenides, Protagoras, and Antiphon, contrasting for Parmenides with $\delta\acute{\omicron}\xi\alpha$, for Protagoras and Antiphon probably with conventional practices of politics or the arts.⁸⁶ And the study of "truth" in this sense often seems to be connected with the study of "nature": Protrepticus B44 speaks of contemplating [$\theta\epsilon\omega\rho\epsilon\acute{\iota}\nu$] "the nature of the things that are and the truth," B47 of taking standards "from nature itself and from truth," Physics I,8 speaks of those before us who "first sought by philosophy the truth and the nature of the things that are" (191a24-5), and Protrepticus B32 says that we are "capable of grasping sciences about nature and the rest of truth."⁸⁷ All this might suggest that $\alpha 1$ -2 are an introduction and encouragement to theoretical philosophy as such, and that this is identified with physics or the study of nature broadly conceived.

Nonetheless, I think it is clear that $\alpha 1$ -2 are in fact an introduction to something more determinate than theoretical philosophy in general. $\alpha 1$, like A1, assumes that we are already interested in "the study of truth" (A1 argues that we are already interested in knowledge for its own sake), then argues that we can best satisfy this interest by a knowledge of $\acute{\alpha}\rho\chi\alpha\acute{\iota}$ and first causes, indeed in $\alpha 1$ more narrowly "the $\acute{\alpha}\rho\chi\alpha\acute{\iota}$ of the things that always are." The reason that $\alpha 1$ reintroduces the notion of "truth" or "the knowledge of truth" as the goal of philosophy (993b16-23, the first mention of "truth" after the opening line 993a30) is to argue that since "we do not know the true without its cause" (993b23-4), the cause of X is the cause of truth (apparently equivalent to scientific knowability) to X, and therefore the causes of beings are truer than their effects, and the first causes or $\acute{\alpha}\rho\chi\alpha\acute{\iota}$ will be the truest of all. (And since "the things that always

⁸⁶There is some reason to think that On Politeia was a part of Protagoras' Antilogiai, in which case Truth might have been another part: see my "On Plato's Πολιτεία" (Proceedings of the Boston Area Colloquium in Ancient Philosophy, v.21 [2005], pp.1-55), p.13. Plato in Phaedrus 247c3-d1 also speaks of "truth," insisting that "the knowledge of the true" must be about an $\omicron\upsilon\sigma\acute{\iota}\alpha$ free from the conditions of body, grasped only by the $\nu\omicron\upsilon\varsigma$ which is the soul's steersman; when he says "especially when we are speaking of truth" (243c5-6), he too seems to be referring to the field of discussion marked out by Parmenides and the like.

⁸⁷for discussions of "truth" in the Protrepticus and Metaphysics α , see Ingemar Düring, "Aristotle on ultimate principles from 'nature and reality,' Protrepticus fr.13" in Aristotle and Plato in the Mid-Fourth Century, ed. Ingemar Düring and G.E.L. Owen (Göteborg, 1960), pp.35-55, and the two Berti papers cited above (also reference in La filosofia del primo Aristotele?)

are" are truer than things that only sometimes are--presumably because only eternally stable things can be the correlates of scientific knowledge⁸⁸--"the ἀρχαί of the things that always are" will be the truest of all.) So the science which α1, and α2 defending the existence of first causes, are introducing and motivating is not just theoretical philosophy, but specifically the study of the ἀρχαί, what A1-2 call σοφία, even if α doesn't use this word. It is perfectly true that α1 does not describe its enterprise as "first philosophy" as opposed to physics, but neither does A1-2. The right conclusion to draw from this silence is not that Aristotle had not yet drawn the distinction between the two disciplines, but that the distinction would be inappropriate at this stage in the argument. Here, as in A1-2, he is giving an initial description of wisdom (or of the knowledge of the truest things) that can be agreed on by those who pursue physics, mathematics, or dialectic as a way to wisdom. (Even in "the ἀρχαί of the things that always are," it is left open whether these eternal effects are the heavenly bodies and their motions, or mathematical things and their attributes, or Forms perhaps interpreted as numbers.) Only later will we investigate more precisely what the object of wisdom is, and what discipline will be needed to know it. This is also the strategy of NE VI = EE V, where wisdom is "ἐπιστήμη and νοῦς of the things which are most valuable [τιμιώτατα] by nature" (NE VI,7 1141b2-3), but where it is left open what these things may be: they will be divine things, "as, most manifestly, those out of which the cosmos is composed [i.e. the heavenly bodies]" (a34-b2), but the Ethics is in no position to decide whether there might be even more divine things beyond the cosmos, or what these might be. This is also the strategy in the Protrepticus, and here too it should not be inferred that Aristotle had not yet distinguished first philosophy from physics: the Protrepticus is addressed to a potential royal patron, as the Ethics is addressed to an audience of aspiring πολιτικοί, and while Aristotle will try to get them interested in wisdom he will not try here to adjudicate the disputes about what the ἀρχαί are, or equivalently about what the object of wisdom is. So Protrepticus B36, in the middle of the argument that the ἀρχαί are most knowable, says neutrally that "whether fire or air or number or some other natures are the causes and firsts of other things, it is impossible to know any of the others without knowing them"; and in B20, having cited Pythagoras and Anaxagoras as saying that the purpose of life is to contemplate the heavens, he concludes that our purpose is indeed to contemplate, "but whether this knowable object is the cosmos or some other nature, we must perhaps investigate afterwards, but for now this much will be sufficient for us at a first [attempt]."

Thus α1-2 is an introduction, not to theoretical philosophy in general, but to wisdom; it does not describe wisdom as first philosophy, but neither does A1-2, and that gives no reason to believe that Aristotle at this stage identifies wisdom with physics or has not yet distinguished first philosophy from physics. It is also true, as Berti points out,⁸⁹ that α1-2 does not describe its enterprise as a science of being quâ being, but again, neither does A1-2, or any text on wisdom or first philosophy outside the Metaphysics, and there is no reason it should: this is not a description that will be immediately accepted by all the physicists, mathematicians and dialecticians who lay claim to wisdom, but is a determination of wisdom that Aristotle will have to establish later in the argument of the Metaphysics. A2 does say that wisdom should be as universal as possible, but even if a single science can know objects in all domains (and Speusippus denies it), that does not mean that it knows them quâ being (i.e. that it considers the causes, to these things, of the fact that they are), or that it investigates the concept of being; the third and fourth aporiai of B show that the question remains open at this stage of the argument

⁸⁸see discussion of this argument elsewhere (refs.) and maybe note the texts for it, esp. in B#8 and Z15

⁸⁹"La fonction" p.290

whether there is a single science of all domains of οὐσίαι and their attributes, and it is not until Γ1 that Aristotle proposes a science of being quâ being.⁹⁰

Nor, finally, does the connection between "truth" and "nature," in the texts cited above especially from the Protrepticus, imply that α1-2 conceives its project as physics even in a broad sense. As we have seen, "the study of truth" means theoretical philosophy. When A3 calls on "those who have come to the investigation of the things that are and philosophized about truth before us" (983b1-3, cited above), this covers not only the physicists but all the philosophers discussed in A3-6, including the Eleatics and Pythagoreans and Plato; and, at the end of this discussion, A7 says that we have now seen "who has spoken, and how they have spoken, about the ἀρχαί and about truth" (988a19-20). The discussion of "truth" here covers all earlier approaches to wisdom; obviously Aristotle does not think this is restricted to physics. Nor does he in the Protrepticus: when B32 says that we are "capable of grasping sciences about nature and the rest of truth [περὶ φύσεως τε καὶ τῆς ἄλλης ἀληθείας]" (cited above), the implication is that that there is, or at least might be, some domain of theoretical investigation beyond nature, and that the investigation of the ἀρχαί which Aristotle is here specifically describing may lead to non-natural things (this possibility is picked up at B36, cited above, "whether fire or air or number or some other natures are the causes and firsts of other things"). Admittedly, when Protrepticus B44 speaks of contemplating "the nature of the things that are and the truth," and B47 of taking standards "from nature itself and from truth," there is no stress on any contrast between the narrower domain of nature and the possibly wider domain of truth, and the conjunction may be exegetical. But that just means that "nature" can have a wide sense equivalent to "οὐσία", as in B36 just quoted where number is a "nature," and this is not a peculiarity of the early Aristotle before he has discovered first philosophy: in Physics I he sharply distinguishes physics from first philosophy (explicit I,9 192a34-b2), and yet when Physics I,8 speaks of those before us who "first sought by philosophy the truth and the nature of the things that are" (191a24-5) he is thinking above all of Parmenides' monism (clearest 191a31-3), which he has excluded from the domain of physics at I,2 184b25-185a20. Protrepticus B32 is enough to show that Aristotle already has the concept of a domain of "truth" beyond nature, and thus of a science beyond physics which might deal with the ἀρχαί, although, as in Metaphysics AB, he ostentatiously refuses to pass judgment on what if anything might exist beyond the natural world. If even the Protrepticus distinguishes physics from the study of non-physical domains of οὐσία, and leaves open the question which discipline will treat the ἀρχαί, there is no reason not to believe this of Metaphysics α as well. (And if we take α1-3 together, as Berti does, then α3 gives clear proof that α is already operating with a "narrow" notion of nature.) What have been taken as signs that α is an early writing and belongs to a project other than that of wisdom as described in A are just signs that α1-2, like A1-2, belongs to an early stage of the exposition of that project (and α3 to physics). α1, like A1-2, develops especially themes from the Protrepticus into an introduction to wisdom; it does not sit well in the same treatise as A1-2, but represents an independent development of some of the same themes. Aristotle was right in judging that A1-2 made a better self-sufficient introduction to wisdom, but at least one ancient editorial tradition was right in judging that α1 should not be thrown out. α2 plugs a gap in the argument of α1, which is also a gap in A, in addressing why and under what circumstances there must be first causes at all; it was not written as part of the same treatise as A and there is no easy way to attach it to A (even the attachment to α1 is not perfect), but, more clearly than α1, it adds

⁹⁰note Berti p.290 on the project of ΒΓΕΖΗΘΙΜΝ (so excluding Λ; in the later paper he'll also exclude Ν). but it's not true that all of these are devoted to the investigation of being quâ being and its attributes: ΒΜΝ aren't

something to the argument. Even $\alpha 3$ might have been developed into a valuable contribution on the right mode of evaluating lectures on wisdom, as distinguished from lectures on mathematics or physics, but Aristotle never in fact developed it in this way.