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## QUALITIES AND BODIES: ALEXANDER AGAINST THE STOICS

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THE goal of this paper is to examine the relation between the Stoic notion of quality and Aristotelian form on the basis of some discussions in Alexander of Aphrodisias, the leading Peripatetic of the late second century AD, who expended a considerable effort on criticism of the Stoic system, while recognizing a number of shared goals and principles.

The affinity between the Aristotelian hylomorphic theory of substance and the Stoic analysis of a thing into four subjects was perceived already in antiquity.<sup>1</sup> The two theories seem to be particularly close in the analysis of the problem of continuant. Aristotle's solution to the problem of growth in *GC* 1. 5 involved a distinction between form and matter of a growing thing, and a claim that growth is with respect to form, not matter. The Stoics, several generations later, had to reply to the Academic challenge of the 'Growing Argument' (*αὐξανόμενος λόγος*): how is it possible to apply the same predicate, such as 'growing', to a thing whose very identity is not certain, because it constantly changes in its size and material

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<sup>1</sup> According to Simplicius, Porphyry derived the Stoic second subject, peculiarly qualified, from the Aristotelian form-substance (*In Cat.* 48. 11–16 Kalbfleisch). Porphyry recounts what is by and large Alexander's version of Aristotle's theory of form.

constitution?<sup>2</sup> In their reply, the Stoics explained that an individual ontological constitution has several levels, on each of which an individual figure as a subject of a particular kind. On the level of matter, we are all aggregates of continuous material parts without qualities; on the level of 'qualities' or 'qualifieds', each of us can be identified as a bearer of a unique 'peculiar quality'; on a further level, that of disposition, each of us is characterized by a particular way in which our peculiar qualities are being used ('knowledge', 'virtue', but also 'walking', belong here)<sup>3</sup> on the fourth level an individual can be picked out as being in a certain relation. The Stoics accepted the 'flux' assumption of the Academic puzzle, but only for the first ontological level, of an individual *qua* material aggregate. They argued that the subject of the second ontological level, a 'peculiarly qualified', persists throughout the lifetime of a material individual, whatever the changes of matter. This seems to be quite similar to what Aristotle says about form at *GC* 1.5.

Whether there is a historical link between the Aristotelian system and the Stoic theory is a moot question, but a certain parallelism of concepts and approaches has been rightly appreciated by recent scholarship.<sup>4</sup> T. H. Irwin has argued that the Stoic theory could be regarded as a development of the notion of particular form, which he attributes to Aristotle in the *Metaphysics*.<sup>5</sup> Irwin has pointed out a parallel between the subject of the Stoic 'definite assertions', expressed by the demonstrative pronoun 'this', and the Aristotelian

<sup>2</sup> H. Cherniss on Plut. *Comm. not.* 1083 B in the Loeb edn. (*Monalia*, vol. xiii/2); A. A. Long and D. N. Sedley, *The Hellenistic Philosophers* [L.S.] (2 vols.; Cambridge 1987), ii, text 28A; D. N. Sedley, 'The Stoic Criterion of Identity' [*Stoic Criterion*], *Phronesis*, 27 (1982), 255–75.

<sup>3</sup> The difficult question of distinction between levels 2 and 3 need not preoccupy us here. The problem was pointed out already by the ancient critics of the Stoics, as a consequence rather than antecedent of corporalism. Cf. Plot. *Enn.* 6. 1. 29 (= STF ii, 376). For analysis see LS i. 177–8; O. Rieth, *Grundzüge der stoischen Ethik: Eine traditionsgeschichtliche Untersuchung* (Berlin, 1933), 71–91; M. Mignucci, 'The Stoic Notion of Relatives', in J. Barnes and M. Mignucci (eds.), *Matter and Metaphysics* (Naples, 1988), 129–217; S. Menn, 'The Stoic Theory of Categories' [*Stoic Theory*], *Oxford Studies in Ancient Philosophy*, 17 (1999), 215–47.

<sup>4</sup> L. Bloes, *Probleme der stoischen Physik* (Hamburg, 1971), 12–13; F. Sandbach, *Aristotle and the Stoics* (Cambridge, 1985); D. E. Hahm, *The Origins of Stoic Cosmology* [Origins] (Columbus, Oh., 1977). On doctrinal parallelism, in addition to Irwin's paper discussed below, cf. A. Graeser, *Zenon von Kitikon: Positionen und Probleme* [Zenon] (Berlin and New York, 1975), 89; Sedley, 'Stoic Criterion', 256 and n. 4.

<sup>5</sup> T. H. Irwin, 'Aristotelian Substances and Stoic Subjects' [*Aristotelian Substances*], *Revue internationale de philosophie*, 201/3 (1997), 397–415.

technical term for an individual substance, *τὸδε τι*, where he takes *τὸδε* as standing for 'this', *τι* for 'something'.<sup>6</sup> The ontological role of 'something' is adequately fulfilled by the Stoic 'peculiar quality', which can be regarded as an equivalent of Aristotle's particular form. 'Particular form' is a constituent of a hylomorphic compound. It imparts unity to the unqualified matter, just as peculiar quality does in the Stoic system. Since the unifying function persists over the lifespan of a natural thing, a 'peculiar quality' or a 'particular form' can be taken to be a true continuum in the process of growth. In this way, as a true continuum, form might satisfy the 'subjecthood' criterion of substance as stated in *Metaphysics Z*. Irwin cites Alexander's commentary on *Metaphysics Γ* 5 for the idea of particular form, and suggests that Alexander here depends on the Stoics.<sup>7</sup> Irwin's analysis shows very aptly the way in which the Stoic system of ontology could be regarded as a realization of the theoretical potential of Aristotle's theory of form-substance. The approach from the problem of the continuum is particularly promising, given the affinity between the Stoic and Aristotelian systems with respect to this issue.

But this parallel, however illuminating, might need some qualifications in the light of the late Peripatetic sources. Some Aristotelian authors of the post-Hellenistic era, in particular, were much less happy about it than modern scholars.<sup>8</sup> One reason for this, among

<sup>6</sup> Irwin thus seems inclined to take *τὸδε τι* in the first of the three senses discussed by J. A. Smith, so that the whole phrase would signify the *individualatum* *zagan* of the class of *res*. See J. A. Smith, *Tode ti in Aristotle*, *Classical Review*, 35 (1921), 19; cf. M. Frede and G. Patzig (eds.), *Aristoteles: Metaphysik Z* (2 vols., Munich, 1988), ii, 15; M. L. Gill, *Aristotle on Substance: The Paradox of Unity* (Princeton, 1989), 31–2; R. W. Sharples, 'On Being a *τὸδε τι* in Aristotle and Alexander', *Mathesis*, 12 (1999), 77–87.

<sup>7</sup> The text to which Irwin refers has to do with the discussion of the difference between qualitative and quantitative change. It runs as follows: *τὸ ζῷον ἔδος τῶν συνεπαύτων πέσει ἐόν τῷ μὴ ἢ συνεπαύτως ἐμβαλεῖται; διὰ μέντοι καὶ ὁ νέος καὶ ὁ ἀρχαίος 105 καὶ ὁ μετῴριος καὶ ὁ γενητικὸς κατὰ τὴν ὕλην συνεπαύτως ὁμοίως ἐόντι (3.10. 18–20 Hayduck). Irwin writes further: 'These comments show that Alexander takes Stoic peculiar qualities to be similar in some important ways to Aristotelian substantial forms. He notices that Aristotle implies a role for form, as a basis of persistence through material change. The Stoic conception of a peculiar quality shows how the same thing can have both this role and another role—being the principle of unity—that Aristotle attributes to form. These similarities allow us to see how the Stoic conception might be a reasonable development of Aristotle's implicit conception of particular forms' (Aristotelian Substances', 499).*

<sup>8</sup> The Stoicizing tendency is present, too (cf. Alex. *De mixt.* 3. 216. 4–14 Bruns; P. Moraux, *Der Aristotelismus bei den Griechen: Von Andronikos bis Alexander von Aphrodisias* [Aristotelismus], 1. *Die Renaissance des Aristotelismus im 1. Jh.*

others, was the radical corporealism of the Stoic system. Stoic qualities are corporeal, as is the mechanism of 'blending' by means of which they inhere in their material substrate. Alexander criticizes both the notion that qualities are corporeal and the theory of blending, developing his version of the Aristotelian theory of form in conscious opposition to the principal points of the Stoic doctrine of qualities.

In what follows I examine some of the ontological implications of this difference as stated by Alexander. The first part of the paper surveys the way in which the Peripatetic view is formulated by Alexander as a distinct position in the *diaphōnia* of different school opinions on the nature of agency. In the second part I analyse the arguments for the incorporeality of the soul developed by Alexander in his treatise *De anima*.

#### 1. The *diaphōnia* about agency: bodies and incorporeals

The elaborate ontological terminology found in the extant Stoic sources suggests that in the case of Stoic corporealism we are dealing not merely with a set of inductive arguments developed to support a core pre-theoretical belief underlying the system of thought, but with a certain theoretical choice, based on active rethinking of the main conceptual options shaped in the school debates by the early Hellenistic era.<sup>9</sup> The proper context in which the corporealism thesis originates is the discussion of the problem of agency. The link between Stoic corporealism and [Plato], *Soph.* 247c, where the capacity to act and be acted upon is adopted as a criterion of reality common to both the 'Giants' and the 'Friends of Forms', was noted already in antiquity.<sup>10</sup> The general form of the corpo-

v. *Chix* (Berlin and New York, 1973), 210–12, on Xenarchus). The criticism of the Stoics seems to be more characteristic of the commentators Alexander and Aspasius.

<sup>9</sup> This has been argued by J. Brunschwig for a more general case of the theory of highest genus, but his argument in effect covers the corporealism thesis also: J. Brunschwig, 'La théorie stoïcienne du genre suprême et l'ontologie platonicienne', [*Théorie stoïcienne*], in J. Barnes and M. Mignucci (eds.), *Matter and Metaphysics* (Naples 1988), 21–120.

<sup>10</sup> See Elias, *In Porphy. Isag.* 47. 26–33 Busse; David, *In Porphy. Isag.* 111. 3–17 Busse (= K.-H. Hülsen (ed.), *Die Fragmente zur Dialektik der Stoiker [FDS]* (4 vols.; Stuttgart and Bad Cannstatt, 1987–8), 730), with a detailed discussion in J. Brunschwig, 'Théorie stoïcienne', 65 and n. 65. In the light of this discussion, the Stoic adoption of the most 'earthborn' version of the Giants' view (involving the

realist thesis is: agency (and its reverse, the capacity to undergo action) is a criterion of reality; only bodies can act and undergo action, hence only bodies are truly real. That 'body' thus understood is a theoretically premeditated concept, rather than an inductive generalization, is indicated by the distinction between bodies and 'incorporeals' systematically drawn in the Stoic theory. Causal efficacy is the criterion of this distinction: 'body' is what can act and be acted upon,<sup>11</sup> 'the incorporeal', another subclass of the genus  $\tau\epsilon$ , is what cannot do either. 'Incorporeals' include place and time for all spatio-temporal objects; void for the universe as a whole; and a 'sayable' ( $\lambda\epsilon\kappa\tau\omicron\nu$ ) which, ontologically, refers to something like a semantic boundary of action, its place in the realm of meaning.<sup>12</sup> Although lacking causal efficacy, the incorporeal, in the Stoic system, is a necessary concomitant of action.<sup>13</sup>

The purpose of including qualities among bodies, from this system of corporeality of virtues) might be a deliberate display, not so much of the spirit of paradox, as of commitment to theoretical consistency.

<sup>11</sup> In addition to the definitions of body as the seat of agency, we find in the sources a class of definitions which do not contain references to agency, referring instead to geometrical and physical characteristics. Apollodoros ap. D.L. 8. 135 (= LS 406):  $\sigma\omicron\mu\mu\alpha$  δ' ἐστίν ὡς φησὶ Ἀπολλόδορος, ἐν τῇ Φυσικῇ, τὸ πρῶτον διαστρατόν, εἰς μῆκος, εἰς πλάτος, εἰς βάθος: τοῦτο δὲ καὶ ἄρρετον σῶμα καλεῖται. Cf. ps.-Galen, *De quadratibus incorporeis* [Q] 12–26 Giusta (= LS 40f, part). On the relation between the two kinds of definitions, see J. Mansfield, 'Zeno of Citium' [*Zeno*], *Memnosyne*, 31 (1978), 134–78 at 158–67.

<sup>12</sup> This is a 'canonical' list. Some sources add geometrical surfaces (e.g. Cleome-des, *Meteor.* 1. 1, 141 Todd). See LS 1. 162–4; Brunschwig, 'Théorie stoïcienne', 76–109; K. Algra, *Concepts of Space in Greek Thought* [*Concepts*] (Leiden, 1994), 308–12.

<sup>13</sup> Thus 'being cut' is a 'sayable' which draws a meaningful distinction between the state of a thing undergoing the action of cutting (which involves a change of shape, colour, structure, and some other physical characteristics, and the fact of a knife being applied to it, and producing all these bodily transformations) and many other states whose physical characteristics may overlap with the ones listed in brackets, but which do not result from being cut (perhaps they are due to being painted, or broken, etc.). So what a sayable 'being cut' singles out in a bodily complex is real; although its reality is dependent on the bodily individuals which make up the complex in question. This I take to be the meaning of the Stoic (reported) thesis that bodies bring about the incorporeals. I cannot therefore agree with a view presented by S. Bobzien in a recent excellent study, according to which motions and qualitative states are solid examples of incorporeals in the Stoic theory (S. Bobzien, *Determinism and Freedom in Stoic Philosophy* [*Determinism*] (Oxford, 1998), 22–7, *passim*). Both can be in principle described in terms of the third or the fourth 'kinds' in the Stoic classification of subjects; and although the issue of their status is not free from controversy within the school (cf. Sen. *Ep.* 113), we cannot, I think, ascribe this view to Chrysippus without an argument (cf. Bobzien, *Determinism*, 22). On the 'sayable', see LS 1. 198–202; M. Frede, 'The Stoic Notion of a Lektōn', in S. Everson

tematic viewpoint, is, then, to maintain their causal efficacy. The extant Stoic arguments for corporeality of qualities involve several different strategies of reasoning by which qualities are shown to originate in bodies, to have a mechanism of existence which is bodily, and to be in the end nothing other than bodies. The cumulative character of these arguments is nicely grasped by J. Brunschwig's expression 'greffe de corporeité'.<sup>14</sup>

It may be convenient to distinguish two kinds of reduction involved in the 'greffe': 'logical' and 'physical'. The 'logical' reduction shows that qualities and dispositions of an individual body are bodily because they are nothing but this individual body qualified or disposed in a certain way, 'nothing but' being a key concept of the proof. The main analytical presupposition of this reduction seems to be the theory of four subjects. Corporeality can be proven for each of the four because each of them refers to a mode or aspect of this body, adding nothing else to the ontological economy at large. The reduction here is to an individual substance.<sup>15</sup>

(ed.), *Language* (Companions to Ancient Thought, 3; Cambridge, 1994), 109–28; A. Schubert, *Untersuchungen zur stoischen Bedeutungslehre* (Göttingen, 1994).

<sup>14</sup> 'Théorie stoïcienne', 88. Cf. R. K. Sorabji on Stoic reductionism, *Matter, Space and Motion: Theories in Antiquity and their Sequel* (London, 1988), 70–105; D. N. Sedley on reduction of the third genus as 'a typical manoeuvre of Stoic corporealism', 'Hellenistic Physics and Metaphysics' [Hellenistic Physics J. in K. Algra, J. Barnes, J. Mansfeld, and M. Schofield (eds.), *The Cambridge History of Hellenistic Philosophy* (Cambridge, 1999), 355–411 at 407. The arguments for the corporeality of virtues cited by Seneca provide a good example of cumulative reasoning. The following principles are adduced in the arguments: (a) anything capable of action is body; (b) anything that affects, shapes, and holds together the body is body; (c) soul is body; hence the goods of soul are bodies, just as the goods of body are; (d) human goods are bodies, as is clear from the facts of nutrition, generation, and material conditions of human life; (e) affections of the soul are bodies, as is clear from the corporeal concomitants of the emotional states; (f) moral dispositions impart intensity to the movements of the muscles; (g) they could not act the way they do except by contact; (h) the ruling faculty of body is body (Sen. *Ep.* 106, 3–11). This array of 'proofs' should make the collections of counter-arguments in the late authors look not quite so inadequate, at least as far as the form of proof is concerned. Cf. arguments for corporeality of voice: *SVF* i. 74, 150; ii. 138, 139, 885; iii. *Diog.* 17, 18, 19.

<sup>15</sup> This argument is not the same as a standard nominalist reduction of universals to particulars. While nominalism in general admits the existence of qualities distinct from bodies, denying only their separate existence, it is not strictly committed to one or another theory of the ontological status of qualities. The only requirement is that they not be reified in a realist manner. In the Stoic theory we find an interesting case of inverse reification offered as an explanation of the ontological status of qualities, which seems to upset the nominalist distinction working from the rear, as it were. The corporeality thesis certainly exposes an important problem with nominalism.

Another type of reduction is based more specifically on a physical notion that qualities are certain states of the *pneuma*, or aeriform bodies.<sup>16</sup> The point here is not just that of a nominalist elimination of entities *praeter necessitatem*, but of a physicalist derivation of a quality from the corporeal active principle of the universe. This version of an argument, like all Stoic physics, involves both inductive and speculative elements. To prove the corporeality of a certain quality inductively, you have to show the exact physical mechanism by which this quality operates.<sup>17</sup> The speculative aspect of the argument has to do with the general question 'Where do the states of individual bodies come from?' The answer to this question presupposes a rich pantheistic framework of Stoic physics: we will be told about the cosmic active principle pervading inert substance.<sup>18</sup> This principle has a special kind of kinetic pattern (self-induced, 'loop'-like, composed of two opposite linear movements), which it imprints onto the substrate in which it comes to inhere, thus producing the states that correspond to the qualities of a body.<sup>19</sup>

In the Stoic physical theory, the active principle of the cosmos is itself a body and a dynamic quality at the same time. Its pulsating motion can be described both as condensations and rarefactions of a basic corporeal stuff, and as intensifications and remissions of a basic power. The equivalence of two descriptions holds also in the case of the elements, which can be treated either as 'bodies', where 'body' is a variable for mass-terms, or as 'powers' of 'hot', 'cold', 'dry', and 'moist'.<sup>20</sup>

The two types of reduction (logical and physical) are not completely independent in the structure of corporealism arguments.<sup>21</sup>

<sup>16</sup> On qualities as aeriform bodies, see references and discussion in *LS* i. 47; Brunschwig, 'Théorie stoïcienne', 87–90; Hahm, *Origins*, 161–2.

<sup>17</sup> e.g. in the way in which Zeno and Diogenes of Babylon argue for the corporeality of *physis*; *D.L.* 7, 55 (= *SVF* iii *Diog.* 17–18). For more references see n. 14.

<sup>18</sup> See G. Verbeke, *L'Évolution de la doctrine du pneuma du stoïcisme à S. Augustin* [Évolution] (Paris and Louvain, 1945), 66–73 (on the Chrysippean theory of *pneuma* as a cohesive source and mover of the universe); D. N. Sedley, 'The Origins of Stoic God', in D. Frede and A. Laks (eds.), *Traditions of Theology: Studies in Hellenistic Theology, its Background and Aftermath* [Traditions] (Leiden, 2002), 41–83.

<sup>19</sup> Nemes. *Nat. rom.* 18, 5–9 Morani; cf. *Aët.* 4, 19, 4 Diels. See D. E. Hahm, 'Self-Motion in Stoic Philosophy', in M. L. Gill and J. G. Lennox (eds.), *Self-Motion: From Aristotle to Newton* (Princeton, 1994), 175–226; Sedley, 'Hellenistic Physics', 384–6.

<sup>20</sup> Cf. definitions of *σφοδρότητα* cited by Stobaeus: Hahm, *Origins*, 76–82; *LS* i. 286–9.

<sup>21</sup> Cf. examples in n. 14 above.

But they are conceptually distinct, and therefore are often played off by the critics of the Stoic system.

In the post-Hellenistic age, the arguments against the Stoic corporeality thesis are found in several near-contemporary works: the anonymous treatise *De qualitibus incorporeis* transmitted with the Galenic corpus,<sup>22</sup> Plutarch's *De communibus notitiis*, Alexander's school treatises *Mantissa* 3 and 6, and Alcinous' *Didaskalikos* II. Several parallels may suggest Academic debates as a common source of the criticisms developed in these later treatises.<sup>23</sup>

The *QI* author contrasts the Stoic approach with those of other philosophical schools:

And what action will they take with respect to those who claim that in fact bodies do not act, but only incorporeals? What [will they do] with respect to Aristotle, who, himself too, in making a division in kind among things that exist, says that some are substances, other accidents? And what do they themselves mean in speaking of substances and accidents, if they say that the latter, too, are bodies, and this not in the way that we call the parts of the body bodies, as [we do] the finger a hand—not as we call the minas in the talent [a talent].<sup>24</sup> (318–25 Giusta)

The author here describes the *diaphōnia* of school views on the subject of the nature of agency.<sup>25</sup> In *QI* we find a genuine form of

<sup>22</sup> For the argument against the manuscript attribution of *QI* to Galen, see Westerberger's introduction to his edition (I. Westerberger, *Galenus qui fertur de qualitibus incorporeis libellus* (diss. Marburg, 1966), xvi–xxiv).

<sup>23</sup> Parallels in Plutarch may be such an indicator in a general sense, as many of his discussions go back to the Academic arguments. See D. Babut, *Plutarque et le stoïcisme* (Lyon, 1969), 34–46; J. Opsomer, *In Search of the Truth: Academic Tendencies in Middle Platonism* (Brussels, 1998), 21–6. The problem of doctrinal sources of *QI* is controversial. Cf. M. Giusta, *L'opuscule pseudogalenico ōri ai porōtētes Stoicōn* (Lyon, 1969), 34–46; R. B. Todd, 'The Author of the *De qualitibus incorporeis*: If Not Albinus, Who?', *L'Antiquité classique*, 46 (1977), 198–204; Moraux, *Aristotelismus*, ii. *Der Aristotelismus im I. und II. Jh. n. Chr.* (Berlin and New York, 1984), 470–2; J. Whittaker (ed.) and P. Louis (trans.), *Alcinous: Encheiridion des doctrines de Platon* (Paris, 1999); J. Dillon (ed.), *Alcinous: The Handbook of Platonism* (Oxford, 1993), 111–14; T. Göransson, *Alcinous, Aritus Didymus [Alcinous]* (Copenhagen, 1995), 53–4.

<sup>24</sup> On naming bodily wholes from bodily parts (metonymy) see Themist. *In Phys.* 109, 4–7 Schenkl. I am grateful to Prof. Robert Todd for this reference and for suggestions on the translation of this passage.

<sup>25</sup> On the concept and different uses of the *diaphōnia* technique in the philosophical tradition, see J. Mansfeld, 'Diaphōnia: The Argument of Alexander: *De Fato* Chs. 1–2 [*Diaphōnia*]', *Phronesis*, 33/2 (1988), 181–207; id., 'Doxography and Dialectic: The *Sitz im Leben* of the "Placita"', in *ANRW* II n. 36, 4 (1990), 3957–229 (on the subject of incorporeality at 3605–85).

*diaphōnia* argument, where the author establishes the stronger tenet by exposing the weaknesses of the alternative view. The author presents no positive doctrine of incorporeals, nor does he show any awareness of the Stoic doctrine of incorporeals. In the quoted passage, he does not explain the distinction between those whom he describes as denying agency to bodies and the Aristotelians. This is how the division of opinions is described by Sextus:

[i] Further, if cause exists, either body is cause of body, or the incorporeal of the incorporeal, or body of the incorporeal, or the incorporeal of body. . . . Moreover, the existing sects of the Dogmatists agree about the distinctions set forth [*συμφωνοῦσι τῇ ἐκκεκμηῆναι διαφάσει*], since [iii] the Stoics declare that 'every cause is a body which is the cause to a body of something incorporeal'; for example, the lancet is a body, and the flesh is a body, and the expression 'being cut' is incorporeal; and again, fire is a body, and 'the wood' is a body, and the expression 'being burnt' is incorporeal. [iii] But those who assume that the God who is the World-maker and governs all things is incorporeal assert, on the contrary, that the incorporeal is the cause of body. [iv] And Epicurus says that both bodies are the causes of bodies and incorporeals of incorporeals—bodies of bodies as the elements are of compounds, and incorporeals of incorporeals as the incorporeal attributes of the primary bodies are of the incorporeal attributes of the compounds. (*M.* 9. 211–12, trans. Bury)

In this description of school positions, we find three different sets of meanings for the terms 'body' and 'incorporeal'. With the Stoics, as we have seen, this is a technical distinction, corroborated by a set of assorted arguments whose cumulative goal is to maintain the corporealist thesis.

The position described in (iii) is that of the Platonists. Sextus mentions as a ground for it their theological belief that the World-maker is incorporeal. The account in Alcinous' *Didaskalikos* II<sup>26</sup> supplies more details of philosophical interest:

Further, the active principles [*τὰ ποιητῶντα*] are nothing other than the incorporeals. For bodies are subject to affection and flux [*παθητὰ γὰρ τὰ σώματα καὶ βέβητά*], and never the same and in the same way, nor permanent and firm-set; and even where they seem to be active in some respect, they are rather found to be affected. Hence, as there is something purely passive, so there must be something active in a precise sense. And this we would find to be nothing other than the incorporeal. (166, 28–35 Whittaker)

<sup>26</sup> Cf. discussions in Whittaker, *Alcinous*; Dillon, *Alcinous*, ad loc.

Here the 'flowing' nature of corporeality is emphasized.<sup>27</sup> It is for this reason that bodies cannot be said to be active in the exact sense. But they are fit for the role of undergoing action, being *παθητά*. So, here, unlike with the Stoics, agency and patiency belong to different ontological kinds: the proper agent is incorporeal, patients may be corporeal.<sup>28</sup>

The third sect represented in the Sextus passage is the Epicureans. Sextus gives a very general summary of the Epicurean treatment of properties. The two relevant points which can be extracted from his report are: (a) properties are incorporeal, and (b) there is a causal gradation of the incorporeal properties, so that the incorporeal microscopic properties of atoms are the causes of macroscopic properties of compounds.<sup>29</sup> On the Epicurean view, as presented here, the causal agency is primarily corporeal, but incorporeals do have derivative causal efficacy, restricted to their own domain.

The Aristotelian sect is not represented in Sextus' *diaphōnīa*. Neither does the *QI* author in the passage quoted above attribute to Aristotle any position on the issue of the nature of agency, although it is implied that Aristotle regarded properties as incorporeal, since the corporeality thesis is said to be incompatible with the distinction between a thing and a quality. In the works of Aristotle, the term 'incorporeal' never makes a topic in its own right, despite the fact that the concept, expressed in various other ways, is put to work in many theoretically important contexts.

It may be worthwhile to take a look at the occurrences of the term *ἀσώματων* in the Aristotelian corpus.<sup>30</sup> It is possible to distinguish four different types of context within which the term is used in a technically consistent way: (1) to describe the first principles, such as the first unmoved mover and the soul;<sup>31</sup> (2) to conceptualize

<sup>27</sup> On the view of matter as flux in the Hellenistic Platonist tradition, see F. Deleuva Caizzi, 'La "materia scorrevole": sulle tracce di un dibattito perduto', in J. Barnes and M. Mignucci (eds.), *Matter and Metaphysics* (Naples 1988), 445–70 (for various influences of this view on Stoicism, esp. 444–52).

<sup>28</sup> Cf. below, n. 48.

<sup>29</sup> See Epic. *Ep. Her.* [68], 6–[69], 11 Arrighetti, discussion by Sedley, 'Hellenistic Physics', 379–82; cf. LS i. 49–54, ii. 52–7 (texts 12A–F).

<sup>30</sup> Twenty-four (checked on the *TLG*).

<sup>31</sup> *De anima* i. 2, 404<sup>b</sup> 31, doxographical division between the thinkers who take the principles to be bodies and those who take them to be incorporeal; *De caelo* 2. 6, 288<sup>b</sup> 5–7, as a description of the first unmoved mover in the argument for the regular character of the sphere of fixed stars; *Metaph.* A 8, 988<sup>b</sup> 25, accusing the materialist monists of ignoring the principles of the incorporeal beings (*τῶν*

one of the options in the aporia preceding a physical argument,<sup>32</sup> (3) to refer to certain physical properties of liquid and gaseous substances, which are contrasted with the properties of solidity, density, mechanical stability,<sup>33</sup> (4) to refer to a quality of a body as distinct from the body itself; this is the most precise correspondence so far to the kind of common-sense and grammar-based logical distinction between thing and property found in the anti-Stoic school exercises.<sup>34</sup>

Generally, although contexts (1), (2), and (4) do not have to be incompatible with each other, Aristotle shows no interest in exploring the conditions of their compatibility, or in producing any synthetic account of form as incorporeal. This should not be surprising given the general anti-Platonic thrust of his theory of substance.<sup>35</sup> Notably, in the *De anima*, the term *ἀσώματων* is used in the division of views on the nature of the soul in what might be presumed to be meaning (1), but at the same time meaning (3) is present throughout the chapter, without any qualifying remark, and even appears in the description of the consensus of the tradition.<sup>36</sup>

In Alexander's works we find a new formula for the Aristotelian position in the *diaphōnīa*: 'bodies act upon bodies by means of incorporeals'. In the present state of the study of the sources it γὰρ σωμάτων τὰ στοιχεῖα πῶς αὖ μόνον, τῶν δ' ἀσώματων οὐ, ὅστων καὶ ἀσώματων); particularly interesting is the case of *Metaph.* A 7, 988<sup>a</sup> 23, where the concept of matter is said to be understood by some as corporeal, and by some as incorporeal. The 'incorporealist' view is based on a certain analytic formula of matter (such as Plato's τὸ μέγα καὶ τὸ μικρόν) rather than an identification with a particular kind of body. This is not an exclusive division, as some major cosmological theories would have a 'mixed' view of matter (cf. Alexander ad loc., and n. 46 below).

<sup>32</sup> *De caelo* 3. 6, 305<sup>a</sup> 14–33; *GC* i. 2, 316<sup>b</sup> 25–7; i. 5, 320<sup>a</sup> 30–321<sup>b</sup> 16; *Phys.* 4. 1, 209<sup>a</sup> 13–17 (place neither body nor incorporeal).

<sup>33</sup> The most famous locus is the beginning of *De anima*, where the term is used to describe the received Presocratic idea of soul as a special subtle kind of body (i. 2, 405<sup>a</sup> 7, 27<sup>b</sup> 12; i. 5, 409<sup>a</sup> 19–22). Note that this interpretation of the opposition 'body vs. incorporeal' (= 'solid and stable' vs. 'flimsy and flowing'), probably going back to the early cosmological tradition, is the exact reverse of the Platonist interpretation we have seen above in the Alcinoan passage. The passages in *Phys.* 4. 4, 212<sup>a</sup> 12, and 4. 8, 215<sup>b</sup> 4–5, 10–12, show that this usage is not dead with Aristotle himself.

<sup>34</sup> This is represented by just one passage, in the *Topics*, but there is no reason to think that such a distinction was in any way unusual. The context is an example of a fallacious definition of the white as the colour mixed with fire: *Top.* 6. 12, 149<sup>b</sup> 1: ἀόρατον γὰρ τὸ ἀσώματων σώματι, μεμειχθῆαι, ὅσων ὅσων ἂν εἴη χροῶμα πύρι μεμειγμένον.

<sup>35</sup> Cf. Hahn, *Origins*, 20–1.

<sup>36</sup> *De anima* i. 2, 405<sup>b</sup> 12: ορίζονται δὲ πάντες τὴν ψυχὴν τριῶν ὡς εἶναι, καθήσει, αἰσθήσει, τῶ ἀσώματῳ.

have seen, there is nothing of the kind in Aristotle.<sup>40</sup> The formula actually occurs in Plutarch's discussion of the Stoic notion of limit at *De communibus notitiis* 46, and most probably goes back to the Academic debate with the Stoics.<sup>41</sup> Plutarch reports the Stoic distinction between contact and mixture—mixture (blending) is by part, whereas contact is by 'limit'—and goes on to draw a paradoxical conclusion from this claim, saying that it will follow both that a body touches a body by means of the incorporeal, and that it does not, since the incorporeal is in between, blocking the path of direct bodily contact. Since according to the Stoics all acting and being affected is by such contact, it will follow, paradoxically, that body acts upon, and is affected by, another body 'through' an incorporeal (i.e. the Stoic limit).<sup>42</sup> Alexander knows at least some of the Academic arguments against the Stoic thesis, and most probably

<sup>40</sup> Whether this tenet is present in the Aristotelian tradition before Alexander should remain an open question. The doxographical tradition does indeed attribute to the Aristotelians the position described by Alexander: ποσὴν δὲ καὶ πάχυνον τὰ σώματα ταῖς ἀσώματοις διαίμαται· κατὰ γὰρ τὰς ἐν ταῖς ταῖς διαφόροις ἀπορροήσασθαι τὰς τῶν δραστηῶν καὶ τὰς τῶν παθητικῶν φύσεις (Stob. *Ed.* 1. 14. 1c, 141. 19–22 W. = Ar. *Did. Epit. fragm. phys.* fr. 5 Diels). However, this fragment cannot be taken as pre-dating Alexander with certainty. The most recent study of Arius' physical fragments, by Moraux, shares Diels's assumptions about the provenance and date of this group of fragments in the Stobaeus collection (*Aristotelismus*, 1. 259–71, 277–85). Diels's view has been challenged recently by Göransson (see his *Aktionen*, 183–218, for Arius' date, 219–26 for the attribution of anonymous fragments), whose argument (albeit not dealing specifically with the physical fragments) leaves open the possibility of a later date for the whole collection. On physical fragments, see further D. T. Runia, 'Additional Fragments of Arius Didymus on Physics', in K. A. Algra, P. W. van der Horst, and D. T. Runia (eds.), *Polyhistor: Studies in the History and Historiography of Ancient Philosophy Presented to Jaap Mansfeld on his Sixtieth Birthday* (Leiden, New York, and Cologne, 1996), 363–79. It may be further noted in this regard that the concept of 'incorporeal power' has special relevance to the Stoic/Peripatetic controversy about mixture attested in several doxographic sources (see Galen's testimonia in *SVF* II. 411, 463, 464). On the other hand, Theophrastus, fr. 307c FHSG (= Prisc. 27. 3–6, 8–14 Bywater), ἀσώματα δὲ ἐν' ἀσώματῳ τὴν πάχυνον ἢ ποτὰ μίξεσθαι, may be regarded as an early antecedent of the tendency to systematic formulations similar to the one we find in Alexander. For a decisive pronouncement on the matter of chronology, the whole question needs further study. I am grateful to Prof. Robert Sharpley for pressing for this clarification.

<sup>41</sup> See Cherniss ad loc.; *FDS* 745; cf. Simplicius, *In Cat.* 208. 22–211. 4 Kalbfleisch. <sup>42</sup> Plutarch says that the Stoic position is subject to the same difficulty as they pointed out in the atomist theory, where contact between atoms seems to be impossible because the atoms do not have parts (*Comm. not.* 1080 E–F). The alternative view of limit as corporeal, also reported for the Stoic school, and connected more specifically with Posidonius, is not taken into account by Plutarch in this paragraph. In some polemical, e.g. the *QI* and Alexander's *Manitissa*, this alternative view comes to the fore (cf. p. 322 and n. 82 below). See Cherniss ad loc.; *FDS* 880–1; I. Mueller, 'Geometry and Scepticism', in J. Barnes, J. Brunschwig, M. Burnyeat,

cannot be established with certainty whether Alexander is the first author to use this formula as a Peripatetic axiom, or whether he inherits it from the earlier Peripatetic tradition. It is clear, however, that he makes a consistent effort to develop a theoretically sound concept of the incorporeal which would retain the causal efficacy denied it in the Stoic theory.

In the *De anima*, introducing the notion of soul as the form of a living body, Alexander starts with a more general case of a hylomorphic compound, taking as his model the four cosmic elements. They are said to have the most basic hylomorphic constitution, being made up by prime matter and a pair of primordial tangible qualities (hot/cold, moist/dry),<sup>37</sup> upon which a dynamic property of 'natural motion' supervenes as a third formal constituent. Thus fire is dry and hot in its tangible structure, and light (i.e. having a centrifugal tendency) in its dynamic structure.<sup>38</sup> All three formal constituents of a simple body are incorporeal.<sup>39</sup> Alexander explains that the powers of being active and being acted upon are also defined by the form of a natural body:

Not only is it the case that every body has from form its being and its differences from other beings, but also the differences with respect to acting and being acted upon are in bodies in accordance with forms. For in acting and being acted upon *quia* bodies they have their capacity of producing so-and-so and being affected by so-and-so from form. For each of these two as well is according to the difference in form. Hence, it is reasonably said [*εὐλόγως λέγεται*] that bodies act and are acted upon in accordance with the incorporeals. (7. 9–14 Bruns)

Alexander does not specify by whom this is reasonably said. As we

<sup>37</sup> *De anima* 2. 25–3. 2; 4. 4–16 Bruns. Cf. Arist. *GC* 2. 4.

<sup>38</sup> 5. 4–9 Bruns. 'Natural motion' is the central concept of Aristotle's deduction of elements in the *De caelo* (cf. esp. 3. 3. 302<sup>b</sup> 5–9; also 4. 4–5). But in the Aristotelian corpus, 'chemical' and 'dynamic' derivations of the elements are notoriously distinct, and their compatibility in fact presents an exegetical problem of long standing (see J. Longrigg, 'Elementary Physics in the Lyceum and Stoa', *Isis*, 66 (232) (1975), 211–29). Alexander in his summary cuts this Gordian knot by making both derivations subordinate to the more fundamental hylomorphic theory.

<sup>39</sup> 'For the form of fire, which is a natural and simple body, is heat and dryness, as well as lightness, generated from these as their sequel, whereas their substrate is matter, which, being by its own nature none of them, is receptive both of them and of their opposites (by virtue of which nature the transformations of the simple bodies into one another happen). None of these is a body, but that which is of them is already a body, namely the fire, which has from its nature and substance-form the principle of upward movement, i.e. lightness; which lightness being form and nature of fire is not itself moved' (5. 6–12 Bruns).

the 'reasonable saying' he quotes comes ultimately from the same stock.<sup>43</sup> But while the point of Plutarch's criticism is just to expose the incoherence of the Stoic doctrine, in Alexander this dictum appears already as a meaningful theoretical claim.<sup>44</sup> Its explanation is found in Alexander's commentary on *De sensu* 4, the chapter on flavour.

In this chapter Aristotle discusses the mechanism by which the objects of taste, i.e. flavours, are formed in natural things. Moist, he explains, is the common genus of all things that have taste; and taste is a result of water being affected in a certain way.<sup>45</sup> The affection is diagnosed, in accordance with the theory of opposites, as inflicted by the dry contained in earth and fire upon the moist present in water, with the heat of the fiery substance acting as a catalyst.<sup>46</sup> Tastes are drawn into plants with the water, which has a solution of flavoured substances contained in the earth.<sup>47</sup> The kind of change involved is alteration. Aristotle describes its mechanism as similar to that of 'dyeing': the tissues of a plant are as it were 'strained' through the water drawn from the earth.<sup>48</sup> Aristotle emphasizes that agency resides not in the body as such, but in the opposite tendencies of the same kind inherent in different bodies. Only between the opposites are acting and being affected possible at all: water and earth as such can act and be acted upon and M. Schofield (eds.), *Science and Speculation: Studies in Hellenistic Theory and Practice* (Cambridge and Paris, 1982), 69–95.

<sup>43</sup> This is clear from parallels between Plut. *Comm. not.* 50, 1085 E, and Alexander's arguments in *De anima*, discussed below; see also n. 97 below. Alexander knows of the Stoic theory of incorporeals, as a subclass of the genus  $\tau\iota$ , as witness *In Top.* 301: 25 and 359: 15 Wallies, although he never discusses its details, such as the kinds of incorporeals.

<sup>44</sup> Plutarch's claim, quoted in n. 42 above, that contact, cohesion, mixture, and conatural unity are by means of the incorporeal, is meant as an *ad hominem* refutation of the Stoic theory of limit. In *Manitissa* 3 we find this claim applied in full earnest, when the author explains that the power of a glue by which it provides cohesion to the things it holds together has to be distinguished from its body: the power is incorporeal: οὐτε γὰρ ἡ κόλλα αὐτῆς συνέχει καὶ τὰ κεκολλημένα. ἔργον γὰρ αὐτῆς τὸ συνέχον καὶ ἔργον τὸ συνέχόμενον. ὁσον μὲν γὰρ σωματικόν, συνέχεται, τὸ δὲ συνέχον ἐστὶν ἢ ποιότης καὶ ἢ δυνάμεις ἀσώματος οὐσα. ἀβλαβείας γοῦν τῆς τοιαύτης ποιότητος, τὸ ἄλλοτὸν καὶ σωματικὸν μένει οὐτε αὐτὸ ἐστὶ οὐτε τὰ φύλα συνέχεν δύνανται (115: 1–6 Bruns). The example of glue discussed by the *Manitissa* author is Stoic, going back to Posidonius: cf. fr. 149 EK (= Achilles, *Introd. in Aratum* 13).

<sup>45</sup> *De sensu* 4, 441<sup>b</sup>20: λέγεται δὲ τῷ πάσχειν τι τὸ ἕωρα μεταβάλλειν.

<sup>46</sup> *De sensu* 4, 441<sup>b</sup>8–10: πάσχειν γὰρ πέφυκε τὸ ὕγρον, ὥσπερ καὶ τὰλλα, ὡς τοῦ ἐναντίου ἐναντίον δὲ τὸ ἕρπον; 441<sup>b</sup>29: τὸ δὲ θερμὸν σναίταιον.

<sup>47</sup> *De sensu* 4, 441<sup>b</sup>30<sup>b</sup>–2.

<sup>48</sup> For the role of opposites in the analysis of change, see sect. 2.3 below.

only in so far as they are constituted by the elemental qualities, for which there are matching opposites in the other bodies.<sup>49</sup>

Alexander supplies a more general theoretical background for this account, strongly emphasizing Aristotle's point that flavours are produced not by the simple bodies *qua* bodies, but by the interaction of their aspects (primordial qualities) which are in opposition with one another (viz. the dry of the earth and the moist of the water):

Having said that opposites are affected by opposites, including therefore the moist by the dry, and vice versa (for the prevailing one is active), and that fire is dry too, but that earth is so in the highest degree, he adds to this that in so far as one of the elements is fire, another water, another earth, yet another air, it is not in their nature either to act or to be affected in any way. For they are substance; and substance is not opposite to substance; whereas acting and being affected are in the opposites. And for this reason he added 'nor anything else'. For no body acts and is affected in so far as it is body, because there is no opposition in them either. But in so far as an opposition is inherent in each of them, to that extent they act upon and are affected by each other. (*In Seis.* 73: 4–12 Wendland)

Pointing out that each of the elements is substance, Alexander draws a connection between the concept of agency and the theory of substance of the *Categories*.<sup>50</sup> Aristotle's analysis of substance in *Categories* 5 involves two statements that are particularly relevant here: (i) substance *qua* substance does not have an opposite (3<sup>b</sup>24–33); (ii) substance alone of all categories is able to receive contraries (4<sup>a</sup>10–22). To explain acting and being affected, we have to look at the qualitative structure of substance, which is constituted by the opposites.

The explanation of agency based on the nature of the opposites presents a substantial correction to the Stoic theory, where the role of explanatory factor is played by corporeality as such. It implies that the main factor of causal transaction between bodies is not contact itself, but the interaction of the opposites, for which contact provides only a necessary condition.<sup>51</sup>

Alexander claims, further, that only individual substance as a

<sup>49</sup> *De sensu* 4, 441<sup>b</sup>12–15: ἢ μὲν οὖν πῦρ καὶ ἢ γῆ, οὐδὲν πέφυκε ποιεῖν καὶ πάσχειν, οὐδ' ἄλλο οὐδέν· ἢ δ' ὑπάρχει ἐναντίους ἐν ἑκάστῳ, ταύτη πάντα καὶ ποιοῦσα καὶ πάσχουσα.

<sup>50</sup> On the place of the *Categories* in the post-Aristotelian Peripatetic tradition, see H. B. Gottschalk, 'Aristotelian Philosophy in the Roman World from the Time of Cicero to the End of the Second Century A.D.' [*Aristotelian Philosophy*], in *ANRW* II. 36. 2 (1987), 1079–1174 at 1101–13.

<sup>51</sup> For the role of opposites in the analysis of change, see sect. 2.3 below.



whole can be a body; its aspects are not bodies. This is how he formulates the Aristotelian position in the school *diaphōnia* about agency:

One could learn from this Aristotle's view on agents and things affected. For neither does he regard bodies as acting and being acted upon, as is the opinion of the Stoics, nor yet the incorporeals, as was the view of the Platonists, but in accordance with the oppositions that are in them, which are incorporeal. (*In Sens.* 73. 18–21 Wendland)<sup>52</sup>

Immediately after presenting this 'division of opinions', Alexander raises the question 'Cannot water be said to be opposite to fire?' Water is cold and moist, fire hot and dry. Can't the two pairs of opposites like these be themselves considered opposite?<sup>53</sup>

This question is neither discussed in, nor prompted by, Aristotle's text. The Aristotelian source of Alexander's discussion is *GC* 2. 3, where Aristotle points out that the simple bodies constituted by opposite characteristics can be regarded as opposites.<sup>54</sup> The fact that Alexander takes up this point here probably indi-

<sup>52</sup> Alexander's statement of the Platonist position seems to differ from Alcinous' in that here both acting and affection are ascribed to the incorporeals, whereas Alcinous recognizes the passive nature of bodies. But the difference in this case is probably less than it might seem. The instability of bodily nature is due to its material origin, and matter verges on incorporeality in Alcinous and in other Platonic texts drawing directly or indirectly on *Tim.* 53 with the theory of the 'receptacle'. Cf. Alcinous, *Did.* 12, 167. 15–32 Whitaker; Calcid. *In Tim.* 345. 1–5 Wazsink. The statement that matter is actually incorporeal, and only potentially a body, is found in a later doxography of Hippolytus of Rome, *Ref.* 1. 19. 1–4 (= 567. 7–18 Diels = H. Dörrie, M. Baltas, and F. Mann (eds.), *Der Platonismus in der Antike: Grundlagen, System, Entwicklung* (6 vols. to date; Stuttgart and Bad Cannstatt, 1987– ), iv (1996), 122 (113, 6)). Alexander may be taking his cue, more specifically, from Aristotle's doxography in the account of causes in *Metaphysics A*, where matter is said to have been described by different thinkers as one or many, corporeal or incorporeal. Aristotle further cites Plato, the Pythagoreans, Empedocles and Anaxagoras, and anonymous cosmologists (Milesians, by scholarly consensus), drawing no specific distinctions as to which thinker illustrates which approach (*Metaph.* A 7, 988<sup>b</sup> 23–32). Alexander in his commentary, 60. 3–4 Hayduck, explains that Plato is mentioned as the first among those who called it incorporeal.

<sup>53</sup> πῶς οὖν, εἰ τῷ μὲν ὕδατι ἐν ἑνότητι καὶ ψυχρότητι, τῷ δὲ πῦρι ἐν θερμότητι καὶ ἐνότητι, οὐκ ἐναντίον τῷ ὕδατι τῷ πῦρι καὶ καθὸ ὕδατος καὶ πύρι. (*In Sens.* 73. 22–4 Wendland).

<sup>54</sup> οὐκ ὄντων δὲ τεττάρων τῶν ἀπλῶν σωμάτων, ἐκότερα τοῖν δυοῖν ἐκότερου τῶν τότεν ἐστίν (πῦρ μὲν γὰρ καὶ ἀπὸ τοῦ πύριος τὸν ὄρον φερόμενον, γῆ δὲ καὶ ὕδατος τὸ πύριος τὸ μέσον), καὶ ἀκρα μὲν καὶ εὐκρινέστατα πῦρ καὶ γῆ, μέσα δὲ καὶ μεμυγμένα μάλλον ὕδατος καὶ ἀπὸ καὶ ἐκότερα δὲ ἐκότερος ἐναντία: πῦρ μὲν γὰρ ἐναντίον ὕδατος, ἀερά δὲ γῆ, ταῦτα γὰρ ἐκ τῶν ἐναντίων παθημάτων συνέστηκεν (*GC* 2. 3, 330<sup>b</sup> 30–331<sup>b</sup> 3). According to the report of Simplicius (*In Cael.* 168. 18–169. 2 Heiberg), Alexander discusses this passage also in his commentary on the *Categorías*, presumably commenting

icates that he realizes its significance in the context of anti-Stoic polemic. If it were possible to speak about fire and water as opposites, it would have been possible to draw an equation between a thing (fire) and its qualitative structure (hot and dry). Thus the Stoic reduction of qualities to bodies would have been justified at the elemental level.<sup>55</sup>

Alexander's answer to the question is 'no'. His argument is quite elaborate, involving all the resources of his innovative hylomorphic theory of elements:

[i] Perhaps, however much it may be true that each of the two has been fashioned into a form in accordance with these [i.e. elemental qualities], yet fire and water are not these [the elemental qualities]. For they are not just forms, but there is also something underlying them, which has these qualities; it is with this [underlying subject] that one of them is water, another fire. [ii] At any rate, the kinetic momentum that they have is not opposite in the primary sense. For it is not the case that as fire is the lightest, so water is the heaviest. [iii] But their being is also with matter, which is the same in all of them. (*In Sens.* 73. 24–30 Wendland)

(i) Alexander emphasizes that the elements are not the bundles of elemental qualities, but substances. If they were bundles of qualities, this might open a way for the Stoic theory of *pneuma*, which he treats elsewhere as a pair of elemental qualities.<sup>56</sup> His hylomorphic analysis of the elements is thus instrumental in his debate with the Stoics.<sup>57</sup> (ii) The third, dynamic component of the elemental hylom-

on 3<sup>b</sup>24–33: substance *qua* substance does not have contraries. His solution to the difficulty in that commentary, as reported, is that the differentia of a substance, but not the substance itself, is capable of being contrary to something. Our text provides evidence of Alexander's elaboration of his interpretation.

<sup>55</sup> Moraux in his valuable discussion (*Aristotelismus*, iii, *Alexander von Aphrodisias* (Berlin and New York, 2001), 10–11) does not take into account the 'Stoicizing' connotations of Aristotle's passage, which Alexander tries to eliminate in his interpretation.

<sup>56</sup> *De mixt.* 10, 224. 14–22 Bruns. This certainly need not be taken as an adequate presentation of the Stoic concept. On Alexander's expository method in the *De mixtionibus*, see R. B. Todd, *Alexander of Aphrodisias on Stoic Physics* [*Alexander of Aphrodisias*] (Leiden, 1976), 34–78.

<sup>57</sup> Alexander makes a point of explaining that when Aristotle says that earth contains as many flavours as are found in plants, he does not mean that earth as a simple body is flavoured, but that it becomes flavoured as soon as it is mixed with the moist under the action of heat (*In Sens.* 72. 7–11 Wendland). This is to preclude the 'vitalist' reading of the Aristotelian theory of the elements (which might otherwise suggest itself), and to emphasize, again, that the production of qualities involves more than just a material transmission (cf. sect. 2.4 below).

morphic structure plays the role of a part-proof in the argument for substantiality. Alexander here seems to be drawing on Aristotle's description of natural movements in *GC* 2. 3. 330<sup>b</sup> 30–331<sup>a</sup> 1 (cf. also *De caelo* 3. 4. 311<sup>a</sup> 15–<sup>b</sup> 13), swaying the argument against the Stoicizing interpretation. (iii) In addition, the being of the elements includes matter; so they cannot be considered mere forms.

By this argument, Alexander rejects the Stoic theoretical model according to which an agent can be construed as *both* a thing and a power. Alexander's theory of elements draws an ontological distinction between complete substance as a seat of agency and its formal and dynamic constituents which operate as vehicles of agency.<sup>58</sup> It is of note that Alexander applies rigorous systematic criteria in establishing the theoretical value of a particular doctrinal claim made by Aristotle. Rather than being a slavish epigone, as he was sometimes described, he here engages in a prescriptive style of exegesis, defending Aristotle's system against Aristotle, as it were, by taking Aristotle's text, which might lend itself to a Stoicizing reading, and showing that such a reading is in fact not available within the Aristotelian theoretical system.

It may be instructive to compare the force of Alexander's argument with Aristotle's theory of agency. In Aristotle, *ποιεῖν καὶ πάσχειν* involves contact, but a serious amendment is made in the definition of contact, which does not have to be symmetrical, but includes the non-reciprocal case where the agent is not acted upon by the patient.<sup>59</sup> Furthermore, Aristotle's *ποιεῖν καὶ πάσχειν* does not exhaust the full range of causes. Taken in this more general sense, 'agency' will include final causation as a separate kind, where there is no bodily contact between the cause and effects.<sup>60</sup>

Alexander's argument in the *De sensu* commentary has to do with

<sup>58</sup> This point is corroborated in the analysis of the opposites at *Quaest.* 1. 16, sect. 2.3, below.

<sup>59</sup> *GC* 1. 6. 323<sup>a</sup> 15–34. The importance of this discussion has been recently pointed out by M. F. Burnyeat, 'De anima II 5', *Phronesis*, 47/1 (2002), 28–90 at 38. Menn, 'Stoic Theory', 219 and n. 6 ad fin. ('[Aristotle] insists that incorporeals (e.g. God) can act on bodies, because they can touch bodies without being touched by them (*GC* 323<sup>a</sup> 25–34). It is not surprising that no one followed him on this', emphasis original), seems to discount the school tradition as developed by Alexander.

<sup>60</sup> *GC* 1. 7. 324<sup>a</sup> 24–<sup>b</sup> 2. Some discussions in Alexander's school corpus suggest that he considers this type of agency natural, not merely supernatural (cf. e.g. the discussion of the magnet at *Quaest.* 2. 23. 74. 4–30 Bruns, where the attraction is explained as involving no bodily contact, although grounded in the elemental composition of the magnet and the iron).

agency, taken, in a narrow sense, to include only physical action by direct contact. He argues that, even in this case, the distinction should be drawn between the corporeal and the incorporeal components of agency. In drawing this distinction, Alexander follows Aristotle's line in resisting a corporeal interpretation of contact and agency. Methodologically, he goes further than Aristotle. Where Aristotle's formulation in *GC* 1. 6 may suggest that at the level of the basic kind of contact there may be some room for agreement between Aristotle and the Stoic theory, Alexander precludes any possibility of agreement, insisting that corporealism interpretation does not hold even at the lowest level of reciprocal contact.

Now, this argument may be enough to score a general point against the corporealism interpretation of physical agency. But it is not clear that soul *qua* agency is so easily aligned with physical properties. We have seen that the Stoic corporealism thesis is based on quite specific ontological assumptions. So are the Stoic arguments for soul's corporeality. To see how these specific assumptions are addressed by Alexander, we shall now look at the arguments against corporealism in his treatise *De anima*.

## 2. Alexander, *De anima*: arguments for the incorporeality of the soul

Alexander's treatise *De anima* is most likely based on his (now lost) commentary on Aristotle's *De anima*.<sup>61</sup> This makes the departures from Aristotle's exposition and argument even more conspicuous and interesting for the historians of philosophy. The arguments against corporealism make up a part of one such 'digression'. Having stated Aristotle's definition of soul as the entelechy of the organic body, Alexander goes on to argue for the attributes of the soul so understood. These include incorporeality, inseparability from body, and immobility *per se*:

But if soul is form, as has been shown, it is necessary that it be inseparable from the body of which it is [form], and incorporeal and unmovable by itself. For every form is such. For the body is a compound of both

<sup>61</sup> P. L. Donini, 'Testi e commenti, manuali e insegnamento: la forma sistematica e i metodi della filosofia in età postellenistica', in *ANRW* II. 36. 7 (1994), 5027–100 at 5045–56; P. Accattino and P. L. Donini (eds.), *Alessandro di Afrodisia: L'anima* [AD] (Rome and Bari, 1996), vii–xvi; Moraux, *Aristotelismus*, iii. 317–85.

[συναμφοτέρον] and subsistent by itself [ὑφ'αυτῶς καθ' αἰῶν], but the form, being 'of' another thing (for such is the entelechy and the perfection), is incapable of being without that of which it is, as the limit [πέρας] is not separate from that of which it is a limit.<sup>62</sup>

So neither is the soul capable of separation and subsistence on its own. Hence it is not body. (17. 9–15 Bruns)

Each of the attributes is supported by a distinct set of arguments, and all of them together form a generic anti-corporealism framework. We shall now look at the first subset of this framework, the one that includes arguments for incorporeality. Although the arguments are supposed to be generic, and so directed against the Epicurean theory of soul as well, it is clear from the presentation that Alexander's target is the Stoic version of corporealism.<sup>63</sup>

### 2.1. 'From distinction between thing and quality (form)' (De anima 17. 15–18. 10 Bruns)

The first series of arguments attacks the reasoning which derives the corporeality of qualities from the fact of their inherence in bodies:

But not even according to those who say that every body is either matter or form matter<sup>64</sup> (as the Stoics believe) would the form be body. [a] For form is not matter (for this latter is without qualities [ἄποιος], while the former is some kind of a quality). [b] nor is it from matter. For if form were to be from matter and form, [b'] first, one of the two components would be identical with the compound of the two; [b''] further, there would be a progression to infinity, since that form would be from matter and form, and this latter form again would need matter and form.

[c] For if they were to say that form is from matter and form in such a sense that it is not from some different form, but from itself having

<sup>62</sup> Note again the conceptual link with Plutarch's argument in *Comm. not.* 40, discussed above.

<sup>63</sup> For the Stoic idea of soul's separability, see *SVF* ii. 790, 809; cf. Themist. *In De an.* 16. 37–17. 8 Heinze; for soul's motion, Hierocles, *Elem. eth.* 3. 55–4. 3 Bastianini-Long [BL]; Calcid. *In Tim.* 232. 12–234. 4 Wąsziak (= *SVF* ii. 879); Stob. ii. 86. 17–87. 6 WH (= *SVF* iii. 169; LS 530).

<sup>64</sup> Bruns's text at 17. 16 reads: πᾶν σῶμα, ἢ ἄλην ἢ ἐξ ἄλης, εἶναι. In adopting the punctuation suggested by von Arnim, i.e. deleting the comma after σῶμα, I follow AD. This is suggested by 19. 4–5, 123. 36; cf. 113. 31–4. Plotinus' argument in *Enn.* 6. 1. 26. 18–20 (καὶ πᾶν σῶμα ἐξ ἄλης καὶ ποιότητος. εἰ δὲ ἄλλως τοῦτο σῶμα, ἀμονήτως λέγεται σῶμα τὴν ἄλην) probably reflects this dichotomy, εἰ δὲ ἄλλως τοῦτο σῶμα corresponding to the first disjunct (ἢ ἄλη) of Alexander's text (to complement Mansfeld's analysis, 'Zeno', 170, cf. Graeser, *Zenon*, 103).

its being with matter, in that case according to them matter would not be without qualities as it should be by its formula; for it too needs for its being some form and quality. [d] But if, even though it cannot subsist without a quality, they still call it 'without qualities' [ἄποιος], because it does not have quality in its proper nature [ἐν τῇ οὐκ ἐν ἑαυτῷ φύσει αὐτῆς], then, according to the same reasoning, also form and quality would be without matter, even if their subsistence [ὑπόστασις] is with matter, because they do not contain matter in their proper nature.<sup>65</sup> [e] Again, how is it not absurd to say that matter, in taking on form and quality, also takes on some other matter? But this claim should follow for those who say that the form and quality are material body.<sup>66</sup> (17. 15–18. 10 Bruns)

The main point of the argument is that the distinction between thing and quality is a logical requirement which applies even to the completely corporeal ontologies that grant no status to incorporate real entities. Alexander here makes use of a common objection to the Stoics, exploiting their description of matter as qualityless (a).<sup>67</sup> The objection is supposed to be *ad hominem*, but Alexander in fact shares the premiss that there is qualityless prime matter; so he will improve on it rather than discard it altogether.

The argument of (b) is an aporetic reduction to absurdity: either (b') to a claim that a part is equal to a whole; or (b'') to an infinite regress.<sup>68</sup> (c) points out the problem for the Stoic notion of prime matter: if quality always exists with matter, then matter, too, always exists with some quality, and the concept of prime matter without qualities cannot be obtained by analysis.<sup>69</sup> This objection is really a preparatory step for the next one (d), in which Alexander formulates his disagreement with the Stoics, drawing a distinction between matter and form, where the Stoic argument establishes the unity of body and quality. Alexander distinguishes having qualities

<sup>65</sup> AD cite in parallel: Plut. *Comm. not.* 1085 f–1086 A (= *SVF* ii. 380) and Alcinous, *Did.* 11. 166. 21–2 Whittaker.

<sup>66</sup> 18. 10: σῶμα ἐνυλον. AD 135 note that the term ἐνυλον here means the same as ἐξ ἄλης at 17. 16 and 18, and is different from Alexander's own technical term for unqualified form. They compare this use with *De mixt.* 11. 225. 14 Bruns.

<sup>67</sup> Cf. Plut. *Comm. not.* 50. 1085 F; Alcinous, *Did.* 11. 166. 23 Whittaker; *QI* 161–84, 234–59 Giusta; Alex. *Mant.* 3. 115. 12–14 Bruns.

<sup>68</sup> This latter is in effect 'mirrored' in the end of this set of arguments, at (e). For a general scheme of reduction, cf. *QI* 55–60 Giusta; *Mant.* 6. 123. 4–7 Bruns; Sen. *Ep.* 113. 1–5.

<sup>69</sup> Cf. Mansfeld, 'Zeno', 169–73. Graeser's analysis (*Zenon*, 103–4) seems to me to accept this kind of reduction, used by Plotinus at 6. 1 [42]. 26. 18–19, as a report, underestimating more direct reports where the extension of 'body' is described as 'either matter or from matter'.

in subsistence' (*ὑποστάσει*) from having them in the proper nature (*ἐν τῇ οὐκείᾳ φύσει*).<sup>70</sup> He suggests that the Stoics might have held that qualities are corporeal in the sense that they do not exist separately from bodies. This would explain how they could simultaneously have the concept of prime matter which is *by its proper nature* without qualities. But then the account of the 'proper nature' of the qualities must be symmetrical: just as matter is said to be without qualities in its proper nature, so the qualities must be said to be without matter in their proper nature. The requirement of a symmetrical match with 'matter without qualities' on the side of the qualities is one of the standard criticisms, probably quite early in date.<sup>71</sup> But the distinction between essence and existence proposed here by Alexander anticipates the kind of ontology not usually found in the Academic arguments.<sup>72</sup>

Compare the following argument from the *QI*, where the author attempts to draw a distinction between the 'acceptable' and 'unacceptable' versions of the Stoic corporeality thesis:

But since no affection [*πάθος*] comes to be without a body which acts and one that is affected, this deceived them into also naming the affections bodies. But if they so named them by the method of naming in accordance with reference-back, not even I would have reproached them in any way. For I know that in this way the grapevine is also spoken of as 'white' by reference-back to the white clusters that come to be from it; and that a time-period is [spoken of as] 'evil' on account of the misfortunes that come about during it, and that a night in which someone gets no support [is spoken of as] 'helpless'.<sup>73</sup> But if [these are spoken of] in a primary, i.e. principal, sense, then [our opponents] err. For we speak of a body as 'endowed-with-shape', and as 'affected', and as 'being moved', not of the shape and the affection and the movement as a 'body', nor of the fist as

<sup>70</sup> This distinction occurs in a number of Alexander's works and in the school corpus. See *Quaest.* I. 8, 17, 12-19, 15; I. 17, 29, 30-30, 22 *Bruns*. Note the use of the term *ὑπαρξίς* in the meaning of 'existence' at *Aspas.* In *Eth. Nic.* 173, 21 *Heylbut*.

<sup>71</sup> Cf. *Plut. Comm. not.* 1086 A: *ὁ γὰρ συμπληκτικὸν σώμα πάσι ποιότητι λόγος οὐδενὸς ἐᾷ μὴ σὺν τῇ ποιότητι σώματος ἀφασθαι τὴν διάνοιαν κτλ.*; *QI* 103-81, 234-59 *Giusta*; *Alecinous, Did.* 11, 166, 21-3 *Whittaker*.

<sup>72</sup> Cf. *Plut. Comm. not.* 1085 B-F: *εἰ μὲν γὰρ ἴδιαν οὐσίαν αἱ ποιότητες ἔχουσι καθ' ἣν σώματα λέγονται καὶ εἶναι, οὐκ ἕτερας οὐσίας δεύονται τὴν γὰρ αὐτῶν ἔχουσαν.* In *Plutarch*, this is merely a polemical move; but Alexander is prepared to give it a meaningful interpretation within the Aristotelian system.

<sup>73</sup> *καὶ νόκτα ἀβρόθητρον ἐν ἧ τῆς ἐπικοπίας οὐκ ἔτυχεν.* The example of vine and grapes occurs in *Iamblichus ap. Simplic. In Cat.* 53, 9-18 *Kalbfleisch*.

a 'body', but as 'a hand endowed-with-shape in a given way'.<sup>74</sup> (306-17 *Giusta*)

The *QI* author here allows speaking about 'corporeal qualities' in a weak sense, which he understands as derivative and non-technical as far as ontology is concerned. In Alexander, the 'weak' sense of corporeality does have a technical meaning of its own, referring to the inseparability of quality from thing. But Alexander points out that this meaning has to do with the mode of existence rather than with the proper nature of a quality. Alexander's argument blocks the final step of the Stoic nominalist reduction, at which inseparable quality is claimed to be corporeal because it is 'nothing but' a qualified body. This claim, Alexander suggests, is true only with regard to existence.

Alexander does not explain the exact meaning of 'proper nature' of qualities. It has to do with a certain analytical assumption whose full scope will reveal itself only in a richer ontological framework of the positive theory of substance. Only two points of relevance can be briefly mentioned here. (1) In the *Topics* commentary, Alexander refutes the definition of quality as '*pneuma* disposed in a certain way', showing that it commits the fallacy of non-synonymous predication of genus over species. This formula, Alexander explains, is not a definition, but should be taken as an instance of 'in a subject' predication: *pneuma* is the subject, and a certain disposition is its property. The case is the same with the definition of fist as 'hand disposed in a particular way'.<sup>75</sup> The Aristotelian position on which Alexander insists is that there is no single genus of things that have being.<sup>76</sup> The implication is that quality and substance are not predicated synonymously. (2) This approach can be problematic as a defence of Aristotelian soul, which risks being reduced to a mere property and thus losing its substantiality. Alexander seems to have been aware of this problem. In several school treatises he

<sup>74</sup> I am grateful to Prof. Robert Todd for suggestions on the translation of this passage.

<sup>75</sup> *ἄλλος γὰρ λόγος τοῦ ἐν ὑποκειμένῳ καὶ ἄλλος τοῦ συνωνύμου. κατὰ μὲν οὖν τὸν ἐν ὑποκειμένῳ ἀναφορῆν ἀν τὸ τὴν ποιότητα εἶναι πεισμά πως ἔχον ἢ ἄλλῃ πως ἔχουσαν· οὗ γὰρ δύναται τὸ πνεῦμα ἢ ἡ ἄλλῃ γένος εἶναι τῆς ποιότητος· ἐν ὑποκειμένῳ γὰρ αὐτοῖς ἡ ποιότης. ἀλλὰ καὶ ὁ τὴν ποιότητα λέγων εἶναι χεῖρά πως ἔχουσαν ἀμαρτάνει· οὐ γὰρ ἡ ποιότητα χεῖρα, ἀλλ' ἐν ὑποκειμένῳ τῇ χεῖρ ἢ ποιότητα (360, 8-13 *Wallies* = *SVF* II, 379, part).*

<sup>76</sup> *κατὰ δὲ τὸ μὴ συνωνύμως δεικνύοντ' ἀν τὸ ἐν μὴ ὄν γένος τῶν ὄντων· ὁμωνύμως γὰρ τὸ ἐν καὶ τὸ ὄν κατηγορεῖται· οὐ γὰρ, εἰ ὁμοίως ἐν καὶ ὄν οὐσία καὶ τὸ πρὸς τὴν τὴ τὴ τῶν ἄλλων γενῶν, ἦδη καὶ ἐν ὑποκειμένῳ αὐτοῖς ἔστιν. ὁμοίως οὐδὲ ἄλλο τι τῶν ὁμωνύμως λεγομένων κατηγορεῖται τιος συνωνύμως τῶν ὄντ' αὐτό (360, 15-19 *Wallies*).*

develops a theory of form-substance which has a special ontological status based on its special role in the ontological constitution of a hylomorphic compound.<sup>77</sup> Thus Alexander's position appears to be not that only body can be substance, but that only substance can be a body. The overall coherence of his position is a subject of separate study. He himself certainly believed it to be coherent.<sup>78</sup>

## 2.2. 'Parts' (De anima 18. 10-19. 3 Bruns)

Alexander reports the following argument:

[a] But to say that it is necessary that of the parts of bodies the parts should also be bodies, as of the surface and of the line and of time the parts are, respectively, surfaces, lines, times, and since parts of the animal, which is a body, are form and matter, each of these, consequently, is body, is erroneous.<sup>79</sup> [b] For these are not parts in such a way that the body would be dissected into them [ὡς εἰς ἀντὶ τὴν τελευθεῖν τὸ σῶμα]. For the parts of the body into which it is dissected contribute to its quantity [εἰς τὸ ποσὸν οὐρατέει], and subsist and remain even when they are cut off. But form and matter are parts of body not in this way, but as the bronze and the shape of a statue: there is no division by which the statue could be 'divided' into them in the same manner as it can be divided into head, and chest and limbs, even though a compound of the two [συνεμφόττερον] is composed of them [viz. form and matter], too, as parts, albeit in a different way.<sup>80</sup> For the shape of a statue is its part not in the sense that it contributes [συυρατέει] to its quantity, but to its quality, and not in a sense that it can persist separately from matter. But the above-mentioned division of body and other continua is into parts in a quantitative sense [εἰς τὰ ὥς ποσὸν μέει] and into what is preserved after the division. For that reason they are not parts of a body in the unqualified sense, but of a certain kind of body, of which that due to which it is this kind of body is also a part, without

<sup>77</sup> *Mant.* 5; *Quaest.* 1. 8, 1. 17 Bruns. For the analysis in terms of ontological constitution, see J. Ellis, 'Alexander's Defence of Aristotle's *Categories*' [*Alexander's Defence*], *Phronesis*, 39/1 (1994), 69-89.

<sup>78</sup> This kind of attitude might have given additional ground for Platonic queries as to whether 'substance' refers to intelligible as well as sensible objects (cf. Gottschalk, 'Aristotelian Philosophy', 1109). According to Simplicius, Alexander does discuss this question in his commentary on the *Categories*, and acknowledges the substantiality of the first unmoved mover as intelligible substance (*Simpl. In Cat.* 82. 6-10, 90. 31-91. 13 Kalbfleisch; Moraux, *Aristotelesismus*, iii. 6-7).

<sup>79</sup> AD emend lines 10-11 to τὸ δὲ λέγειν (τρεῖς) τὸν τὸ σῶμα κτλ. The Hebrew version omits τὸν μέει, which, AD say, is evidently the translator's conjecture. The Aldine text (10. τὰ τὸ σῶμα τὸς μέει) must be the editor's conjecture.

<sup>80</sup> AD cite here as a parallel Arist. *Metaph.* Δ 25. 19-22; but it is not exact. Aristotle at this point does not talk about the shape of a cube as its part, along with its material (bronze), but only of an angle, i.e. a part of a shape.

being a body. [c] Nor does the argument that says, 'That whose part is body is itself a body; but sensation, which is a part of the soul, is body, hence this latter is also body', prove anything. [d] For if it is referring to the sensation in the meaning of the sense organ, the thing referred to is body, but not part of the soul. If, on the other hand, it is referring to the faculty of sensation, then it will be referring to part of the soul, but not to body. (*De anima* 18. 10-19. 3 Bruns)

In (a) and (c) we find two arguments, deriving some properties of parts from properties of wholes and vice versa, on the basis of the assumption of homogeneity of bodily structure. The reasoning in (a) is as follows:

- (i) Parts of parts of bodies are bodies (ditto for surfaces and lines).
- (ii) Form and matter are parts of bodies.
- (iii) Hence, form and matter are bodies. So form (quality) is body.

The corporeality of qualities is thus derived from the homogeneity of division of continua into parts. We do not know how fair Alexander's presentation of the Stoic argument is. It is likely that he did some restructuring and omitted a number of important details (particularly the arguments the Stoics gave for treating substance and quality as real parts in a homogeneous partition, viz. such that parts, as well as parts of parts, preserve the main ontological character of the whole). But there is no reason to think that he completely made it up.

The parallel to premiss (i) which we find in the Stoic sources seems to have to do with the properties of different types of continua, whether corporeal or incorporeal.<sup>81</sup> It is possible that the same principle was applied by the Stoics to a qualified physical continuum as well. The Stoics do hold that in some sense substance and quality are completely inseparable on any level of a physical partition. But it is not clear that the division into form and matter (substance and quality) should be parallel to the homogeneous division in Apollodorus' passage. Probably what is at issue is the mode of being of qualities in a physical continuum, where each quality is preserved intact in the whole volume of the contin-

<sup>81</sup> Apollodorus' *Φουασει* τὴν ἐξείη, quoted by Stob. i. 19. 7 WH (= Ar. *Did.* fr. phys. 24. 460. 6 Diels, *DC=SVF* Ap. 7 iii. 260. 12).

um. The theory of 'total blending' forms the background of this view.<sup>82</sup>

Premiss (ii) is most likely an abridged version of the Stoic theory of four subjects.<sup>83</sup> In Alexander's presentation, premiss (ii) should be independent of (i), lest the argument become circular. This means that we must look for some ground of distinction between parts independent of the assumption of their corporeal nature. A number of sources tell us that the reason the Stoics gave for their distinction between the first two subjects in the structure of a thing was their different behaviour in the process of change. Plutarch says that the material substrate of a particular substance is in constant change (a challenging postulate of the Academic puzzle which the

<sup>82</sup> In *QI* we find, among others, one criticism of the Stoic theory which can give us an idea of the reasoning behind the thesis of total pervasion: 'And if accidents are also bodies, and every body is divided ad infinitum, and if each of those infinitely numerous bodies is accidental to all the other accidents which themselves, too, are corporeal, behold the plenitude of absurdities: that a body is accidental to body; and that what is considered a unity [is accidental] to infinitely many things; and that [something is] simultaneously the whole and not the whole: the whole because all of, say, the shape and quantity of the apple's roundness are accidental to all the other accidents of the apple; not the whole, because each of the infinite segments is not identical with that from which it is divided' (9, 109-18 Giusta). The concepts which illustrate the 'accidents', i.e. qualities, here are 'shape' and 'quantity'. They do create the problem for the theory of continuum; although it must be noted that the view of shape and abstract 'quantity' as corporeals is not in the mainstream of the Stoic school doctrine (cf. p. 309 and n. 40 above). But this choice of non-paradigmatic 'qualities' for the purpose of refutation of the theory can show us the way the theory was designed to work. The thesis of total pervasion is dependent on the infinite divisibility of a continuum. Interpreted for a physical continuum, this principle apparently entails the mutual implication of qualities on all levels of division. Every part of a body which possesses one quality must also possess all the other qualities. The *QI* author can only upset this principle when he assumes, controversially, that geometrical properties as such are qualities.

<sup>83</sup> AD think that this argument must be *ad hominem*, designed by some Stoic against the Peripatetics in order to confirm the corporeality of form. If, as the Peripatetics claim, form and matter are 'parts' of a living being, then form must be corporeal (AD 135). But we do not seem to know of any Stoic attempts to refute the Peripatetic theory of form. In fact, it seems that this theory became stable and distinct as a school teaching after Alexander, and due to him. On the other hand, we know that Alexander does regularly render Stoic concepts in Peripatetic terms (Todd, *Alexander of Aphrodisias*, 73-88; R. W. Sharples, 'Alexander of Aphrodisias: Scholasticism and Innovation [Alexander]', in *ANRW* ii. 36. 2 (1987), 1176-1243 at 1180). We have seen in the preceding argument how he imported the term and concept of *εἶδος* into his version of the Stoic theory of *σώμα παρασύνθετον*, using it interchangeably with *πρωτότης*. So I chose to reconstruct the thought that Alexander exploits, on the basis of what we know about his expository methods. An abridgement of the Stoic theory of four subjects is not unusual (cf. Plutarch in *Comm. not.* 1083 E, acknowledging it).

Stoics accept), while the quality remains the same over the lifespan of a thing.<sup>84</sup> Both the 'flowing' part and the stable part contribute to the dynamic and volume of a whole thing, although they do not behave as ordinary mereological parts, as Plutarch makes vividly clear in his report.<sup>85</sup> We do not seem to have evidence that this principle of division into functional parts was ever detached from the assumption of their corporeality in Stoic reasoning. Alexander in his reconstruction makes an analytic step of separating them.

In his criticism, he points out that homogeneous partition as suggested by the Stoics cannot apply to form and matter, because form is not separable from matter. According to Alexander, this proves that form is incorporeal. The point deserves a little more discussion. Head, chest, and limbs, the organic parts cited by Alexander, can exist after partition, each of them on its own. But as we, and Alexander, know all too well from Aristotle, after partition they are head, chest, and limbs only 'homonymously'. So in fact there is a sense in which they are not separable from each other, while being corporeal. The Stoic construal of corporeal subjects in a living being could arguably make the same stipulation as Aristotle makes for the organs of a living being. In that case, body and soul could be corporeal parts persisting 'homonymously' upon separation, inseparable 'in existence': body as flesh and bones, soul as a physical state of *pneuma*. On this view, after death, there are certain physical residues corresponding to body and soul, respectively. 'Body' becomes inert matter, and 'soul' goes back to the pool of cosmic energy.<sup>86</sup> We could call this a 'weak' sense of inseparability. Alexander's claim is different. According to him, form does not exist without matter (or soul without body) not in a weak 'homonymous' sense, but in a strong sense of denying any physical 'residue' which would correspond to form upon a dissolution of the substance. There is no analogue to the Stoic corporeal active

<sup>84</sup> The same in Anon., P. Oxy. 3008 (LS 28c). Cf. Stob. i. 17, 177, 20-179, 17 WH (= LS 28d = Posid. fr. 96 EK (part)), where Posidonius and Mnesarchus take different functions in the process of change to be a ground for distinction between the first matter and individual qualified beings within the cosmos. Although the nature of the distinction drawn in the two cases is different, the principle of analysis seems to be the same.

<sup>85</sup> *Comm. not.* 1083 C; cf. LS ii, 28A, 23, discussion in LS i. 173-4.

<sup>86</sup> The notion of physical separation of soul from body plays an important part in the arguments for corporeality. Alex. *Mant.* 3, 117, 21-8 Bruns. Cf. Nemes. *Nat. hom.* 22, 3-6 Morani (= *SVF* ii. 790); Tert. *De anima* 5 (= *SVF* ii. 791). On soul's physical persistence after death, see *SVF* ii. 809-22; i. 145.

principle in the Aristotelian system. This means that Aristotelian soul, differently from the Stoic one, has no corporeal links with the cosmos other than the ones it has through the body of which it is the soul.<sup>87</sup>

While in (a) the conclusion about soul's corporeality was reached *diminuendo*, starting from a whole and going to parts, in (c) the reasoning goes *crecendo*: the wholes which have corporeal parts are also corporeal. This logic is similar to that used in the Stoic argument for the divine attributes.<sup>88</sup> In his critique of this argument in (d), Alexander draws the distinction between *αἰσθησις* as the organ of perception and *αἰσθησις* as the function of perception. The use of *αἰσθησις* in the meaning of *αἰσθητήριον* is more characteristic of the Stoic system than Peripatetic, and in the Stoic system it is in fact based precisely on the *lack* of the distinction which Alexander wants to draw here.<sup>89</sup> The distinction intended by Alexander, put more precisely in Peripatetic terms, is between the two types of operation involved in the process of sense perception: the one which involves a real change and a bodily affection of the organ, and the one which does not involve a bodily affection and corresponds properly to the cognitive function of perception. The Aristotelian claim that the function of vision remains unchanged throughout life, but that the organ is affected by change, because it is material,<sup>90</sup> would probably make no sense in the Stoic system, except as a modal

<sup>87</sup> This is not to say that Alexander is not interested in the problem of relation between the first principle and natural substances: in fact he deals with it in many works (e.g. *Quaest.* 2. 3. *De providentia*, *De principis omnium*). The solution he gives to it cannot be discussed here, but the drift of the present argument clearly indicates the grounds on which Alexander rejects the Stoic materialistic model of 'conjunction' with the first principle. (For surveys with bibliography, see Sharples, 'Alexander', 1204–20; C. Genequand, *Alexander of Aphrodisias on the Cosmos* (Leiden, 2001); R. W. Sharples, 'Aristotelian Theology after Aristotle', in Frede and Laks (eds.), *Traditions*, 1–40; S. Fazzo, *Aporia e sistema: La materia, la forma, il divino nelle Quaestiones di Alessandro di Afrodisia* (Pisa, 2002).)

<sup>88</sup> Cf. Cic. *ND* 2. 22–8, discussion in Hahn, *Origins*, 141–2.

<sup>89</sup> For Aristotle, Bonitz records three occurrences of *αἰσθησις* in the meaning of *αἰσθητήριον* (pointing out that the explicit distinction between the two terms is quite frequent): *De sensu* 3. 440<sup>b</sup>19; *PA* 2. 10. 657<sup>b</sup>3; 4. 10. 686<sup>b</sup>8. In the Stoic system, *αἰσθησις* as a cognitive state of the *pneuma* is not really distinct from the corporeal structure of the latter. Cf. S. M. Rubarth, 'The Stoic Theory of *Αἰσθησις*' (diss. Toronto, 1996).

<sup>90</sup> *De anima* 1. 4. 408<sup>b</sup>20–4: *μάχιστα γὰρ ἐπέθετο* ἂν ὑπὸ τῆς ἐν τῇ γῆτι ἀμαυρώσεως, *νῦν δ' ἵσως ὅτι ἐπὶ τῶν αἰσθητήριων ἀμφιβαίνει· εἰ γὰρ λάβοι ὁ πεπεωρημένος ὄμμα τοιοῦτο, βλάπται ἂν ὡςπερ καὶ ὁ νέος. ὡστε τὸ γῆρας οὐ τῶν ψυχῶν τι πεπονθήσεται, ἀλλ' ἐν ᾧ, κατὰ τὴν ἐν μέτρῳ καὶ νόσῳ. In the Stoic theory this kind of inviolability is available only to the cultivated rational part of the soul.*

statement. It is for this type of function that Alexander reserves the role of an incorporeal part of a hylomorphic compound.

Alexander's disagreements with the Stoics on the two points (soul being a corporeal part and soul itself having corporeal parts) are important. First, the notion that soul is a corporeal part of a living body is linked in the Stoic theory with the idea that soul is a state of the *pneuma*. This *pneuma*, the cosmic active principle, is the proper ontological resource of soul, and of any quality in general. Persistence of soul is in a very specific (corporeal) way anchored in the persistence of *pneuma*. Denying the corporeality of soul, Alexander denies the soul any access to this kind of ontological resource. That such is his intention is clear from his next criticism, which has as its target the theory of change. Second, by denying that soul has corporeal parts, he blocks one of the traditional inductive proofs for the corporeality of soul. This move has perhaps even more interesting doctrinal consequences for Alexander's own theory of soul's functions in general, and sense perception in particular.<sup>91</sup>

### 2.3. 'From theory of change' (*De anima* 19. 3–20 *Brunns*)

The target of the next argument is the Stoic concept of *pneuma* and the doctrine of the states of *pneuma*, which Alexander shows to be incompatible with the Aristotelian theory of change.

[a] For,<sup>92</sup> if soul is body, and body not in the sense of matter, then it will be from matter and form, given that every body, according to them, apart from matter,<sup>93</sup> is such. But if so, then in that body also the soul will be from. [b] For if the body that underlies it is a particular thing [*τὸδε τι ὄν*] and capable of subsistence by itself, either a *pneuma* or something else, not ensouled, then the thing that, being added to that body, which is preserved [*σῶζομένῳ*] [in the process of addition], makes it into ensouled from soulless

<sup>91</sup> The notion of soul as incorporeal constituent of a body is found in several school treatises of Alexander's circle in the argument for distinction between form-substance and accidental qualities. Cf. esp. *Mant.* 5. 122. 4–15 *Brunns*; *Quaest.* 1. 8. 19. 11–15 *Brunns*; discussion in Ellis, 'Alexander's Defence'.

<sup>92</sup> καὶ γὰρ, instead of a more natural ἐντι δέ, as AD 136 rightly point out. The link between (a) and (b) and the following seems to be securely set by γὰρ in line 7, and (b) clearly belongs to a new line of the argument, from the theory of change. Given the string-like structure of the series of arguments, we can perhaps take καὶ as a connective between the two different arguments and γὰρ as referring to the final clause of the previous argument (μείσος μὲν ψυχῆς, ἀλλ' οὐ σώματα λήθηται); the new set of arguments will then be explaining further difficulties of construing the function of a living body as a body on its own.

<sup>93</sup> Retaining the MS reading τὸ at 19. 5.

would be soul, according to them. [c] For it is impossible to say that because of the addition of a quality to the *pneuma*, *pneuma* becomes soul. [d] For if the addition of the quality to the *pneuma* made for the substantial change of the *pneuma*, it would be possible to say that *pneuma* changes into the soul. [e] But if even after the addition of a quality it remains *pneuma*, and *pneuma* was not soul, then even the quality added to it would not make it into a soul, since it does not change its substance, but rather is present in the *pneuma* as some accidental property. For no natural body can, without a substantial change, pass [*μετασχηματίζεσθαι*] from one nature into a different one. But the nature of soul is different from that of *pneuma*. Certainly, at any rate, it is impossible to say that *pneuma* is the genus of the soul given that it has its subsistence by itself [*ἑξ ἑαυτοῦ ὑπόστασιν καθ' αἑαυτόν*]. For no genus is such as to subsist by itself. (*De anima* 19. 3–20 Bruns)

The argument here is that soul is form even on the Stoic analysis, according to which everything is body (a). Alexander's assumption in (b) is that since the Stoic soul is corporeal, it should be possible to distinguish in it the part which is not ensouled, which he identifies with the *pneuma*, from the part which makes it ensouled. This latter should be regarded as soul proper. This assumption will normally be regarded as a distortion of the Stoic concept of *pneuma* which possesses the highest degree of unity within any compound. But at this point we are interested not in the accuracy of Alexander's report, but in the nature of his query about *pneuma*'s transition from the 'soulless' to the 'ensouled' state. Alexander's question is whether this transition should be classed as 'substantial' or 'non-substantial'. Either option entails an implausibility (c). If the change is substantial, *pneuma* can be said to turn into soul, but in that case, as (d) implies, it would have ceased to be *pneuma*. And if (e) *pneuma* is taken to persist in this change *qua pneuma*, the change is accidental, and *pneuma* is not the soul; rather, the accidental quality which it has acquired in the process of change will be soul. In conclusion, Alexander explains that the Stoic concept of *pneuma* is impossible because it licenses a conflation of two types of change, substantial and non-substantial, in one and the same process. This undermines not only the distinction between substantial and non-substantial change, but also effectively the distinction between substance and a non-substantial compound.<sup>94</sup>

In the Stoic system, differently from the Aristotelian, the cosmic

<sup>94</sup> In so far as every particular has two descriptions: one in terms of its own particular constitution, *qua idios ποσόν*, another in terms of the universal principles, *qua* part of the whole and of the cosmic history.

active principle is corporeal, persists in all changes, and preserves itself continuously on all the levels of the *scala naturae*.<sup>95</sup> The coming to be of an animal, for instance, consists in the process of acquisition by the *pneuma* which is in the state of *φόσις* of new properties, perception and impulse,<sup>96</sup> whereby it becomes *ψυχή*. *Pneuma* is described as a goal-directed agent constantly in the process towards the end.<sup>97</sup> The process of change is gradual and quantitative: a series of minute rarefactions induced by *pneuma* within matter enhance a particular state up until a certain critical point, which serves as a point of departure for a new kind of formative material process. This happens, for instance, at the moment of birth, when the embryo becomes an animal with a soul. This 'leap' from one state to another is compared by the Stoic authors with certain processes in inorganic nature in which an instantaneous physical action is exercised upon matter previously prepared and made amenable, such as the process of 'cooling' which is used to harden the shaped metal in a smithy.<sup>98</sup> This is how Hierocles describes the process:

[a] Well, the seed fallen into the uterus at the proper moment, and at the same time collected by the strong vessel, does not rest any more as before, but, set in motion, initiates its own functions and drawing on the matter of the pregnant body, shapes [*διαπλάττει*] the embryo according to certain unchangeable sequences until it arrives at the end and makes its product ready for birth.

[b] But all this time, i.e. from conception until birth, it remains nature [*φόσις*], which is *pneuma* that has been changed from the seed and is mov-

<sup>95</sup> These are in fact just the states of the active principle. They include *ἔξις*, which characterizes inorganic nature (cohesion of parts being its main function), *φόσις*, which is the main description of the being of plants (the vegetative functions of nourishment, growth, and reproduction being characteristic of this type), *ψυχή*, possessed by the animals that have the powers of perception and voluntary motion as their distinct mark, and *λογικὴ ψυχή*, possessed by humans: Philo, *Leg. alleg.* 2. 22; *Quod deus sit immut.* 35 (= *SVF* II. 458).

<sup>96</sup> Philo, *Leg. alleg.* 2. 22: *ψυχὴ δὲ ἐστὶ φόσις προσεληφύτα φαντασά(σ)ν καὶ ὀρίστη*. Cf. Hierocles below.

<sup>97</sup> *ὄδοσ* is the expression that designates the directedness of the activity of a principle in various sources. Cf. the description of the active cosmic element in Stob. i. 129. 2–130. 13 WH (= *SVF* II. 413 (136. 33–6), LS 47A).

<sup>98</sup> Cf. Plut. *Stoic repugn.* 41, 1053 A; *De primo frigido* 2, 946 C; *Comm. not.* 46, 1084 C. On the character of the process of change, see Verbeke, *Evolution*, 79–81, D. E. Hahn, 'The Stoic Theory of Change', *Southern Journal of Philosophy*, suppl. 33 (1985), 39–56 at 42–46. For discussions of Stoic embryology, see Bastianini and Long ad loc.; Tieleman, 'Diogenes of Babylon and Stoic Embryology', *Mnemiosyne*, 44 (1991), 106–25; Mansfeld, 'Doxography and Dialectic', 3186–90; F. W. Kohnke, 'Γεωργία ἐργαστήριον φύσεως: Ein Chrysippizitat', *Hermes*, 93 (1965), 383–4.



ing, in some regular way [ὁδῶ κωμύμενον], from the beginning to the end [ἀπ' ἀρχῆς εἰς τέλος]. [c] At the first time the nature is still somehow denser *pneuma* and far removed from soul, but after that and when it has almost arrived at [the moment of] birth, it gets finer, being 'blown' by the continuous operations [σ(υ)έχασιν ἐφ' ὧν] and as regards quantity is equivalent to soul. For that reason, accordingly, when it goes out, it is made adequate to the milieum [τῶ περιέχοντι] so that it changes into soul as though being hardened by [the milieum] [ὁτον σπομωθεῖ] εἰς πρ(ό)σ αὐτοῦ μ(ετα)β(ά)λε[ι]ν εἰς ψυχῆν.

[d] For as *pneuma* in stones is quickly inflamed by striking because of its readiness [ἐρομότης] for such a change, in the same way also the nature [φύσις] of an embryo that has already become 'ripe'<sup>100</sup> changes into soul without a delay, as soon as it gets into the surrounding milieum. (*Elem. eth.* 1. 5–27 BL)

In (a) we find a standard description of the seed as a self-mover exercising its 'shaping' functions in accordance with design.<sup>100</sup> A characteristic emphasis is placed on the role of the physical conditions in 'triggering' the teleological mechanism. In (b), the goal-directedness of *pneuma*'s states is pointed out, in standard school terms of the Stoa. (c) well illustrates the robust corporealist thesis: the difference between nature and soul lies in the greater fineness of the structure of the latter, that being the goal of the 'continuous operations' of the *pneuma* in the embryo. The comparison with inorganic processes in (d) clinches the main point of the corporealist thesis.

It may be instructive to compare Hierocles' description of the embryogenetic process with a passage of Alexander preserved by Simplicius:

[i] When the first principle has been sown into the matter which is receptive both of the principle and the things that are to come to be by it and from it, this very thing, that was the first sown, produces this itself, for that of which it is productive is defined; and that which comes to be from it [produces] another thing; for each of them is productive and efficient with respect to the things that are after them, if nothing impedes. And so it goes on, up until a certain limit and the natural form, whose principle was sown into the matter in the beginning. [ii] It is as in the things moved by pulling strings: when the master communicates the principle of motion to the first

<sup>100</sup> Or: 'which has already come to be in a softened mode' (to link with the 'hardening' model of the previous passage); 1. 25: πέποι[ος] ἥδη γέγονός. νέμων may have a double meaning of 'ripe' and 'soft' in this case.

<sup>101</sup> On the διαπλαστική δύναμις see Galen, *Nat. fac.* 1. 111. 22–112. 5; 2. 163. 14–22 Helmreich; cf. Alex. *De mixt.* 1. 225. 21 and 226. 27 Bruns.

thing, it moves the one after it, and that the next, until the movement goes through all of them, unless something impedes, the forward ones moving the ones that are after, not according to some reasoning and to their internal choice. [iii] In the same way, too, the nature and power that is thrown together with the seed, and comes to be in the proper matter, being a mover of the latter, moves [it] in the way in which the seed is normally disposed to move and matter be moved. And the power which comes forth from the first movement produces, in turn, another movement, and has this ability, until it produces the like of that by which it was sown, identical to it either in species or in genus, as is the case with those born from different animals, like mules. For they are the same in genus with those who made them. And this succession happens according to certain numbers and order until the generated thing reaches its perfection in form, if nothing impedes. (Simpl. *In Phys.* 311. 1–19 Diels)<sup>101</sup>

This passage is a part of Alexander's argument, in his lost commentary on *Phys.* 2. 2, 194<sup>b</sup> 26,<sup>102</sup> that forms are not paradigms, but nature still can be said to act for a purpose. His agenda here is clearly close to the Stoic one, goal-directedness and causal immutability being its key items (i). But we will also notice a difference of ontological focus in the two cases. Alexander makes no reference at all to the physical nature of the processes, emphasizing rather the co-ordinated operation of different physical agencies within a single general plan. The simile of a puppet-master underscores this point. The continuity between the stages is logical and operational: what is being transmitted is not corporeal states (as in the Hierocles passage), but specific formative activities.<sup>103</sup> An important point underscored throughout in Alexander's discussion is that the

<sup>101</sup> For discussions see R. B. Todd, 'Alexander of Aphrodisias, *De anima* 76. 16: Michael of Ephesus' Text Defended', *Liverpool Classical Monthly*, 7/4 (1982), 48–9; P. Accattino, 'Alessandro di Afrodisia e la trasmissione della forma nella riproduzione animale' [AA e la trasmissione], *Atti dell'Accademia delle Scienze di Torino*, 122 (1988), 79–94; R. W. Sharples, 'On Body, Soul and Generation in Alexander of Aphrodisias', *Apeiron*, 27 (1994), 163–76; B. Fleet, *Simplicius on Aristotle on Physics 2* (London, 1997), ad loc.

<sup>102</sup> ἄλλων δὲ [sc. τῶν αἰσθητῶν λέγουσιν] τὸ εἶδος καὶ τὸ παράδειγμα.

<sup>103</sup> Todd in his analysis of different uses of *νεοπλασματικὰ* points out that 'in the case of biological change Aristotle uses the fact that puppets move spontaneously after an initial guiding impetus to characterize the autonomy of certain natural processes; thus Alexander uses the passive form *νεοπλαστούμενα* to reflect his larger claim . . . that nature is goal-directed without having conscious reason' ('Alexander of Aphrodisias, *De anima* 76. 16', 49). It may be added that another overtone of this usage has to do with emphasizing the formal and 'technical' (mediated) rather than material nature of the guiding impetus.

end of the process is reached when the like of the substance which has initiated the process has been produced (iii).

This difference of emphases corresponds to the difference between Stoic ontology, where an individual thing is construed as a part of the cosmic continuum, sharing to an extent in all the physical mechanisms of the cosmos at large, and Peripatetic ontology as reconstructed by Alexander, where an individual substance is construed in terms of a separate being, having no ontological continuity with the cosmic principles.

In the *De anima* argument, Alexander is concerned with the distinction between substantial and non-substantial generation which he thinks is blurred by the Stoic account of the soul as a particular state of the *pneuma*. If there is a real entity continuous and persistent throughout all changes, then all changes become accidental with respect to this entity. Aristotelian individual substance on this construal would become just another modification of the *pneuma*.<sup>104</sup>

#### 2.4. 'Against one-element theories' (*De anima* 19, 21–20, 26 *Brunns*)

These arguments are directed against those who, though they hold that soul is form, treat it as one of the elements: fire or air.

[4] But those who say that soul is the form of body, but make it out to be a certain one of the underlying bodies in the living being, such as fire or air or something else, unwittingly make part of matter into the form of [all] the remaining matter, which is absurd. For, as has been shown, the nature of form is different from that of matter. While one is underlying, another is 'in' it; and while one is shaped [*σχηματιζόμενον*], the other is that according to which it is shaped (*καθ' ὃ σχηματίζεται*). [5] And those who say this should, by all logic, also claim the fire or the air to be the perfection [*τελειότης*] of the three remaining bodies, and to have generation from the mixture of those; for the perfection is such. But in this case it would no

<sup>104</sup> The weight given to the Aristotelian theory of change by Alexander is clear also from the analysis of the ontological status of primary opposites in *Quaest.* 1, 16. The difficulty (raised as an exegetical problem in *Phys.* 1, 5, 188<sup>b</sup>26–30 and <sup>b</sup>21–6) is to explain how the opposites can be the first principles of all changes without being themselves subject to change. The author defends a realist solution to the problem, distinguishing between the primary opposites (form and privation) and the secondary ones (instantiations of these such as particular qualities), and explaining that primary qualities exist *per se* and independently from the secondary qualities, although not without matter (29, 2–9 *Brunns*). Form and privation *universaliter* are then shown to be the structuring principle of Peripatetic matter (29, 10–29 *Brunns*). In the Stoic system, this type of realism is forbidden. Cf. Graeser, *Zenon*, 95, on D.L. 7, 134.

longer be a simple body. For that whose generation is from the mixture of multiple bodies is not simple. And consequently the simple bodies would not be four in number. [c] But neither is it possible for any of the four bodies to come about from the mixture of the remaining ones, given that in the thing that comes about from mixture all the powers of the ingredients must be expressed [*ἐμφαίνεσθαι*], for mixture differs from passing away in that (in it) the passing away of the mixed ingredients is not complete. But it is impossible to say either that in the fire there are moistness and coldness, or in the air dryness and coldness. (*De anima* 19, 21–36 *Brunns*)

'Fire' and 'air' certainly might represent the Stoic active principle.<sup>105</sup> But arguments (a) and (b) appear to be *ad hominem*: the proponents of the corporealist thesis are taken to share the view that soul is form and perfection. An exact attribution of this theory is difficult, but some evidence we have of post-Aristotelian Peripatetic psychology suggests that Alexander might have had special reasons to argue that Aristotelian theory of soul is not 'corporeal-ist'.<sup>106</sup>

Despite the fact that Aristotle explicitly criticizes the Presocratic theories of soul as subtle stuff in *De anima* 1, 2, the distinction between the function and corporeal structure of soul-entelechy does not come across as clearly drawn in post-Aristotelian Peripatetic sources. The philosophical tradition shows lack of uniformity in the interpretation of Aristotle's 'soul-entelechy'. Aristotle's students Dicaearchus and Aristoxenus are on record as denying soul's existence.<sup>107</sup> Strato of Lampsacus shows many sympathies with corporealists, against 'incorporealist' arguments, such as Plato's in the *Phaedo*.<sup>108</sup> The view according to which soul is made of 'fifth sub-

<sup>105</sup> Cf. Cic. *Tusc.* 1, 65; Nemes. *Nat. hom.* 2, 16, 12–16 Morani (= *SVF* ii, 773); D.L. 7, 156 (= *SVF* ii, 774); *Commenta Luciani* 9, 7, 290 Usener (= *SVF* ii, 775); ps.-Galen, *Def. med.* xix, 355 Kühn (= *SVF* ii, 780).

<sup>106</sup> Unfortunately I have been unable to see the dissertation of Asiano, who reportedly suggests a Peripatetic origin for the doctrine that Alexander criticizes here (AD 137: C. Asiano, 'Problemi dell'anima negli scritti minori di Alessandro di Afrodisia: Rapporti tra anima e corpo' (diss. Turin, 1985–6), 172–91).

<sup>107</sup> The reports are too terse to provide evidence of departure from Aristotle's views; but the logic of 'nothing but' can be clearly perceived. Here, again, I think it may be useful to distinguish the logical reduction from the physical. See Cic. *Tusc.* 1, 10, 21 (= Dicaearchus fr. 7 Wehrli); S.E. M. 1, 349 (= fr. 8a Wehrli); recent discussions by V. Caston, 'Dicaearchus' Philosophy of Mind', and R. W. Sharples, 'Dicaearchus on the Soul and Divination', both in W. W. Fortenbaugh and E. Schürtrumpf (eds.), *Dicaearchus of Messana: Text, Translation, and Discussion* [*Dicaearchus*] (New Brunswick, 2001), 175–93 and 143–73 respectively.

<sup>108</sup> Fr. 118, 122–7 Wehrli = texts 13–16 Gottschalk. Again, this does not imply a

stance' is attributed to Critolaus.<sup>109</sup> Andronicus is praised by Galen for professing the view close to his own, according to which soul is nothing but a bodily mixture.<sup>110</sup> Xenarchus' definition of the soul, although not overtly in disagreement with the Aristotelian, is listed among the 'materialist' doctrines, as Moraux notes.<sup>111</sup> According to Boethius, being in constant motion is one of the characteristics of soul. This does not by itself imply corporeality; however it certainly is a rejection of the theory of soul as unmoved mover, and so raises the question of the source of soul's motion.<sup>112</sup> Needless to say, most of these facts are brought to our attention by the secondary tradition, whose authors have their own goals, so a certain amount of distortion and tendentiousness is inevitable. What is more interesting is the variety of theoretical contexts from which the doxographical excerpts are made, and the way in which the internal tensions of hylomorphic theory are exposed in these contexts. These tensions themselves sufficiently indicate the need for new conceptualizations.

In the last section of Alexander's school treatise *De intellectu* (= *Mantissa* 2) we find a report of Peripatetic theory where potential intellect, defined as a corporeal power or disposition which serves as an instrument to the agent intellect (which brings in the commitment to the corporealist thesis in its theoretical form, but makes his position hard to distinguish from that of corporealists, particularly in the Christian doxographical collections. See discussions in H. B. Gottschalk, 'Soul as Harmonia', *Phronesis*, 16 (1971), 179-98; L. Repici, *La natura e l'anima: Saggi su Strato e Lampsaco* (Turin, 1988), 1-47; S. A. Berryman, 'Re-Thinking Aristotelian Teleology: The Case of Strato of Lampsacus' (diss. Texas, 1996), 243-318.

<sup>109</sup> By Tertullian, *De anima* 5, who puts him at the end of the list of the 'strong' corporealists: 'qui eam [sc. animam] de manifestis corporalibus effigunt . . . ut Critolaus et Peripatetici eius ex quinta nescio quia substantia, si et illa corpus quia corpora includit'. Cf. *Stob. Flor.* 1. 1. 35. 5-6 W. (= 'Aët.' *Plac.* 1. 7. 21 Diels; cf. F. Olivier, *De Critolao peripatetico* (diss. Berlin, 1895), 45.

<sup>110</sup> Galen, *Quod animi mores*, 44. 12-45. 3 Müller; discussions in P. L. Donini, 'L'anima e gli elementi nel De anima di Alessandro di Afrodisia' [*Anima*], *Atti dell'Accademia delle scienze di Torino*, Classe di scienze morali, stor. e filol., 105 (1971), 61-107 at 97-106; Moraux, *Aristotélisme*, i. 132-4, ii. 773-85; Gottschalk, 'Soul as Harmonia', id., 'Aristotelian Philosophy', 1113-14; Sharples, 'Alexander', 1202-4; V. Caston, 'Epiphenomenalisms, Ancient and Modern' ['Epiphenomenalisms'], *Philosophical Review*, 106/3 (1997), 309-63.

<sup>111</sup> *Stob.* 1. 39, 320. 5-8 WH: *Ξενάρχος ὁ Περιαπαιρητικός καὶ πῦες ἐρεῖται τῆς ἀβήσεως τῆς κατὰ τὸ εἶδος τελειότητα καὶ ἐντέλειαν, καθ' ἑαυτὴν οὐδὲν ἅμα καὶ μετὰ τοῦ σώματος συντεταγμένη;* Moraux, *Aristotélisme*, ii. 207.

<sup>112</sup> On Boethius, see Moraux *Aristotélisme* i. 143-79 (on the soul at 172-6); H. B. Gottschalk, 'Boethius' Psychology and the Neoplatonists', *Phronesis*, 31/3 (1986), 243-57; 'Aristotelian Philosophy', 1117-18.

function of thinking), is described as 'fire or something of this kind coming about from the elemental mixture'.<sup>113</sup> The author of the treatise directs the main thrust of his objection against the apocryphal doctrine of *agent* intellect. The concept of potential intellect as a bodily instrument of thinking is not seriously questioned at this point. As a matter of fact, the *Mantissa* author has his own theory of material intellect, which is different from potential, but presents an innate bodily disposition none the less. It can be assumed that the concept of potential intellect as a body of some sort is available in the Peripatetic tradition. The concept of 'fire' mentioned in the *De intellectu* refers to the innate heat, the theory of which was developed by Aristotle in the biological treatises and the *Parva naturalia*.

One explication of the routine use of 'fire' in the sense of innate heat is found in Alexander's *Topics* commentary. Aristotle cites as an example of inept use of 'proper characteristic' the characteristic of fire as 'that in which soul is primarily located by nature' (*Top.* 5. 2, 129<sup>b</sup> 18-19). Alexander explains:

Now, those who hold this view mean by 'fire' the innate heat [*τὸ ἐμφύητον θερμότης*], and they say that soul is the vehicle [*ἵχημα*] of it. For it appears and inheres in it, and cannot act without it. For cold is mortifying [*βεκροποιός*] and productive of immobility. For the moving and the nourishing soul and its other powers accomplish through the innate heat, as some kind of instrument, concoctions, and nutrition of the animal, and movements, and growth, and other activities. (*In Top.* 376. 24-30 Wallies)

In terms of content, this need not be more than a paraphrase of the theory of innate heat.<sup>114</sup> But some points of Alexander's presentation suggest that he might be referring to a contemporary theory.<sup>115</sup> Alexander points out that this theory is only one of the three competing views on the location of the soul, two other can-

<sup>113</sup> *ὅταν μὲν οὖν ἐκ τοῦ σώματος τοῦ κραβέντος πῦρ γένηται ἢ τι τοιοῦτον ἐκ τῆς μέσως, ὡς καὶ ὄργανον δύνασθαι τὸ πῦρ παρὰσχεῖν, ὅς ἐστιν ἐν τῷ μύγματι, τοῦτο ἐστὶ ἐν παντὶ σώματι, ἅμα δὲ καὶ τούτο, τούτο τὸ ὄργανον ἀνάμει μετὰ λέγερα ἐπιτήδειός τις δύναμις ἐπὶ τῷ σώματι κρᾶσις τῶν ἀσμάτων γινόμενη πρὸς τὸ δέξασθαι τὸ ἐνεργεῖόν των* (*Mant.* 2, 112. 11-16 Bruns). Discussions in P. Moraux, *Alexandre d'Aphrodisie: Exégèse de la noétique d'Aristote* (Liege and Paris, 1942), 151-64; id., *Aristotélisme*, iii. 386-94; Sharples, 'Alexander', 1204-14; Accattino ad loc.

<sup>114</sup> Cf. e.g. a close parallel in Arist. *De int.* 469<sup>b</sup> 7-20.

<sup>115</sup> The claim that soul is the 'vehicle' of innate heat seems to go beyond the conventional metaphor. The use of *ἵχημα* at *Tim.* 44 E (cf. 69 C 7), in the meaning of 'vehicle for an organic function', is close to that in medical philosophy. Cf. Hipp. *De alim.* 55. 1 (*ὄργανόν τῆς τροφῆς ἵχημα*); Galen, *De usu part.* 3. 272. 19-274. 5 Kühn. In

didates being *pneuma* and the heart.<sup>116</sup> The end of the *De anima* notably contains an argument for the cardiocentric theory; so it is possible that Alexander is here dealing with some cognate but distinct theory of internal heat and soul as the vehicle of innate heat.<sup>117</sup> The distinction is on the level of ontological rather than empirical description. The persistence of non-ontological, 'latent' corporealism in the Aristotelian tradition might be due to medical theories associated with the Peripatos.<sup>118</sup>

In the final chapter of the pseudepigraphic *De spiritu*,<sup>119</sup> we find the problem of the powers of vital heat stated in terms close to the ones used in Alexander. The interesting point of the discussion is that the anonymous author denies the opinion of 'some' who take the powers of fire to be purely mechanical in their nature, and insists on the variety of vital functions possessed by the innate heat in various kinds of organism.<sup>120</sup> Having said this, he immediately points out that the powers are not to be attributed to the material stuffs of fire and air as such, and poses the difficulty of thinking about nature or soul as the agency which imparts to the bodies not only simple sensible properties but also a more complex feature,

our text the relation seems to be the reverse: soul is said to be the vehicle of a corporeal characteristic, heat still being regarded as the 'instrument' of the soul (but cf. the Hippocratic treatise *De flatibus* at 3. 23, where 'vehicle' means a mobile container). The word seems to be a *hapax* in Alexander (cf. ps.-Alex. *Prob.* 1. 12. 6, 197. 4 Usener). *νεκρωσις* is also a *hapax* in this author, and generally rather rare. Cf. Alexander's argument at *De anima* 95. 8–12 Bruns.

<sup>116</sup> εἰ τις θεῖη πύρρος ἴδιον εἶναι (τὸ ἐν ᾧ πράσιον πέφυκεν εἶναι) ψυχῆν ἀμφοβητήτρα γὰρ εἶναι τῷ ἐμψύκῳ θερμῷ ὑπόκειται ἢ ψυχῆ; ἄλλοι γὰρ ἐν τῷ πνεύματι ἀπεδύσκουσι εἶναι τὴν ψυχὴν καὶ ἄλλοι ἐν τῇ καρδίᾳ· ὥστε οὐκ ἔστι καλοῖς ἔχον τὸ ἀποδοθῆν ἴδιον (*In Top.* 375. 18–21 Wallies).

<sup>117</sup> 94. 7–96. 15 Bruns. Alexander argues that heart is the seat of the soul because it contains most heat, which is the instrument *and matter* of the nutritive soul (94. 17–20, 96. 5–8 Bruns).

<sup>118</sup> Much work still remains to be done on this issue. Cf. W. Jaeger, 'Das Pneuma im Lykeion' ['Pneuma'], *Hermes*, 48 (1913), 29–74, and his *Diaktes von Karystos* (Berlin, 1938); J. Longrigg, 'Medicine and the Lyceum', in Ph. J. van der Eijk, H. F. J. Horstmanshoff, and P. H. Schrijvers (eds.), *Ancient Medicine in its Socio-Cultural Context: Papers Read at the Congress Held at Leiden University, 13–15 April 1992* (Amsterdam, 1995), 431–43; I. M. Lonie, 'Erasistratus, Erasistrateans, and Aristotle', *Bulletin of the History of Medicine*, 38 (1964), 426–43, esp. 441; Accattino, 'AA e la trasmissione'.

<sup>119</sup> Discussed in Jaeger, 'Pneuma'; physiological doctrines in C. R. S. Harris, *The Heart and the Vascular System in Ancient Greek Medicine* (Oxford, 1973), 175 n. 1; updated *status quaestionis* in A. Rosselli (ed.), [Aristotele]: *De spiritu* (Pisa, 1992), 8–19.

<sup>120</sup> *De spiritu* 9, 48<sup>a</sup>:28–36.

which he designates with the word *ῥεθμός*.<sup>121</sup> Notably, the innate heat is said to be different in different species according to its degree of intensity,<sup>122</sup> and this latter is defined by purity and lack of contamination.<sup>123</sup> The author's commitment to the functionalist view of heat notwithstanding,<sup>124</sup> with this parallel between the hierarchy of heat's biological functions and the gradation of physical states something more seems to be involved than one-way functional dependence between the innate heat and soul. The physical and the biological may be regarded as competing principles instead. To remove this tension within the theory, one will constantly have to emphasize the right direction of the explanation: from function to implementation, and not vice versa.<sup>125</sup>

Alexander turns a blind eye to the vitalist appeal of the theory of 'living fire' as an embodiment of cosmic *élan*, asking rather bluntly:

[d] Also, what would be the reason for this particular one of the four, rather than some other, to be the form of the remaining three? (*De anima* 19. 36–20. 1 Bruns)

Of course he knows the reason: fire is productive of life, *ζωοποιόν*. But the point he wants to make is methodological: even if fire has physical properties better suited to cater for most vital functions, this does not mean that it is to be regarded as the source and seat of those functions. Furthermore, all the elements should be equal in their relation to the processes of generation and mixture.<sup>126</sup>

<sup>121</sup> 48<sup>b</sup>:9, for different translations of the term see Dobson ad loc.; for discussion, Rosselli ad loc.

<sup>122</sup> 48<sup>b</sup>:17: πύρρος γὰρ διαφόροι κατὰ τὸ μάλλον καὶ ἥττον.

<sup>123</sup> 48<sup>b</sup>:17–18: τὸ γὰρ καθαρότερον μάλλον.

<sup>124</sup> Cf. 48<sup>b</sup>:36.

<sup>125</sup> The language that Alexander uses in (c) shows that he does envisage a special status for the formal presence of the elemental constituents within a body: it is described with the word *ἐμφαίνεσθαι*, which is parallel to the Stoic concept of *συνεμφαίνεσθαι*, used to describe the co-presence of qualities in a mixture. Cf. Todd, *Alexander of Aphrodisias*, 54–5. But while the mode of co-presence of Stoic qualities is corporeal, Alexander's choice of the term indicates that in this case, too, he distances himself from corporealism. This is an extrapolation of the Aristotelian use in *Meteor.* 3. 4. 372<sup>a</sup>:33 *et passim*. Alexander uses this term in his theory of sense perception, where it describes the incorporeal co-presence of the objects of perception, such as colours, in the medium. See *Manit.* 14, 142. 117–31 Bruns.

<sup>126</sup> Aristotle's gradations of the elements, where some are considered as more 'formal' (e.g. *De caelo* 3. 8; *GC* 2. 4), will have their scope restricted by the same general consideration, as far as the theory of soul is concerned. It will be noticed that Alexander does not discuss the theory of aether as the matter of soul. The theory had been criticized by Xenarchus (see Moraux, *Aristotelismus*, i. 197–214 at 198–206; id., 'Xenarchos', in *RE* xviii (1967), 1422–35 at 1425–8; more generally, for

The following argument conceivably prepares the ground for Alexander to claim that this power is incorporeal:

[e] Also, in the living being there would be only the powers of the body which is generated from the mixture of the others. So, if that generated body were to be fire, [it would have been] heat and dryness, if some other body, [it would have been] its powers, in so far as this is what has come to be from those. But since the powers of other bodies persist in the living thing no less<sup>127</sup> than the powers of this one, it probably has not been generated [ἐγεγενήσθαι] from those, so it would not be form. If not form, neither is it soul. (*De anima* 20. 1–6 Bruns)

Alexander's analysis here does not do full justice to the Stoic theory of the elements, according to which the elements come to be as a part of a directed cosmobiological process, from which they cannot be properly detached so as to form an independent atemporal foundation of the cosmos.<sup>128</sup> They are evolving states of the cosmos rather than its simultaneously existing building blocks. But this simplification of the Stoic theory is a part of Alexander's defence of the version of Aristotelianism which he believes to be authentic, the one that rules out the possibility that complex higher-level phenomena have a history of this doctrine in the Hellenistic Peripatos, see Moraux, 'Quinta essentia', in *RE* xxiv/1 (1963), 1171–1263, esp. 1213–31, 1248–9). Alexander defended it on the cosmological level (*De mixt.* 223. 10 Bruns; *In Mete.* 2–17 Hayduck); but there is nothing to suggest that he might have supported it in psychology. The last section of *Mantissa* 2 (*De intellecta*) probably contains the traces of this view, expounded by one of Alexander's predecessors, in close connection, as it seems, with the exegesis of *GA* 2. 3; cf. esp. 736<sup>b</sup>30–737<sup>a</sup>7). The view is criticized by the *Mantissa* 2 author. The view according to which the first instrument of the soul is the *αἰθεροειδὲς μέγεθος* is found in ps.-Alex. *Prob.* 1. 72. 6, 96. 6; 2. 61. 10, 67. 34–40 Usener, but even this is still short of the claim that soul itself is such *pneuma*. Alexander's view of relation between the four elements and the divine body seems to be more elaborate and complex than comparable views of his predecessors. The role of the fifth element consists in supplying the subinary cosmos with vital elemental components (such as heat). But this does not mean that soul is 'made of' the fifth element, only that the fifth element does have some causal role in the production of soul. This view is developed in *Quaest.* 2. 3 (see references in n. 87 above). Another current theory not covered by this argument is the theory of mixture; Alexander deals with it later, when he, following the order of Aristotle's *De anima*, discusses the 'harmony theory'. His general point is well known: soul is not an elemental mixture; rather it is a power based on mixture but not equivalent to it. Cf. Donini, 'Anima', 97–106; Gottschalk, 'Soul as Harmonia'; Moraux, *Aristotelismus*, ii. 705–7; Caston, 'Epiphenomenalisms'.

<sup>127</sup> 20. 4; *μηδὲν μάλλον* for *μηδὲν ἥττον*. See AD ad loc.; R. W. Sharples, *Alexander of Aphrodisias*: *Questiones* 2. 16–3. 15 (London, 1994), 123 n. 134.

<sup>128</sup> See Hahm, *Origins*, 185–99; J. Mansfeld, 'Zeno and Aristotle on Mixture', *Mnemosyne*, 36 (1983), 306–10.

erties (such as the vital and mental) could be imparted to complex bodies by their simple ingredients rather than evolve as being defined by the essential structure of the whole body. This possibility, Alexander might think, is harboured by the Stoic theory of *pneuma* and its Peripatetic analogues.

The next argument is directed against the physical theory of 'total blending', which explained many special points in the doctrine of the *pneuma*:

[f] Also, if the soul is a certain one of these [elements], either the whole living being will not be ensouled, or body will go through body: what could be more absurd than this view? For how can some body, which is full of itself [μέστρον ὄν αὐτοῦ] and has not any void in itself, receive into itself another body, which is similarly filled up with itself? For if that which is completely full [πληρῆς] of itself will receive something else, which itself is in turn also full of itself, then there will be no obstacle to its receiving another, and yet another thing. For being no less full when it was one than it is now that it has received in itself something else, it was not prevented from receiving some second [body]. In this way, too, nothing will prevent the greatest body from being in the smallest one. But how is it not absurd to say that the place completely filled [πεπληρωμένον] with some body can also receive some other body, remaining the same, while the body that had filled it remains in it and is not moved somewhere? But the absurdity of this doctrine has been discussed by us at greater length elsewhere.<sup>129</sup> (*De anima* 20. 6–19 Bruns)

Alexander criticizes this theory in detail in the treatise *De mixtione*. Here in the *De anima* he makes only one objection against 'total blending': it violates the principle according to which two bodies cannot be in one place. The principle invoked, a consequence of Aristotle's theory of place,<sup>130</sup> might be another sign that Alexander is here addressing dissident Peripatetics.<sup>131</sup> The following objection

<sup>129</sup> 20. 18; probably written after *De mixtione*; AD 140 refer also to Alex. *Mant.* 139. 30–141. 28 Bruns.

<sup>130</sup> The Stoic definition of place (*τόπος*) reported in Ar. *Did. Epit. fragm. phys.* fr. 25 Diels (= *SVF* ii. 503; LS 49a, part) includes a clause allowing that place be occupied by several bodies (*ἢ τὸ ὅλον (τε) κατέχεσθαι ὑπὸ ὄρου καὶ δι' ὅλου κατέχουμένου εἶνε ὑπὸ τινός, (ἐἴτε) ὑπὸ τινῶν*, 460. 18–20 Diels, *DG*). Brunschwig, 'Théorie stoïcienne', 95, has suggested, plausibly, a connection with the theory of *κράσις* δι' ὅλου. Cf., however, Algra, *Concepts*, 279 n. 53.

<sup>131</sup> Suggested sources for this argument include the proof attributed to the proponents of the void in Arist. *Phys.* 4. 6, 213<sup>b</sup>5–12 (Todd, *Alexander of Aphrodisias*, 80 and n. 231), and Arcesilaus (AD, citing Plut. *Comm. not.* 1078c). Todd also cites S.E. *PH* 3. 60–1.

also seems to presuppose that the opponents share some premisses of Alexander's theory of form:

[g] Also, those who say so do not preserve the analogy [*ἀναλογία*] of the form in the animal to the forms of both the simple bodies and artefacts. For neither is heaviness such a form, nor lightness, nor shape. [h] Also, if they were to say that a certain one of the simple bodies is such a form as the soul,<sup>132</sup> then, since it is the form rather than the compound of the two [viz. form and matter, *συνεμφύροισι*] that forms [*εἰδοποιεῖν*] the matter, the soul would be, according to those who say so, the form of this (simple) body, i.e. lightness, or its concomitant heat and dryness, or some form of some of the simple bodies. (*De anima* 20. 19–26 Bruns)

The *ἀναλογία* mentioned in (g) can rule out any possible improvements on the theory of *pneuma* by means of distinguishing between the 'technical' and 'atechnical' varieties of the same elemental stuff, and endowing the 'technical' variety with special properties which other elements do not have. The simple bodies and artefacts, which are hardly ever considered as proper substances by Aristotle, all of a sudden become paradigmatic in this argument of Alexander's.<sup>133</sup> Alexander wants to say that just as the determinate aspects of the elements and the artefacts are due to their structure rather than to some inherent stuff, so it is the case with all the natural composite substances, soul and mind being no exception. Moreover, (h) says, even if it is granted that some special simple body can do the work of the soul, it will not be the body itself but rather the form of this body that will count as soul, on a correct analysis, thus preserving the analogy.<sup>134</sup>

We can now draw some conclusions. Alexander's arguments show us how the Aristotelian doctrinal position on the nature of agency and soul is being shaped in a series of debates with the Stoics. The formula, according to which the agent is corporeal but the instrument of agency is not, comes probably from Academic school polemic, but gets a new interpretation in Alexander, in the light of Aristotelian theories. His concepts of body and corporeality de-

<sup>132</sup> 20. 22–3: *τῆν ὡς ψυχῆν* V Bruns: *τὸ ὡς* Usener: *ὡς τῆν* AD.

<sup>133</sup> The theory of *ἀναλογία* is expounded in detail at the beginning of his treatise 8. 5–11. 13 Bruns. It is hard to say whether Alexander could take this position to be a legitimate part of an *ad hominem* argument, although the possibility is not to be dismissed. The parallel with the role of the active principle in the Stoic *scala naturae* is clearer.

<sup>134</sup> Cf. the argument at 19. 3–9 Bruns, discussed above.

pend on the Aristotelian concept of individual separate substance. This precludes the possibility of 'intermediate' corporeal status, such as the one the Stoics grant to the causally relevant aspects of bodies. This is the gist of Alexander's general objection to the Stoic choice of the 'Giant' option in the debate on agency. In the thesis 'everything that acts or undergoes action is a body', the subject, 'everything that acts or undergoes an action', needs some further analysis, from the point of view of the Aristotelian theory of categories. Alexander, in other words, refuses to accept the concept of agency as ontologically basic. In every action, one has to distinguish the agent and the activity, the seat and the process of action. The agent can only be defined as substance, in accordance with Aristotle's theory of categories, and its activity determined by its essential structure.

The case of the soul has special interest in this theory in so far as soul does satisfy a certain (weaker) version of the substantiality criterion: it is substance *qua* form. Alexander's discussion here has to do with some central assumptions about the special sort of causal agency that soul possesses in both Aristotle's and the Stoic theories. The arguments he uses are based to a good extent on the traditional anti-Stoic criticisms of his age, going back to the Academic–Stoic and Epicurean–Stoic debates. However, the interpretation he gives to the commonplace objections and the conclusions he draws from them are distinctly Aristotelian and quite significant for the development of the Peripatetic system.<sup>135</sup>

The most important thesis of Alexander's theory of soul is that of soul's inseparability from body, in a strong sense. Other arguments support and explicate this thesis. Argument 2.1 requires an ontological basis for the logical distinction between thing and quality. Argument 2.2 says that soul is not a mereological part of body. Argument 2.3 establishes that the corporealist theory of soul is not compatible with the Peripatetic theory of change. Finally, argument 2.4 precludes any corporeal continuity between soul as the vital principle and the cosmic elements. The resulting set of doctrinal tenets might strike one as difficult to reconcile with the strong commitment to both the hylomorphic thesis and soul's causal priority to body. What needs clarification in particular is the precise

<sup>135</sup> The same tendency can be observed in the two large school collections of short arguments against the corporeality of qualities and soul in the *Mantissa* (treatises 6 and 3 respectively).

mechanism by which an incorporeal agency such as soul can maintain its causal priority over body. This clarification can only be achieved on the basis of a full-fledged hylomorphic theory of substance. Alexander is fully aware of all the difficulties of the view he proposes. He does develop a metaphysical solution to the problem as well as the notion of incorporeal agency in natural philosophy (physics of elements and mixtures, theory of sense perception, and finally the cosmotheological doctrine of intellect). Many elements of the Aristotelian system which we regard as its original parts in fact only get their first argued conceptualization in this exegetical work of Alexander. It is particularly important to see the formative role of the debate with the Stoics in all these developments.

It should be noted also that the target of Alexander's arguments was by no means a dead or an altogether implausible philosophical option. The Stoic system certainly did have enough resources to produce replies to Alexander's objections, and to raise its own objections. Both sides of the debate are present in the Neoplatonic discussions of later antiquity. In fact, the question which type of ontology should be regarded as preferable seems to persist in modern philosophy, although it may take a different form.<sup>136</sup> The presence of Plato's 'Giants' on the current intellectual scene is hardly to be disputed: in fact, the general tendency is to befriend them, and that is certainly prudent. But the task of ontological analysis of the 'gigantesque' assumptions still remains on philosophy's agenda. This is what Alexander's arguments against the Stoic conception of soul remind us of, so far as contemporary philosophy is concerned.

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<sup>136</sup> A division between the two systems can be compared, with some qualifications, to a debate between the defenders of 'panpsychism', on the one hand, and 'emergence' on the other, in present-day philosophy of mind: T. Nagel, 'Panpsychism', in id., *Mortal Questions* (Cambridge, 1979), 181–95; J. Van Cleve, 'Mind-Dust or Magic? Panpsychism versus Emergence', in J. E. Tomberlin (ed.), *Action Theory and Philosophy of Mind* (Philosophical Perspectives, 4; Atascadero, Calif., 1990), 215–26; Caston, 'Epiphenomenalisms' (cf. p. 332 and n. 110 above).

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## NOT EVEN ZEUS

A Discussion of A. A. Long, *Epictetus: A Stoic and Socratic Guide to Life*<sup>1</sup>

MARGARET GRAVER

TOM WOLFE's 1998 novel *A Man in Full* tells how a clerical error—or so it seems—delivers an antiquated translation of Epictetus' *Discourses* to a county jail outside Oakland, from which young Conrad Hensley had requested a spy thriller of similar title. Annoyed, but hungry for reading material, Conrad opens the unpromising pages and is accosted by words that speak to his own condition:

To ye prisoners on the earth and in an earthly body and among earthly companions, what says Zeus? Zeus says, 'If it were possible I would have made your body and your possessions (those trifles that you prize) free and untrammelled. But as things are—never forget this—this body is not yours; it is but a clever mixture of clay. I gave you a portion of our divinity, a spark from our own fire, the power to act and not to act, the will to get and the will to avoid.'

Captivated, Hensley adopts Epictetus' Stoicism as a personal creed, and when shortly thereafter he escapes from prison—fortuitously?—he sets about the work of converting others. 'People tend to think of Stoics as people who are long-suffering and don't complain', he tells his dubious hearers. 'But really, it's a whole religion.' And it is to a quasi-religion that he wins his most spectacular convert in Charlie Croker, a former Georgia Tech quarterback who has made and lost a fortune in speculative real estate. At the book's climax, Croker disappoints a press conference by suppressing his scheduled testimonial on behalf of a black athlete accused of rape to

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<sup>1</sup> A. A. Long, *Epictetus: A Stoic and Socratic Guide to Life* (Oxford, 2002), pp. xiv + 310.