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How Nothing Can Be Something: The Stoic Theory of Void

Introduction

The notion of void has posed metaphysical difficulties for philosophers since antiquity, and the Stoics are no exception. What could something that is arguably nothing even be? The Stoics' answer to this question was a matter of some internal debate then, as it is now to those of us looking back. I will give an account of the Stoics' unique theory of void, and show how it illustrates the general ontological principles that make the Stoics our first true physicalists.

To appreciate the uniqueness of Stoic void a little background is necessary. Leucippus and Democritus, in the 5th century BC were the first atomists, followed by Epicurus in the Hellenistic period (4th and 3rd centuries BC). As David Sedley has argued,¹ these theories did not come about in a vacuum (so to speak), and their evolution is instructive of the conceptual difficulties of ancient Greek physics. The Greek translated as *void* is *to kenon*, which literally means *the empty*. It is natural to take this as a mass term and thereby understand void as empty space. As Sedley argues, however, in responding to Pythagoras, Parmenides and Melissus, the atomists Leucippus and Democritus conceived of void rather as an element, a negative substance that itself occupies space. Indeed, this is the force of positing atoms and the void (better: voids) as the ultimate constituents of the cosmos. Epicurus and Lucretius, on the other hand, did espouse a concept of void as empty space. Epicurean void is best characterized as three-dimensional extension that persists when atoms move through it. Though void is no longer an ultimate constituent of the cosmos *qua* element, it remains fundamental in that it is not a derivative attribute of body (atoms), i.e., Epicurean void has independent existence.

The Stoics embraced neither of these options; though, as I will show, their conception of void has aspects of both. It is on the one hand a discrete entity denoted by a count noun, like the Democritean conception of void as element; on the other hand, it is also empty space, like the Epicurean conception. However, unlike either atomist picture, Stoic void does not exist

¹ "Two Conceptions of Vacuum," *Phronesis*, Vol. 27, No. 2 (1982), pp. 175-193

independently of body; if there were no body there would be nothing at all—not even void. In this latter respect the Stoics are akin to contemporary relationists about space (and time), but in a non-reductive spirit that allows them to embrace substantialist discourse that takes void as a particular. Accordingly, Stoic void is Something rather than nothing, even though it does not exist. In order to arrive at this result, however, we will first have to navigate a minefield of textual and interpretive issues.

For example, the Stoics are often called the first nominalists. Indeed, they eagerly affirm that only bodies (and their attributes) exist,² and they categorically reject universals.³ However, though the Stoics are certainly staunch physicalists, they are not typical nominalists in that their ontology is not restricted to bodies. This probably sounds paradoxical, since the Stoics also say that only bodies exist. But the Stoics' central metaphysical innovation is that corporeal existence does not exhaust what there is within a physicalist framework—they say that while everything is Something (*ti*), not everything exists. In addition to bodies, the Stoics recognize immaterial entities they call *incorporeals*; incorporeals depend on body without themselves being bodies, much as the flow of traffic depends on cars without being nothing but the cars. Though these entities do not *exist* in the full-fledged manner of bodies, they nonetheless have a derivative kind of reality the Stoics term subsistence (*hupostasis*). Encompassing both kinds of reality, corporeal existence on the one hand and immaterial subsistence on the other, the Stoics created Something (*ti*) as the highest genus of reality.

Just how the Stoics can coherently countenance immaterial entities within a physicalist ontology has been a matter of debate since antiquity. Though the canon of Stoic incorporeals—place, void, time and the tantalizing *lekta*, or sayables (roughly, the meanings of our words)—is well attested,⁴ it has been unclear what this motley crew of immaterial entities have in common; or, what comes to the same: what it even means to say they *subsist*. Many commentators consider at least one of the incorporeals to be a breach of Stoic physicalism, and *subsistence* to be no more than *ad hoc* jargon. Galen, for one, mocks the Stoics' distinction between existence and subsistence as “linguistic quibbling” (*ten micrologian ton onomaton*).⁵ Without a unifying principle to their subsistence,

² Alexander, *In Ar. Top.* 301,21-22 (27B part); Sextus Empiricus *M.* 10.3-4 (49B; passage I below)

³ Stobaeus 1.136,21-137,6 (30A), Aetius 1.10.5 (30B), Diogenes Laertius 7.60-1 (30C), Alexander, *In Ar. Top.* 359,12-16 (30D), Simplicius, *In Ar. Cat.* 105,7-20 (30E, passage L below)

⁴ Sextus Empiricus *M.* 10, 218 (27D). Parenthetical citations like (27D) refer to passages by chapter and order therein from A.A. Long & David Sedley, *The Hellenistic Philosophers*, Vols. 1 and 2, Cambridge University Press (1987) (hereon LS); unless otherwise noted, translations are from LS with occasional modifications.

⁵ *Meth. Med.*, 10.155,1-8 (27G)

the incorporeals look like left over entities that don't fit the corporeal mold, but aren't quite dispensable either; and Something, as the highest genus of being, seems more gerrymandered than principled. Suddenly, the Stoics don't look much like nominalists at all, or even like competent physicalists, for that matter. The debate over Stoic void is at the heart of these issues in that it has been unclear whether there is even a single theory of void embraced by enough thinkers to be called a doctrine or, rather, whether disagreements over void reflect a fundamental incoherence to the concept such that the Stoics cannot even be seen as operating against a background of shared physicalist assumptions. If they cannot, problems with the void are testament to general problems with the coherence of their ontology.

Evidence and Controversy

It is uncontroversial that the Stoics classify void as an incorporeal Something and that its mode of reality is called *subsistence*. As I have said, however, there is little agreement about what these terms mean or whether they are just *ad hoc* labels for left over entities. So I will proceed directly to the texts. Since I will argue that the Stoics recognized *place*, *room* and *void* as three distinct incorporeal phenomena, I will have to address place and room as well; indeed these concepts go hand in glove.

The first thing to notice is that void appears to be an inherently negative conception, defined purely in terms of lacking body, as the following texts (A1, B3) attest.

- A) They differentiate void (*kenon*), place (*topos*) and room (*chora*); (1) and void is on the one hand lack of body, (2) while place is what is occupied by body, (3) and room is what is partly occupied, just as in the case of a jar of wine.⁶
- B) (1) The extra-cosmic void (*kenon*) is what extends into infinity (*apeiron*) from all sides (*apo pantos merous*). And of this, (2) what is occupied by body (*katechomenon hupo somatos*) is called place (*topos*), (3) while what is not occupied will be void.⁷

The question that immediately arises is what sense there can possibly be for the Stoics to maintain that only bodies exist and yet that void is something beyond these. If void is just what is not a body, doesn't that make it nothing at all? The problem is all the more pressing when we notice that void is

⁶ Aëtius, *Plac.* I.20,1 = SVF 2.504

⁷ Cleomedes, *Cael.* I,1,17-19 (Todd) = SVF 2.538+

strictly speaking extra-cosmic, i.e., outside the material cosmos (earth and the surrounding heavens and sun, moon, etc.) that exhausts what exists,⁸ as B1 and the following show.

- C) The Stoic void (*kenon*) is not something within, it holds (*huparchein*) outside the cosmos.⁹

Further, one wonders what the infinity of void (B1) could possibly amount to if it is nothing but a non-body. One approach to this question is to take void as something self-subsistent, along the lines of empty space that is there whether the cosmos exists or not.¹⁰ As evidence for the independence of void, commentators cite the following passages.

- D) Void is not scattered (*katesparthai*) among bodies but encompasses them, and void is something outside the heavens *per se* (*kath' hauto*), just as the impression (*he phantasia*) of many people exceedingly holds, considering void to be something infinite (*apeiron*) outside the heavens.¹¹
- E) Moreover (*toinun*) it is necessary that there be a certain subsistence to void (*kenon*). The notion (*he epinoia*) of it [void] is exceedingly simple, being incorporeal (*asomatou*) and intangible (*anaphous*), and neither having shape (*schema*) nor accepting shape (*schematizomenou*), and neither undergoing nor doing anything, but (rather) being simply what is capable of receiving (*dechestha hoion te onto*s) body.¹²
- F) Outside [the cosmos] is the infinite void (*apeiron kenon*) encompassing it, which is indeed (*hoper*) incorporeal; and being incorporeal it is what can be occupied by bodies but is not occupied; and in the cosmos there is no void (*kenon*), but it is a united whole (*henosthai*); for the union (*sumphnoian*) and tension (*suntonian*) of the heavenly relative to the terrestrial necessitates this.¹³

Certainly the negative conception of void as unlimited non-body outside the material cosmos is evident in these passages. Its independence from body is found (by those who seek it) in the *per se* locution in passage D and the testimony of passage E that there must be *a certain subsistence* to void. Further, passages D and F suggest that void must be an independent phenomenon if it is to be the sort of thing that can *encompass* the cosmos. The virtue of an account of void as independently subsisting space is that it gives good intuitive sense to characterizing the phenomenon as infinite and extra-cosmic. Unfortunately, the sense of the Greek *apeiron*, which I have rendered as *infinite*, is a controversial matter of its own. The literal meaning of the term is *unbounded*, and so on its own

⁸ As Alexander of Aphrodisias has worried, *Quaestiones* 3.12, 106-35-107,4

⁹ Galen, *De animi peccatis dignoscendis* SVF 2.542; see also *Diff. puls.* 8.674,13-14 (49D)

¹⁰ For example, Brad Inwood, "Chrysippus on Extension and the Void," *Revue Internationale de Philosophie*, 3/1991, No. 178, pp. 245-266; and Keimpe Algra, "Place, Space and Void in Stoic Thought," *Concepts of Space in Greek Thought*, E.J. Brill (1995), pp. 261-339. See also Richard Sorabji, *Matter, Space and Motion: Theories in Antiquity and Their Sequel*, Cornell (1988).

¹¹ Philoponus 17.614 (SVF 1.96)

¹² Cleomedes 8.10-14 (Ziegler) (49C)

¹³ Diogenes Laertius 7.140=SVF 2.543; see also Cleomedes 10,24-12,5 (49H)

lends itself as well to *indefinite* as it does to *infinite*. The rest must be gleaned from context. For example, passage E, which describes the void only in terms of lacking material qualities, might plausibly be taken as evidence for *apeiron* as indefiniteness. On the other hand, their well-known treatment of never-ending divisibility (to infinity, as it is natural to say) speaks to *apeiron* as infinity. Whether we take the unboundedness of void as spatial infinity¹⁴ or as mere indefiniteness,¹⁵ there are implications for the nature of time (also characterized by the Stoics as *apeiron*), for the status of incorporeals generally (is the unboundedness of time and void a function of their being incorporeal, or just a property of those two incorporeals?), and ultimately for the coherence of the ontology as a whole (how can a physicalist, let alone nominalist, system support not only incorporeal but now indefinite entities?).

Further complicating matters, some commentators take Stoic void to be a modal notion.¹⁶ It's clear enough why someone would think so, since the Stoics clearly define void as *what can be* occupied by body (E, F); and with a modal account there is no problem with the status of void as incorporeal and lacking material qualities. But then the challenge to Stoic physicalism is exacerbated: if non-bodies were already a stretch, possible entities are even more so in a system that makes bodies their fundamental entities; how could possible entities depend on bodies in a way that does justice to the nominalist label? This is a problem not only for the modal account of void but also for those who take void as independently subsisting space; if void is independent of body, how is body primary or fundamental?

Our picture of Stoic void takes on new dimensions (as it were) with the following testimony:

- G) The Stoics are compelled to admit that extension in three dimensions (*to triche diastaton*) is common to body and void and place, since they leave void in the nature of existing things even if they deny its presence within the world.¹⁷

Seeing void as three-dimensional extension¹⁸ is helpful in addressing the initial question, how void can be something more than nothing at all—at least now it has some positive characteristics of its

¹⁴ As do, for example LS, David E. Hahm, *The origins of Stoic cosmology*, Ohio State University Press (1977); and Richard Sorabji, *Matter, Space and Motion: theories in antiquity and their sequel*, Cornell University Press (1988)

¹⁵ As do Inwood (op. cit.), Algra (op. cit.) and David Hahm (op. cit.)

¹⁶ For example, Robert B. Todd, "Cleomedes and the Stoic Concept of Void," *Apeiron* vol. 16, No. 2 (June 1982), pp. 129-136; and Emile Bréhier, *La théorie des incorporels dans l'ancien Stoïcisme*, Vrin (1928)

¹⁷ Galen, *Qual. inc.*, 19.464,10-14 (49E)

own. Indeed, extension in three dimensions is uncontroversially a physical phenomenon, which is an asset to the view that void is independently subsisting space rather than a modal concept. However, then it is unclear why the Stoics would define the phenomenon in negative corporeal terms (lacking body, shape, tangibility, and capacity for action or passion) when they could proceed directly to a definition of it as independently subsisting, three-dimensional extension outside the cosmos (as the Epicureans do).

Now, in adjudicating the independence of void and its relation (or lack thereof) to body, we confront the more complicated textual puzzles that lead to the related phenomena of place and room. I will address these briefly, to give a sense of the complications involved.

- H) (1) Chrysippus declared place (*topos*) to be (a) what is occupied through and through by an existent (*to katechomenon dia holou hupo ontos*), or (b) what can be occupied (*to hoion <te> katechesthai*) by an existent and is occupied through and through either by a particular existent (*hupo tinos*) or by several (*hupo tinon*). (2) And if what can be occupied by an existent is partly occupied by something and partly unoccupied, the whole will be neither place nor void, but something else unnamed; for the void (*to kenon*) is spoken of almost (*paraplesios*) in the manner of empty containers, while place in the manner of full ones; (3) but is room (*chora*) (a) a bigger thing that can be occupied by an existent and like a bigger container for body, or is it (b) what has room for a bigger body? (4) At any rate, void is said to be infinite (*apeiron*). For what is outside the cosmos is such; and place is finite because no body is infinite. And just as the corporeal is finite, so the incorporeal is infinite, for time is infinite and so is the void. For just as nothing is no limit, so neither is there any limit to nothing, as in the case of void. For according to its own subsistence (*kata ten hautou hupostasin*) it is infinite; and, again, this is made finite by being occupied; but if what fills it is taken away, a limit to it cannot be conceived (*ouk estin autou noesai peras*).¹⁹

Those who favor a modal view will point to the language of what *can be* occupied describing all three phenomena throughout the passage. On the other hand, the language is strongly realist, as fans of void *qua* independently subsisting space will point out: *according to its own subsistence*, void is infinite. In further support of void as independent, Brad Inwood has argued that the unnamed phenomenon of H2 is a new entity: three-dimensional (indefinite) extension.²⁰ The fact that it is unnamed, according to Inwood, shows that Chrysippus was introducing a new entity to serve as conceptual backdrop to Zeno's incorporeals. According to this picture, it seems there was no unified or orthodox Stoic conception of void. Rather, Zeno started a list of incorporeals that did include void, and Chrysippus later added another entity (extension) to help make sense of the original list. This

¹⁸ Alternately, *interval* or *dimension* can translate *diastema* (e.g., an interval) and *to diastaton* (e.g., the extended). I use extension in all cases for the sake of consistency, sometimes in favor of good Greek over lame English, to highlight the fact that the Greek is consistent.

¹⁹ Arius Didymus fr. 25 from Stobaeus, 1.161,8-26 (49A)

²⁰ op. cit., p. 248

does not paint a principled picture of the Stoic ontology. To make matters worse, there is disagreement as to which texts constitute orthodox and heterodox views. For example, Keimpe Algra²¹ takes passage H to represent an orthodox Stoic view from Chrysippus, while passage I (below) represents Chrysippus' heterodox view on *room*.

- I) (1) The Stoics say void (*kenon*) is what can be occupied by body but is not occupied, or extension (*diastema*) empty of body, or extension unoccupied by body, (2) and place (*topos*) is what is occupied by an existent and made equal to what occupies it (by *existent* they now mean *body*, as is clear from the interchange of names). (3) They say room (*chora*) is an extension that is partly occupied by a body, and partly unoccupied. (4) Some said that room is (*huparchein*) the place of a larger body, so that room differs from place in this respect: that place does not reflect the size of the body contained (for even when it contains the smallest of bodies, it is no less called place) while room is noteworthy (*axiologon*) in that it does reflect the size of the body in it.²²

Algra tries to untangle the place-room-void knot by attributing to Chrysippus the heterodox view that void has two senses: “apparently Chrysippus made a distinction between void *qua* empty space *as such* (being infinite and isotropic) and the void *qua* space surrounding the cosmos (being at any rate anisotropic).”²³ According to Algra, void *qua* empty space is the orthodox view, even though he recognizes that in being self-subsistent it is dangerously close to the Epicurean view that puts void on an ontological par with body. The issue of isotropy (sameness of properties) is raised by Plutarch,²⁴ who finds absurdity in the notion of Stoic void as infinite yet with an identifiable center (where the cosmos is); what is infinite, according to Plutarch and with Algra's sympathies, can't have a beginning, middle or end, i.e., it must be *isotropic* and therefore it must be impossible to say the cosmos is at its center. To address Plutarch's complaints and the mysterious characterizations of room in passages H and I, Algra posits a second sense of void as limited, anisotropic space outside the cosmos, and takes this second sense of void to be what Posidonius called room. Thus on Algra's view, like Inwood's, there is no consistent story about void within the Stoic school.

One might easily think that such internal variance, plus commentators' disagreement as to what disagreements there were among the Stoics, shows there was no consistent or coherent theory of void. Indeed, scholarly interpretations run broad. For instance, David Hahm takes place and void to be “coordinate species of a third thing, ‘that which is capable of being occupied by body’” in

²¹ *op. cit.*

²² Sextus Empiricus, *M.* 10.3-5 (49B+); see also *PH* 3.124

²³ *op. cit.*, p. 335, original emphasis

²⁴ *St. rep.* 44. 1054-B-1055C

an Aristotelian spirit;²⁵ Emile Bréhier reduces room to body;²⁶ and Max Pohlenz,²⁷ Johnny Christensen²⁸ and Long & Sedley take room as the all (*to pan*), e.g.: “to denote space which combines place and void (i.e. the ‘all’, 44A); and they also acknowledged the less technical point that a spatial container within the world, for instance a half-filled wine jar, can accommodate more of the body which partly fills it.”²⁹ The textual evidence, especially the last two passages (H, I), does pose significant interpretive difficulties for void, place and room, and by extension for the Stoic ontology as a whole. So, any account of these three phenomena will have to address the unnamed phenomenon of H2, the difference between H3a and H3b, and the consistency of H with what we get in I.

In addition, an adequate account will determine how void is Something rather than nothing, what it means to say it is three-dimensional extension and how it is related to body. Is void an independently subsisting phenomenon, a modal notion, or describable some other way that respects the avowed primacy of body in Stoic ontology? The unboundedness of void must also be adjudicated; is *apeiron* to be taken as spatial infinity or mere indefiniteness? Further, does it have this property as a function of being incorporeal so that all incorporeals are similarly unbounded, or does it apply only to void and time? Finally, did the Stoics have such widely divergent views about void, place and room that we cannot even speak of an orthodox theory of void? What’s at stake in settling these details is not just whether the Stoics agreed about the nature of void, but whether their debates took place against a background of shared assumptions about what it is to be incorporeal and what it means to be Something subsistent. The coherence of the ontology as a whole hangs in the balance.

The Principles of Stoic Ontology

As I will argue, the Stoics did in fact have a principled and coherent physicalist ontology—one in which we can even identify the sense in labeling them nominalists despite the fact that they recognize immaterial entities in addition to bodies. I will explain the principles of Stoic ontology

²⁵ op. cit., p. 105; indeed, Hahn takes Stoic cosmology to have evolved out of Aristotle quite directly.

²⁶ op. cit. p. 52

²⁷ *Die Stoa: Geschichte einer geistigen Bewegung*, Vandenhoeck & Ruprecht (1959)

²⁸ *An Essay on the Unity of Stoic Philosophy*, Scandinavian University Books (1962)

²⁹ LS, vol. 1, p. 296

here, then apply them to void, resolving the interpretive debates introduced above to show in conclusion that void is no bur to Stoic metaphysics but, on the contrary, illustrative of its very coherence.

As I have said, the Stoics' highest category of reality, Something, is comprised primarily of corporeal entities. Now, the strong materialist criterion for existence is whether the entity can act or be acted upon.³⁰ Unlike their materialist predecessors, the Stoics took a broad swath of reality to be corporeal, including even the virtues, which had hitherto served as the primary evidence for non-corporeal entities like Plato's Forms. Corporeal reality, or matter disposed in a certain way, is all that properly speaking exists for the Stoics.³¹ However, the Stoic innovation is to forge two criteria of reality instead of one.³² The second criterion establishes a minimal threshold for being Something, i.e., for the immaterial mode of reality they called subsistence (*hupostasis*). There are two aspects to what I call the Something criterion: a measure of objectivity and a test for particularity; I will take each in turn.

One way to capture what it means to be Something for the Stoics is to say that whatever is Something is a proper object of thought, the referent of genuinely significant discourse.³³ I will sometimes call this the thinkability criterion, by which I mean that availability for thought is a logical measure of Something's objectivity, not a point about its provenance. The thinkability criterion does not equate subsistence with being a *product* of thought, but rather restricts the domain to those entities that are available *to* thought such that anyone can think about them. Thus availability to thought is not a criterion for mind-dependence but quite the opposite—it is a logical measure of objectivity because being a *proper* object of thought means being equally available to any thinker, i.e., publicly or intersubjectively.³⁴ Indeed, as Jacques Brunschwig says, to be Something is to have extra-mental reality.³⁵

³⁰ Cicero, *Academica* 1.39 (45A part). See also Aëtius, *Plac.*, 4.20.2=SVF 2.387; Aristocles in Eusebius, *Pr. Ev.* 15.14.1 (45G); Cleomedes, *Cael.* 1.1.66, 1.1.99-100 (Todd); Diogenes Laertius, 7.134 (44B); Sextus Empiricus, *M.* 8.263 (45B), *M.* 10.3-4 (49B); Plutarch, *De comm. not.* 30, 1073E=SVF II, 525

³¹ Alexander, *In Ar. top.* 301,21-22 (27B part); Sextus Empiricus *M.* 10.3-4 (49B); Stobaeus 1.138,14-139,4 (55A)

³² As Jacques Brunschwig suggested in "La théorie stoïcienne du genre suprême," in Jonathan Barnes and Mario Mignucci (eds.) *Matter and metaphysics*, Fourth Symposium Hellenisticum, Bibliopolis: Naples (1988), pp. 20-127. I now take up and follow through his suggestion, which has so far gone unexplored.

³³ As LS put the point on p. 164; note, however, that my analysis does not agree with LS that Stoic subsistence captures Meinong's mode of being he called *bestehen*.

³⁴ Jacques Brunschwig: "Intersubjectivity is at least a step toward objectivity," p. 218 of "Stoic Metaphysics," in Brad Inwood (ed.) *The Cambridge Companion to the Stoics*, Cambridge University Press (2003), pp. 206-233

³⁵ "Genre suprême," p. 77, p. 79

In support of thinkability and then, below, of the principle of incorporeal subsistence, I will focus on the following famously perplexing passage from Sextus Empiricus:³⁶

- J) For they [the Stoics] say, just as the trainer or drill-sergeant sometimes takes hold of the boy's hands to drill him and to teach him to make certain motions, but sometimes stands at a distance and moves to a certain drill, to provide himself as a model (*pros mimesin*) for the boy—so too some impressors touch, as it were, and make contact with the commanding faculty (*hegemonikon*) to make their printing in it, as do white and black, and body in general; whereas others have a nature like that of the incorporeal sayables (*lekta*), and the commanding faculty is impressed in relation to them (*ep' autois*), not by them (*ouk hup' auton*).³⁷

The impressors that touch the commanding faculty are corporeal, as one would expect given that only bodies can act or be acted upon; they are the motions the boy *sees*, and this type of agency is captured by the preposition *hupo*. In contrast, the impressors with a nature like the incorporeal *lekta* do not meet the action/passion criterion for existence and thus do not make physical contact with the soul. Nonetheless, they are *bona fide* impressors, i.e., proper objects of thought and discourse, which is captured by the preposition *epi*. In this case, the pattern of the drill-sergeant's motions is what the soul is impressed in relation to; it is not visible like the token motions, but it is intelligible, i.e., discoverable by thought. The distinction between sensible and intelligible impressors in this passage is unambiguous, thus lending support to the idea that the Stoics took availability for thought, i.e., the commanding faculty's ability to be impressed *in relation to* Something, as a measure of objective reality. This principle shows up throughout the Stoic corpus. For example, in the context of Stoic logic, Sextus tells us the following:

- K) But one [an argument] like “If sweat flows through the surface, there are ducts discoverable by thought. But sweat flows through the surface. Therefore there are ducts discoverable by thought” is demonstrative, having the non-evident conclusion “Therefore there are ducts discoverable by thought.”³⁸

What is discoverable by thought here is a true conclusion, i.e., what is the case, which is of course objective. Thus availability for thought is consistently testament to objective reality. I will now turn to the second aspect of the Something criterion: particularity.

³⁶ Another important piece of evidence for the thinkability criterion is M. 1.17 (27C): If something is taught, either it will be taught through not-somethings (*outinon*) or through somethings (*tinon*). But it cannot be taught through not-somethings; for these have no subsistence for the mind (*anupostata...tei dianoiā*), according to the Stoics

³⁷ M. 8.409 (27E)

³⁸ Sextus Empiricus, *PH* 2.140 (36B7)

There is good textual evidence³⁹ and a long scholarly tradition⁴⁰ that the Stoics countenance an ontology of particulars. Indeed, this is why the Stoics are often cast as the first nominalists. Since it's not entirely clear in what the particularity of non-existent Somethings consists it's worth making some terminological observations at the outset. Being a particular (*καθ' ἑκαστον, τοδε τι*) is a matter of being an individual, in contrast to a universal. Particulars are fully determinate entities as opposed to Plato's Forms or the generic Average Man with 2.4 children.^{41, 42} Accordingly, talk of kinds is always reducible to talk of tokens so that statements like "Man is a rational mortal animal" translates without loss of meaning to the universally quantified proposition "If something is a man, that thing is a rational animal."⁴³ So while it is acceptable to characterize Stoic particulars as tokens, it is important to remember that such talk does not bring with it a corresponding realism about types. For the Stoics all there is are individual tokens, and in this respect they are rightly called nominalists.

Jacques Brunschwig has suggested that the Stoics' famous Not-Someone argument against Platonic Forms is a test for reality, one that screens for particularity in terms of basic laws of logic.

- L) (1) Indeed, Chrysippus too raises problems as to whether the Idea is to be called a "this Something" (*τοδε τι*). (2) One must also take into account the Stoics' custom concerning generically qualified things—how according to them cases (*πτωσεις*) are expressed, in their school how universals (*τα κοινα*) are called not-somethings (*ουτινα*), and how their ignorance

³⁹ Syrianus, *In. Ar. Met.* 104,17-21 (30G); Alexander, *In. Ar. Top.* 359, 12-16 (30D); Sextus Empiricus, *M.* 11.8-11 (30I)

⁴⁰ e.g., Brunschwig, "Genre supreme" and "Stoic Metaphysics;" Caston, op. cit., *et al.* in his footnote 1, p. 145; LS p. 164, pp. 181-2; John Sellars, *Stoicism*, UC Press (2006), p. 84; Gerard Watson, *The Stoic Theory of Knowledge*, Belfast (1966); Benson Mates, *Stoic Logic*, UC Press (1961), p. 32

⁴¹ To borrow an LS example, p. 181

⁴² While being a concrete or pure particular (that is spatio-temporally continuous and therefore not multiply located) is one way of being an individual, and pure universals like Platonic Forms are never individuals for the Stoics, this dichotomy is not exhaustive; there is also room in the Stoic ontology (as there is for Peter Strawson, *Individuals*, Methuen (1959)) for abstract individuals that are multiply located and not spatio-temporally continuous though still, as Strawson would say, substance-dependent and therefore physical. Such entities have a different kind of subsistence, which the Stoics call *neither corporeal nor incorporeal*; this third kind of Something includes figments (such as Centaurs and Giants) and mathematical limits (such as surface, line and point). The body-less incorporeals, in contrast, are pure particulars in that their determinacy *is* spatio-temporally continuous. Note that I have purposely avoided characterizing the debate in terms of the identity of indiscernibles, though it is central to the conventional distinction between particulars and universals and to the status of abstract entities as individuals. I have avoided it because the Stoics are committed to a uniquely individuating quality (*ιδιον ποιον*) in virtue of which pure particulars will always be discernible; thus they would not characterize pure particulars as failing the identity of indiscernibles test. Nonetheless, they would agree with the spirit of the observation that pure particulars are not identical when they are indiscernible, as in the case of identical neckties. The issue is further complicated by the Stoics' commitment to everlasting recurrence according to which the world repeats itself eternally. It is a matter of debate whether each iteration of the cosmos is numerically identical, indiscernible or merely type identical but with certain distinguishable differences. The Stoics were the first to endorse the identity of indiscernibles, so the way in which each cosmos is *just like* the last has far-reaching theoretical consequences. It is relevant to their understanding of body-less time (defined as the temporal extension (*διαστημα*) of the world's change), as well as for personal identity across worlds and the *lekta*, or sayables—roughly the meanings of our words; indeed, the Stoics are arguably the first to conceive of possible worlds and to posit Twin Earth-style thought experiments.

⁴³ Sextus Empiricus, *M.* 11.8-11 (30I)

of the fact that not every substance signifies a “this Something” (*tode ti*) gives rise to the Not-Someone sophism, which relies on the form of expression. (3) Namely, “if someone is in Athens, he is not in Megara; <but man is in Athens; therefore man is not in Megara.>” (4) For, man is not Someone (*ou tis*); for the universal is not Something; but we took him as Something (*hos tina*) in the argument, and that is why the argument has this name, being called the Not-someone argument.⁴⁴

Here, as with thinkability, the criterion is logical and not causal. Our ability to think about Something is not constitutive of its objectivity, but it is an excellent measure. Likewise, passing the Not-Someone, or *outis*, test is not explanatory of an entity’s particularity, but indicative of it. Now, it’s obvious how individuals like Socrates pass the *outis* test, especially in contradistinction to a universal like Man that obviously is in Megara and Athens at once. But the particularity of non-existent Somethings has remained unclear,⁴⁵ or has been rejected as applicable only to bodies. My suggestion is that each and every thing that is Something is an individual, i.e., a particular, and that this is the grain of truth in labeling the Stoics as nominalists. How so is best illustrated in application to the immaterial Somethings case by case; if it can be applied to all the Stoics’ non-existent entities, then this aspect of the Something criterion is confirmed. Here, I will show that the test applies to place, void and room.

I should add, however, that Victor Caston is pessimistic about the matter: “Attempts to extract a criterion for ‘not-somethings’ from this argument have failed,” he says in reference to Brunschwig (and his treatment of void in particular).⁴⁶ Caston argues that the need for *ad hoc* restrictions in application to the incorporeals shows that the test is not a genuine criterion. However it is important to note that Brunschwig does not put the *outis* test forth as a criterion for Not-Somethings, but as a positive criterion for Somethings. I will therefore persevere and show that the test can be applied without *ad hoc* restrictions. The upshot is that the Stoics’ commitment to objective particulars goes well beyond the familiar Stoic thesis that only bodies exist. In fact, the lesson of the Not-Someone argument is that everything there is (anything that’s Something) will be a determinate individual in space-time. Thus the nominalist label is accurate insofar as the Stoics take everything there is to be located somewhere and therefore to be physical, even if not material.

⁴⁴ Simplicius, *In. Ar. Cat.* 105,8-16 (30E)

⁴⁵ Especially in the case of the Stoics’ hallmark Sayables (*lekta*). Yet, as Brunschwig says, “That *lekta* are particulars is beyond the shadow of a doubt, even if it is quite difficult to grasp that in which their particularity consists,” *op. cit.*, p. 92. Though he goes on to sketch the landscape of the question, Brunschwig does not pursue an answer; he is content knowing that the particularity of *lekta* can be adjudicated in principle.

⁴⁶ *op. cit.*, p. 159

The result so far is that to *subsist* is to be a proper object of thought and discourse, an objective particular that meets the so-called Something criterion. The objectivity of such entities is measured by their availability for thought and discourse; while their particularity is tested by the Not-Someone argument. If I am right about this Something criterion, then the Stoic ontology may be a principled system after all, and not some *ad hoc* construction cobbled together to handle a collection of left-over entities that can't be forced into the corporeal mold. However, even if all Stoic entities meet the Something criterion, there is no guarantee that they constitute a coherent physicalist system. For instance, it remains open whether the incorporeals all subsist according to a common principle at all; and, in fact, interpretations of Stoic incorporeals vary widely in the scholarship.

My thesis is that in addition to the Something criterion that applies to all Stoic subsistents, the incorporeals can each be understood as *body-less*:⁴⁷ entities that depend on body without themselves being bodies, much like the flow of traffic depends on cars without being reducible to the cars that give rise to it. The flow of traffic is a proper object of thought and discourse—we can say true and false things about it, like that it is slow or fast; and it is objectively available for anyone to think about. In addition, such an entity will be particular, and not properly understood as a mass term when it passes the Not-Someone test for particularity: the flow of traffic on the Emperor Norton Bay Bridge cannot be the same flow of traffic as that on the Golden Gate Bridge. They might both be slow, stop-and-go, smooth, or fast; but just as my car cannot at the same time be on the Bay Bridge and the Golden Gate Bridge, so too the particular flow of traffic arising from cars on one bridge cannot be the same as that on another bridge. If a certain flow of traffic arises from cars in Athens, then it cannot be in Megara.

The reason this cannot be the case is that in being *body-less* the incorporeals inherit their positive physical characteristics from the bodies that give rise to them. So the incorporeals are characterized in negative terms, i.e., as a lack of body, in order to capture the fact that their positive characteristics are due to the particular bodies they lack. In fact, the Stoics define body as three-dimensional solid extension⁴⁸ with resistance;⁴⁹ and the point of specifying its solidity is that they

⁴⁷ To borrow the phrase from LS, p. 200

⁴⁸ Diogenes Laertius 7.135 (45E)

⁴⁹ Galen *In. incorp. qual.* 19.483,13-16 (45F)

recognize three-dimensional extension without body as well, as we saw before (passage G).⁵⁰ This is not to say, as Inwood has argued, that non-solid extension is an independent phenomenon subsisting whether body exists or not. Rather, the point of seeing incorporeals as *body-less* (versus a-corporeal, one might say) is to capture their dependence on body. Stoic incorporeals lack body in a specific way, namely they inherit positive physical characteristics from the solid, three-dimensional bodies on which they subsist. If there were no bodies, there would be no incorporeals; there would be nothing at all.

The notion of *positive physical characteristics* needs clarification. I hope it is intuitively clear how the flow of traffic has positive physical characteristics (such as its speed, density and smoothness of its flow) inherited from the cars that give rise to it. However, the Stoics obviously did not speak of the flow of traffic, so it won't do to rely on anachronistic examples to make this point. Let's return instead to the case of the drill sergeant described by Sextus (passage J above). This passage was relevant earlier in establishing that the Stoics recognized availability for thought and discourse as a logical measure of objectivity—if the commanding faculty can be impressed *in relation to* a certain impressor (even if not *by* it), then it must be Something objectively real. Now the passage will help establish just how the incorporeals are *body-less*, i.e., how they can be immaterial yet physical. The drill sergeant's motions are themselves corporeal, and when he takes the boy's hands to teach him the drill he makes corporeal contact. But what is the model the sergeant provides such that it can be an objective impressor without making contact? It's not the motions themselves, since those are perfectly corporeal and make an impression by printing on the soul, like "white and black and body in general." Rather, the model *in relation to which* the boy is impressed is a *body-less* three-dimensional pattern that emerges and is distinct from from the sergeant's individual bodily motions. If the sergeant had not moved that way, there would be no model (or it would be a different model). Yet the model is still Something in its own right: we could say, in a contemporary voice, that the pattern supervenes on the corporeal motions, without being identical or reducible to any one of the sergeant's motions or to all of them collectively. Nonetheless, the ontological commitment to Something of this sort is minimal in that the drill sergeant's pattern comes for free, so to speak—it is an immaterial entity whose extension in three dimensions is entirely determined by the underlying body (the sergeant's individual motions). It is therefore physical despite—or, rather, because of—lacking body, without being a free-standing entity either.

⁵⁰ Galen, *Qual. inc.*, 19.464,10-14 (49E)

So what Sextus means when he says that some impressors have a nature like that of the incorporeal sayables is that while they cannot act or be acted upon and are thus stripped of their causal efficacy, they are nonetheless real in a derivative way such that the commanding faculty can still be impressed in relation to them, i.e., they are proper objects of thought and discourse and therefore Something in their own right. To say that incorporeals are real in a derivative way means that they are entirely dependent on body. In contemporary terms one could say that they are epiphenomenal, or that they supervene on or emerge from body.⁵¹ In Stoic terms, the incorporeals *subsist* according to (*kata*) body; in this case, the sergeant's model subsists according to his individual motions without which there would be no model—it is thereby Something with positive physical characteristics despite being immaterial, i.e., not itself a body.

The remainder of the paper will focus on void, which is a canonical incorporeal and thus a canonical subsistent. I will demonstrate how the principle of body-less subsistence can apply to what is arguably nothing at all; further, that the body-less subsistence of void explains *why* it meets the Something criterion for objective particulars, thus putting my finger on the Stoics' genuinely nominalist strain. Finally, I will show how such an approach to incorporeals generally makes the Stoic ontology principled and coherent.

How Void is Something Rather than Nothing

I have urged that all Stoic incorporeals get their reality by subsisting according to underlying body—this was the point of calling them *body-less*. Nowhere is incorporeal dependence on body more apparent than in the definition of place as *what is occupied by body* (A2, B2, H1a, I2). For example, the place where my car is parked depends for its subsistence on my car (and the pavement underneath); and we can say that it has positive physical characteristics in that it has the three spatial dimensions given to it by my car. Thanks to that *body-less* subsistence, my parking place is a proper object of thought and discourse—it is an incorporeal impressor like the drill sergeant's model in relation to which the commanding faculty is impressed. Only the car can be *seen* because only the car has three *solid* dimensions with resistance (only the car is corporeal), but its place is Something

⁵¹ A comparison of Stoic subsistence with contemporary supervenience theories is well beyond the scope of this paper but would be highly instructive. Cf. Victor Caston's illuminating treatment of Aristotle in "Epiphenomenalisms, Ancient and Modern," *Philosophical Review*, vol. 106, no. 3, pp. 309-363

objectively real I can think about because it is three-dimensional. This positive physical characteristic also makes the parking place particular, as evidenced by the Not-Someone test: if a parking place subsists according to a car in Athens, it is not in Megara.

Now, place is defined disjunctively as what is or what *can be* occupied by body (D1b). This sounds a little odd. Are we to define such a place by possible objects? Is there a subsistent parking place for my possible dream car? How would one decide which possible object should be the one to define a place? These questions are rhetorical of course, since this would be the wrong way to take the second disjunct. The subsistence of possible place will not be on the bodies that *could* fill it, but on the bodies that actually determine its boundaries. So the parking space for my dream car is not defined by a non-actual car, but by the actual cars that do in fact carve the boundaries of the place. Whereas place defined as what *is* occupied gets its three dimensions from the occupying body—from the inside out one might say—place defined as what *can be* occupied gets its three dimensions from the delimiting bodies—from the outside in.

There is a further wrinkle to the definition, which is that the second disjunct does not say just that it *can be* occupied but that it can be *and is* occupied. One might think this makes the second disjunct reduce to the first, since it *is* occupied; but that is not the case. Rather, defining place as what *can be and is* occupied signals the Stoic commitment to an intra-cosmic plenum.⁵² A parking place both lacks an occupying car and is in fact occupied by air (or whatever elements); passage E4 confirms this reading, since even the smallest of bodies makes something place. So, place according to the second disjunct is defined by its actual delimiting bodies, on the model of a parking place being defined by the surrounding cars, and there is no barrier to saying that this place is also occupied by air. Put this way the incorporeal subsistence of place on body is apparent in both disjuncts, explaining why it is a proper object of thought and discourse that passes the Not-Someone test. Just as an occupied place subsisting from the inside out in Athens cannot be in Megara, likewise place subsisting according to its delimiting bodies from the outside in in Athens also cannot be in Megara. Thus we can see already how an immaterial entity can be an objective particular in a staunchly physicalist system, and make sense of the nominalist label beyond the Stoic commitment to bodies as the only things that exist.

⁵² As Galen confirms, *Diff. puls.*, 8.674,13-14 (49D)

So far we have seen two modes of subsistence: place according to bodies that actually fill it, subsisting from the inside out; and place according to the bodies that create its external boundaries or finite endpoints, subsisting from the outside in. Void offers a third mode, from the outside out, one could say: it begins at the edge of the material world (including the heavens) and extends out from all sides (B1). Void is in a way the incorporeal par excellence⁵³ being defined purely in terms of lacking body—it is whatever can be occupied by body but isn’t occupied at all (A1, B3, F, I1), which is why one might be tempted to think of it as nothing at all. However, it is very much a determinate phenomenon with positive physical characteristics whose objectivity and particularity are due to its underlying body, the entire material cosmos. The only boundary of void is the outside limit or edge of the corporeal universe, the starting point according to which the external void beyond subsists. It is therefore infinite (B1, D, F, H4) in being unbounded in its outward extension *from all sides* (B1). Though it is defined as what can be occupied and isn’t, void is not a modal concept,⁵⁴ just as the second disjunct of place as what can be occupied was not defined in terms of my possible dream car. Rather, each is characterized as what can be occupied because of the actual delimiting bodies that make them real—place as what can be and is occupied (from the outside in) and void as what can be occupied and isn’t (from the outside out). The infinity of void is therefore not nothing at all but an entity of infinite spatial extent, albeit in one direction.

Thus I am against Brad Inwood’s suggestion that void is indefinite or indeterminate unfilled extension best “distinguished as unlimitedness in the simplest sense, absence of limits or boundaries...thus a rather negative conception [that] makes no positive assertion about spatial extent, as the atomistic conception of infinity does.”⁵⁵ Though the notion is elusive, I think we are in a position to say that the unboundedness (*apeiron*) of void is not mere indefiniteness but spatial infinity, and that it belongs to void not *qua* incorporeal but *qua* void subsisting on the material world from the outside out.^{56, 57} And this infinity is no slight to the objective reality of void, which is what

⁵³ To borrow Brunschwig’s phrase in “Stoic Metaphysics,” p. 213

⁵⁴ Contra Todd, Bréhier op. cit.

⁵⁵ op. cit., p. 255

⁵⁶ Just as it belongs to time not *qua* incorporeal but *qua* the temporal extension (more intuitively, *dimension*, but crucially the same Greek term, *diastema*, for place, room, void, and time) that extends infinitely into the past and future.

⁵⁷ As further evidence against indefiniteness as a feature of incorporeals *qua* incorporeals, the *lekton* is a direct counterexample, in being clearly finite, with determinate parts and not divisible to infinity, as Brunschwig observes in “Genre Supreme,” p. 90; it is conspicuously absent from Stobaeus’ list of things divisible to infinity, which includes bodies and things comparable to bodies like surface, line, place, void and time (1.142,2-6 (50A)). Furthermore, it’s not clear how place can be considered unlimited according to Inwood’s interpretation. If unlimited extension is limited when occupied, then place is strictly speaking not an unlimited incorporeal except insofar as it is extension. If so, Stobaeus’

the Stoics' realist language in passages H4 and D shows: “*In respect of its own subsistence it is infinite,*” and “void is outside the heavens *per se.*” On the other hand, while this realist language is certainly testament to void as an objective phenomenon, it does not give reason to think that void is self-subsistent, independent or prior to the material world, as Algra and Inwood suggest. It is just that the extra-cosmic void subsists in three non-solid dimensions according to the material world from which it inherits those dimensions, as passages B1 and G indicate.

Galen (G) sees absurdity in the result, as he does in the distinction between existence and subsistence, but closer inspection shows that the Stoic conception of place and void as three-dimensional extension is perfectly coherent, even if unusual. Accordingly, subsistence remains a physicalist notion even though incorporeals are immaterial; place and void lack body but not extension and are thus physical though not material. Furthermore, this picture respects the avowed primacy of bodies in the Stoic system: the subsistence of the void, as with place, is due to underlying body, not independent of it and certainly not on an ontological par. Should the material world disappear, the extra-cosmic void would cease to subsist as well. What would be left is nothing at all.

The isotropy of the void remains at issue: how can the cosmos be at the center of something infinite when things that are infinite have no center? Algra solved the problem by positing a second sense of void (i.e., room) as finite and anisotropic to give sense to talk of the universe at the center of void. But the isotropy of the void is a false problem for the Stoics, because it's not that the cosmos is at the center of an independently subsisting void that can't have a center.⁵⁸ Rather, the cosmos is characterized as being at the center of void because it is the starting point of the infinite extra-cosmic void (the rest of all there is⁵⁹) extending from the outside out.⁶⁰ It is isotropic in that there is no middle or end to the void once it starts, just as the series of natural

report (49A, passage H above) that what is incorporeal is infinite is no longer taken to apply to all incorporeals, just time and void.

⁵⁸ By the same token, there is no genuine problem with the coherence of the cosmos as Peripatetics and others hostile to the Stoics' extra-cosmic void have supposed. The *prima facie* problem is that if the cosmos were not at the center of the extra-cosmic void it would not remain a unified whole. The problem does not arise because they do not posit independently subsisting space and because the world is a unified whole on its own, from the internal tension or tenor. Cf. Plutarch *St. rep.* 44. 1054B-1055C for this problem and isotropy.

⁵⁹ Hence *the all (to pan)* is best understood as the simple combination of the material cosmos and the extra cosmic void as everything there is, rather than as the combination of place and void. After all, place, void and/or room is certainly not all there is for the Stoics; *the all* as cosmos plus void better merits the name.

⁶⁰ *op. cit.*, throughout but especially p. 303, p. 306; see also Victor Goldschmidt, *Le Système stoïcien et l'idée du temps*, Vrin (1969), who takes the position of the cosmos to determine the *center* of the void, as opposed to its start.

numbers extends infinitely in one direction from a determinate starting point (1 or 0), and thus has no middle number. That the Stoics thought of infinity this way is evidenced by their description of time as infinite on precisely this model, extending forever in both directions,⁶¹ and above all by the coherence of the ontology that emerges from this reading. There is no need to posit two senses of extracosmic void as Algra does (void proper as infinite, insotropic space, and room as finite, an isotropic space), or to render Chrysippus unorthodox about void or room. Further, three dimensional subsistence from the outside out shows that void is spatially infinite in virtue of the specific way it subsists on body, and that there is nothing indefinite about the principle of body-less subsistence *per se*. Therefore, being incorporeal does not mean being inherently indefinite, but quite the contrary; void and place subsist according to a common principle of incorporeality (being body-less) that makes them determinate entities, whether infinite or not.

The objectivity of void (and place) is due to body and identified by its availability for thought, as illustrated by passages D, E and H4. Our inability to conceive of an outside limit to void (H4) is not a cognitive shortcoming, but due to the fact that the void is infinite, and thus testament to the thinkability criterion as measure of objective reality. If there were an outside limit to void, it (the limit) would be a proper object of thought and discourse; since there isn't one (and can't be *ex hypothesi*) we can't conceive of it. Likewise, the impression that many people have of void as something infinite outside the heavens (D) is testament to the fact that void is an objectively real impressor in relation to which the commanding faculty is impressed. Given its incorporeal, i.e., intangible nature, it would stand to reason that void would be an intelligible rather than sensible impressor—but, as Sextus' drill sergeant passage shows, that is no slight to its objectivity or physicality. In fact, the simplicity of the notion of void (E) reflects the simplicity of its objective subsistence from the outside out.

So void is technically whatever is outside the corporeal world, and it extends infinitely from all sides of the cosmos. Let's now handle the elephant in the room, so to speak: room (*chora*). Passages A, H, and I, which I will recap, raise some important puzzles about place and void. Passage H from Stobaeus reports fragment 25 of Arius Didymus, who attributes to Chrysippus the disjunctive definition of place as what is occupied (H1a) or what can be occupied (and is) (H1b). Then (H2) we get a further division of the second disjunct into what is partly occupied and partly

⁶¹ Stobaeus 1.105,8-16 (51D)

unoccupied, so that the whole thing is nameless, since it's neither void (spoken of like empty containers) nor place (spoken of like full ones). This characterization of nameless partly occupied place is followed by the question (H3) whether room is (a) the bigger container or (b) what has room for a bigger body. From there we get (H4) that at any rate void is infinite, as evidenced by the fact that a limit to void is inconceivable.

What are we to make of the distinction between the nameless phenomenon of H2 and the room dilemma of H3? It looks at first sight as though we have a division of place considered as what can be occupied into two distinct phenomena, what is partly occupied and nameless, on the one hand, and room on the other. What then is the nameless phenomenon and how is it different from room, especially given the explicit definition of room in passages E and F as what is partly occupied? Inwood takes the nameless phenomenon to be extension, and its namelessness as evidence that Chrysippus' view was new and different from other Stoics'. Algra, on the other hand, takes this passage to represent Chrysippus' orthodox Stoic view, as opposed to passage I that introduces Chrysippus' heterodox view of room. I think we need not see Chrysippus as heterodox at any juncture.

First, what is nameless is the whole entity (*to holon*) that is partly occupied and partly unoccupied, and the reason it is nameless is that it doesn't align either with void or place because it is neither full of body nor empty of body. This seems like a reasonable puzzle about the nature of a body-less incorporeal: it has extension from the underlying body, but it's not clear what to call it. There's no real question about the nature of the phenomenon, just about how to classify such an intracosmic pocket. What would be convenient is for this phenomenon to be called room, and for H3 to introduce a further puzzle as to whether room names the bigger thing able to be occupied by body, like a greater container for body, or just the phenomenon of there being room for a bigger body. However, the nameless entity and room do look, grammatically speaking, like two distinct phenomena so that it would be strained to cast H3 as a further division of H2 rather than as a contrast. I propose that this can be explained as the rather fine-grained distinction between three distinct phenomena: the nameless entity of H2 will be the whole entity consisting of the occupied place plus unoccupied room, the pocket inside; room in the sense of H3a will be the limit of the container itself (outside in); and room in the sense of H3b will be the unoccupied extension within the container (inside out). These are subtle distinctions indeed—pedantic perhaps, but not without

sense and not contradictory.⁶² In fact, the common thread is their extension in three body-less dimensions and their being objectively available for thought as a result.

Contrary to Brad Inwood, then, I take the phenomenon of non-solid extension to be dependent on body, not prior to it, nor a later innovation by Chrysippus. While I agree that extension underwrites the phenomena of place and void, and that Chrysippus is providing the conceptual backdrop to Zeno's incorporeals, I don't take extension to be a *further* incorporeal entity but the mode of incorporeal reality that place, void and room all share; it is the principle of their subsistence. The Stoics from Zeno forward recognized a common phenomenon, not itself material or sensible but nonetheless physical and intelligible; thus I don't take Chrysippus as unorthodox in his views about place, room or void. The real lesson of passage H, I urge, is that the Stoics recognized incorporeality as a pervasive phenomenon, inheriting objective reality from the bodies underlying. Indeed, what place, void and room have in common is three-dimensional extension.⁶³ That the Stoics recognized three-dimensional spatial incorporeals as of a kind is evidenced by Diogenes Laertius' report that the Stoics divided physics into five topics, the fifth being limits, place and void.⁶⁴ Room is not mentioned on this list, but if I am right that the Stoics worked with an open-ended list of incorporeals according to the principle of body-less-ness, it would make good sense for there to be internal disagreement as to how best to classify things like room and the nameless phenomenon, and for controversial entities not to show up on canonical reports.⁶⁵

For example, passage I tells us that room is partly occupied, partly unoccupied extension (as does passage A) and that some Stoics said the difference between room and place is that room makes the size of the occupying body relevant. If we take these as less fine-grained reports than what we got in passage H, the texts are perfectly compatible. The description of room as partly occupied, partly unoccupied extension is prior to (less fine-grained than) the distinctions between the nameless entity (occupied plus unoccupied extension together), room as the limit of the container, and room as the unoccupied extension inside the container; so too for the description of room as the place of a larger body. In all cases room amounts to an intracosmic incorporeal

⁶² Thus I take this account to answer Algra's desiderata for the passage. Namely, that one account for the difference between room and the nameless phenomenon, as well as the two senses of room (3a and 3B), room as incorporeal.

⁶³ Time and *lekta* will also inherit their objectivity from underlying body, but not in the same, spatial way; time will be the temporal dimension of underlying body, and *lekta* the semantic.

⁶⁴ 7.132 (43B)

⁶⁵ Also, for limits of bodies to be included on the list, vs. mathematical limits, which are *neither corporeal nor incorporeal*

phenomenon,⁶⁶ pockets of space that can be (and are) occupied. Again, what these passages tell us is that there was some debate as to how to classify unoccupied spaces in the world: should they be called void, while defining place as what is actually occupied; or should they be classified as place that can be occupied, as in the disjunctive report? The debate over how to characterize unoccupied spaces in the world emphasizes that void is strictly speaking unoccupied space outside the world, place is strictly speaking occupied space in the world, and that incorporeality is a pervasive physical phenomenon. Whatever the classification of the intracosmic pockets, their reality is uncontroversially dependent on the bodies that determine their extension and boundaries, which is what makes them objectively available for thought and discourse.

Their dependence on body also makes place, void and room particulars. I already showed that places defined as what can be and are occupied (i.e., place defined from the outside in) are objective particulars that pass the Not-Someone (*outis*) test. The same will apply to any interpretation of room(s) we care to give—insofar as they are intra-cosmic pockets dependent for their objective reality on delimiting bodies and thus akin to place, they will pass the *outis* test. For example, if there is room in a wine jar in Athens, it can't be in Megara; the pockets in Athens are not the ones in Megara. The more interesting question is how extra-cosmic void, being infinite, passes the *outis* test: if void is in Athens, then it is not in Megara. As stated, the result is unclear. If treated as a mass term, it would be false to say that if there is some void in Athens then there is no void in Megara; just as it would be false to say that if there is some honey in Athens, there is none in Megara; or that if there is traffic on the Bay Bridge there isn't any on the Golden Gate. On this interpretation, Brunschwig says the *outis* test is powerless to justify the extra-cosmic void as Something.⁶⁷ His solution is to say that void, properly speaking, refers to the unified and continuous extra-cosmic void, which does pass the *outis* test. If (*per impossibile*) the extra-cosmic void is in Athens, then it can't be in Megara. So far Brunschwig is exactly right—namely, that Stoic void is strictly extra-cosmic, and that *qua* particular it cannot be in two places at once. But the unfortunate assumption that void acts as a mass term sends Brunschwig in circles to address the intra-cosmic pockets.

[T]he term “void,” while remaining a mass term, applicable in the same sense to the whole and its parts, designates nothing more, when it applies to the whole, than a continuous whole of a single tenor, with the exception of the enclave of the world that limits it on the interior as a hole limits the

⁶⁶ Thus I disagree with Algra that room should be considered the finite amount of extra-cosmic void required for the conflagration.

⁶⁷ “Genre suprême,” p. 97

continuity of a Gruyère; and when the term *void* applies to the parts of the whole, it designates nothing more than parts arbitrarily lifted from the continuous whole.⁶⁸

Brunschwig's result is that the extra-cosmic void has cosmic parts, the contradictoriness of which he hedges by making the parts somehow arbitrary. Now, there is an important sense in which the Stoics do make parts of the whole arbitrary and of a lesser reality,⁶⁹ but in making the void correspond to the Gruyère, and the world to the holes, Brunschwig reduces the Stoics to absurdity because the void is no longer extra-cosmic. Treating the parts as arbitrary is therefore too little too late, and runs afoul of the principle that mass terms are applicable *in the same sense* to whole and parts. The problem is Brunschwig's assumption that void is a mass term, which blinds him to the fact that the so-called intra-cosmic void and extra-cosmic void are just two different phenomena, i.e., two different kinds of incorporeal reality. Void, strictly speaking is extra-cosmic: it begins at the edge of the material world and extends infinitely out from there in all directions. As a single, continuous entity determined by a body (i.e., the world) it is itself a particular that passes the *outis* test. The void outside *this* world can't be over there, outside *that* world (not that the Stoics recognized more than one cosmos, though they could entertain it as logically possible).⁷⁰

In addition to the extra-cosmic void, the Stoics also recognized pockets of space in the material world, able to receive body; that there was internal debate as to whether these should be classified as a kind of place, void, room, or something else is testament to the fact that the Stoics recognized the pockets as a further case of incorporeal subsistence. There is on the one hand place as defined by the body that occupies it, from the inside out; on the other hand void as defined by the edge or limit of the material world, from the outside out; and then there is another phenomenon where bodies define a space from the outside in—should we call that the extension itself, the limit of the extension or the combination of both? What we have are several different ways in which extension can be conceived without body. It is only natural that there be an active debate as to how to characterize the various kinds of incorporeal subsistents. Being in the world, these pockets are akin to place and so warrant the disjunctive definition of place attested by Stobaeus. On the other

⁶⁸ *op. cit.*, pp. 98-9

⁶⁹ As continuum physicists, the Stoics held that although the corporeal and incorporeal world (including time) can be divided to infinity, it does not consist of infinitely many bodies or incorporeal parts. See Stobaeus, 1.105,17-106,4 (51E), 1.106,5-23 (51B), 1.142,2-6 (50A); Diogenes Laertius 7.150-1 (50B); Plutarch, *Comm. not.*, 1078E-1080E (50C), 1081C-1082A (51C). See also Daniel Nolan's "Stoic Gunk," *Phronesis* 51 (2006): 162–83.

⁷⁰ That the Stoics were live to this kind of distinction between metaphysical and logical possibility is evidenced by Chrysippus' consideration (cited polemically by Plutarch, *St. rep.* 44, 1054B-1055C) of the logical possibility of a cosmos not in the center of an independent void, as Algra notes (*op. cit.*, p. 301 ff.).

hand, being what *can* receive body makes the pockets akin to void—but not proper parts or the same thing as void. Brunschwig’s error is in the way he deploys the Gruyère metaphor. He makes the cheese correspond to void, and body to the holes (such an egregious role reversal might have been a clue that something was amiss). But it’s the perfectly intuitive sense of Swiss cheese that captures the phenomena: the cheese corresponds to the material world, the holes to the pockets of space in the material world, and everything outside the cheese to the extra-cosmic void. Extra-cosmic void is thus an objective particular subsisting according to the material world, from which it inherits its particularity and objective reality. As such, it passes the *outis* test straightforwardly, without the need for *ad hoc* restrictions (as Caston had worried).

Conclusions

We are now in a position to see just how the Stoics agree and disagree with the atomists about void. They agree with Leucippus and Democritus, who conceived of void (or rather, voids) as fundamental elements of the cosmos, in that Stoic void is an objective particular we refer to with a count noun; hence the point of countenancing void as Something. They also agree with Epicurus and Lucretius, who take void in the sense of empty space, in that Stoic void is empty three-dimensional extension capable of receiving body; it is the same in its whole and parts the way a mass term is. Contrary to both atomist theories, however, Stoic void is no fundamental building block of the universe but entirely dependent on body as *sine qua non*. If all body were eliminated, there would be no void; there would be nothing at all. Nonetheless, Stoic void is essential to explaining the cosmos as they see it; it is not just some superfluous entity they recognize because it follows from the principle of body-less subsistence. For the Stoics there is no beginning or end to the world’s motion, just an everlasting recurrence punctuated by periods of conflagration when the world turns into fire and then starts over. During the conflagration the world becomes pure undifferentiated fire, expanding as God withdraws into himself (itself) and prepares to exhale another cosmos just like the last one. In order for the cosmos to expand, there must be Something into which it expands; thus Stoic void plays a practical cosmological role for the Stoics, as it does for the atomists.

In what, then, does Stoic nominalism consist? Certainly its core is that only bodies exist. But this commitment is only innovative and interesting insofar as *existence* is a technical term for the Stoics, in contrast to *subsistence*. By making body the *sine qua non* of all reality, as opposed to the only

kind of reality, Stoic physicalism takes on a new and controversial dimension. What's newsworthy is that in positing Something as the highest genus of reality set over existence on the one hand and *subsistence* on the other, the Stoics recognize immaterial entities without breach of their physicalist commitments. I have shown how Stoic incorporeals can be considered *body-less* rather than a-corporeal or outside space-time. Being body-less is a negative concept in that incorporeals lack body, but these entities are not without positive physical characteristics: place, room and void have three-dimensional extension, which they inherit from the bodies on which they subsist. Thus Stoic void is not an empty notion (as Aristotle would have it), nor a case of straight non-Being (as Parmenides would charge), nor the genuinely puzzling notion of independent nothingness (as the atomists posit).

Rather, the case of void, place and room shows that the Stoics are committed to an ontology of objective particulars as measured by the Something criterion. According to this logical measure of reality, whatever is Something will be objective insofar as it is a proper object of thought and discourse, and particular insofar as it passes the Not-Someone test. Crucially, it is precisely because they are *body-less* entities with positive physical characteristics that incorporeals satisfy this criterion. In the case of void, the fact that it extends in three dimensions from all sides of the material cosmos accounts for its objective availability for thought (and the inconceivability of an outside limit to void) as well as its being a spatio-temporal individual. The combination of these principles is the true heart of Stoic physicalism and nominalism: only determinate entities that arise from bodies as their *sine qua non* will meet the Something criterion for objective particulars. On this view, even void—the infinite nothing beyond—can coherently be called Something.