

MATTER IN HELLENISTIC PHILOSOPHY

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The Hellenistic fortunes of the concept of matter lay in the hands of the Stoic school. It was in this school's physical theory, and in its skirmishes with its Academic critics, that the concept maintained its prominence. And that prominence lasted from the time of the school's founding father, Zeno of Citium, around 300 BC, at least to its last major Hellenistic voice, Posidonius, in the early first century BC.

First, though, a word in passing about the rival Epicurean school. Paradoxically, Epicureanism was too materialist a philosophy to need a word for matter. The role that might have belonged to matter is taken up in Greek Epicurean texts with talk of the underlying atoms. And in general, although there is a probable exception to this in the Epicurean theory of mind,¹ the atoms are the driving causal force of the Epicurean universe. There is no reason in principle why a materialist philosopher should not use a term like *hylē* for the underlying matter in which causal dominance is located, but it is doubtful whether any did so. And there is a reason for this. When Aristotle, particularly in *Metaphysics* A 3, speaks of some Presocratic predecessors making *hylē* the dominant cause, it is very much his own perspective that is being represented, and there is even an air of censure about the terminology. The metaphor of 'wood' or 'timber' conveyed by the term *hylē* was a sufficiently live one to create the expectation that *hylē*, properly conceived, should be something subservient to a purposive cause directed at good ends, like the timber from which a carpenter constructs a table. It was therefore entirely to be expected that this concept should, outside Aristotle's own school, gain currency among Platonists and Stoics, lending itself as an entirely natural term to convey the amorphous stuff which, according to the *Timaeus* and its heirs, must be intelligently guided if it is to serve any structured ends.

¹ In the difficult fragments of *On nature* 25, Epicurus speaks repeatedly of a kind of agent-causation which is not identifiable with atomic causality. See FRANCESCA MASI, *Epicuro e la filosofia della mente*, Sankt Augustin, Academia Verlag, 2006 («Studies in Ancient Philosophy», 7), esp. pp. 206-209.

As for Epicurus, the two places where he beyond dispute uses the term *hylē* are astronomical passages (*Letter to Pythocles* 93, 112) in which it refers to ‘fuel’ suitable for combustion – not a borrowing from the Aristotelian use, but an independent recognition of the term’s semantics: *hylē*, ‘wood’, is the sort of thing to have causal efficacy, if at all, only through subservience to some preconceived function such as fuelling a fire.²

Correspondingly when it comes to the Latin tradition, we find Cicero in his philosophical dialogues using the terminology of ‘matter’ in connection with Epicureanism only when criticizing the school from a Platonist/Stoic vantage point. Thus at *Fin.* 1.18, speaking in his own voice, he says of the Epicureans: «Whereas in the nature of the universe two things need to be sought, (a) what the matter (*materia*) is out of which each thing is brought about, (b) what the force is which brings each thing about, they spoke about matter, but omitted the force and cause».³ Thus it is from the point of view of Platonist and Stoic physical dualism that the Epicureans are seen as having concentrated on the ‘matter’ half of the duality alone. But when he is writing from within the Epicureans’ own idiom, the term disappears: it is no part of the school’s self-presentation in the mouths of Cicero’s Epicurean spokesmen.

There is nevertheless one important exception in the Latin Epicurean tradition. Although *materia* makes no appearance in Cicero’s Latinizations of Epicurean physics, the Epicurean poet Lucretius does with some frequency refer to atoms collectively as *materia* and *materies*. This usage occurs typically in contexts where biological metaphors are being exploited (for example, ‘seeds’ for atoms, another usage without established Greek Epicurean antecedents),⁴ and undoubtedly the etymology of *materia* as ‘motherhood’ is a semantically live one to his ear. We need therefore not assume that he has the Greek term *hylē* in mind when he so writes.

I have already implied that the Stoic conception of *hylē* was in direct line of descent from Plato’s *Timaeus*. Many would dispute this, insisting that

² The same kind of subordination to an end is clearly implied by Plato’s usage of the term at *Phlb.* 54c1-4, φημι δὴ γενέσεως μὲν ἕνεκα φάρμακά τε καὶ πάντα ὄργανα καὶ πᾶσαν ἕλην παρατίθεσθαι πᾶσιν, ἐκάστην δὲ γένεσιν ἄλλην ἄλλης οὐσίας τινὸς ἐκάστης ἕνεκα γίνεσθαι, σύμπτασαν δὲ γένεσιν οὐσίας ἕνεκα γίνεσθαι συμπύσεως.

³ «Dum in rerum natura duo quaerenda sint, unum, quae materia sit ex qua quaeque res efficiatur, alterum, quae vis sit quae quidque efficiat, de materia disseruerunt, vim et causam efficiendi reliquerunt».

⁴ There is occasional use of σπέρμα for ‘atom’ in the indirect tradition about Epicurus, notably at *Plut. Col.* 1109c, but in my view none in Epicurus’ own writings. For debate on this, see DAVID SEDLEY, *Lucretius and the Transformation of Greek wisdom*, Cambridge, Cambridge University Press, 1998, p. 193; PIERRE-MARIE MOREL, *Corps et cosmologie dans la physique d’Épicure*. «Lettre à Hérodote», § 45, in *Matière et devenir dans les philosophes anciens*, «Revue de métaphysique et de morale», 2003, pp. 33-49, esp. pp. 40-42.

the concept's prehistory was, like the term itself, fundamentally Aristotelian.⁵ My own view, which I cannot argue adequately here,⁶ is that the concept itself was a Platonic legacy, and that it was primarily the precise term, *hylē*, that had an Aristotelian origin. How much detailed knowledge of Aristotle, if any, this required is open to discussion. But a minimalist on the question can at least point out that the Aristotelian description of the Platonic underlying stuff as *hylē* was already present in Theophrastus' doxographical treatise on the history of physics, the *Physikai doxai*,⁷ the one Peripatetic work that we can feel confident was widely circulated and studied in the early Hellenistic period.⁸ So, although we have the option of seeking a primarily Aristotelian background to the Stoic concept of *hylē*, we are not obliged to do so.

Stoic physics is dualistic, reducing everything to the two principles matter (ύλη) and god (θεός). Both god, the active principle, and matter, the passive principle, are bodies, both of them everlasting, and the former entirely interpenetrating the latter. They are separable only in thought. Despite the systematically dualistic language, some scholars have insisted on calling Stoic physics 'monistic', on the grounds that matter and god, being inseparable aspects of a single entity, constitute a genuine unity. I do not think that this way of viewing it is likely to survive consideration of the historical background.

Although the decision to nominate god and matter as the twin physical principles may initially sound like a radical new departure, the Stoics were in reality endorsing a very ancient dualist tradition. Its first proponent was arguably the archaic poet Hesiod, in whose *Theogony* the world originates as the conjunction of two divine families, namely the descendants of Heaven and Earth, and the descendants of Chaos. The remarkable fact, too rarely noticed,⁹ that for generation after generation these two enormous families never interbreed to my mind indicates a fundamental dualism, distinguishing two irreducibly different classes of entity. The resemblance of

⁵ The major defence of this genealogy for Stoic physics is DAVID E. HAHM, *The Origins of Stoic Cosmology*, Columbus, Ohio State University Press, 1977.

⁶ I argue this in DAVID SEDLEY, *The origins of Stoic god*, in D. FREDE and A. LAKS (eds.), *Traditions of Theology*, Leiden, Brill, 2002, pp. 41-83. My general caution about the degree of Aristotelian influence in Stoicism owes much to the sober monograph of F. H. SANDBACH, *Aristotle and the Stoics*, Cambridge, Cambridge University Press, 1985.

⁷ See next note.

⁸ Cf. D. SEDLEY, *Lucretius* cit., pp. 182-185.

⁹ See however the excellent account of these twin genealogies in the introduction of GLENN W. MOST (ed. and trans.), *Hesiod, Theogony, Works and Days, Testimonia*, Cambridge (Mass.), Loeb Classical Library, 2006.

these two families to Stoic god and matter respectively runs deep. But a far more explicit statement of such dualism is found in Anaxagoras (early fifth century BC), who very clearly lists two items: a single more or less homogeneous mixture of ingredients, and, irreducibly distinct from these, the intelligence (*nous*) which organises them into structures. Others, including Parmenides, were thought to advocate some such dualism. But its fullest development was seen by many, and perhaps rightly, as having occurred in Plato's *Timaeus*.¹⁰

The earliest dualistic interpretation of the *Timaeus* predates the emergence of Stoicism, and is found in a fragment of Theophrastus' *Physikai Doxai*, where Plato is placed at the end of a long line of dualists.¹¹ We are fortunate to possess a much fuller unfolding of this interpretation, one attributed to the pre-Hellenistic Academy, in Cicero's *Academica* (1.24-29).¹² On this dualistic reading, matter is unmistakably represented by the receptacle of the *Timaeus*. The second principle, the divine moving cause, is obtained by conflating the Timaeian demiurge and world-soul into a single power.¹³ As for the third Platonic principle, the Forms, it too is apparently subsumed under this divine moving cause, probably on the grounds that the Forms are god's thoughts, and not independent entities. Thus the only divine force acting on matter in the Platonic world becomes, in effect, the world soul, an immanent god.¹⁴

¹⁰ The major study of Stoicism's debt to the *Timaeus* in this and other regards is GRETCHEN REYDAMS-SCHILS, *Demiurge and Providence: Stoic and Platonist Readings of Plato's Timaeus*, Turnhout, Brepols, 1999. Cf. also HANS-JOACHIM KRÄMER, *Platonismus und hellenistische Philosophie*, Berlin, de Gruyter, 1971.

¹¹ SIMPLICIUS, *In Phys.* 26.7-15: ὁ μὲντοι Θεόφραστος τοὺς ἄλλους προϊστορήσας "τούτοις, φησίν, ἐπιγενόμενος Πλάτων, τῆ μὲν δόξῃ καὶ τῆ δυνάμει πρότερος τοῖς δὲ χρόνοις ἕστερος καὶ τὴν πλείστην πραγματείαν περὶ τῆς πρώτης φιλοσοφίας ποιησάμενος, ἐπέδωκεν ἑαυτὸν καὶ τοῖς φαινομένοις ἀράμενος τῆς περὶ φύσεως ἱστορίας: ἐν ἧ δὴ δύο τὰς ἀρχὰς βούλεται ποιεῖν τὸ μὲν ὑποκείμενον ὡς ἕλην ὃ προσαγορεύει πανδοχέας, τὸ δὲ ὡς αἴτιον καὶ κινῶν ὃ περιάπτει τῆ τοῦ θεοῦ καὶ τῆ τοῦ ἀγαθοῦ δυνάμει". «But Theophrastus, having first given a historical account of the others, adds: "These were followed by Plato, who preceded them in reputation and ability, although chronologically he was later. He devoted the greater part of his work to first philosophy, but also paid attention to appearances, trying his hand at physical inquiry. In this inquiry he wants to make the principles two in number: one which underlies, in the role of matter, which he calls 'all-receiving', the other in the role of cause and mover, which he connects with the power of god and with that of the good'».

¹² In D. SEDLEY, *The origins* cit. I argue for the fundamental authenticity of this report.

¹³ As Francesca Alesse has kindly pointed out to me, this conflation of world-soul and demiurge could be defended by appeal to the Platonic *Epinomis*, 984b-c.

¹⁴ We do not know for sure what, in the generation or two before the emergence of Stoicism, had motivated this drastic reinterpretation of Plato's physics as a bare dualism of god and matter. But the likeliest explanation lies in the unenviable task, faced by Plato's successors, of reconciling two apparently conflicting bodies of doctrine: (a) the *Timaeus*, in which for once a system was built out of the various components of Platonic doctrine, and (b) the legacy of Plato's

Stoicism's founder Zeno studied for years in the Academy, and it seems probable that the dualism of god and matter was among the ideas he absorbed there.¹⁵ The doctrine's prehistory, if so, makes it doubly implausible to read it as a disguised monism. The tradition to which Stoicism was heir had consistently viewed matter and the immanent divine force shaping it as two irreducibly different items, each with its own indispensable function.

In Stoic eyes, not only is matter a body, but so is god. The textual evidence for this has long been debated, but scholarly opinion increasingly, and rightly, concurs on the point.¹⁶ Only body has the power to interact, and these two principles certainly must interact: god is, precisely, that which acts, and matter is that which is acted upon. On this supposition, that both principles are corporeal, the question arises whether we should call the Stoics materialists. Any answer will depend on the definition of materialism that we choose.

If materialism is the thesis that everything that exists «is material», then a quick answer is to say that Stoicism cannot be materialist, since matter is only one of its two fundamental principles of physical reality, alongside god, and moreover has no causal powers, being purely passive. An alternative formulation of materialism is that everything that exists «consists of» matter. This would make it true in a way to call Stoicism materialist, simply on the following ground: in Stoic physics, every existing thing other than the principles themselves by definition «consists of» matter, the function of matter being precisely to constitute things, while the role of god is not similarly constitutive but, very approximately, directive. However, this diagnosis borders on the vacuous. For the Stoics, not unlike Aristotle, matter is by definition that which things consist of: this entails, but trivially and uninformatively, that every existing thing consists of matter.

The fundamental reason why the Stoics have often been labelled materialists has nothing to do with the role of matter in their system. It is because of their insistence that whatever exists, including items like soul, vir-

'unwritten doctrines', founded on a dualism of the One and the Indefinite Dyad. Reading the *Timaeus* as itself dualistic was part of the process of reconciliation. As has been rightly pointed out by JEAN-BAPTISTE GOURINAT, *The Stoics on matter and prime matter: "corporealism" and the imprint of Plato's Timaeus*, in R. SALLES (ed.), *God and Cosmos in Stoicism*, Oxford, Oxford University Press, 2009, pp. 46-70, at pp. 52-53, the same dualistic reading was encouraged by such passages of the *Timaeus* as 47e-48a.

¹⁵ Cf. ARISTOCLES (1st-cent. AD Peripatetic), *ap.* EUSEBIUS, *Pr. ev.* 15.14.1: στοιχείον εἶναι φησι [sc. Zeno] τῶν ὄντων τὸ πῦρ, καθάπερ Ἡράκλειτος, τοῦτου δ' ἀρχῆς ἦλην καὶ θεόν, ὡς Πλάτων. ἀλλ' οὗτος ἄμφω σώματ' αἰσιν εἶναι, καὶ τὸ ποιοῦν καὶ τὸ πάσχον, ἐκείνου τὸ πρῶτον ποιοῦν αἴτιον ἀσώματων εἶναι λέγοντος. Cf. also ROBERT W. SHARPLES, *Counting Plato's principles*, in L. AYRES (ed.), *The Passionate Intellect*, New Brunswick, Transaction Publishers 1995 («Rutgers University Studies in Classical Humanities», VII), pp. 67-82.

¹⁶ See most recently J.-B. GOURINAT, *The Stoics cit.*, p. 55.

tue and god commonly considered incorporeal, must in fact be a body. If for example your courage can move your limbs in ways in which those of a coward would not move, by taking you towards the enemy instead of away from them, that courage must itself be corporeal: otherwise it would be unable to move your body. And the thesis that it is corporeal, once explained, is less implausible than might at first appear: your courage is your soul in a certain state, and your soul is itself a highly attuned portion of breath, i.e. warm air, coextensive with your body.

This doctrine has little to do with materialism as conventionally conceived, which typically regards minds and mental properties as fully explicable in terms of material properties alone, such as weight, temperature and position in space. The Stoics on the contrary hold that mental properties, such as intelligence, are irreducible to material properties, and that is precisely why Stoic physics is dualist: god, its second principle alongside matter, is there because matter itself cannot provide vital properties. Intelligence, life etc. are, correspondingly, ineliminable properties of the principle god precisely because they are neither derivable from nor reducible to the properties of matter. If god, in addition to these vital properties, possesses corporeality, that is to ensure that this active principle has causal efficacy as well. It is therefore better to avoid the term 'materialist' when speaking of Stoic physics, and to stick to terms like 'corporealist' or 'pansomatist'.

By imposing their dualism even at the most primitive level of analysis, the Stoics ensure a rigid division of roles between matter, conceived as pure prime matter devoid of all attributes, and god, conceived as pure divine intelligence, abstracted from material embodiment. Unfortunately, however, interactions at this entirely theoretical level are not open to inspection, and it is therefore hard if not impossible to conduct an informative account of cosmic processes in terms of these two entirely simple protagonists. The pairing of god and matter provides a basic dualist ontology, but little more. It is no doubt for this reason that in Stoic cosmology the god-matter dualism is replicated higher up, at the phenomenal level. Out of god and matter, we are told, are formed the four elements – earth, water, air and fire. And it is the interactions of these four, rather than of god and matter, that are described in the process of cosmogony. In the early stages of cosmogony the craftsmanlike role of god is taken over by one of the four elements, fire, and in subsequent stages by the two active elements air and fire. Air and fire, either severally or, more typically, in combination,¹⁷ form

¹⁷ For evidence that even fire or air taken severally can count as *pneuma*, see RICHARD SO-RABJI, *Matter, Space and Motion*, London, Duckworth, 1987, pp. 85-89.

an active animating power called *pneuma*, 'breath', which pervades the entire body of the world.

The details of this need not delay us now. The following remarks should suffice. The initial leading role played by fire in shaping the elemental structure of the world is a legacy from Heraclitus, and reflects in particular the work of Cleanthes, Zeno's Heraclitean-inclined colleague and, in due course, successor. The eventual dominance of *pneuma* as the Stoic explanatory principle was probably the trademark of the third Stoic scholar Chrysippus. It seems to be intended as a scientific updating of the Stoics' original legacy, inspired by the latest Alexandrian medical research, to the extent that this, in discovering the nervous system, seemed to have confirmed the central role of *pneuma* in animating the body. The Stoic world being itself an animate being, it was natural for Chrysippus to extend to the whole of it the same vitalizing *pneuma* that was held to pervade and animate the human body. According to his physics, *pneuma* is omnipresent in the world. Much as the *pneuma* animating a living body accounts not only for its mind, sense organs etc. but also for its hair and fingernails, so too even a part of the world as primitive as a rock gets from the kind of *pneuma* that imbues it (technically called *hexis*) both its cohesion as a single entity, and attributes such as hardness and whiteness.

Since *pneuma*, usually a mixture of the active elements air and fire, is as it were the vehicle by which the divine principle pervades the world, it was natural for the Stoics to treat the other pair of elements, the passive ones earth and water, as discharging the function of matter. It is, for example, usually when compounds of earth and water are warmed, and draw breath, that they become animate beings, and that is a very simple illustration of how the active elements fire and air can function as the force that intelligently shapes the passive, material ones.

It should by now be clear how at the phenomenal level the pair of active elements, air and fire, take over the role played by the principle god at the most primitive level. And this shift of level is acknowledged in Stoic usage: the cosmic *pneuma* is itself called 'god' and divine 'reason' (*logos*), just as at the lowest level the active principle is. Correspondingly, the terminology of 'matter' is sometimes applied to an underlying stuff which is not featureless prime matter but an already partly informed proximate matter, such as one of the four elements, or the clay, bronze or wax of which artefacts are formed. The Stoics, that is, started from an ontological conception of matter, namely irreducible prime matter, an ultimate constituent of reality with its own distinctive nature; but they added a second, functional notion of matter, in which some underlying item, whose own matter already bears some formal properties, comes itself to serve as pliable matter relative to the

shaping powers of *pneuma* acting upon it.¹⁸ This flexible use of the concept of matter was no novelty, but had clear antecedents in Aristotle.

The next task is terminological. Two main Greek terms for matter occur in our Stoic sources. The first is *hylē*, the Aristotelian term of art, literally ‘wood’ or ‘timber’, and therefore well suited to the role of that ‘out of’ which things are manufactured. Whereas debate remains as to where, if anywhere, Aristotle speaks explicitly of prime matter, there is no possible dispute that *prōtē hylē* was from an early date Stoic terminology for prime matter, the ultimate bearer of all properties, not in its own right characterized by any of those properties. Calcidius Latinizes *hylē* quite literally as *silva*.¹⁹

The second regular Stoic term for matter is *ousia*, the abstract noun from the verb «to be», conventionally translated ‘substance’. It was Latinized somewhat confusingly by Cicero as *materia*,²⁰ and by Seneca as *essentia*,²¹ while Calcidius alternates between *essentia* and *substantia*. Throughout the Hellenistic period, *ousia* is used as a designation for matter, much like the word ‘substance’ in its most familiar modern usage, and no trace is detectable of its Aristotelian use as a count noun for ontologically fundamental items, the usage according to which the candidates for substance include such discrete items as men and essential forms. This remarkable transformation in the philosophical meaning of *ousia* can, I believe, be traced to a certain way of understanding the term’s use in Plato’s *Timaeus* (35a, 37a-b), where the enigmatic reference to «divisible *ousia*» as a component of the world-soul and as one object of its thought was being read as a reference

¹⁸ Another sign of this flexibility is the occasional Stoic use of the other technical term for matter, *ousia* (see below) to designate the matter underlying divine or mental entities, despite the fact that this matter is not a passive element but *pneuma* or aether: e.g. DL 7.136, 142, SVF 2.1052, 1064, POSIDONIUS F128. I prefer to think of this as confirming that matter is a relative notion than as attesting a distinct ‘active’ sense of matter. For the latter alternative, see esp. FRANCESCA ALESSE, *Il concetto di οὐσία nel pensiero metafisico e cosmologico di Posidonio: alcune considerazioni su F 92 e 96 EK (= 267 e 268 Th.)*, in A. M. IOPPOLO and D. N. SEDLEY (eds.), *Pyrrhonists, Patricians, Platonizers. Hellenistic Philosophy in the Period 155-86 BC*, Naples, Bibliopolis, 2007, pp. 143-185, at pp. 161-163.

¹⁹ *Materia* in Cicero’s rhetorical writings is likely to represent ὕλη, but for reasons given in the next paragraph it is doubtful whether it ever does so in the philosophical treatises.

²⁰ *Materia* is Cicero’s regular Latinization of οὐσία in his *Timaeus* translation (even, remarkably, at 37a), and since this translation was intended to form part of his systematic development of a Latin philosophical terminology there is no reason to doubt that the same applies to his use of *materia* elsewhere, although it cannot be ruled out that it sometimes also translates ὕλη.

²¹ SENECA *Ep.* 58.6. Here he attributes *essentia* to Cicero, but it occurs nowhere in Cicero’s surviving works, and the claim is contradicted by Quintilian’s different attributions of the term’s origin (2.14.2, 3.6.23, 8.3.33).

to matter by Platonists contemporary with Zeno.²² It was to all appearances not until the later first century BC, when the text of Aristotle's *Categories* becomes a new focus of study, that the Aristotelian concept of *ousia* re-entered the philosophical vocabulary.²³

How if at all do *hylē* and *ousia* differ? Calcidius, whose commentary on the *Timaeus* is our fullest source for the Stoic concept of matter, represents the Stoics as having found a number of ways of relating these two terms to each other. Some Stoics, he reports, treat them as synonyms, or at least as entirely co-referential: according to these, *hylē* and *ousia* alike are terms for the ultimate entity that underlies all phenomenal bodies, being that which they consist of, and in which their changes take place without it itself ever changing (289).²⁴ However, Calcidius adds (290), the majority of Stoics, including Zeno and Chrysippus, use *hylē* as the more general term for matter, including proximate matter such as iron and bronze, and equate *ousia* not with all *hylē* but narrowly with *prōtē hylē*, prime matter. It is prime matter that is most properly called *ousia*, because it is the common cause of being for all things.²⁵

²² For this possibility, see further D. SEDLEY, *The origins* cit., pp. 70-71. Crantor, fr. 10 Mette, is one Platonist who was certainly interpreting 'divisible *ousia*' that way.

²³ A third term, which our sources for Stoicism sometimes use interchangeably with *ousia*, is *hypokeimenon*, in this context probably better translated 'substrate' than 'subject'. Like *hylē*, this has an Aristotelian origin. But it occurs almost entirely in Aristotelianizing sources (e.g. Porphyry *ap. SIMPL. In Cat.* 48.11-16, DEXIPPUS *In Cat.* 23.25ff.). Simplicius uses *hypokeimenon* as the name of the first of the four Stoic categories (*In Cat.* 66.32-67.2), as does Plotinus (*Enn.* 6.1.25-30), but PLUT. *Comm. not.* 1083A-1084B gives the strong impression that the first category was actually called *ousia*, and that each of the four categories was held to pick out a particular *hypokeimenon*, here better rendered «subject». In the present state of the evidence it seems to me unsafe to assume that the use of *hypokeimenon* as a noun for designating matter is authentically Stoic. To judge from Calcidius' testimony, the Stoics did speak of matter as 'underlying' a fully formed body, but without also designating matter *to hypokeimenon*. I therefore set it aside for present purposes, and concentrate on the other two terms, *hylē* and *ousia*.

²⁴ «[...] quod silvam, simul essentiam appellat, hactenus definites: "essentia et silva est quod subiacet corpori cuncto, vel ex quo cuncta sunt corpora, vel in quo proveniunt rerum sensibilibus commutationes ipso statu proprio manente, item quod subitum est corporibus qualitates habentibus, ipsum ex natura propria sine qualitate». Calcidius does not specify that only one group of Stoics is being cited, but this becomes clear when he continues (290) «plerique tamen silvam separant ab essentia [...]» (see next note). It is unclear how far this group goes in identifying the two concepts, and therefore unclear whether or not it includes Posidonius (F92, διαφέρειν δὲ τὴν οὐσίαν τῆς ὕλης, τὴν αὐτὴν οὐσίαν κατὰ τὴν ὑπόστασιν, ἐπινοία μόνον, on which see the extended treatment of F. ALESSE, *Il concetto* cit.).

²⁵ «Plerique tamen silvam separant ab essentia, ut Zeno et Chrysippus. silvam quippe dicunt esse id quod est sub his omnibus quae habent qualitates, essentiam vero primam rerum omnium silvam vel antiquissimum fundamentum earum, suapte natura sine vultu et informem. ut puta aes aurum ferrum, cetera huius modi, silva est eorum quae ex isdem fabrefiunt, non tamen essentia; at vero quod tam his quam ceteris ut sint causa est, ipsum esse substantiam». This distinction is between (a) matter in general (whether proximate or prime), called ὕλη, and (b) one species of it,

A further distinction is then quoted (291).²⁶ *Ousia* is essentially a static term, denoting that of which a thing is at bottom constituted: hence it is reasonable to say that the world must have an *ousia*. By contrast, *hylē* is a dynamic term: when we speak of something's *hylē*, which might best here be translated literally as 'timber', we are thinking of a craftsman in the process of constructing that thing out of the appropriate matter.²⁷

These latter groups – those Stoics who equate *hylē* with non-prime as well as prime matter, and those who regard *hylē* as a dynamic term appropriate to the process of construction – are clearly meant to hold mutually compatible views, since Calcidius refers to both groups as 'the majority' (*plerique*) of Stoics. We are therefore entitled to synthesize their views, along the following lines. *Hylē*, 'timber', is essentially building material. Its paradigmatic cases are therefore the kinds of proximate matter deployed by carpenters, sculptors and others. At the very lowest level of analysis, the limiting case of *hylē* is prime matter. However, there is no actual stage of cosmogony at which god is working to shape prime matter, in the way that a sculptor works to shape his bronze. At every stage god is working on already informed matter: first air, then moisture, then all four elements. Prime matter is therefore not, other than in a very attenuated sense, a building material, understood dynamically. Rather, it is that which permanently underlies the world, providing the locus of change without changing its own properties, since it does not in fact have any properties. (Hence the sources frequently call it *apoiós ousia*, «qualityless substance».)²⁸ Given this stat-

prime matter, called οὐσία. No term is reserved for proximate matter alone, either here or at DL 7.150. Regarding this latter passage I therefore differ from J.-B. GOURINAT, *The Stoics* cit., esp. pp. 48, 58, who infers from it that «In the [second] sense, "matter" designates the qualified matter of particular realities». The distinction made at DL 7.150 is in my view a different and unrelated one, between the sum total of prime matter, which is fixed, and its parts, which change size, as amplified at STOB. *Ecl.* 1.132.27-133.3 = *SVF* 1.87 (part).

²⁶ «Plerique etiam hoc pacto silvam et substantiam separant, quod asseverant essentiam quidem operis esse fundamentum, ut mundi fore merito dicatur atque existimetur essentia, silvam vero contemplatione opificis dictam, quod eam fingat ac formet».

²⁷ This same connotation is detectable in the Stoic ethical use of ἄλη (PLUT. *Comm. not.* 1069E, 1071B, CIC. *Fin.* 3.61, EPICT. *Diss.* 1.29.2-3, 2.5.1-8, *SVF* 3.114): naturally preferred indifferents, like wealth and health, are the «matter» underlying virtue or wisdom, not in the sense that they constitute virtue or wisdom, but by being that on which virtue and wisdom operates in making choices.

²⁸ Especially *SVF* 1.86-88, 2.316-317. Anomalously, DL 7.137 appears to say that «the four elements are jointly qualityless substance, matter»: τὰ δὲ τέτταρα στοιχεῖα εἶναι ὁμοῦ τὴν ἄποιον οὐσίαν τὴν ἄλην. This is ingeniously defended by J.-B. GOURINAT, *The Stoics* cit., p. 67: «the pairs of contradictory qualities (hot + cold + liquid + dry) add up to a null sum», but in my view it is too isolated a testimony to stand (PLUT. *St. rep.* 1086A, which Gourinat cites, is making a different point), and we would do better to return to the reading of the best MSS, τὴν ποιὸν οὐσίαν, which may suggest τὴν ποιὸν οὐσίαν as the basis of a more correct text.

ic role, it becomes less informative to call prime matter *hylē*, and preferable to call it the world's *ousia* – 'being' or 'substance'.²⁹

I now turn to another aspect of Stoic matter, one that again probably owes more to the Platonic than to the Aristotelian background. Stoic matter is radically fluid.³⁰ The background lies in Plato's characterization of matter in the *Timaeus*, in his Heracliteanism about the sensible world, and most directly in the work of his second successor Xenocrates, a dualist who made matter one of his two metaphysical principles and named it «the everflowing» (τὸ ἀένανον). Aetius (1.8.2) seems to be broadly right when he associates the Stoics with the same tradition, according to which matter (*hylē*) is changeable and fluid (ῥευστή) throughout, a view which he tendentiously traces back to Thales, no doubt on the ground that Thales made water the basis of everything, as well as to Pythagoras. Naturally Heraclitus, considered the philosopher of flux *par excellence*, and a hero of the Stoics, is likely to be an independent influence.

Is this flux thesis one about prime matter, phenomenal matter, or both? Certainly some reference is made in our Stoic sources to the flux of prime matter. According to Aetius (*SVF* 1.87), the world's prime matter taken as a whole is quantitatively unchanging, but its parts become alternately separated and fused under the governance of divine reason. However, when we ask how this can be, the answer is inevitably that it is by courtesy of the changes imposed by the active principle upon informed matter that portions of prime matter too can move from place to place, mix and separate. Prime matter cannot move on its own, if only because it never is on its own. What moves is always a portion of prime matter endowed with certain qualities, and indeed it is usually its qualities, such as heaviness or liquidity, that cause it to move in the way that it does. It is therefore unsurprising that Stoic discussions of the role of matter rarely bother to specify whether it is prime matter or phenomenal matter that is at issue. And this may in turn help to explain why in Stoic usage *ousia*, although as we have seen it was deemed the term of art for prime matter, expanded to become the favoured Stoic word for matter in general. Prime matter may be an es-

²⁹ Cf. DL 7.150, οὐσίαν δέ φασί τῶν ὄντων ἀπάντων τὴν πρώτην ἕλην, ὡς καὶ Χρῆσιππος ἐν τῇ πρώτῃ τῶν Φυσικῶν καὶ Ζήνων. ἕλη δὲ ἐστὶν ἐξ ἧς ὁτιδήποτε γίνεται. Here again the opening words may suggest that *ousia* is the preferred term, and *hylē* is treated as the more dynamic of the two terms.

³⁰ The scattered evidence for this theme is magisterially assembled by F. DECLEVA CAZZI, *La «materia scorrevole»*, in J. BARNES and M. MIGNUCCI (eds.), *Matter and Metaphysics*, Naples, Bibliopolis, 1988, pp. 425-470.

sentential item of Stoic ontology, but its explanatory power regarding cosmic processes is close to zero.

The Stoics never inferred from the fluidity of matter that it is the source of evil, as the Platonist tradition came to do.³¹ Nor did they follow Plato in holding that it makes the sensible world unknowable. To see the Stoic flux doctrine in operation, we must turn instead to a classic debate between the Stoics and their opponents in the Academy about diachronic identity.³² The Academics raised a puzzle about how growth is possible, tracing its origin back to the 5th century playwright Epicharmus.³³ The basis of this puzzle, known as the Growing Argument (*auxanomēnos logos*), is that everything is constantly changing its material composition by addition and subtraction: in particular, living things undergo regular recombination through ingestion and excretion. You lose matter between meals, and regain it when you eat. Every addition or subtraction makes you a different individual. As a result, although you may seem to be an enduring being, you are in fact a long series of ephemeral individuals, each of them differently constituted. Hence – and this explains the title «Growing Argument» – there can be no such thing as growth. You cannot grow without at least some material addition to your body, but that addition, however small, is enough to turn you into a different lump of matter, and hence a different individual. In which case, it cannot be said at the end of the process that you have grown, because it is not the same person who was smaller at the start of the process and larger at the end of it.

In response to this puzzle, the Stoics accept that a thing's *ousia* is not stable enough to constitute its enduring identity. That is, the radical fluidity of matter is accepted as a premise on both sides of the debate. What is being agreed here is not merely the point, hardly controversial, that matter undergoes regular change, but that matter's change is such as to render it incapable of providing enduring identity over time. I say «over time» because the problem addressed by the Growing Argument is entirely a diachronic one. Synchronically, for the Stoics matter really is a criterion of individuation: at any given time it is impossible, they say, either for two individuals to occupy the same *ousia* as each other, or for one individual to occupy two different *ousiai*.³⁴ Over time, however, they have now been

³¹ For this contrast, cf. CALC. *In Tim.* 296.

³² I have written about this more fully in DAVID SEDLEY, *The Stoic criterion of identity*, «Phronesis», XXVII, 1982, pp. 255-275.

³³ The fact that in tracing it back to Epicharmus they were taking their cue from Plato, *Tht.* 152e, strengthens the suspicion that their agenda was in some sense a Platonic one; cf. F. DECLERVA CAZZI, *La «materia scorrevole»* cit., esp. pp. 247-250.

³⁴ For the first of these theses, see PLUT. *Comm. not.* 1077C-E; for the second, PHILO, *Aet. mundi* 47-51.

forced by the Growing Argument to admit that the same individual cannot expect to continue being paired with one and the same *ousia*. Your history throughout your lifetime is not the history of the ephemeral lump of matter that is now you.

Who then are you? The Stoics' solution is based on their metaphysical theory often referred to as the Stoic 'categories'. It is the first two of the four categories that do the work here. The first category is listed in our sources as «substrate», *hypokeimenon*, but in our most dependable textual evidence the word used is not this Aristotelian term but the Stoic term *ousia*.³⁵ The second category is the «qualified individual» (*poios*). Very simply, the point is that each discrete individual can be referred to in a variety of ways: most primitively, simply by pointing to a lump of matter, but more richly by reference to the qualities that inhere in the matter. Some of these qualities are 'common' ones, such as colour and shape; but some are uniquely individuating qualities. In fact, the intuition that each of us succeeds in being a single lifelong individual is converted by the Stoics into the metaphysical doctrine that every individual must have a uniquely individuating quality that endures from birth to death. Your name picks out, in their technical terminology, an *idiōs poios*, a «peculiarly qualified individual». The individual who is you at this moment occupies a certain lump of matter, and could not be an individual without doing so. But what endures, and grows when you eat, is not the lump of matter, but you, the peculiarly qualified individual.³⁶

The Academic critics retorted that the Stoics were now claiming that each of us is two different bodies in the same place, (1) a lump of matter, and (2) a unique person.³⁷ Actually, though, our evidence shows that, the Stoics were quite careful *not* to talk this way, as if, absurdly, you and your matter were two identically shaped bodies crammed into one and the

³⁵ Cf. note 23 above.

³⁶ There is undoubtedly a resemblance between this Stoic thesis and the contention of Aristotle, *GC* 1.5 that growth occurs in respect of form, not matter: see further, F. ALESSE, *Il concetto* cit., pp. 169-171. Whether a historical connection need be postulated is less clear, given the origins of the Stoic doctrine in the debate with the Academy and in the school's own category theory.

³⁷ See esp. P. Oxy. 3008, printed as text 28C in A. A. LONG and D. N. SEDLEY, *The Hellenistic Philosophers*, Cambridge, Cambridge University Press, 1987: «[...] since the duality which they say belongs to each body is differentiated in a way unrecognizable by sense-perception. For if a peculiarly qualified thing like Plato is a body, and Plato's substance is a body, and there is no apparent difference between these in shape, colour, size and appearance, but both have equal weight and the same outline, by what definition and mark shall we distinguish them and say that now we are apprehending Plato himself, now the substance of Plato? For if there is some difference, let it be stated and demonstrated».

same portion of space. To quote the clarification put forward by the Stoic Posidonius:

The peculiarly qualified thing is not the same as its constituent substance (*ousia*). Nor, on the other hand, is it different from it, but is all but the same, in that the substance both is a part of it and occupies the same place as it, whereas whatever is called different from something must be separated from it and not be thought of as even part of it.³⁸

The Stoics, as witnessed here, strongly endorsed Plato's contention that a whole is neither the same as its part nor different from it.³⁹ Here that insight is being put to good use in explaining how a thing is related to its own matter. If you were simply indistinguishable from your matter, nothing could be true of you that was not true of your matter, and you could have no more persistence through time than your matter has, i.e. virtually none. If you and your matter were simply two different bodies, we would better understand how it can be that you grow whereas your matter does not, but we would be at a loss to explain why you and your matter are nevertheless at all times perfectly co-extensive. By taking the Platonic middle route, and treating your matter as neither the same nor different, the Stoics are seeking to steer between these two pitfalls.

An Aristotelian might have addressed the same issue by conceding your identity with your matter but adding that it is an accidental identity, not an essential one. That basic Aristotelian distinction between essence and accident is not part of the Stoics' analytic framework, not even that of Posidonius, despite his undoubted interest in parts of the Aristotelian corpus. In place of the Aristotelian distinction, we have seen here yet again how, to help theorize the role of matter, Stoicism was able to draw on alternative insights stemming from the Platonic tradition.⁴⁰

³⁸ POSIDONIUS F96.

³⁹ PLATO, *Parm.* 146b. For Stoic adoption of the same thesis, cf. S.E. *M* 9.336, 11.24, SENECA, *Ep.* 113.4-5, and see further, J. BARNES, *Bits and pieces*, in J. BARNES and M. MIGNUCCI (eds.), *Matter and Metaphysics* cit., pp. 223-294, F. ALESSE, *Il concetto* cit., p. 172.

⁴⁰ My thanks, for helpful written comments, to Francesca Alesse.