

The Ontological Foundations of the Stoic Theory of Identity and Individuation

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Submitted to
Central European University
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In partial fulfilment for the degree of Master of Arts.

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2012

Abstract

The Stoics professed the view that material objects cannot be identified and individuated in function of their material constitution, because matter is not individuable and of a fleeting identity. Instead, they affirmed that objects persist and are individuated in a perceptible way in virtue of having peculiar qualities. However, it is not exactly clear what kind of metaphysical entity in the Stoic philosophical system could have fulfilled the double role attributed to peculiar qualities, since it is really hard to conceive of an essential quality that can account for the object's uniqueness in a perceptible way. Although our sources do not give us any precise information as to what peculiar qualities could be, based on the available evidence it has been suggested that it is the *pneuma* permeating individuals that accounts for their persistence and perceptible qualitative uniqueness. Nevertheless, as I will argue, the *pneuma*, itself being a material object, cannot serve as a criterion of identity and a principle of individuation for material objects, since its own identity is not any more grounded than the identity of the entities it is supposed to identify. I will conclude that the Stoics' ontological commitment to the corporeality of all existent things and their conception of material objects taken together makes it impossible for them to account for the identity and individuation of objects in virtue of their qualification.

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Introduction

The Stoic metaphysical theory has been subject to numerous criticisms by later philosophers for positing two *corporeal* principles (matter and god) to account for all that there is in the world. It is arguable whether these criticisms were indeed justified in all of their points and it is beyond my powers to decide whether the whole Stoic metaphysical undertaking, to construct an ontology based on solely corporeal principles, was indeed doomed to failure.

However, what I should like to point out in the present thesis is the consequences such a metaphysical theory has for the issues of identity and individuation. What I shall attempt to show in the followings is that given the way the Stoics conceived of bodies, matter, and the relevance of material constitution for identity, they could have only accounted for the identity of objects if they also had an incorporeal principle available. For several different reasons the Stoics had to reject material constitution as relevant for the identity and individuation of entities, and instead make both identity and individuation a function of the object being peculiarly qualified. But, given the fact that they conceived of qualities and the ontological principle answering for the qualification of individuals as bodies, they were caught in a vicious circle: they were not able to formulate a theory that would be immune to the kinds of criticism which made them reject a theory that derived the identity and individuation of entities from their material constitution.

Before proceeding, I would like to make some terminological clarifications concerning the problem of identity in general and present aspects of the problem that are relevant to my thesis. Identity, in very general terms, is a relation something has to itself. This seems to be a trivial matter: of course everything is identical to itself. The philosophical interest of such a seemingly straightforward relation lies in trying to answer what makes it the case that a thing

is identical to itself. What makes it the case that a thing *is* itself? In looking for a criterion of identity the philosopher tries to pinpoint such a metaphysical feature of objects that can answer for their identity— the existence of which is necessary to identify the object. What is more, this metaphysical feature has to be such that can ground the identity of the entity having its own identity established on grounds independent from its relation to the object.

The question of identity can be posed from different points of view and here I shall only differentiate between problems of identity focused around three points. First, I shall distinguish between *qualitative* and *numerical* identity. Qualitative identity requires that things share properties, whereas “[n]umerical identity requires absolute, or total, qualitative identity, and can only hold between a thing and itself.”¹ It is questionable whether things can be completely identical qualitatively (share all of their properties) but still be two numerically different objects.²

Second, the question of identity can be posed from a *synchronic* and *diachronic* point of view. In diachrony, what is of interest to the philosopher is what feature of the object makes it possible that the object is identical to itself at a time t_0 and t_1 , despite the various changes that it might have gone through during that time interval. Obviously, objects cannot survive all kinds of changes. The task of singling out a criterion of diachronic identity amongst the object’s ontological features entails defining which kinds of changes are relevant for its identity and which are irrelevant. In synchrony, the philosopher’s concern is to tell what makes it the case that an object is identical to itself at a certain time t_0 . This issue can also be formulated in terms of differentiation: “What makes it the case that two objects are different at a certain given time?” The principle based on which two seemingly identical objects can be

¹ Harold Noonan. “Identity,” in *The Stanford Encyclopedia of Philosophy* (Winter 2011 Edition), ed. Edward N. Zalta, Last modified Sat Nov 7, 2009. <http://plato.stanford.edu/archives/win2011/entries/identity/>.

² Cf. Max Black’s example of the universe consisting of two identical globes of iron, as quoted by Mary Louise Gill, “Individuals and Individuation,” in *Unity, Identity and Explanation in Aristotle’s Metaphysics*, ed. Theodore Scaltsas, David Charles and Mary Louise Gill (Oxford: Clarendon Press, 1994), 58. and Ferenc Huoranszki, *Modern Metafizika* (Budapest: Osiris, 2001), 221.

distinguished from each other is also called the *principle of individuation*. Although some authors differentiate between a criterion of synchronic identity and a principle of individuation, here I shall use them synonymously, because I do not feel that the distinction would be relevant in the Stoic context.³

Third, there is the difference between the metaphysical and the epistemological aspects of identity. As a metaphysical problem, identity is about pointing out what makes it the case that an object is identical to itself. Whereas as an epistemological problem, defining an object's identity consists in identifying a feature that makes it the case that we can tell two objects apart or reidentify them.

Besides the different aspects of the question of identity, another terminological remark has to be made concerning the relationship of individuation, countability and unity. Identity, from a purely logical point of view is a two place predicate: it does or does not stand between things *a* and *b*. In order to be able to establish whether the relation stands or not, first one has to clarify what makes it the case that the question whether they are the same thing or two different things can even be posed. What makes it the case that there is an *a* and there is a *b*? What makes *a* a unity and *b* a unity or *a* and *b* two things whose identity can be brought into question, is a principle of unity. A principle of unity basically determines what to count as one thing, it need not be the same principle based on which we individuate things.⁴

The crux of the Stoic theory of identity is that all (unified) objects⁵ are qualitatively unique, and it is this qualitative uniqueness that accounts for both the synchronic and

³ Gertrude E. M. Anscombe, "The Principle of Individuation," in *Articles On Aristotle*, Vol 3. *Metaphysics*. ed. Jonathan Barnes, Malcolm Schofield and Richard Sorabji (London: Duckworth, 1979), 93-94 E.J. Lowe, *The Possibility of Metaphysics*, (Oxford: Clarendon Press, 1998), 200-201.

⁴ Cf. E.J. Lowe, *The Possibility of Metaphysics*, 60-63, 201 (Lowe refers to what I call a "principle of unity" as a "principle of individuation" and he refers to what I call "principle of individuation" as a criterion of identity.) Also, cf. A.C. Lloyd, "Aristotle's Principle of Individuation," *Mind*, 79 (1970): 519 quoted by Jennifer Whiting, "Form and Individuation in Aristotle," *History of Philosophy Quarterly* 3 (1986): 362.

⁵ The difference between unified and non-unified objects will be discussed later.

diachronic identity of objects on both a metaphysical and an epistemological level.⁶ This qualitative uniqueness is expressed in Stoic terms by calling individual objects “peculiarly qualified” (*idiōs poion*) which they are in virtue of having one (or several) peculiar qualiti(es) (*idia poiotes*). Unfortunately, pointing out a metaphysical principle that can fulfil all these roles is quite an impossible feat, unless some specifications are made on the relation between the criterion of synchronic and diachronic identity, qualitative and numerical uniqueness and uniqueness on a metaphysical level and its perceptible manifestation. Moreover, the fact that we barely have any direct evidence as to what the Stoics meant by “peculiar qualities”, does not really help us interpreting their theory.

In what follows, first I shall try to sketch a possible way of interpretation of the Stoic theory, by suggesting what kind of emendations have to be made for it to work. Then I shall try to find a metaphysical entity in the Stoic universe that could be a criterion of identity and a principle of individuation at the same time; while also accounting for the recognisability and distinguishability of entities. As I will point out, given the Stoic notion of matter and the fact that they picture the world as constituted by the intricate mixture of two *corporeal* principles, there is nothing in the Stoic universe that can fulfil the role ascribed to peculiar qualities, regardless whether one makes refinements to the theory or one does not.

In order to delineate my point I shall start in chapter I with a brief presentation of the theory of identity. I will discuss the related textual evidence and the difficulties stemming from making the same entity a principle of individuation and a criterion of identity at the same time. Then, relying on suggestions by contemporary literature, I shall present a possible solution to the aforementioned difficulties, by suggesting that individuals are peculiarly qualified in virtue of the specific portion of *pneuma* constituting them. In chapter II, I shall present the reasons why the Stoics needed to reject material constitution as a criterion of

⁶ cf. Eric Lewis, “The Stoics on Identity and Individuation,” *Phronesis* 40 (1995): 91. cf. Simplicius, *On Aristotle's On soul* 217,36-218,2 (=SVF II.395 = LS 281).

identity and a principle of individuation and rather make identity a function of qualification. In chapter III, I shall consider in more detail the Stoic understanding of qualities, with special regards to qualities' relationship to matter and the bodies they qualify and conclude that in order to be able to individuate and identify entities qualities have to be such that do not depend for their identity on anything of material nature, thus they cannot be configurations of matter or the material object, but rather dispositions of the qualifying active principle, the *pneuma*. In chapter IV, I will show that given that the *pneuma* is itself a material object, qualities' dependence for their identity on matter cannot be avoided unless we can point to an incorporeal principle in the Stoic universe. I shall conclude that given the Stoic ontological commitment to the corporeality of all causally efficient things such a principle just cannot exist and therefore the Stoic theory of identity and individuation just does not work.

I. What makes an entity peculiarly qualified?

In the present chapter I shall give a detailed description of the Stoic theory of identity, and the contradictions that follow from an unreflected interpretation of the textual evidence we have. Enumerating the points of the theory that need further elaboration, in the light of solutions offered by contemporary literature, I shall point to some possible emendations that will help constructing a coherent theory. Finally, again by taking into consideration modern interpretations, I shall suggest a plausible candidate for a principle of individuation and a criterion of identity.

1.1. Peculiar qualities and their status in Stoic philosophy

Amongst the evidence reporting on Stoic philosophy that was transmitted to us, there is no detailed description of a theory of identity. All the interpretations we have are based on scattered definitions of *peculiar qualities* and *peculiarly qualified individuals* on the one hand and the reconstruction of Stoic-Academic debates on matters of epistemology and physics on the other hand.⁷ Besides this more or less direct evidence, interpretations rely on other tenets of the Stoic philosophical doctrine, which, taken into account, can contribute to the further refinement of the theory. In what follows, first I shall give a brief discussion of the Stoic-Academic debates on epistemological and physical doctrines and then interpret the scarce textual evidence we have on the nature of peculiar qualities. I shall point out that, taken at face value; the theory that can be constructed from the available evidence is contradictory.

⁷ In pointing out the importance of these debates between the Academy and the Stoa, I am mostly relying on David Sedley's developmental reconstruction of the Stoic theory of identity in his "The Stoic Criterion of Identity," *Phronesis* 27 (1982) and his commentaries on chapter 28 "The first and second genera" of LS 172-175.

The Stoic theory of identity was shaped by two debates between the Stoa and the sceptical Academy. The Stoics had to answer the Academic attacks on their epistemological doctrine concerning the possibility of infallible knowledge. They believed that each of us can have trustworthy, reliable beliefs about how things are in the world. They supported this view by affirming that we can have such impressions (cognitive impressions - *phantasiai katelēptikai*) that report “of what is” and are formed in exact accordance with “what is”⁸. These impressions, once we have recognized them as veridical and assented to them, could under no circumstances provide us with false beliefs.

But if such impressions are possible, then, under ideal circumstances one would never give their assent to an impression that does not report of the facts of the world as they are. For example, one would never give their assent to an impression reporting “This is B”, when, as a matter of fact, instead of B one is presented with A. But what if A and B, while being different objects, are qualitatively exactly identical?⁹ As the Academics argued, in some cases having cognitive impressions are either not possible (i.e. the impression will not report of “what is” with exact accordance with “what is”) or even reporting of “what is” with exact accordance with “what is” is insufficient to guarantee the truth of the mental proposition one is supposed to assent to. Even if one’s impression reproduced every minute detail of A when seeing it and of B when encountering it, if A and B are exactly alike and there is no perceptible feature based on which one could tell them apart (i.e. if A and B are qualitatively identical albeit numerically distinct) then one could have an impression, brought about by an

⁸ DL VII.46 9 (=LS 40C), Cicero *Academica* II.77-8 (=LS 40D), Sextus *Against the Professors*, XI.183 (=LS 40E),

⁹ The terms of qualitative and numerical identity have to be used with some amendments in the Stoic context, however. Since the Stoics are interested in the possibility of the existence of distinguishable and recognizable entities what they would like to prove is that there are no two individuals whose *intrinsic, perceptible* qualities are identical: from their point of view historical and relational properties are not interesting. (By historical properties I mean predicates that are true of an entity in virtue of its history, e.g. properties like “having been member of a football-team”, “having lost a foot”, etc. These properties are typically non-perceptible, although they might have perceptible results, like “having lost a foot”, but clearly there is a difference between “being one-footed” and “having lost a foot”.) If we take the standard example of two indistinguishable eggs, the solution to the problem that the eggs occupy a different place (which is a relational property) is of no interest to the Stoics as they want to make sure that if the eggs swap places they would still be recognizable.

existing object,¹⁰ in exact concordance with how that object is, but still not be able to grasp the *fact* which object is A and which one is B.¹¹ The problem of identification also poses a problem in a diachronic context: cases when someone does not recognize an entity or mistakenly identifies it as something or someone else are also casting doubt on the possibility of infallible cognition.¹²

Clearly, if they wanted to maintain the possibility of reliable beliefs, the Stoics had to make certain that such cases were excluded. One way for them to answer the challenge posed by the Sceptical Academy was to affirm that there were no cases of numerical distinctness that were not reducible to qualitative distinctness (i.e. that all entities had intrinsic, perceptible qualities based on which one could differentiate between them).¹³ Indeed, we know that they have affirmed that being numerically distinct is a function of being peculiarly qualified: they held that it was both impossible for two peculiarly qualified objects to be in one substance¹⁴ and for one peculiarly qualified object to be in two substances.¹⁵

As Sedley points out this solution was already “available to them in the form of their solution to [another Academic challenge,] the Growing Argument.”¹⁶ This argument was a puzzle bringing into question the persistence of material objects, due to their constant constitutional changes. At the same time it also questioned the possibility of said material changes as, according to the argument, given that by taking place they destroyed the very subjects they should have been predicated of, these processes were essentially impossible. As

¹⁰Whether “what is” i.e. the cause of cognitive impressions is an object or a state of affairs is left ambiguous by the Stoic theory. See Michael Frede, “Stoic Epistemology,” in *The Cambridge History of Hellenistic Philosophy*, ed. Keimpe Algra, Jonathan Barnes, Jaap Mansfeld and Malcolm Schofield (Cambridge: CUP, 1999), 302-304.

¹¹ cf. Sextus Empiricus, *Against the Professors*, 7.402-10 (=LS 40H), Cicero *Academica*, 2.57 (= LS 40I), id. 2.83-5 (=LS 40J)

¹² This account of Stoic epistemological theory is overly simplistic. Nevertheless as my thesis deals with the metaphysical and not the epistemological aspect of identity, I will only concentrate on the aspect of epistemological theory that has an immediate relevance to the subject-matter.

¹³ cf. Lewis, “The Stoics on Identity,” 90-91.

¹⁴ Where substance is apparently understood as a portion of matter, cf. LS 172, and Stephen Menn, “The Stoic Theory of Categories,” *Oxford Studies in Ancient Philosophy* 17 (1999): 221-222

¹⁵ Philo, *On the Indestructibility of the World* 48 (=SVF II.397 = LS 28 P) and Plutarch, *On common conceptions* 1077C (=LS 28O, part) respectively.

¹⁶ Sedley, “The Stoic Criterion,” 265.

Sedley argues, as growth was a process central to Stoic natural philosophy, the Stoics felt compelled to counter the argument and they did so by pointing out that the identity of material objects is not unstable, because their identity is not a function of their material constitution but rather of them being peculiarly qualified.¹⁷ Thus, the epistemological theory of perceptible qualitative distinctness and recognisability was bolstered by a metaphysical theory that also proclaimed that objects are identified and persist by being peculiarly qualified. (I.e. peculiar qualities are both criteria of identity and principles of individuation).¹⁸

Besides the indirect evidence from the Stoic position taken in the above mentioned debates, all we know about peculiar qualities (*idia poiōtēs*) is that they are different from common qualities (*koinē poiōtēs*) by being specific to individual entities, but we have very little evidence as to how they ground the individuality of those entities.¹⁹ The only actual testimony on what peculiar qualities are, comes from Dexippus' commentary on Aristotle's *Categories*, which presents peculiar qualities as unique, perceptible features (or a set of features), characteristic of each individual such as a hooked nose or baldness.²⁰ This interpretation of peculiar qualification has been rejected by modern commentators for obvious reasons.²¹ Being bald or having a hooked nose are typically features of an individual that can change, and such a change is hardly of the kind affecting the identity of the individual. Provided the fact that peculiar qualities persist, they have to be *essential qualities*, such that are indispensable for the entity's persistence. On the other hand, typical instances of essential qualities (e.g. belonging to a certain natural kind) are usually not such that in and of themselves they could account for the perceptible uniqueness of an entity.

¹⁷ Sedley, "The Stoic Criterion," 258-261.

¹⁸ *ibid.* 266. cf. Simplicius, *On Aristotle's on the Soul*, 217, 36- 218,2 (=SVF II.395 =LS 28I)

¹⁹ Diogenes, reporting on the linguistic theory of Diogenes of Babylon, contrasts common nouns (or appellatives, *prosēgoria* in Greek) with names (*onoma*). "A common noun or appellative is defined by Diogenes as part of a sentence signifying a common quality, e.g. man or horse; whereas a name is a part of speech expressing a quality peculiar to an individual, e.g. Diogenes, Socrates." (DL VII.58)

²⁰ Dexippus, *On Aristotle's Categories* 30, 20-6 (=LS 28J)

²¹ cf. Sedley, "The Stoic Criterion," 261, T.H. Irwin, "Stoic Individuals," *Philosophical Perspectives* 10 (1996): 466-467, Lewis, "The Stoics on Identity," 93-95.

This conflict between the supposed persistence and the supposed perceptible qualitative uniqueness, highlighted by Dexippus' evidence is a chief problem for an interpretation of peculiar qualities. It is apparent that the conditions the criterion of identity has to meet in order to bolster the Stoic doctrine of the perceptible qualitative uniqueness of entities seems to be in discord with another condition: being an unchangeable, essential, inherent metaphysical principle that is not a function of material constitution.

What is important to see however, is that on a metaphysical level, peculiarly qualified need not mean "being qualitatively unique in a perceptible way" this condition is only to be met for peculiarly qualified objects on the epistemological level. As far as metaphysics is concerned it is sufficient for the theory to be able to account for the numerical distinctness and the persistence of entities based on the same metaphysical principle, and to make sure that that principle has a visible manifestation that accounts for the entity's recognisability and distinguishability. Also, as far as epistemology is concerned, the perceptible quality that makes for object A's distinguishability from object B at a time t_0 need not be the same qualitative feature that makes for object A's distinguishability from object C at a time t_1 or guarantee object A's identificability at times t_0 and t_1 . Insofar as the perceptible quality that object A has is a function of its peculiar qualification there need not be a correspondence between synchronic and diachronic identity criteria on the epistemological level; it is sufficient if they are the same on a metaphysical level.

1.2. Grounding identity – the *pneuma* as a possible principle of individuation and criterion of identity

Recognizing that the contradictory nature of peculiar qualities can be made sense of by a differentiation between the demands imposed on the metaphysical theory by the epistemological doctrine and the metaphysical requirements themselves, is a central feature of

contemporary discussions of the Stoic theory of identity. The authors discussing the issue (David Sedley, T.H. Irwin and Eric Lewis), offer possible interpretations of the notion of peculiar quality by making the following emendations to the Stoic theory of identity: (1) the notion of perceptible qualitative uniqueness can be relaxed as to include more than just immediately perceptible physical features (like the ones in Dexippus' example)²², (2) a distinction can be made between the unique perceptible features and the metaphysical principle that they owe their existence to.

As to Sedley, he does not really pinpoint an entity (or entities) in the Stoic universe that could have been the criterion of identity and the principle of individuation, but he offers an example provided by contemporary science that illustrates that the Stoic tenet of a metaphysical identity criterion that has corresponding perceptible features that are persisting and unique is not such a farfetched idea. If we think of it, the DNA is a property we all have which is essential and unique, and as such is sufficient for both individuating a person and guaranteeing their persistence through time. Moreover, as he argues, the unique and persistent but immanent DNA has also a unique and perceptible manifestation: our fingerprints. These latter are genetically determined and also sufficient to identify an individual.²³

Now, there is only one problem with this suggestion. Neither the concept of DNA, neither that of fingerprints were available to the Stoics, such a possibility (entirely contingent on the results of modern biology) does not really help us in interpreting their theory. But if the Stoics did not have anything specific in mind that could have met the aforementioned criteria for being both a criterion of identity and a principle of individuation, all this in such a way

²² The notion of unique perceptible features can be quite broad, given the fact that although the Stoics argued that everyone can (and do sometimes) have cognitive impressions, strictly speaking it is only the Stoic wise man who would always have cognitive impressions. It would be only him who would recognize the real identity of entities, even under unfortunate circumstances. Now, given the fact that cognition does not only presuppose fortunate external circumstances but also a certain mindset on the part of the individual (i.e. the knowledge of certain concepts, cf. Frede, "Stoic Epistemology," in Algra, *The Cambridge History*, 307) it is possible that the unique perceptible features of an individual might only be perceivable to the trained eye (or ears, mouth, fingers, etc.) of the Stoic sage. cf. Cicero, *Academica*, 2.57 (= LS 40I)

²³ Sedley, "The Stoic Criterion," 266.

that makes infallible recognition and individuation possible, then their theory does not stand on firm grounds. Or at least it is not powerful enough to fend off the Academic arguments. Clearly, the Stoics must have meant something by “peculiar quality” as it is a ubiquitous feature of their philosophy, appearing in several pieces of textual evidence. It would be rather odd if they only had but a vague idea of some quality that individuates individuals and makes for their persistence.

1.2.1. The soul being the peculiarly qualified

As opposed to David Sedley, Eric Lewis and T.H. Irwin offer a solution that identifies the peculiarly qualified with a concept readily available to Stoic philosophers: the soul of the individual. This idea is perfectly well justified, insofar as the soul can be conceived of as having its very own qualitatively unique and perceptible features that are manifest in the behaviour of the individual. Also, it is a modification of the *pneuma*, which, as the active principle, permeating each and every object of the universe, unifies and differentiates objects at the same time.²⁴

The Stoics conceived the universe as an intelligent living being, made up of matter and the active principle (fire, *logos* or god, or on the Chrysippean analysis, *pneuma*²⁵). Matter (*ousia* or *hulē*) in itself is amorphous and qualitless, it is kept together, moved and differentiated by the active principle.²⁶ Individual objects reflect the composition of the universe, they too are constituted of a piece of matter and a portion of the *pneuma* and it is in

²⁴ Nemesius 70,6-71,4 (= LS 47J) Galen, *On bodily mass* 7.525,0-14 (=SVF II.439 = LS 47F), Alexander, *On Mixture* 224,14-17 (=SVF II.442, part =LS 47I)

²⁵ The *pneuma* is a mixture of fire and air (the two active elements) a “warm breath” that interpenetrates everything in the world: it unifies things, differentiates them and at the same time is their life principle.

²⁶ DL VII.134 (=SVF II.300, part II. 299= LS 44B) Sextus Empiricus, *Against the Professors* 9.75-6 (=SVF II.311= LS 44C) Calcidius 292 and 293 (=SVF I.88, part = LS 44D and LS 44E, respectively)

virtue of the latter that they are unified and have qualities.²⁷ It is these qualifying and unifying functions of the *pneuma* that led modern commentators believe (besides an analogy with Aristotelian theory and also with modern approaches) that it should be a specific modification of the *pneuma*, namely the soul (*psuchē*) that can make the entity *peculiarly* qualified beyond its unity and common qualification.

The soul is a special kind of *pneuma*, characteristic of animals. Although every existing object²⁸ is unified by *pneuma*, there are different kinds of *pneuma* pertaining to different kinds of objects. Whereas inanimate things are only held together by *hexis*, unensouled plants have their own principle of life and growth (*phusis*), animals have a soul (*psuchē*) and humans, in addition to these also have a rational soul which develops gradually through concept formation.²⁹ The different kinds of *pneuma* are present together also in the more differentiated entities (e.g. animals have a *hexis*, a *phusis* and a soul) making for different functions of the individual, e.g. the *hexis* in an animal keeps together its lifeless parts (bones and sinews), its *phusis* accounts for its vegetative functions and the cohesion of its body and its *psuchē* for its psychic functions.³⁰ It is not the case that more differentiated kinds of *pneuma* subsume less differentiated kinds.³¹

Baltzly notes that the *pneuma* actually has the same role as the substantial form in Aristotle's philosophy. As we will see this is also an opinion Irwin endorses. Dirk Baltzly. "Stoicism" in *The Stanford Encyclopedia of Philosophy* (Winter 2010 Edition). ed. Edward N. Zalta, Last modified Mon Oct 4, 2010, <http://plato.stanford.edu/entries/stoicism/>.

²⁸ The Stoics differentiate between different levels of unity in objects: they distinguish between objects which exist by separation (like an army), by contact (such as a ship), and unified objects which are unified in virtue of having a unifying tenor (*hexis*), a certain disposition of the *pneuma*. Simplicius, *On Aristotle's Categories* 214,24-37 (=LS 28M).

²⁹ Philo, *Allegories of the Laws* 2.22-23 (=SVF II.458, part = LS 47P), *On God's Immutability* 35-6 (SVF II.458, part = LS 47Q) Origen, *On principles* 3.1.2-3 (=LS 53A), DL VII.86 (quoted by Long, "Stoic psychology," in Algra, *The Cambridge History*, 564) and DL VII.138-9 (=LS 47O) Aetius 4.11.1-4 (=SVF II.83=LS 39E).

³⁰ As a passage by Philo suggests, an animal's body is both united "externally and internally" by "its own tenor" and the soul. Philo, *Questions and answers on Genesis* 2.4. (SVF II.802 = LS 47R) For the same point see Anthony A. Long, "Soul and Body in Stoicism," *Phronesis* 27 (1982): 38-45 and Long "Stoic Psychology," in Algra, *The Cambridge History*, 563-564.

³¹ This differentiation is a function of the intensity of the tensional motion characterising the portion of *pneuma* Long, "Stoic Psychology," in Algra, *The Cambridge History*, 565-566 cf. Lewis, "The Stoics on Identity," 99-100, David Sedley, "Stoic Physics and Metaphysics," in Algra, *The Cambridge History*, 389.

Modern commentators, mostly focusing on the issue of *personal* identity, ignore the problem of the identity of inanimate beings. Moreover, in the case of animals they also claim that it is the soul of creatures that makes for their individuality and persistence. This consideration is supported by several arguments which differ from author to author, but it is organised around the following statements.: (1) The soul is a principle of unity for animals (and also responsible for their qualities) therefore, it should be the criterion of identity and the principle of individuation. (2) As the soul is a characteristic feature of animals only, it is an essential property of animals, thus it should be definitive for their persistence. (3) The soul (as opposed to other kinds of *pneuma* is non-circularly individuable, thus it is a principle of individuation. (4) The soul's existence is temporally coextensive with the existence of the individual and is a necessary condition for it: thus the soul is a criterion of diachronic identity. (5) By means of psychic qualities, the souls of individuals qualify them in a perceptible way, and this qualification is a result of an essential, persisting disposition. From the above enumerated arguments, (1) and (2) constitute T.H. Irwin's reconstruction, whereas (3) and (4) were propounded by Eric Lewis, and (5) is supported by both of them.

The crux of Irwin's argument for identifying the peculiarly qualified with the *pneuma* is that the peculiar quality is above all a principle of unity and only derivatively a criterion of identity and a principle of individuation.³² He draws this conclusion from differentiating between "fully" and "merely" qualified things, based on an excerpt from Simplicius' commentary on Aristotle's *Categories*. Simplicius discusses the Stoic differentiation between objects having different levels of unity. Whereas some things are only unified by contact or separation (the examples are a ship and an army respectively) other things are unified by a *hexis* (the form of the *pneuma* responsible for the cohesion of entities). Both kinds of entities

³² Irwin, "Stoic Individuals," 470.

can be qualified, insofar as qualities can be predicated of them, but it is only the entities unified by a *hexis* that are qualified in virtue of *having* a quality.³³

From this passage Irwin concludes that in the case of unified things it is the same things in respect of which entities are qualified and unified: the *hexis* binding the entity together. From this he infers that the *hexis* is the entity's peculiar quality. He establishes this point by drawing a parallel with Locke³⁴ (and also with an interpretation of Aristotle), attributing to the Stoics the view that "unity at a time is the basis of both distinctness at a time and persistence through time".³⁵ Thus as he puts it, peculiar qualities should be "fundamentally principles of unity, and derivatively principles of distinctness and principles of persistence".³⁶

As the *hexis* unifying "fully qualified" entities is a portion of the *pneuma*, Irwin concludes that the peculiar quality must also be a portion of the *pneuma*. Moreover, since he takes that peculiar qualities correspond to an *infima species*,³⁷ he concludes that peculiar qualities have to reflect the characteristics of the species to which the peculiarly qualified individual belongs. As having a (rational) soul is a specific feature only characteristic of humankind and an essential part of being human, he concludes that the peculiar quality of humans must be this kind of *pneuma* specific to them.³⁸

There are several problems with Irwin's analysis. He makes an unfounded identity statement based on the fact that the *pneuma* present in an entity is responsible for the object's unity and differentiation at the same time. His assumption that a principle of unity must derivatively also be a principle of individuation and a criterion of identity, is erroneous. It

³³ Simplicius, *On Aristotle's Categories* 214,24-37 (=LS 28M) cf. footnote 28.

³⁴ Irwin "Stoic Individuals," 470.

³⁵ Ibid. Irwin quotes Locke's *An Essay Concerning Human Understanding* II. 27.5.

³⁶ Ibid.

³⁷ Ibid. Here Irwin relies on the following passage by Diogenes Laertius: "The species (*eidos*) is what is included in the genus, as man is included in animal. The most generic is the thing that being a genus has no genus, such as being (*hoion to on*, my addition, M.Ny.). The most specific is the thing that being a species has no species, such as Socrates." (DL VII. 61, Irwin's translation) It has to be noted that peculiar qualities are not mentioned in this context. The only thing that Irwin can base on his equation of peculiar qualities and "a species that has no species" is establishing a connection with an other passage of Diogenes, that I have already quoted stating that peculiar qualities apply to (or are) particular individuals (cf. DL VII.58).

³⁸ Ibid. 470-471.

need not be: something can be a unity in virtue of being a token of a natural kind, but this is not sufficient to ground its individuality (and identity).³⁹ What qualifies and unifies entities at the same time need not be an entity's peculiar quality.

Furthermore, while it is true that it is in virtue of having a portion of *pneuma* in them that entities are both united and (peculiarly) qualified, it would be jumping to conclusions to say that all these functions are performed solely by the (rational) soul, as we have seen that all the different modifications of the *pneuma* are co-present in animated beings. On this basis we cannot exclude that it is rather the *hexis* or the *phusis* of the individual that makes it peculiarly qualified, or that it is its *hexis* or *phusis* that unifies it, but it is peculiarly qualified by its soul. Also, from the point of view of qualities: it need not be the case that it is the peculiar quality that unifies individuals. Common qualities can very well be principles of unity and they can also qualify individuals in a general way, although they cannot individuate them (and from the point of view of Stoic epistemology their identifying role is also questionable).⁴⁰ So Irwin's point that peculiar qualities need to be and in fact are "unifying qualities" and thus need to be identified with the rational soul of the individual, just does not stand.

What is more, he does not account in any way for the individuation and identity of the *pneuma*, I gather that he stipulates that each animate creature has a numerically distinct soul that also persists for a lifetime, but this is not sufficient if one is looking for a non-circular way of grounding entities' individuality and identity.

³⁹ cf. Lowe, *The Possibility of Metaphysics*, 60-63, 201.

⁴⁰ In support of the view that common qualities are sufficient to unify and qualify things see Plutarch, *On Stoic Self-contradictions* 1053F-1054B (= SVF II.449 = LS 47M) "In his books *On tenors* he [Chrysippus] again says that tenors are nothing but currents of air: 'It is by these that bodies are sustained. The sustaining air is responsible for the quality of each of the bodies which are sustained by tenor; in iron this quality is hardness, in stone density and in silver whiteness.'" and Simplicius, *On Aristotle's Categories* 237,25-238-20. (= SVF II.393 part, = LS 47S) "So tenors, for them are not specified by their duration or strength, but by a certain peculiarity and a mark. Just as things with roots are rooted in different degrees but have the single common feature of holding to the earth, so tenor has the same meaning in things which change with difficulty and in those which change easily. It is a general truth that many things which are qualified generically are defective in the feature by which they are specified, such as sour wine, bitter almonds, Molossian and Maltese dogs. These all carry the mark of their genus, though to a slight and relaxed extent, and their tenor persists in a single condition so far as its actual defining terms are concerned; but frequently it is easy to change for some other reason." The enumerated qualities in both examples are not unique (although they might be persistent) and Simplicius actually stresses that these tenors, are marks of a genus, not of individuals. cf. LS 289.

Lewis has different arguments in favour of the soul as a candidate for peculiar quality. One of his main arguments is that as opposed to the other kinds of *pneuma*, the soul can be individuated. While he accepts that entities are qualified in virtue of having a particular kind of combination of *hexis*, *phusis* and *psuchē*, and that individual entities are individuated in virtue of having a particular combination of *hexis*, *phusis* and *psuchē*, he refuses the possibility that the *hexis* or the *phusis* of the individual could have individuating powers.⁴¹

He constructs a very ingenuous theory for individuating the soul, deriving its individuality from the uniqueness of the mental contents the individual has. As he argues, given the Stoic theory of perception it just cannot be possible that two individuals ever have the same mental contents. On the Stoic view impressions (*phantasiai*) are imprints⁴² on the soul. As no two entities can ever occupy the same spatial position at the same time, no two animate beings can ever have the exact same impressions. Their corporeal souls, altered in different ways will be disposed differently and thus they will be qualitatively unique.⁴³

Lewis's other main argument concerns the soul's role in accounting for the persistence of the individual. What he attempts to establish is that since having a soul is necessary for the persistence of animate beings, it is the soul that is the criterion of identity for animals. He supports his statement by showing that (a) the soul persists as long as the individual does, and that (b) the individual does not exist before his soul has come into existence.⁴⁴ He supports statement (a) by evidence of Stoic thinkers stating that the individual lives as long as his soul does not separate from the body⁴⁵ and that the individual survives as their soul as long as their

⁴¹ Lewis, "The Stoics on Identity," 100. His arguments to exclude the *hexis* and *phusis* of an individual as possible criteria of identity are not convincing, but for the moment I shall disregard this and concentrate on his account of the individuation of the soul.

⁴² Or on the Chrysippean account, alterations (*heteroiōsis*) cf. Sextus Empiricus, *Against the Professors* VII.230 = SVF I.58, VII 227-30, VII 372-3 = SVF II.56. (quoted by Robert J. Hankinson "Stoic Epistemology," In *The Cambridge Companion to the Stoics*, ed. Brad Inwood (Cambridge: CUP, 2003), 62.

⁴³ Lewis, "The Stoics on Identity," 107-108.

⁴⁴ Lewis, "The Stoics on Identity," 97-99.

⁴⁵ The Stoic definition of death being the soul's separation of the body, Sextus Empiricus *Against the Professors* 7.234 = LS 53F, Calcidius 220 = LS 53G, Nemesius 78,7-79,2 = LS 45D, quoted by Lewis, "The Stoics on Identity," 97.

soul persists. As to statement (b), he derives it from the Stoic theory of ontogenesis, stating that animals exist as a plant-like life-form in the embryonic stage, and only develop a soul upon birth under the effect of environmental factors (notably upon meeting the cold outside air.⁴⁶ As he argues, it is clear from this that “Prior to being ensouled no individual animal exists, since no animal exists at all.”⁴⁷

Although his arguments for statement (a) are completely justifiable, I have doubts about statement (b). His inference that the formation of the soul is a necessary condition for the birth of the individual presupposes some kind of sortal essentialism on the part of the Stoics, but we have no evidence that they have espoused such a theory. If anything, their doctrine of ontogenesis rather supports the fact that they did not. Considering that the Stoics affirmed that psychic qualities are genetically transmitted, since the offspring takes after their parents not just in their physical properties but also in their character traits,⁴⁸ and that they derived the soul from the seed⁴⁹ we can suppose that the defining character traits of the individual (that might be grounding its identity) are already present in the plant-like embryo. In order to be able to confirm that the Stoics were sortal essentialists and that the soul is necessary for the existence of the individual, one should convincingly prove first that the character traits that were present in the seed, the embryo and the grown-up adult are not relevant for its identity.

Lewis’s analysis has the genuine advantage over Irwin’s that he can account for the soul’s individuality in a non-circular way, without either just stipulating the numerical uniqueness of the soul or deriving it from being the soul of a peculiarly qualified individual (which would be question-begging).

Still, besides trying to demonstrate that the soul’s existence is temporally coextensive with the existence of the individual, Lewis does not provide any evidence for the soul’s

⁴⁶ Hierocles, *Elements of Ethics*, 1.5-33, 4.38-53 (=LS 53B), Plutarch, *On Stoic self-contradictions*, 1052F.

⁴⁷ Lewis, “The Stoics on Identity,” 99.

⁴⁸ Tertullian, *On the Soul* c.5. (=SVF I.518), cf. SVF 2.792, Quoted by David E. Hahm, *The Origins of Stoic Cosmology*, (Ohio State University Press, 1977), 4.

⁴⁹ Hierocles *Elements of Ethics*, ibid.

persistence over time. All he says on the matter is that: “We have no text which claims that we have numerically the same soul throughout our lives, yet it would be a uniquely bizarre thesis to believe otherwise.”⁵⁰ But this statement does just not stand, even if it seems to be true intuitively. As far as intuition is concerned we would also doubt that one does not have numerically the same body throughout one’s life, still there exist a host of metaphysical puzzles about the problem of material constitution and identity. What we are looking for is exactly a principle, beyond our intuitive convictions that can ground the persistence of the individual over time.

It seems like all we could establish, based on the analysis of Irwin and Lewis is that the soul might be individuable based on its unique mental contents and thus can account for the individuality of the animate being. This individuality can be made perceptible and thus account for the distinguishability of the individual in virtue of the unique psychic features of the person: their virtues, their behaviour and their way of life.⁵¹ But on this account the persistence of individuals is not answered for in any way, not to mention the problem of the individuation of inanimate beings.

This latter is indeed a serious problem. If we limit the individuating and identifying power of the *pneuma* to the soul, then plants, sticks and stones cannot be individuated. A view that does not ascribe definite identity conditions to some kinds of individuals is not unprecedented. Nevertheless, I doubt that such a view could be attributed to the Stoics. First, if we consider their epistemological motivations for establishing a theory of identity, it is clear that they wanted to maintain that all kinds of entities, whether ensouled or not, have to be distinguishable and re-identifiable. The indistinguishability of inanimate entities poses a

⁵⁰ Lewis, “The Stoics on Identity,” 97.

⁵¹ Lewis, “The Stoics on Identity,” 91-92, Irwin, “Stoic Individuals,” 471.

problem just as serious for the Stoic doctrine of cognitive impressions as the indistinguishability of animate ones.⁵²

Second, provided the cyclic worldview of the Stoics, and their idea that the same events take place in each world, populated by the same individuals, they had to ensure that all kinds of individuals preserve their identities. Inanimate entities, besides animate ones also play a causal role in how things take place in each world. A change in the identity of any element of a causal chain is likely to affect the identity of any other elements, thus if inanimate things do not have a fixed identity, the Stoics cannot safely affirm the trans-world identity of any sorts of things.

My third point concerns Lewis' account of the uniqueness of the soul. If the soul is individuated by the different impressions it has received from experiencing various objects from various perspectives, then again, the identity of the impressors should be determined. Otherwise this derivative account of individuation just does not work.

Taking all this into consideration, I would suggest to accept the accounts provided by Sedley, Lewis and Irwin with some modifications. All interpretations pointed out a very important idea, namely that the perceptible qualitative uniqueness of individuals should be accounted for by a persistent, numerically unique, inherent metaphysical principle. However, as to what concerns Irwin's and Lewis' suggestion that this principle should be the entity's soul, this account should be slightly modified. Instead, we should rather say that entities are peculiarly qualified in function of the portion of *pneuma* in them. At this point I cannot really specify what makes that portion of *pneuma* unique, besides stipulating its numerical uniqueness and I cannot account for its persistence either, in any other way than stipulation. However, for the moment I shall put this issue aside and investigate whether making the

⁵² This point has been brought to my attention by Gábor Betegh.

pneuma a principle of individuation and a criterion of identity is a justifiable theoretical move in the framework of Stoic metaphysics.

II. Material constitution cannot be a criterion of identity or a principle of individuation

In this chapter I shall investigate in more depth the Stoic treatment of the relationship between material constitution, qualification and identity. Such an inquiry is crucial for a better understanding of the Stoic theory on several accounts. First, understanding the motivations behind the Stoic doctrine reveals the conditions their identity theory has to satisfy, while at the same time it sheds light on its theoretical limitations. Second, clarifying the role of matter in the ontological structure of particular objects is also important for understanding how do qualities and matter make up an object, and in what sense are these two principles similar and different from each other. In what follows I shall present why material constitution cannot account for identity or individuation on the Stoic view, then I will give some further textual support for my thesis by providing an interpretation of the thought experiment concerning Dion and Theon.

2.1. The Growing Argument

As we have seen earlier, one of the reasons why the Stoics developed a theory that made identity a function of peculiar qualification was that they needed to retaliate the Growing Argument (GA). According to the argument⁵³ material objects are unstable things that cannot persist through time, given the fact that the matter they are made of is constantly changing. In

⁵³The GA was a philosophical puzzle first propounded by the comedy-writer Epicharmus. In his formulation, the argument appears in a comic setting: a debtor who is not in the position to repay his debt tries to convince his creditor that provided the fact that his composing matter has changed since the day before, he is not the individual who has borrowed the money and thus cannot be expected to repay someone else's debt. As Sedley puts it, this version of the argument is meant to illustrate the "radical instability of the physical world." (Sedley, "The Stoic Criterion," 255) Material objects are unstable things that do not really exist, given the fact that the matter they are made of is constantly changing.

the context of the Stoic-Academic debate, besides the previous point concerning the fleeting identity and existence of material objects, the argument was reiterated with the added interest of demonstrating the “philosophically incoherent” nature of growth as a process.⁵⁴ This is the version of the argument we are presented with by Plutarch in his *On Common Conceptions*, where he also gives the solution he attributes to the Stoics. Plutarch’s version is as follows:

- (a) All particular substances are in flux and motion, releasing some things from themselves and receiving others which reach them from elsewhere;
- (b) the numbers and quantities which these are added to or subtracted from do not remain the same but become different as the aforementioned arrivals and departures cause the substance to be transformed;
- (c) the prevailing convention is wrong to call these processes of growth and decay: rather they should be called generation and destruction, since they transform the thing from what it is into something else, whereas growing and diminishing are affections of a body which serves as a substrate and persists.⁵⁵

The assumption, characteristic of both formulations of the GA, but not included in the argument, is that a physical object’s identity is a “strict function of its material composition”.⁵⁶ But, since physical objects are in constant flux and motion as they release and receive particles, their identity is unstable, for the arrival and departure of particles changes the material constitution of the object, and thereby its identity. This conclusion concerning the ever-changing identity of material objects is presented in (b). As to the attack on the reality of the processes of growth and diminution, it is formulated in (c). If a material object changes its identity every time a particle is added to it or subtracted from it (that is, it grows or it

⁵⁴ Sedley, “The Stoic Criterion,” 255-256.

⁵⁵ Plutarch, *On common conceptions*, 1083A-1084A (=LS 28A)

⁵⁶ John Bowin, “Chrysippus’ Puzzle about Identity,” *Oxford Studies in Ancient Philosophy*, 24 (2003): 241.

diminishes), then the very notion of growth is rendered “philosophically incoherent”.⁵⁷ For in order for growth to exist as a process, there should be “a body which serves as a substrate and persists”. But clearly there is no such thing: the body at the beginning of the growing process is different from the body we get as an end result, or for that matter, from the bodies at any stage of the growing process. Thus, growth (or diminution) cannot be predicated of anything, because the subject of such a predication is elusive.

Based on the evidence⁵⁸ reporting on discussions of processes of material change, we know that the Stoics answered the argument by rejecting the assumption that material constitution is identity. They differentiated between different subjects (or substrates)⁵⁹ in the object, having different persistence criteria, and thus susceptible to different kinds of changes.⁶⁰ Whereas the material substrate, whose identity is defined by its constitutive parts does not survive a change in material constitution, the qualified substrate (basically the individual itself) survives through growth and diminution and all other kinds of material changes, because its persistence is a matter of having peculiar qualities.

According to most interpretations⁶¹, the differentiation between the two substrates consists in viewing the individual under different *aspects*, thus being able to provide different (even contradictory) descriptions of it, while, at the same time preserving its unity.⁶² The material substrate describes the object *qua* a lump of matter, whereas the qualified substrate *qua* a peculiarly qualified individual. Besides the material and the qualified aspect of objects, the Stoics differentiated between two further levels of existence under which objects can be

⁵⁷ Sedley, “The Stoic Criterion,” 257.

⁵⁸ Plutarch, *On common conceptions* 1083A-1084A (=LS 28A), Dexippus, *On Aristotle’s Categories*, 23,25-24,4 (=SVF II.374.) (quoted by Irwin, “Stoic Individuals,” 461.), Anonymous Academic treatise, Oxyrhynchus Papyrus 3008 (=LS 28 C) Stobaeus, *Ecl.* I. 178.10- 179.5 = Posidonius, fr.96 = LS 28D).

⁵⁹ The Greek word is *hupokeimenon* LS translates it as „substrate” (LS 28A = Plutarch, *On common conceptions* 1083A-1084A) whereas Irwin translates it as „subject” (Irwin, “Stoic Individuals,” 459).

⁶⁰ Irwin, “Stoic Individuals,” 459-461.

⁶¹ Cf. Irwin “Stoic Individuals”, 459-462, Inna Kupreeva, “Qualities and Bodies,” *Oxford Studies in Ancient Philosophy* 25 (2003): 297-298, 302, Sedley, “The Stoic Criterion,” 258-259, Richard Sorabji, *Matter, Space and Motion*, (Cornell UP: New York, 1988),87.

⁶² Sedley, “The Stoic Criterion,” 258-259.

described: the disposed (*pōs ekhon*) and the relatively disposed (*pros ti pōs ekhon*).⁶³ The former includes descriptions of objects referring to structural settings e.g. standing or the positioning of the hand as a fist; the second comprises features the individual has based on its relation to something, i.e. relational properties, such as “taller than *x*”, “the husband of *y*”.⁶⁴

Now, there is something very important that has to be noted about this solution. The fact that the Stoics chose to refute the argument, by rejecting the assumption that identity is a function of material constitution, shows that they found the argument conclusive and accepted all the other premises (implicit or explicit) that it comprises. They admitted that *if* material constitution were the sole way to determine identity, *then* material objects would indeed be of a fleeting nature and processes like growth and diminution would not be possible. It has to be stressed that this conclusion is by no means evident. For all we know, it could be argued that as opposed to diminution and stable flux, in the process of growth (where the entity does not *lose* any of its constitutive parts) the original entity is not destroyed. Rather, it remains preserved as a part in the new entity. On this view, the conclusion presented in (c) stating that processes of growth and diminution should rather be called generation and destruction does not follow from the argument’s premises.⁶⁵

Whether one accepts the conclusion or does not, depends on how one conceives of material constitution. The fact that the Stoics found the argument convincing and thus a possible threat to their natural philosophy shows that they had the same idea of material

⁶³Menn remarks, that the first *genus* (*hupokeimenon*), as it appears in Simplicius, *On Aristotle’s Categories* 66,32-67,2 (*SVF* II.369, part = LS 27F) and Plotinus, *Enneads* 6.1.25 (*SVF* II.371) should not be taken to be as the object’s matter, but rather the object as a “‘this’ or more generally, *hupokeimenon*”, (Menn, “The Stoic Theory,” 222). However, in Plutarch, the Oxyrhynchus Papyrus, and Stobaeus (as quoted above, in footnote 59), the term that I have (along with Sedley and Irwin) referred to as “material substrate” is *ousia*, which in Stoic context means matter. Also, Plutarch mentions that besides the two substrates there are other two as well, which suggests that the material and qualified substrate can indeed be matched with the first and the second genera. “I am simplifying their account, since it is four substrates that they attribute to each of us; or rather, they make each of us four.” Plutarch, *On common conceptions* 1083A-1084A (=LS 28A),

⁶⁴ Cf. Alexander of Aphrodisias, *On Aristotle’s Topics*, IV p.181 Ald. P. 360,9 Wal (= *SVF* II. 379), Simplicius, *On Aristotle’s Categories* 166,15-29 (= *SVF* II.403, part = LS 29C) Menn, “The Stoic Theory,” 242-243.

⁶⁵ This is how Bowin conceives of the concept of matter in the GA in his “Chrysippus’ Puzzle,” 245-246 also, this is how Sedley seems to understand it in his “Stoic Criterion,” 270.

constitution as the one the GA operates with. Irwin, when discussing the Stoic notion of material constitution, draws a comparison with Locke, presenting two ways to understand material constitution relevant from the point of view of the argument. He identifies two criteria along which the identity of a lump of matter can be defined: the particles composing the mass of matter should “(i) be 'joined' in the relevant way and (ii) not similarly joined to any other atoms.”⁶⁶ He calls the first the concept formulated by the first condition (i) the “moderate Lockean conception” of a mass, and the two conditions together the “extreme Lockean conception”.

It is clear that the argument works with the extreme Lockean conception. Based on the moderate Lockean conception one could reject the conclusion of the GA for the case of growth, and maintain that although the new entity is not identical with the old one, the latter has not perished, but is rather present as a part in the new individual. But, the Stoics clearly did not do so, they accepted the conclusion, otherwise they would not have felt the need to present arguments for the possibility of growth, and to choose to refute the GA by a wholesale rejection of material constitution as a criterion of identity. This clearly shows that they accepted that if entities were not qualified, then their identity would be constituted by their material parts along the extreme Lockean conception.⁶⁷ By differentiating in their answer to the argument between a material and a qualified substrate, they are distinguishing between an object whose identity is defined in a strict mereological essentialist way (the material substrate) and one that is identified based on its qualities (the qualified substrate) and they make the persistence of the individual a function of the persistence of the latter.

⁶⁶ Irwin, “Stoic Individuals,” 462.

⁶⁷ Irwin proves that the Stoics accepted the „extreme Lockean conception of matter” in another way. He quotes Posidonius saying „Substance is neither increased or decreased by addition or subtraction, but is only altered as it happens with numbers and measures.” (Stobaeus. *Eclogae* I.178.10-179.5 =LS 28D) (Irwin’s translation,) from which he concludes that the Stoics maintained that quantity is essential for the identity of material objects, to the extent that they perish if that quantity is changed. Actually what Posidonius is saying here is a reformulation of the GA, so Irwin’s point is basically the same as mine. (Irwin, “Stoic Individuals, 462-464).

2.2. Matter cannot be a principle of individuation

An apparent problem with attributing a strict mereological essentialist view of matter to the Stoics is that they were not corpuscularists. They believed in the actual infinite divisibility of bodies⁶⁸, understanding infinite divisibility not in such a way that bodies are composed of an infinite number of infinitesimal parts⁶⁹, but that bodies do not have ultimate parts, because each part is divisible to further proper parts and so on *ad infinitum*.⁷⁰ As Daniel Nolan points out, such a notion of matter basically corresponds to what is called “gunk” in contemporary philosophy: a concept of matter on which material objects are such that each of their proper parts have further proper parts, *ad infinitum*.⁷¹

Such a conception of matter raises difficulties from the point of view of individuating material objects on a purely mereological essentialist basis. If a lump of matter’s identity conditions are defined by its constitutive parts, as the aforementioned interpretations of the Stoic solution to the GA suggest, then on an ultimate analysis the lump of matter should be individuated based on its most basic parts. This is so, because the parts of a lump of matter are also lumps of matter and thus they are also individuated based on their constituents. This mereological analysis goes on until we get to the ultimate indivisible parts of parts, based on which we can individuate the whole lump of matter. However, if there are no such ultimate parts, then there is nothing based on which we can individuate parts, and if parts are not individuated, then the whole lump of matter will not be individuable either. Thus, in a purely mereological essentialist approach, the individuation of material objects is not possible with a gunky concept of matter.

⁶⁸ And of space and time. Stobaeus 1.142,2-6 (=SVF II.482,part =LS 50A), DL 7.150-1 (=SVF II.482, part = LS 28B), Sextus Empiricus, *Against the Physicists* II 121-126, 139-142 (=LS 50F).

⁶⁹ DL VII. 150. “Hence the further doctrine that matter is divisible Chrysippus says that the division is not *ad infinitum*., but itself infinite; for there is nothing infinitely small to which the division can extend. But nevertheless the division goes on without ceasing.” It has to be noted, that *ouk eis apeiron* is a supplement by Von Arnim. Cf. Robert B. Todd, “Chrysippus on Infinite Divisibility,” *Apeiron* 7, (1973): 21.

⁷⁰ Daniel Nolan, “Stoic Gunk,” *Phronesis* 51 (2006): 166-167.

⁷¹ Nolan, “Stoic Gunk,” 163.

If this is so, then it is not only the case that material constitution cannot serve as a criterion of diachronic identity but also it cannot be a principle of individuation. If one were to individuate something based on its material constitution, then one should be able to enumerate its parts, but with gunk this is just impossible. The situation is further complicated by the fact that on the Stoic worldview the cosmos itself is a continuous *plenum*⁷² filled with bodies everywhere, so the solution that chunks of matter could be individuated by being separated from each other by void is not an option for them to individuate matter either.⁷³

Thus, it seems like in and of itself matter on the Stoic view is not individuable but only with reference to some external principle such as the object of which it is the composing matter or the place it occupies or by certain continuity relations.⁷⁴ As we have already seen such an external principle is readily available in the Stoic context, namely the portion of *pneuma* permeating the object. On the one hand, it unifies the object physically by holding it together, and thus it establishes a distinctive continuousness relation, sufficient to single out a portion of matter. On the other hand, it imparts qualities to the object, thus making it a unity also on a metaphysical level, by commonly qualifying it and individuates it by peculiarly qualifying it.⁷⁵ Thus, a portion of matter can be individuated in virtue of being the matter of a peculiarly qualified individual object, which latter is defined by its qualities imparted to it by a portion of *pneuma*.

But we have not answered our original question so far, concerning mereological essentialism. It is not clear why would the GA pose a problem to the Stoics if they indeed

⁷² Sedley, "Stoic Physics and Metaphysics," in Algra, *The Cambridge History*, 396.

⁷³ Galen, *On Incorporal Qualities*, 19.464,10-14 (SVF II.502 = LS 49E), Simplicius, *On Aristotle's On the Heavens* 284,28-285,2 (SVF II.535 = LS 49F).

⁷⁴ Cf. Lowe, *The Possibility of Metaphysics*, 74. "What we lack in the case of the concept of a mere part of gold is any principle of individuation for the items falling under the concept. This is not to say that parts of gold *cannot ever* be individuated, but only that they are never individuable merely *as* parts of gold. I can individuate a part of gold as, for example, that part of gold which is the sum total of the gold currently composing a certain gold ring – but that is because I can independently individuate the gold ring as an object in its own right. A 'principle of individuation' as I understand the term, is a principle that tells us what is to count as *one* instance of a given kind."

⁷⁵ cf. footnotes 40.

espoused a view that makes individuation a matter of qualification. If the matter of objects and parts of the matter of objects cannot be identified based on their ultimate components any way, why would they have to accept that a change in components would affect the identity of a material object? However, the fact that objects change their matter is something that we observe every day, and the Stoics were not the kind of philosophers who doubted the truth of such commonsensical observations. And they need not have had to doubt it, indeed, since changes in the constitutive matter of objects can also be accounted for in the framework of a theory that does not allow for the existence of unqualified lumps of matter.

On the one hand, in a Lowean spirit, the Stoics can account for changes in material constitution by reference to the constitutive matter of objects *as* the matter of those specific objects, individuated by a peculiar quality.⁷⁶ E.g. if we take the case of Chrysippus whose material constitution has changed after having consumed his lunch, in Stoic terms this can be formulated as the matter of a peculiar fig becoming part of the matter of Chrysippus. The account can be elaborated even further, by introducing temporal indexing; portions of matter can be individuated as having been the constitutive matter of object *a* at time *t1*, then constituting *b* at time *t2* etc. On the other hand, the Stoics can also formulate material changes involving parts of objects. Plus, they can do so without having to suppose that the identity of parts has to be derived eventually from the identity of some ultimate indivisible parts. Indeed, as it is apparent from the evidence by Plutarch, the Stoics did not deny that objects had parts, only that objects had *ultimate parts*.⁷⁷ Parts of entities can either be individuated by reference

⁷⁶ Cf. DL VII.150 “Both substance (*ousia*) and matter (*hylē*) are terms used in a twofold sense according as they signify (1) universal or (2) particular (*epi merous*) substance or matter. The former neither increases or diminishes, while the matter of the particular both increases and diminishes.”

⁷⁷ “Chrysippus says that when asked if we have parts, and how many, and of what and how many parts they consist, we will operate a distinction. With regard to the inexact question we will reply that we consist of head, trunk and limbs – for that was all the problem put to us amounted to. But if they extend their questioning to the ultimate parts, we must not, he says, in reply concede any such things, but must say neither of what parts we consist, nor likewise of how many, either infinite or finite.” (Plutarch, *On common conceptions* 1078E-1080E (= LS 50C part))

to the object they are parts of and with the specification of some further criteria, e.g. spatio-temporal location.

2.3. Dion and Theon

Another important piece of evidence supporting that the Stoics believed that matter cannot serve either as a principle of individuation or a criterion of identity, is the puzzle of Dion and Theon, a thought experiment constructed by Chrysippus in his work *On the Growing [Argument]*⁷⁸, transmitted to us by Philo of Alexandria. The puzzle is notoriously obscure and along with similar thought experiments has been very popular with philosophers up until modern times.⁷⁹ It goes the following way:

(1) Chrysippus, the most distinguished member of their school, in his work *On the Growing [Argument]*, creates a freak of the following kind. (2) Having first established that it is impossible for two peculiarly qualified individuals to occupy the same substance jointly, (3) he says: ‘For the sake of argument, let one individual be thought of as a whole-limbed and the other one minus one foot. Let the whole limbed one be called Dion, the defective one Theon. Then let one of Dion’s feet be amputated.’ (4) The question arises which one of them has perished, and his claim is that Theon is the stronger candidate. (5) These are the words of a paradox-monger rather than a speaker of truth. For how can it be that Theon, who has had no part chopped off, has been snatched away, while Dion, whose foot has been amputated has not perished? (6) ‘Necessarily’, says Chrysippus. ‘For Dion, the one whose foot has been cut off has collapsed into the defective substance of Theon. And two peculiarly

⁷⁸ “Peri auxanomenou” in the Greek.

⁷⁹ Sorabji, *Matter, Space and Motion*, 105.

qualified individuals cannot occupy the same substrate. Therefore it is necessary that Dion remains while Theon has perished.⁸⁰

There have been several different interpretations of the puzzle and also several attempts to resolve it. Here I will only discuss two main lines of interpretation;⁸¹ one suggesting that it formulates a criticism of the conception of peculiar qualities as a set of unique perceptible features,⁸² and the second one taking the puzzle to be a *reductio ad absurdum* of the GA.

The first interpretation was advanced by Irwin. His point is to provide support for his idea that peculiar qualities can only be such “substantial” qualities that do not only set apart the entity from other objects but also unify it. On his view, Dion and Theon are two peculiarly qualified individuals, Theon’s peculiar quality being one-footed. Once Dion’s foot is cut off, Theon loses the peculiar quality that would have set him apart, although nothing has happened to him. Moreover, Dion, who actually has undergone a change, is left unscathed, which Irwin attributes to the fact that he has probably another peculiar quality, such as being snub-nosed. The point of the thought experiment, according to Irwin, is to point out that a Dexippean construal of peculiar qualities will make identity of an extremely unstable nature. The reason why this is so is because on this view even a Cambridge-change can result in the loss of identity and thus the destruction of the individual, which seems indeed highly improbable.⁸³

However, I do not agree with this interpretation. First of all, I do not understand what Irwin means by saying that being one footed was Theon’s only peculiar quality. Does he imply that no one else in the whole universe was one footed in a similar way to him? Or does he rather mean that, apart from being one footed, Theon was qualitatively identical to Dion

⁸⁰ Philo, *On the indestructibility of the world* 48 (= SVF II.397= LS 28P)

⁸¹ The other interpretations I am acquainted with were either overridden by those of these authors or are not historically accurate and as such are of little interest to us. For the latter example of interpretations see M. B. Burke, “Dion and Theon: An Essentialist Solution to an Ancient Puzzle,” *The Journal of Philosophy*, 91 (1994): 129-139 and Jim Stone, “Why Sortal Essentialism Cannot Solve Chrysippus’s Puzzle,” *Analysis* 62 (2002): 216-223

⁸² As suggested by Dexippus.

⁸³ Irwin, “Stoic Individuals,” 467-478, 474-475.

and thus the loss of foot of the latter made him lose his peculiar qualification and, as a consequence, perish?

As for the first case, it would have been quite thoughtless on the side of the Stoics to think that being one footed was sufficient to individuate someone. To this it could be said that no two people are one-footed in the same way and a specific kind of one-footedness should be sufficient to single out someone, but the puzzle does not give any specifications on whether Dion's foot was cut off in the exact same way as Theon's, so this construal seems to be unlikely.

As for the second case, if Dion and Theon were qualitatively identical, except for the number of feet they had, then, since after the amputation we would have been left with two identically peculiarly qualified individuals, we should have appealed to a further principle to tell which one should survive. That further principle, however, cannot be Dion having another peculiar quality (e.g. a snub nose as Irwin suggests) because then they would not have been almost qualitatively identical to begin with. In either ways the interpretation seems rather implausible and I do not see sufficient textual evidence to support it in this passage by Philo.

Sedley's reconstruction differs on two crucial points from Irwin's and also from earlier interpretations.⁸⁴ First, he points out that the argument is about two individuals enclosed in one human body: Dion the whole man and Theon, a portion of Dion, lacking one of the feet of the latter.⁸⁵ Second, he sees the puzzle as a *reductio ad absurdum* of the GA.⁸⁶ Thus, the thought experiment does not operate with Stoic premises (like a former definition of peculiar qualities) but rather takes the premises of the GA to show the argument's absurdity.

⁸⁴ Sedley, "The Stoic Criterion," 268-269.

⁸⁵ For a different interpretation positing two qualitatively identical, although numerically distinct individuals see M. E. Reesor, "The Stoic Concept of Quality," *American Journal of Philology* 75 (1954) : 46-47.

⁸⁶ Sedley, "The Stoic Criterion," 270.

On Sedley's analysis the puzzle takes as a starting point the idea that identity is a function of material constitution, taking material constitution in the moderate Lockean sense. As on this view during growth the old individual is preserved as a part in the new individual, "the Academic argument does indeed imply that whole and part constitute distinct individuals."⁸⁷ Furthermore, according to the GA the candidate to survive the amputation would definitely be Theon, as growth and diminution are processes of generation and destruction: by having lost a leg and thus diminishing in substance, Dion is the one who should have perished. But, as Chrysippus points out, that cannot be the case. On having amputated Dion's foot we are faced with two peculiarly qualified individuals in the same substance, which he takes to be an absurdity. As there can only be one peculiarly qualified individual in one substance a decision has to be made as to who survives the amputation, and according to Chrysippus, that person is Dion.⁸⁸

It is not quite clear why does Chrysippus say that Dion is the surviving one, and it is even less clear why would the proponents of the GA have had to accept his conclusion and thus be forced to reconsider their idea that material constitution determines identity. Furthermore it is also quite surprising that they would have even accepted Chrysippus's point that after the amputation one is left with two peculiarly qualified individuals in one substrate and that that is an absurdity.⁸⁹ As far as a mereological essentialist is concerned, after the amputation of Dion's foot there is only one person left, as there is only one lump of matter left.⁹⁰

⁸⁷ Ibid. Of course, the puzzle also works with an extreme Lockean conception, because we can arbitrarily single out a part of Dion by enumerating a list of its constituting parts. cf. David Wiggins, "On Being at the Same Place at the Same Time," *The Philosophical Review* 77 (1968): 94-95.

⁸⁸ Sedley, "The Stoic Criterion," 267-270.

⁸⁹ As Bowin points out, the Academics need not have endorsed the principle that two peculiarly qualified individuals cannot be in one substance, as that was a Stoic principle. As opposed to what Sedley suggests ("The Stoic Criterion," 270). cf. Bowin, "Chrysippus' Puzzle," 247, 249.

⁹⁰ At least from the point of view of the argument, otherwise one could identify as many lumps of matter as one wants in the substrate of Theon on a mereological essentialist view.

I believe that these confusions can be cleared up if we take two things into consideration. First, the term peculiarly qualified need not be taken in the Stoic sense, it is just a Stoic way to refer to an individual (in this case a person). Second, although the proponents of the GA seem to have maintained that material constitution is definitive for identity (i.e. a change in material constitution entails the perishing of the individual) it does not mean that they excluded that any other factors can have relevance for identity. We have good reasons to suppose that they accepted that entities can also be individuated based on their qualities.

In their debate with the Stoics about the possibility of infallible cognition the Academics argued that some things are qualitatively identical and therefore could not be distinguished. Arguing so, they affirmed that it is possible for two numerically distinct things to be qualitatively identical. However, they conceded to the Stoics that if, as these latter believed, entities were all qualitatively distinct and our impressions were indeed such that they can preserve every minute detail of their impressors, then infallible cognition is possible.⁹¹ From this, I believe, it can be inferred that the Academics acknowledged that qualitative distinctness is sufficient to establish identity, even if it is not necessary for it. As a consequence, we can suppose that the Academics accepted the principle that if two entities are not indiscernible then they are not identical.

With these specifications in mind, we can interpret the Dion-Theon puzzle in a coherent way as a *rejoinder* (although maybe not as a *reductio ad absurdum*)⁹² to the GA. The interpretation is as follows. The argument starts out with two (peculiarly qualified) individuals as understood on a mereological essentialist view (i.e. two pieces of matter with different constituents) situated in one substrate (one discrete lump of matter). Then, the whole-limbed individual's (Dion's) foot is cut off. After the operation, according to the mereological essentialist view, we should be left with Theon, as a survivor, because his material

⁹¹ Cf. Lewis, "The Stoics on Identity," 91, also Cicero, *Academica* 2.83-5 (= LS 40J).

⁹² It does not only contain premises from the GA.

constitution remained intact, whereas Dion's had changed. Furthermore, Theon is also a better candidate because his material constitution is identical to the amputee's.

However, the amputee and Theon differ in one respect: one of them had a foot cut off while the other one had not.⁹³ Given the fact that the Academics accept the idea that if two entities are not indiscernible then they are not identical, they should accept that Theon and the amputee are two distinct individuals. But if they do so, they are faced with an impossibility: two qualitatively distinct entities that have the same material constitution.⁹⁴

Their two understandings of individuation seem to conflict, because they end up with two individuals on one view and with one individual on the other. Furthermore, their two different criteria for establishing persistence are also in conflict, when it comes to naming the survivor of the operation: on the mereological essentialist view it should be Theon who survives, whereas in the approach making identity a matter of qualification it should be Dion.

The point that Chrysippus makes is that it is impossible to deny the role of qualification in individuating and identifying individuals. On the one hand, he shows that a theory that aspires to make material constitution a principle of individuation is absurd, because it allows for two peculiarly qualified individuals in the same substrate, by allowing for individuating Theon as a part of Dion. On the other hand, he presents that if one had to decide whether it was material constitution or qualification that can account better for persistence, then qualification would obviously be a better candidate: hence the survival of Dion.

⁹³ Cf. Sedley, "The Stoic Criterion," 269. and Bowin, "Chrysippus' Puzzle," 248.

⁹⁴ Thence: "two peculiarly qualified individuals cannot occupy the same substrate."

III. Qualities and bodies

In chapter I and chapter II I have presented two aspects of the Stoic view on identity. In chapter I, I have sketched a theory according to which entities are unified and qualified in virtue of being permeated by a portion of the active principle, the *pneuma*, the numerical uniqueness of which accounts for the perceptible qualitative uniqueness of individual objects. In chapter II, I have showed that given that the Stoics conceive matter as undefined gunk, the matter of the object in and of itself cannot account for its individuation: objects' matter, although crucial for their existence,⁹⁵ cannot be identified in any way on its own except by reference to the qualities of the object. Furthermore, I have also presented that persistence is also accounted for in terms of qualification. To offer an explanation of our everyday observation that the matter of objects is changing, and of our intuition that despite these changes in material constitution, objects persist through time, the Stoics affirm that the material changes do take place, but they only affect the object's persistence *qua* a lump of matter, as a peculiarly qualified object, the individual persists through those changes.

As in the rest of the thesis I shall investigate whether qualities, as understood by the Stoics, can indeed fulfil the role attributed to them i.e. whether they can both identify and individuate bodies, in this chapter I shall explore in more depth the relationship between qualities and bodies. First, I shall reflect on the Stoic doctrine of the corporeality of qualities: how it is to be understood, especially in the context of identity and individuation. I shall investigate several interpretations of the corporeality of qualities. By taking into account what I have established so far, I will conclude that qualities are only bodies insofar as they are dispositions of the corporeal active principle (the *pneuma*) and that they are present as *parts* in individuals. From the point of view of a theory of identity this needs to be so, since if matter

⁹⁵ Cf .Calcidius, *SVF* I.86 (quoted by Menn, "The Stoic Theory," 222).

cannot ground persistence and cannot be individuated but with reference to qualities, then qualities can by no means be dispositions of matter or material bodies, and thus depend for their identity on them. To support my point, in the second part of the chapter, I will also explain what the Stoics exactly meant by dispositions and in what sense are qualities (*poiotētes*) different from dispositions (*pōs ekhonta*).

3.1. Corporeal qualities and the four genera

The Stoics believed that qualities are bodies.⁹⁶ This thesis is a necessary result of their ontological commitment to the corporeality of all existent things (i.e. all things capable of causation and being affected). Since qualities are things that are preferably of such nature that they can act as causes,⁹⁷ and all causes are bodies,⁹⁸ it is reasonable to suppose that qualities are bodies too. However, it needs to be clarified how this definition is to be meant exactly, that is, in what sense are qualities themselves corporeal. Our sources give different specifications of this definition: some formulate the point at issue as qualities being dispositions of matter,⁹⁹ some as dispositions of bodies,¹⁰⁰ and some¹⁰¹ as dispositions of the *pneuma* (and thus themselves being *pneumata*).¹⁰²

The latter view, i.e. that qualities are *pneumata*, is in concordance with the sources claiming that it is the portion of *pneuma* in entities that is responsible for their qualification,

⁹⁶ That is the qualities of corporeal things. As Simplicius reports, the Stoics believed that while the qualities of bodies are corporeal those of incorporeals are incorporeal. Simplicius, *On Aristotle's Categories*, 217,32-218,1 (SVF 2.389,part) (=LS 28L).

⁹⁷ Cf. Sorabji, *Matter, Space and Motion*, 91-92.

⁹⁸ Stobaeus 1.138,14-139,4 (SVF I.89 and 2.336 = LS 55A), Cicero, *Academica Posteriora* I.39. (SVF I.90), Sextus Empiricus, *Against the professors* 9.211 (SVF II.341 = LS 55B), Aetius 1.11.15 (SVF II.340 = LS 55G)

⁹⁹ Plotinus, *Enneads* VI.I.29. (=SVF II.376), Alexander of Aphrodisias, *On Aristotle's Topics* IV p.181 Ald. P. 360,9 Wal (=SVF II.379), Plutarch *On Common Conceptions* cp. 50 p. 1085e.(=SVF II.380).

¹⁰⁰ The Stoics argued that the qualities of corporeal entities are themselves corporeal. SVF II.377, 380, 381, 383, 388, 389. The quoted sources are due to Hahn, *The Origins of Stoic Cosmology*, 4, cf. , "Qualities and Bodies," 302.

¹⁰¹ Plutarch, *On Stoic self-contradictions*, 1053F-1054B

¹⁰² On this distinction cf. Kupreeva, "Qualities and Bodies," 302-303.

since it is the active principle that makes for differentiating and bringing into motion the passive matter.¹⁰³ Conformingly, in what follows, I shall argue that the corporeality of qualities should be construed as qualities being bodies or dispositions of bodies in the sense that qualities are *pneumata* and *as such* corporeal. Nevertheless, I believe that it is worth considering textual evidence and reconstructions conform to the other interpretation as well, in order to get a clearer idea of the Stoic conception of qualities and to understand better how they can function as principles of individuation and criteria of identity.

The interpretation according to which qualities are but dispositions of material objects has been advocated by Richard Sorabji. As he argues, the Stoic view that qualities are bodies should be understood as an idea formulated in terms of the doctrine of the four genera: qualities should be understood as the object disposed in a certain way (*pōs ekhon*). That is, qualities are the object (a body) viewed from the point of view of the third genus, disposition.¹⁰⁴ By saying so, he implies that qualities are basically identical to the bodies they are the qualities of.¹⁰⁵ As to what he takes the body to be, I suppose that he conceives it as a mixture of the active and the passive principle, and takes the substrate, the qualities, the dispositions and relative dispositions to be all identical to this compound object, differing only on the level of descriptions.

I believe that this interpretation is mistaken on several accounts. But before proving it wrong, I will return to the construal of the doctrine of the four *genera*, as I introduced it in the context of the GA. There, I have explained (relying on Sedley's and Irwin's interpretation taken up by subsequent authors)¹⁰⁶ that the point of the distinction between the different

¹⁰³ Nemesius 70,6-71,4(= LS 47J) Galen, *On bodily mass* 7.525,0-14 (=SVF II.439 = LS 47F), Alexander, *On Mixture* 224,14-17 (=SVF II.442, part =LS 47I).

¹⁰⁴ Sorabji, *Matter Space and Motion*, 89-93.

¹⁰⁵ Cf. Sorabji, *Matter Space and Motion*, 90: "The idea about qualities, as I understand it, is strongly reductionist. [...] For all that actually exists in the world is a single body, the man's matter, *pneuma*, soul or reason. That body is disposed in various ways, but if we talk of dispositions, we should not treat them in the normal way as something distinct from the body they belong to. They are just the body disposed."

¹⁰⁶ Irwin, "Stoic Individuals," 459-462, Kupreeva, "Qualities and Bodies," 297-298, 302, Sedley, "The Stoic Criterion", 258-259,

substrates, is viewing the object under different descriptions and thus being able to set apart aspects of the object with different persistence conditions.

In doing so one can allow for the object to change as viewed under some of its aspects, while remaining the same as viewed under other aspects, and more importantly, to change in respects that are not relevant to its identity, while it itself persists. Similarly to Sorabji's take on the Stoic definition of qualities, this interpretation of the four genera also suggests that each genus of the object is referring to the same entity, the material object itself – a mixture of the qualifying active and the qualitiless passive principle. On this view under its material and qualified aspect the object is presented in abstraction from its other aspects: the material substrate describes the object as an unqualified lump of matter, whereas the qualified substrate as a bundle of qualities.¹⁰⁷

However, this interpretation is imprecise. As Stephen Menn points out, it is not the case that the complex body, under one description is but a lump of unqualified matter (as belonging to the first genus) and under a different description a bundle of qualities (as belonging to the second genus). The object as a mixture of the active and a passive principle has in it as *parts* qualities and unqualified matter respectively, but since it is not identical to its parts, it is neither identical to a lump of matter under one description or a bundle of qualities under another description. Rather, it is a *hupokeimenon* (a substrate or a subject) viewed as an entity belonging to the first *genus*, in virtue of having unqualified matter (*ousia*, usually translated as substance) and a *poion* (a qualified thing) in virtue of having quality (*poiotēs*), imparted to it by the active principle.¹⁰⁸

This is so for several reasons. First, qualities cannot be taken to be identical with the qualified object because the qualified object, as a mixture of the active and the passive

¹⁰⁷ Cf. Menn, "The Stoic Theory," 222.

¹⁰⁸ *ibid.*

principle is made up of earth, water, fire and air¹⁰⁹, whereas, as several of our sources¹¹⁰ confirm, qualities are *pneumata*¹¹¹, being causes (and as such parts of the active principle, which is the *pneuma*).¹¹² Second, the Stoics indeed believed that qualities are in bodies as parts.¹¹³ Although they are not completely distinct from the whole body, they are not exactly identical with it, either.¹¹⁴ Indeed, this is supported by almost all of the textual evidence dealing with the Stoic differentiation between the two substrates. In *On common conceptions*, when discussing the Stoic solution to the GA, Plutarch implies that the Stoics, rather than differentiating between aspects of the same “unitary object”¹¹⁵, supposed the existence of two (or four) different bodies occupying the same place at the same time.¹¹⁶ A passage by Stobaeus also says that:

The peculiarly qualified thing is not the same as its constituent substance. Nor on the other hand is it different from it, but is all but the same, in that the substance is both part of it and occupies the same place as it, whereas whatever is called different from something must be separated in place and not be thought of as even part of it.¹¹⁷

Actually, the main reason to reject the interpretation presented by Menn is to avoid the problems stemming from the supposition that matter and quality are present as parts in the object. The Stoics have been severely criticized for what is judged to be an absurd consequence of this view, namely that they posit the existence of two contemporaneous,

¹⁰⁹ *ibid.*

¹¹⁰ Plutarch, *On Stoic self-contradictions*, 1053F-1054B, Simplicius, *On Aristotle's Categories*, f. 56.

¹¹¹ $\Delta \epsilon \delta$. $B\alpha\sigma$. (=SVF II.389.) (The sources are due to Menn “The Stoic Theory” 222).

¹¹² And as such made up of air and fire.

¹¹³ Aetius 1.11.15 (SVF II.340 = LS 55G) also Seneca implicitly states that causes belong to the realm of the active principle, by opposing matter and causes as “the two things in nature from which everything is produced” in *Letters* 65.2 (= LS 55E).

¹¹⁴ Menn, “The Stoic Theory,” 222.

¹¹⁵ Cf. Lewis, “The Stoics on Identity” 101-106.

¹¹⁶ Cf. Sedley, “The Stoic Criterion” 259-260.

¹¹⁷ Plutarch, *On common conceptions* 1083A-1084A (= LS 28A)

¹¹⁸ Stobaeus 1.177,21-179,17 (including Posidonius fr.96, =LS 28D)

spatially coextensive bodies.¹¹⁸ Although the *pneuma* and the matter are present as parts in the object they do not occupy different spatial extensions within it, but are both coextensive with each other and the object. However, given the Stoic theory of complete blending (*krasis di' holon*) and their belief in the indivisibility of bodies, I do not think that this consequence of the theory has to be taken to be an absurdity.¹¹⁹

3.2. Dispositions

As to Sorabji's interpretation of the corporeality of qualities, his idea that qualities are dispositions of bodies is not only erroneous because qualities are brought about by the portion of *pneuma* present in the object, but also because on the Stoic construal dispositions' identity is entirely dependent of the substrate they are the dispositions of. This is so because as opposed to the other three *genera*, something *pōs ekhon* is only determined by the object itself which is *pōs ekhon*.

This becomes clear from Menn's reconstruction, who derives the development of the doctrine of the four genera from the Stoic ontological commitment to the corporeality of all beings on the one hand, and on the other hand "from the sharp distinction which they observe [...], between concrete and abstract terms."¹²⁰ Since the Stoics were corporealists, they maintained that only bodies can act as causes and thus they conceived of predications as being true in function of a causal interaction between bodies.¹²¹ Thus they aimed to reduce all kinds of predications as being true in virtue of an interaction between corporeal entities.¹²²

While in the case of predicates, characterising objects viewed under the first and the second genera, this corporeal relationship is that of immanence: that is objects are a

¹¹⁸ Sorabji, *Matter, Space and Motion*, 85.

¹¹⁹ Cf. Sedley, "Stoic Physics and Metaphysics," in Algra, *The Cambridge History*, 391.

¹²⁰ Menn, "The Stoic Theory," 217.

¹²¹ Cf. Stobaeus 1.138, 14-139,4 (SVF I.89 and II.336 = LS 55A) Sextus Empiricus, *Against the Professors* 9.211 (SVF II.341 = LS 55B) Clement, *Miscellanies* 8.9.26.3-4 (= LS 55C)

¹²² Menn, "The Stoic Theory," 217-221.

hupokeimenon and a *poion* in virtue of having a portion of *ousia* and *poiotēs* in them; in the case of the *pōs ekhon* and the *pros ti pōs ekhon*, this corporealist account was formulated in a different way. Objects are *pros ti pōs ekhonta* in virtue of an external relation to another body¹²³, whereas they are *pōs ekhonta* in virtue of the disposed body's structural arrangement, i.e. in virtue of the relationship between the parts of the body, themselves being bodies.¹²⁴

It is apparent from this that objects viewed under the first and the second *genera* as well as the fourth one are depend for their identity on several corporeal objects. The material substrate can change in its identity if the component matter present as a part in the object changes, the qualified can change due to a change in the *pneuma* qualifying the object, and the relatively disposed can change due to a change in an external object. However, the disposed substrate's identity is only determined by the changes in the object it is the disposition of.

To this it could be said that the *pōs ekhon* is determined by the structure that structures the body. But given the Stoic commitment to corporeality this just cannot be the case. As Plotinus points out the entity *pōs ekhon* is nothing more than the entity itself, because the Stoics cannot account for the structural positioning of entities by appealing to any other principle.¹²⁵ Since they exclude incorporeal principles (e.g. a form structuring the entity in a certain way), they attempt to account for structural arrangement in a corporeal way. But doing so, they have to reduce the structure itself to the bodies constituting the structure, thus necessarily making structured bodies identical to the bodies constituting the structure.¹²⁶

¹²³ Ibid, 234-236

¹²⁴ Ibid, 242-243. This is apparent from the more illustrative examples given for the third genus, such as a fist.

¹²⁵ "If they say that not every *pneuma* is soul (since there are countless *pneumata* without soul), but that the *pōs ekhon pneuma* is soul, then they must say either that this *pōs ekhon* and this *skesis* is some being, or that it is nothing. But if it is nothing, there is only *pneuma*, and the *pōs ekhon* is a name: and in this way it will follow that they are saying that soul and God are nothing other than matter, and everything is a name, and this alone exists. But if the *skesis* is a being and is something else beside [*para*] the subject and the matter... it would be a *logos* and not a body, but some other nature. "Plotinus, *Enneads* 4.7.4.11-21 quoted by Menn, "The Stoic Theory", 224-5.

¹²⁶ cf. Menn, "The Stoic Theory," 245.

Thus if qualities were but dispositions of the bodies they qualify, then their identity would be determined by the identity of that very body. But this is impossible on several accounts. First, if qualities were dependent for their identity on matter and the material objects they qualify, then they could not fulfil their role of principle of individuation and criterion of identity since they themselves would depend for their identity on what they are supposed to identify. Second, if qualities were dependent for their identity on a compound of *pneuma* and matter, then their identity was at least partly determined by the matter composing the object. But if this was so, then their identity was partly defined by something that is itself unindividuable and of fleeting nature. If qualities were but dispositions of material objects, then their identity and uniqueness would not be any more stable than the identity and uniqueness of the entities they are supposed to identify and individuate.

On all these accounts I believe that we should exclude the possibility that qualities are dispositions of material bodies. Rather we should conceive them as qualifying the body in virtue of the presence of an additional principle in the body, which is part of the body, but not identical with it. This principle, as it has become clear from what we have established so far, should be the *pneuma*. Qualities should be understood as *pneumata*, or dispositions of *pneumata*.

IV. Identifying and individuating the *pneuma*

From what I have established in chapters I and III it has become clear that qualification should be understood as a function of the presence of a portion of *pneuma* in the object. However, so far I have not discussed what it exactly means that qualities (and the *pneuma*) are corporeal and how can corporeal entities serve as criteria of identity and principles of individuation. The *pneuma* is a corporeal entity, and insofar as it is a mixture of air and fire, it is also a material object, although definitely not equivalent to matter. Considering that according to the Stoics material objects cannot persist and be individuated but in virtue of their qualities, and that those qualities cannot depend for their identity on anything material, we face the task to explain how the *pneuma* can account for the uniqueness and the persistence of objects.

In what follows, first I shall show that in respects of individuation and persistence, the *pneuma* is just like any other material object: it has to be individuated and identified in virtue of its qualification. For it to be able to account for the persistence and uniqueness of entities, first it should be individuated itself. In the second part of the chapter I shall explore whether it is possible to identify and individuate the *pneuma*, whether there is a principle qualifying it that does not depend for its identity on something of material nature. I shall conclude that there is no such principle, since either that principle itself would be a material object in need of identification or it would have to be an incorporeal principle, but that option is not available in the Stoic metaphysical framework.

4.1. The *pneuma* cannot be individuated based on its material constitution nor does it persist as a material object.

As we have seen, if an entity is infinitely divisible this excludes that it can be individuated in a mereological essentialist way, so if it might turn out that the *pneuma*, similarly to matter, is infinitely divisible, then its own individuability and thus its capacity to individuate other kinds of entities becomes contestable.

As a matter of fact we have several reasons to believe that the *pneuma* is also infinitely divisible. To begin with, the *pneuma* is a body, and when the Stoics state their doctrine of infinite divisibility they talk about bodies in general (and time and place), and do not limit the principle to material bodies.¹²⁷ What is more, even if we were to maintain that the *pneuma*, although a body, is radically different from matter and as such not infinitely divisible, there is some definitive evidence for the contrary. As I have explained before, entities are differentiated and held together by the portion of *pneuma* interpenetrating them. This interpenetration is pictured by the Stoics as a form of mixture in which the ingredients, the *pneuma* and matter, are thoroughly blended.¹²⁸ As I will show below, this kind of blending can only take place, if all the components (and also the resulting mixture) are infinitely divisible.¹²⁹

According to Alexander of Aphrodisias, the Stoics differentiated between three kinds of mixture: juxtaposition (*parathesis*), fusion (*sunthesis*) and blending (*krasis*). Juxtaposition is a kind of mixture, in which the components are arranged side by side and joined by juncture, each preserving their original qualities in the mixture. Fusion is a thorough mixture

¹²⁷ Stobaeus 1.142, 2-6 (SVF II.482, part) (=LS 50A), Plutarch, *On common conceptions*, 1078E-1080E (with omissions =LS 50C), Galen, however states that the Stoics affirmed that qualities were not infinitely divisible, as opposed to bodies. *On incorporeal qualities* 10 Vol XIX p. 483K (=SVF II. 381),

¹²⁸ "Chrysippus has the following theory of blending: he first assumes that the whole substance is unified by a breath which pervades it all, and by which the universe is sustained and stabilized and made interactive with itself." Alexander of Aphrodisias, *On mixture* 216,14-218,6 (=SVF II.473 = LS 48C)

¹²⁹ Nolan, "Stoic Gunk," 171-172, Michael, J. White, "Stoic Natural Philosophy (Physics and Cosmology)," in Inwood, *The Cambridge Companion* 147-148. Sedley, "Stoic Physics and Metaphysics," in Algra, *The Cambridge History*, 390-392.

of the constituents in which they both perish and lose their original qualities giving way to a new substance characterised by different qualities. Blending is the kind of mixture that combines the qualities of both of the above kind of mixtures. In such a mixture, the components completely interpenetrate each other, to the point where “there is no part of them that does not partake of everything [...]”¹³⁰ This means that no matter how little a part of the mixture we take, it will contain all of the components of the mixture. While being completely commingled, the ingredients persist in the mixture, preserving their own qualities, so that they can be extracted from the mixture at any point in time.¹³¹

But, these two characteristics of blending seem to be in contradiction with each other. How would it be possible that both elements of the mixture are preserved in the blend, if they are so thoroughly blended that there is no part of the mixture to which we could point to that is constituted by either of the elements and not by the mixture itself? If the entities were indeed preserved in the mixture with all their qualities, then there should be a way in which we are able to identify them, as parts of the mixture.¹³²

Clearly, the concept of blending cannot be interpreted in the framework of a corpuscularist theory of matter. In such a theory the components of the mixture will be constituted by indivisible particles. Thus blending in these conditions is either the commingling of the composing particles of the two component-substances, in which case particle-wise the components preserve their own qualities, but, such kind of a mixture would correspond to nothing else but juxtaposition, as defined above.¹³³ Or if the mixing were indeed through and through to the point that component particles were not preserved anymore

¹³⁰ Alexander of Aphrodisias, *On Mixture* 216, 1-2 (=SVF 2.470= LS 48C, part) (quoted by White, “Stoic Natural Philosophy,” in Inwood, *The Cambridge Companion*, 147. Cf. Plutarch, *On common conceptions* 1078B-D (=LS 48E).

¹³¹ Stobaeus 1.155,5-11 (SVF 2.471, part) “[Reporting the Stoic doctrine] That the qualities of blended constituents persist in such blendings is quite evident from the fact that they are frequently separated from one another artificially. If one dips an oiled sponge into the wine which has been blended with water, it will separate the water from the wine since the water runs up into the sponge.”

¹³² Cf. Alexander of Aphrodisias, *On mixture*, 220, 37-221,15 quoted by White, “Stoic Natural Philosophy,” in Inwood, *The Cambridge Companion*, 148.

¹³³ cf., “Stoic Physics and Metaphysics,” in Algra, *The Cambridge History*, 390.

in the mixture but rather new particles were formed characterised by the qualities characteristic of the resulting mixture, then the condition of the components preserving their own qualities would be violated.

As opposed to this, on the non-corpuscularist theory of the Stoics the notion of blending becomes readily interpretable. If the components of the mixture do not have ultimate constituents, but rather are infinitely divisible, then it is on the one hand possible for the substance to have both of the components as parts, without having any continuous part in itself that is only constituted by one of the components. On the other hand it is also possible to maintain that “[...] any continuous region of the blend is wholly occupied by a piece of the blend which has parts of the original blended substances among its own parts.”¹³⁴

Besides being unindividuable, the *pneuma* also cannot persist. Insofar as it is composed of air and fire, it is a material object, and its material composition is in constant change. As the *pneuma* is an inner principle present in the body that also serves as the substance of the individual’s soul, one would be tempted to assume that despite its corporeal nature it remains unchanged inside the body, as far as its material constitution is concerned. However, this is not the case. The *pneuma*, although not reducible to the breath of the individual, given its multifarious functions and differentiations¹³⁵, is breath insofar that from a physical (or medical) point of view, it is a “warm vaporous substance” that is propagated through the body in a similar way to breath.¹³⁶ Indeed, the Stoics were reported to argue that the soul of the individual is its “natural breath”¹³⁷ and as such “it is preserved by exhalation both of blood and of the <air> drawn into the body by inhalation through the windpipe.”¹³⁸ But if this is the case, then the soul of the individual is in constant change: parts of air enter it with inhalation

¹³⁴ Nolan, “Stoic Gunk,” 171-172.

¹³⁵ Long, “Stoic psychology,” in Algra, *The Cambridge History*, 564.

¹³⁶ Long, “Stoic psychology,” in Algra, *The Cambridge History*, 568.

¹³⁷ “(1) Chrysippus says: ‘It is certain that we breathe and live with one and the same thing. (2) But we breathe with natural breath. (3) Therefore we live as well with the same breath. (4) But we live with the soul. (5) Therefore the soul is found to be natural breath.’ Calcidius 220 (=SVF II.870, part = LS 53G, part).

¹³⁸ Galen, *On Hippocrates’ Epidemics* VI 270,26-8 (=SVF II.782 = LS 53E)

and parts of air leave it through exhalation. Being so it changes its constituent parts all the time: chunks of air leave it and join the air of the atmosphere, to be later inhaled by other persons. Thus it is subject to the exact same kind of changes as all material objects are.¹³⁹

This being the case, we can proclaim that taken as a material object, the *pneuma* does not persist and it cannot be individuated either. Similarly to other material objects, a distinction has to be introduced between its qualitative and material aspect to account for its persistence despite its constant material changes. Furthermore, its individuation also has to be made a function of its qualities. It is questionable however how one should conceive of the qualities qualifying the *pneuma*. Since it is itself the active qualifying principle of the universe it is hard to see how its qualification could be accounted for.

4.2. Qualities and dispositions of the *pneuma*

In what follows I will show that the *pneuma*'s qualification cannot be accounted for in any way in the Stoic system: the idea that it is identified in virtue of its disposition(s) has to be rejected and the solution positing the existence of a further qualifying principle cannot be accepted either.

As to the *pneuma* being individuated and identified in virtue of its dispositions, I believe that the impossibility of this solution is quite manifest considering what I have established in chapter III. Given that the object *pōs ekhon* is nothing but the object, although seen under a different description, the *pneuma* disposed in a certain way would be dependent for its identity on the *pneuma* as a material object. This being so, the account of identity and

¹³⁹ I am not quite certain how the argument could be made for lifeless objects, such as stones, their breath (*pneuma*) is certainly a breath insofar as it is the breath and soul of the whole kosmos, but I am not sure whether their breath would also change by inhalation and exhalation. However, for our purposes it is sufficient to establish that the *pneuma* cannot ground identity also for a smaller class of beings.

individuation would be circular since what is supposed to be a principle of individuation and a criterion of identity would be itself dependent for its identity on the object it is supposed to individuate and identify. Furthermore, the *pneuma* disposed in a certain way would not be any more unique and persistent than the *pneuma* itself. That could only be the case if there was another principle accounting for the disposition of the *pneuma*, e.g. a form defining how the *pneuma* should be structured.¹⁴⁰ But, we have seen that on the Stoic account such a principle is not available. They conceive of dispositions as being a matter of the structural positioning of bodies and they reduce the structure itself to the bodies constituting the structure.¹⁴¹

As to the *pneuma* being individuated in virtue of the existence of a further qualifying principle, this idea is again problematic. First of all, our sources do not report of any such independent principle. They make it quite clear that it is the *pneuma* that makes for the qualification of all things, and account for most differentiations of the *pneuma* in terms of disposition.

Moreover, even if there existed such an entity, it had to be incorporeal. The qualifying principle has to be incorporeal, because if it were corporeal, then similarly to the *pneuma* and other material objects it should be identified and individuated in terms of a further qualitative principle. This division of corporeal objects into a material and a qualitative component would go on, *ad infinitum*, thus not leaving us with an ultimate principle that could account for the uniqueness and persistence of principles.

But our sources do not report that the Stoics would have posited any such incorporeal principle. Neither do we have any evidence that they would have thought of the peculiar

¹⁴⁰ The fact that dispositions of a body cannot remain the same with the change in the substrate of the dispositions has also been pointed out by Plutarch, in his critique of the Stoic theory of concept formation. Besides criticizing the *pneuma* as the substrate of concepts for other reasons, on account of its insufficient resistance, Plutarch also points out that the Stoics cannot account for the formation of memories and thus concepts, because with inhalation and exhalation the *pneuma* constantly changes, thus the memories and concepts would not remain the same. *On Common conceptions* 1084F-1085B This line of thought proves wrong Eric Lewis's suggestion that the soul is individuated in virtue of its unique disposition as a result of the different impressions having left their imprint on it. Since the soul is constantly changing the impressions could not be preserved, thus the soul could not account for the animal's identity over time.

¹⁴¹ cf. p. 42.

qualities as incorporeal qualities.¹⁴² Indeed if they would have done so, they would have probably discussed the issue, given its crucial importance for their metaphysical theory. But there is no evidence of them having done so, and the criticism of the contemporaries and subsequent philosophers¹⁴³ rather suggests that they have not done so and that they have refused to even consider such a possibility. This is quite understandable, given their ontological conviction that only bodies can have a causal role. This being so, no fundamental principle or quality could possibly be incorporeal in their understanding. Thus the *pneuma* cannot be individuated and identified by an incorporeal causal principle, because such principles do not exist in the framework of Stoic metaphysics.

As a consequence the *pneuma* cannot be identified or individuated on any accounts, thus it cannot account for objects' qualification and as a consequence objects cannot be identified and individuated based on the qualities they have.

¹⁴² Cf. Brunschwig, who in his analysis of the Stoic answer to the GA suggests that peculiar qualities should be different from common qualities that are corporeal and thus affected by the GA. (Jacques Brunschwig, "Stoic Metaphysics," In Inwood, *The Cambridge Companion*, 229).

¹⁴³ A criticism concerning the corporeality (and the complex nature) of the active principle had been formulated by several opponents of the Stoic doctrine, although not concerning the issue of identity and individuation. These authors have also suggested that the twofold (qualified and material) nature of the *pneuma* is problematic and would require for the positing of an incorporeal principle accounting for its qualification. cf. Plotinus, *Enneads*, 6.I.29 (=SVF II.376.), and Alexander of Aphrodisias' argumentation against form being from matter and form. "For form is not matter [...] nor is it from matter. For if form were to be from matter and form, first one of the two components would be identical with the compound of the two; further, there would be a progression to infinity, since that form would be from matter and form, and this latter form again would need matter and form. (*De Anima* 17.15-18.10 Bruns translated and quoted by Kupreeva, "Qualities and Bodies," 316.)

Conclusion

In my thesis I hope to have established that taken together, the Stoics' prior ontological commitment to the corporeality of all existent things (i.e. things having causal power) and their concept of matter and material constitution makes it impossible for them to account for the identity and individuation of things in virtue of their qualification. Since they refuse matter to be a principle of individuation and a criterion of identity, given its undefined and unstable nature, they attempt to individuate material objects based on their qualities. Nevertheless, since those qualities are corporeal and depend for their existence on a principle that is itself a material object (the *pneuma*), the whole project of making persistence and uniqueness a function of qualification misses its point.

In chapter I, I have showed that the doctrine of peculiar qualities can only be made sense of, if one posits a persistent and unique immanent metaphysical principle in entities that accounts for their perceptible qualitative uniqueness. Given that entities are unified and qualified in virtue of being permeated by the active principle, this immanent principle has to be the portion of the active principle permeating individual objects, or some modification of it. Since the Stoics affirm that material objects can only persist in virtue of having a persistent quality and that they cannot be individuated, except by reference to certain qualities, this principle cannot be a material object itself and its identity cannot be dependent on the identity of anything material.

However, as it is reported by our sources, the *pneuma* itself is corporeal and also, insofar as it is composed of air and fire, it is material. Just like matter, it is infinitely divisible and thus not individuable, and also it is unstable in its identity due to it constantly changing in its material constitution. Thus, similarly to other material objects, it has to be individuated and identified by positing a further qualifying principle. But such a further qualifying principle

cannot be found since either it too would be corporeal and as such it would be insufficient to account for individuation and identity, on the same account as the *pneuma* is. Or it would be incorporeal, but that is impossible in the Stoic universe, given the causal role of qualities and the necessary corporeality of causes.

The confusion around the qualifying role of the active principle is manifest as it is apparent from the attacks on the doctrine of the corporeality of both principles by contemporaries and later philosophers. What I have attempted to show here is that the theoretical incoherence attributed to the Stoics by Platonist and Peripatetic philosophers is not only due to the theoretical preferences of these latter, but as far as identity and individuation is concerned, a theory that conceives of the active principle as corporeal, indeed proves to be unsatisfactory.

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List of Abbreviations

- DL Diogenes Laertius. *Lives of Eminent Philosophers*.
- LS Long, Anthony A. and Sedley, David, eds. *The Hellenistic Philosophers*.
- SVF Hans von Arnim, ed. *Stoici antichi Tutti i frammenti*

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