Soul and Body in Stoicism

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I. The Mind (Soul) Body Relationship and Greek Philosophy

What a modern philosopher might call problems of the self and problems of personal identity take the form, in Greek philosophy, of questions about the human Ψυχή and its relation to the body. In this paper I propose to explore some of the ways in which the early Stoics approached such questions. The scholarly literature has not neglected the Stoic concept of Ψυχή, but most of the discussions have focussed upon detailed questions concerning the soul itself rather than its relationship to the body. My procedure here will be designed primarily to illuminate that relationship. So, in the second part of the paper, I will discuss the Stoic concept of ‘unified bodies’; I will then bring Ψυχή more fully into the argument by considering the nature of animal bodies and psychic functions; and finally I will make some brief remarks about ‘rational souls’ and their relation to (their) bodies.

For reasons that should become clear it is peculiarly difficult to characterise the Stoic position on the relationship between soul and body. But it may be helpful, as an introduction, to make some comparisons with the principal rival accounts that we have from antiquity, the Platonic, Aristotelian, and Epicurean. If one were to draw up a table or questionnaire and consider the similarities and differences among these four positions, the two extremes would be represented by Plato on one side and Epicurus on the other. Broadly speaking, one may call Plato a dualist and Epicurus a materialist. Plato and Epicurus are diametrically opposed on the question of the soul’s relation to the body. Thus (1), Plato allows that Socrates, or Socrates’ soul, can exist without the body that Socrates now happens to have. But Epicurus maintains (2): Socrates, or Socrates’ soul, cannot exist independently of just that body which is Socrates’ body. (3) According to Plato, Socrates, or Socrates’ soul, is an incorporeal substance which can exist independently of any body. (4) Epicurus holds on the other hand that Socrates is an arrangement of indivisible bodies (atoms), some of which constitute his flesh, blood, and bones, while others account for the vital powers of the body constituted by that flesh, blood, and bones. (5) For Plato, Socrates, or Socrates’ soul, is immortal. (6) But in the view of
Epicurus Socrates is necessarily mortal, and his soul cannot survive the destruction of his body.

The Aristotelian and Stoic accounts, which are harder to describe briefly, fall between these two extremes. Aristotle's notion of the \( \psi\nu\chi\xi \) as the 'form (or actuality) of a natural body which has life potentially', has proved attractive to some contemporary philosophers because it seems to them to avoid the pitfalls of dualism and materialism.\(^3\) Certainly, if we ignore the status and duration of 'the active intellect', Aristotle seems to side with Epicurus at (2) and (6) above; for, if having a soul is to be an actually living body, it makes no sense to ask whether that form or actuality can exist without the body of which it is the form or actuality. But there is little justification for treating Aristotle's psychology as a whole as if the 'active intellect' were only an embarrassing appendage. The 'active intellect' has no corresponding bodily potentiality, and it is explicitly said to be 'what it is only when separated, and this alone is immortal and eternal' (De an. 3.5, 430a22-23). Aristotle's account is most safely regarded as sui generis with some dualist and some materialist features.

It is rather the same, though for different reasons, with the Stoics. Unlike Epicurus, and Aristotle (without the active intellect), they would not accept (2) and (6) above. They would say that Socrates' soul, though not immortal, could and would survive the destruction of his body and thus it can exist independently of that body.\(^4\) In this respect they resemble Plato. But against Plato they defend a version of (4) whereby Socrates here and now is entirely an arrangement of two things, each of which (in some sense awaiting clarification) is a body. If then it is helpful to speak of dualism in Stoicism it is not a dualism of matter and incorporeal substance. For, given Stoic ontology, nothing can be truly predicated of Socrates which does not make reference to corporeal existence. In this respect the Stoics are at one with Epicurus. But at many points details of their position recall Aristotle so closely that we have reason to suspect his influence, an awareness of common problems, and Stoic attempts to improve upon him.

There is of course much common ground among all four philosophers. All of them accept the legitimacy of making a distinction between body and soul such that soul is the cause of intelligent life occurring within that part of space which is bounded by a normal human body. They all agree too in identifying the location of the principal activity of the soul with a particular region of the body.\(^5\) What today would be called mental and moral attributes are universally regarded as attributes of the \( \psi\nu\chi\xi \) as distinct from the body associated with that \( \psi\nu\chi\xi \); and to this extent notions such as personal identity and personality are 'psychic' rather than
somatic'; which is not to say that they are uninfluenced or unmodified by the body's condition. Here there is room for considerable variation. It was also agreed, by all except the early Stoics, that the human soul itself admitted of a distinction between 'rational' and 'irrational' activities or states of consciousness. All except the Epicureans extended the possession of soul beyond terrestrial creatures and traditional gods. The entire world in Stoicism is an instance of the relation between body and soul; in Plato and Aristotle too the heavenly bodies are 'ensouled'.

II. The Soul and 'Unified Bodies'

If a modern philosopher claims that persons or human selves are bodies we naturally take him to be denying dualism or the Cartesian concept of mind. Persons in Stoicism are bodies, but this statement by itself does not make the Stoics materialists as distinct from dualists. The Stoics had reasons, as we shall see, for insisting that the soul is corporeal; but those reasons fall within a general conceptual framework which denies that anything can exist which is not a body or the state of a body. Since persons do exist they must be bodies, according to Stoicism. The corporeality of the soul is not simply an empirical truth in Stoicism, though empirical reasons were given in its favour. It must be the case that the soul is a body or the state of a body, given the Stoic conception of reality. Accordingly the corporeality of the Stoic soul becomes an informative notion only when we ask what kind of a body, or real thing, it is taken to be, rather than by contrasting it with the Platonic or Cartesian conception of an incorporeal soul or self.

A human being, in Stoicism, is a composite of a σώμα, in the sense (provisionally) of our saying that Heracles has a powerful body, and a ψυχή which is a body in some other sense. More specifically he is an ensouled, rational, and mortal body. More basically he is a part of the universal stock of matter (ὁλότοκος) pervaded through and through by a part of god (θεός); or alternatively, he is a part of god pervading some part of the universal stock of matter. This last description of human beings is not, by itself, any ground for them to congratulate themselves on a special association with divinity. All things in the Stoic universe are combinations of god and matter, stones no less than men. But if god and matter in association fail to tell us what is human about persons, that is no cause for immediate alarm. The Stoic god, in its constant conjunction with matter, can make rational beings as well as stones. But it is worth dwelling, initially, on the fact that persons are not different from any other discrete objects in their basic principles or constituents. Men no less than stones are subject to the laws of physics; they
resist and offer resistance to other discrete objects, just like stones; men and stones are alike in having a shape and identity which persists over time. There is in Stoicism a great chain of being which tolerates no discontinuity or introduction of principles which operate at one level but not at another. The entire universe is a combination of god and matter, and what applies to the whole applies to any one of its identifiable parts.

But to speak of god and matter in conjunction is somewhat abstract for present Stoic purposes. God and matter are the fundamental Stoic ἄρχαι — active and passive principles — but they are never found in dissociation from one another. Even in the simplest state of the universe, before any cosmic cycle has commenced, something can be predicated of matter, namely fieriness. God always causes matter to possess at least this quality. Nor can god act without matter to act upon. The conjunction of god and matter always results in qualified matter (hence the possible description of god as 'matter in a certain state'). God and matter together constitute something that not only has mass or resistance to pressure, and that is extended in space, but something which has shape or form. Whether or not god and matter can, each by itself, be properly called bodies (as in the evidence they often are), it is certainly the Stoic view that every discrete body is matter pervaded and informed by god, and that each of these is necessary to its existence as a discrete body. The Stoics often described god as 'fire the craftsman' or as 'intelligent breath' (πνεῦμα). They also contrasted with the active principle thus described so-called 'inert elements', earth and water. Even though any one of these active or passive elements must itself, in the most basic analysis, be a combination of matter and god, it will be correct and helpful, for present purposes, to speak as though god is coextensive with πνεῦμα and matter coextensive with the minimally qualified inert elements.

The justification for so doing is that the Stoics conceived wateriness and earthiness as 'transformations of fire' (or πνεῦμα), and as such they are not instantiations of god in propria persona. The first-order distinction between god and matter gives rise to a second-order distinction between a rarefied active body, which is the nearest thing possible to pure god, and a dense passive body, which is the nearest thing possible to unformed matter. The distinction between body and soul, and the distinctions between all attributes or sets of things, are ultimately referable to the protean qualifications with which god informs matter.

This brief outline of the Stoic ἄρχαι may help us to approach the difficult question, is a man or animal in Stoicism one body or two bodies? The Stoics distinguished three kinds of bodies, or perhaps more accurately,
four kinds, the fourth being a subdivision of the third: bodies composed of 'separated' parts (διασπορά), such as an army; bodies composed of 'contiguous' parts (συναπτόμενα), such as a house or a ship; 'unified' bodies (ἡμωμένα), such as stones and logs; and fourthly, or a subdivision of the last category, bodies unified and 'grown together' (συμφυσά), namely, living things (SVF 2.366 and 368, cf. SVF 2.1013). 'Grown together' (συμφυσά) is needed in addition to 'unified' to classify living bodies. Unity by itself does not point to life, any more than disjoined parts of an army signify something lifeless. Stones are like men in being 'unified' bodies, and their unity is due to the same cause. Both stones and men are 'held together' by the πνεύμα which pervades all the rest of their matter. Stones are said to be held together or controlled by (or participate in) 'mere ἐξής' or 'ἐξής alone' (SVF 2.988, 1013, 714), where their ἐξής consists in 'cohesive πνεύμα' or 'πνεύμα that turns back to itself' (SVF 2.368, 458). Animals in general in as much as they are 'unified bodies' are also said in one text to be 'governed by a single ἐξής' (SVF 2.1013). But men and animals in our evidence are generally differentiated from inanimate substances, such as stones, by reference to ψυχή. We see that the breath of god moves in different ways. In the stone it is mere coherence (ἐξής) but in the animal it is soul.

We shall need to ask whether the Stoics thought that animals participate in ἐξής as well as soul, or whether the soul univocally accounts for those features of animals (bones and sinews) which are analogous to the coherence of stones. A related point concerns plants. Stoic plants, unlike Aristotelian ones, do not have soul. Their powers of growth and reproduction are explained by πνεύμα which manifests itself as φύσις ('growth' / 'nature'), a principle distinct both from bare ἐξής and also from soul (SVF 2.714-718). So the question arises of how functions of plants which animals also possess are analysed. Is φύσις a principle of life in the animal in addition to soul, accounting for its vegetative functions, or does the animal soul subsume the work of φύσις and account for everything that makes the body coherent and alive? Answers to these questions partly depend upon more basic interpretation concerning the concept of any 'unified body'.

The unity of any 'unified body', be it a stone, plant, animal, or human being, is explicitly attributed not to the form or arrangement or inseparability of its parts, but to one of its corporeal constituents, πνεύμα, and the 'cohesion' of 'tensional movement' this establishes throughout all the rest of the body. More generally, all 'unified bodies' are instances of 'complete blending' (κράσις δὲ ἀλώμα). This technical expression refers to a form of compounding whereby 'two or even more bodies are extended through one another as wholes through wholes, in such a way that each of them
preserves its own substance and qualities in a mixture of this kind . . . For it is the special feature of things which are blended that they can be separated again from one another; and this can only take place if the things blended preserve their own natures in the mixture'. 11 Alexander of Aphrodisias, the source of this quotation or paraphrase of Chrysippus, observes that the Stoics cited the relation of soul and body as ‘clear evidence’ for such a kind of mixture: ‘for none of the soul lacks a share in the body which possesses the soul. It is just the same too with the ϕύσις of plants, and also with the ἔξος in things which are held together by ἔξος. Moreover they say that fire passes as a whole through iron as a whole, while each of them preserves its own ψυχα'. 12 Alexander concludes this survey with the most general example of ‘complete blending’; what is true of the ‘unified bodies’ just considered is true a fortiori of the elemental relation between the fine active pair of elements, fire and air (= πνεῦμα), and the dense passive pair, earth and water. Fire and air wholly pervade the passive elements, but all four of them preserve ‘their own nature and coherence’. 13

It follows from this account that the soul/body relationship is a particular instance of a general principle in Stoic physics. It also follows that all so-called ‘unified bodies’ are at least two bodies: to be a unified body is to consist of at least two separately identifiable and separable bodies which are so blended that you cannot take a part of one of them, however small, without also, in that process, taking a part of the other(s). 14 But it would be a mistake to explain the ‘unity’ of ‘unified bodies’ as nothing more than a function of ‘complete blending’. Two liquids, such as wine and water, can be ‘completely blended’, but they do not thereby constitute a ‘unified body’. What we are concerned with is the unity of individual organic substances such as living creatures. If these are constituted by the ‘complete blending’ of cohesive πνεῦμα and a passive body, the independent identity and separable existence of these constituents is not obviously analogous to that of wine and water. What body is left when you remove ‘coherence’ from a stone? More urgently, what is a human body in Stoicism when considered independently of the soul? We may hope to clarify this question by considering three possible answers.

1. The body is the structure of bones, organs, blood and skin which contains the soul and which the soul, in turn, pervades. This is the straightforward answer, but it can scarcely be correct in this formulation. For the body, as so described, has a definite complex structure: this means, according to Stoic physics, that the body is already an instance of ‘complete blending’, a compound structure generated by the interaction of πνεῦμα and matter. But πνεῦμα is the stuff of soul, and there is evidence that the Stoics
supposed such bodily structures as bones to be due to the soul.\textsuperscript{15} The body moreover is the body of a living thing. If then we take the body in this way it appears that we are already invoking the concept of soul; we do not have an independently identifiable substance answering to body.\textsuperscript{16} But this is what the soul/body relationship, as a mixture, requires.

2. The body is matter in the form of earth and water. This answer avoids the main difficulty in the previous one. Earth and water are not constituents of the soul, and so they are separately identifiable apart from soul. Moreover, these dense elements do provide most if not all the material of which the body consists. But this answer raises new problems. It seems to be simply false, or at least quite uninformative, to say that an animal's or a man's body just is earth and water. Granted, the Stoics must regard a man, like any other unified body, as a compound of the active shaping principle (\textgreek{λόγος} = god = πνεῦμα) and the passive material principle (\textgreek{γῆ} = earth and water). But that analysis is at a level of such utter generality that it seems quite inadequate to make a helpful distinction between the animal or human soul and the animal or human body. It is not earth and water without qualification that might serve to identify a living thing's body, but earth and water in a certain form. Yet that brings us back to the problems of the first answer.

3. The body is earth and water informed by cohesive and vegetative (soul) \( \pi\nu\chi\eta, \) but not specific soul \( \pi\nu\epsilon\mu\alpha. \) This third answer is a compromise between the two previous ones which seeks to keep their virtues and avoid their difficulties. I shall argue that it probably expresses the essentials of Chrysippus' position.

According to Sextus Empiricus some Stoics distinguished two usages of the term \( \pi\nu\chi\eta: \) they applied it quite generally to 'that which holds together the whole compound', and specifically they used it to refer to the \( \tau\acute{e}μωνικόν \) (\textit{Adv. math.} 7.234). For these Stoics, Sextus continues, it is only the soul in the latter sense which is invoked when we say that man is composed of body and soul, or that death is the separation of soul from body. This last point seems to recognize the difficulty of the first answer I considered above. Soul in the sense, 'that which holds together the whole compound', does not provide any informative way of distinguishing the body which a human being has from the 'unified body' which the human being is. But the Stoics need to be able to make that distinction in a relatively straightforward way if they are to justify speaking of a man as a compound of body and soul, or to explain death as the separation of these. A more specific usage of soul is required in order to acknowledge that there is continuity as well as difference between the body which Socrates had
when he was alive and the body which Socrates’ soul has left behind.

The same distinction between two senses of soul is implied in a passage of Diogenes Laertius (7.138-9). Referring to books by Chrysippus and Posidonius he observes that νοῦς pervades every part of the cosmos, just as soul (pervades every part) in us. ‘But through some parts it is more pervasive and through others less so; for it passes through some parts as ἐς, as through the bones and sinews; but through others as νοῦς, as through the ἰγμενον.’ The basis of this distinction is of course the Stoic concept of πνεῦμα and the different degrees of tension which characterise its movement. Since the soul itself is πνεῦμα, and since ἐς and νοῦς are both functions of πνεῦμα at different degrees of tension, it was possible for the Stoics to make soul responsible both for the form of the body (bones and sinews etc.) and for specifically psychic attributes. But they could only do so by distinguishing the soul as ἐς (and, as we shall see later, φύσις) from the soul in the specific sense.

I conclude therefore that the Stoics must invoke the concept of soul in order to account for an animal body as an identifiable substance. But this is not open to the objections of our first answer, once we cease to treat soul as an univocal concept. Soul in general is responsible both for the body’s form and for all vital functions. But we can mark off the body from the soul by distinguishing between bones and sinews (which are due to soul as ἐς) and specifically psychic attributes (which are due to soul as ἰγμενον). Thus both the body and the psychic attributes are matter in a certain state. But the nature of that ‘certain state’ depends upon the tension of the soul πνεῦμα.

The point of decisive importance which will emerge more clearly as I proceed is the Stoics’ concentration on the specific usage of soul, the soul as ἰγμενον. It is not the soul as ἐς which differentiates an animal from a stone, for a stone too is governed by ἐς. That common pneumatic function indicates that both animals and stones have durable and individually identifiable bodies. It does not indicate that stones are in some peculiar sense alive, nor does it imply that an animal’s bones and sinews are psychic attributes. But bones and sinews are, for excellent reasons, attributed to the working of soul at the most general level. An animal requires bones and sinews in order to live. The coherence of a stone has nothing to do with life. Therefore the ἐς of stones is not a function of πνεῦμα as soul, but the ἐς of an animal must be due to soul. This makes it clear that an animal’s body is matter which has a form suitable for life. I shall try to show in the next section how the Stoics drew on the two conceptions of soul — the general and the specific — in their account of the evolution of life in individual animals.
III. The Soul and Animal Bodies

Having now clarified the Stoic distinction between the body and the soul we may return to the question of their relationship, bearing the following points in mind: we are asking about the relationship between the body as an organic structure (held together by psychic πνεύμα in one sense of this expression) and the soul in its specific sense as ἡγεμονίκον (plus seven subordinate parts, see below p. 47), or principle of specifically animal life; we already know that they must be related to one another as constituents of 'total blending', and that, accordingly, each of them has its own persisting substance; we also know (I think) that the soul, even in this specific sense, completely pervades all parts of the body, or at least, all parts where it is not already present as the principle of bodily form and coherence (ἐξής). In answer to the earlier question then, it seems to follow that all Stoic animals (things with soul) do consist of two bodies. They are compounds of what I shall call a flesh and bones body and a specific soul body. The specific soul body acts upon the flesh and bones body to make the compound of them both a sentient and self-moving being. The flesh and bones body contains the specific soul body and provides it with the bodily organs necessary for endowing the compound — the 'unified body' — with life as a sentient and self-moving being. From here onwards I shall conform with normal Stoic practice in using 'soul' to refer to ψυχή in the specific sense.

The Stoics argued formally for the corporeality of the soul; and the premises of their arguments help to show how they interpreted the relationship between soul and body. Three principal arguments are attested, which I will call respectively, genetic, sympathetic, and contactual. The genetic argument, attributed to Cleanthes, rests on the premises first that offspring of animals resemble their parents not only in respect of bodily attributes but also in respect of the soul, where soul refers to passions, character, mental dispositions; secondly, resemblance and lack of resemblance are predicated of body, and not of incorporeals.18 Cleanthes' second argument is based on υμπτίδες: 'nothing incorporeal shares in the suffering of a body, nor does a body share in the suffering of an incorporeal; but soul suffers with the body when the body is sick and being cut, and the body suffers with the soul; the body turns red when the soul is ashamed and pale when the soul is afraid. Therefore the soul is a body'.19 Aristotle of course instanced the same phenomena in arguing that anger, fear, etc., though πάθη of the soul, are 'inseparable from the physical matter of the animals' (De an. 403b17), but he did not conclude that the soul as such must be a body. The third argument, 'the contactual' one, has
its fullest form in Chrysippus: ‘Death is separation of soul from body; but nothing incorporeal is separated from body; for an incorporeal does not even make contact with a body; but the soul both makes contact with, and is separated from, the body; therefore the soul is a body’.20

All three arguments assume that there must be a relationship of physical contact between the flesh and bones body and that within the body in respect of which an animal has sensations. So why not say that the soul is a part of the flesh and bones body — that sensation generally, and psychic attributes specifically, are nothing more than functions of the heart or the brain? The Stoics will not do this. They are willing to say that the soul is a physical part of the animal. But it is not a part or an organ of the flesh and bones body. The soul is a substance in its own right which permeates the flesh and bones body, and which leaves that body at death.21

The Stoics adopted this position, I suggest, not unthinkingly, nor out of respect for traditional Greek views or their own metaphysical assumptions. They supposed that an animal needs a body which is completely equipped with all the organs and functions of a flesh and bones body before its soul can come into existence, as the principle of specifically animal life for that flesh and bones body.

The soul cannot be an organ of the flesh and bones body because all bodily organs exist before the soul comes into being. The seed in semen, like soul, consists of ‘hot breath’ which ‘moves itself’;22 but the embryo which grows by the agency of this πνεῦμα is not yet a ζώον, an animal. Throughout gestation the seed πνεῦμα ‘remains ϕύσις’.23 This means that an embryo belongs to the biological category of plants. Its mode of existence is adequately identified by ‘growth’ (ϕύσις).24 As gestation progresses the ϕύσις πνεῦμα is said to become ‘finer’, and at birth this πνεῦμα ‘changes into soul’ (or ‘animal’),25 as a result of being instantly hardened by contact with the cold air outside. Forgetting about the fantastic embryology we may note several further Stoic doctrines which well accord with this development from seed νευξία to soul σώματα. Like Aristotle they held that the heart is the first part of an animal to grow (Galen SV F 2.761) and that the heart in turn ‘generates the other bodily parts’. The heart must owe its origin to the activity of the seed πνεῦμα; and when the soul itself is fully developed the left ventricle of the heart is full of soul πνεῦμα.26 So there is a continuing relationship between πνεῦμα and the heart both before and after an animal’s birth.

The evolution of life for a rational animal passes through three stages each of which is identified by changes to a persisting πνεῦμα. The seed changes to ϕύσις, the ϕύσις to soul, and the soul eventually becomes a
rational soul. The differences from Aristotle are interesting. A Stoic animal’s capacity to grow and to feed (Aristotle’s nutritive soul, apart from reproduction) is not, as I understand the evidence, attributable to soul in its specific sense. The soul in this sense is not responsible for the basic bodily activities, and as we shall see, all of its so-called ‘functions’ (δυνάμεις) have to do with sentient life. The body’s growth and nutritive powers are due to the cohesive agency of πνεῦμα, but πνεῦμα prior to its changing from φύσις to ψυχή. What then about these vital functions after birth? An animal has to feed and go on growing. Are we to say that when φύσις changes to soul the new soul inherits the functions of ‘causing growth’, in addition to performing its work as the principle of sensation and locomotion?

‘Impression’ and ‘impulse’, the basic psychic functions, are powers added to a pre-existing φύσις; and Philo, in one passage, describes soul as ‘φύσις which has also acquired impression and impulse’ (SVF 2.458). That seems a suitably Stoic account of soul as an animal’s vital principle in the most general terms, but it does not easily accord with evidence for the soul in its standard, specific sense. Galen, for instance, distinguishes three kinds of πνεῦμα: εκτικόν, φυσικόν, and ψυχικόν, and says that it is the φυσικόν which ‘nurture’ animals and plants, and the ψυχικόν which makes ensouled creatures sentient and capable of moving (SVF 2.716). Clement of Alexandria maintains that ‘irrational animals’ participate in ὠρμή and φαντασία (i.e. psychic faculties) in addition to ἐξεσι and φύσις (SVF 2.714). Philo attributes bones to ἐξεσι and nails and hair to φύσις (SVF 2.458). Galen again says that ‘every plant is directed by φύσις, and every animal by φύσις and ψυχή together; if at any rate all we men use the name φύσις for the cause of feeding and growth and such activities, and use ψυχή for the cause of sensation and self-movement’ (SVF 2.718). These texts are all mutually consistent, and entitle us to conclude that the dominant Stoic doctrine distinguished the πνεῦμα which changes from φύσις to soul from the πνεῦμα responsible for bodily coherence and growth after an animal is born.

Since there is no good evidence that soul in the specific sense does control digestion, bodily growth, etc., we should probably conclude that the functions of the Aristotelian nutritive soul (apart from reproduction) become functions of the body when an animal is born. The idea would be that the growth of the body is now such that the heart etc. can control purely bodily functions without needing direction from the soul (cf. SVF 2.708). Presumably there must be πνεῦμα of the φύσις tension within all bodily organs to maintain their form and functions, but this πνεῦμα is no more part of the soul properly speaking than the πνεῦμα which controls bones and sinews. Perhaps we can call it a persisting residue of the original
πνεῦμα which manufactured the living body.

The distinction between φύσις and ψυχή enabled the Stoics to unburden the soul from causing growth and nutrition; one can see why they want to do this. In the first place they need some way of distinguishing the flesh and bones body and its processes from mental functions. But, more importantly, they regarded the distinctive functions of animal life as sentience and locomotion.

Before discussing those functions I should like to compare the results of the last few pages with the conclusion of the second section of this paper. There is an apparent contradiction in the evidence, which my analysis reflects. Earlier we had a distinction between soul as ἐξις accounting for bones and sinews (and bodily coherence generally), and the soul as specifically the ἱγμονεῖς, accounting for psychic attributes. Now, with the later evidence, an animal’s coherence (ἐξις) and growth (φύσις) are not attributed to its soul at all. The animal’s soul is a principle additional to, and subsequent upon, a coherent, growing organism. The problem is probably to be resolved by means of the previous distinction between two senses of the word ψυχή. An animal does not have two souls, but its single soul can be treated as either all of its πνεῦμα or only the most tenuous parts of that substance, depending upon what questions we are asking. All of the πνεῦμα is responsible for an animal’s being the kind of body that animals are; so in that sense all the πνεῦμα is the soul. But what differentiates an animal from a plant and a stone is that its growth and coherence are for the sake of living a sentient and mobile life. It is a life of at least that degree of complexity which characterises everything that has soul. So, in this sense, only the πνεῦμα which makes an animal sentient, mobile etc., is the soul.

IV. Psychic Functions

We have seen the difficulty of making a distinction between the body of a living thing and its soul. But the Stoics were clearly on the right lines in using that hackneyed distinction for the important purpose of distinguishing between modes of life. Bodily processes are fundamental to an animal’s life; but a different order of necessity is manifest in an animal’s exercise of its senses. We speak unkindly but correctly of someone who has sustained gross and irreversible brain damage, but whose bodily functions can continue to be made to work, as living the life of a vegetable. What we mean is that such a person cannot live a human life, and has perhaps, even, ceased to be a person. There is something in favour then of using the distinction between body and soul to isolate, as the soul, those vital func-
tions which most sharply mark off animals from plants. More particularly, the Stoics' specific concept of soul makes the point that bodily processes — digestion and so forth — are not an animal's governing principle. What governs an animal, they said, is its soul, and that directs us to consider what an animal does, how it standardly behaves, as the key to understanding its nature.

The animal differs from the non-animal in respect of impression (φαντασία) or sensation (αἰσθησις) and impulse (ἀρμή). This is the standard Stoic view. Notice that these two functions of soul subsume Aristotle's αἰσθητικός and κινητικός. What it is to be a Stoic animal, most minimally, is to be a living body which is aware of itself and the external world, and more particularly, aware of itself reflexively as the subject and object of impulse. Awareness of, and impulse to pursue or avoid an external object, provide the necessary and sufficient conditions of animal locomotion. The fullest account of animal development is from the Stoic Hierocles, writing at the time of Trajan on the foundations of Stoic ethics. He begins his discourse with embryology.

As soon as an animal is born, he argues, i.e. from the first moment that it has a soul, it has awareness of itself. He advances a series of arguments to support this thesis in opposition to those who say αἰσθησις is just for recognizing 'externals'. The first psychic action of an animal is γνώση of the body's parts and functions. Evidence for this is, for instance, that birds perceive that they have wings, humans perceive that they have sense organs and that each of these has its own functions: seeing, hearing, etc. Furthermore, animals are immediately aware of a means of defending themselves. The mechanism which explains self-awareness appears to be 'tensional movement', the concept which explains the stone's coherence and the plant's growth. In the animal 'tensional movement' is (in addition) the soul's mode of action. Hierocles maintains that the soul, because it is mixed with all the parts of the flesh and blood body, acts upon and is acted upon by them: 'For the body, just like the soul, offers resistance (ἀντιλήψις). And the πάθος, which is a case of their simultaneously pressing together and resisting each other, is generated. From the outermost parts inclining within, it travels to the ἑμοφυκών, with the result that apprehension (ἀντιλήψις) takes place both of all the body's parts and those of the soul. This is equivalent to the animal's perceiving itself. It is tempting to take this passage as giving not the paradigm account of sense-perception or any specific psychic act, but quite generally, as a description of the minimal conditions of any moment of conscious life. Hierocles does not say or imply that the πάθος which results from contact between body
and soul must be a result of some specific event affecting body or soul. The mere fact that body and soul are in constant conjunction is perhaps sufficient to constitute awareness of oneself, where 'oneself' equals a living body. But Hierocles' main purpose is to demonstrate that feelings and sensations are psychic events such that the subject of them is aware that it is his body which is affected.38

Self-awareness is not the only minimal condition of having a soul. Along with self-awareness goes ὀρμή, 'impulse', which also has the animal's own σύστασις, 'constitution', as its primary object from birth. Hierocles and Seneca adduce evidence from the behaviour of animals in support of this claim, e.g. tortoises' efforts to turn themselves back on to their feet, and young children's attempts to stand, even though they keep falling down, are not due to a desire to escape pain, but a desire to be in that state which they are conscious of as their own (natural) constitution.39 An animal does not know quid sit animal, animal esse se sentit (Sen. Ep. 121.11).

The Stoics' emphasis on self-consciousness is quaint, especially if we think of animals as Cartesian automata. But there is of course a problem about denying it. For we surely do want to say that animals see things and feel pain, and if an animal sees things and feels pain then some value must be assigned to the 'it' which sees and feels. If an animal does not in some sense experience itself as the locus of its seeing and feeling then we must surely deny that seeing and feeling can be predicated of it. What the analysis of such a self can be is naturally impossible to state in any but the most elementary terms. The Stoics insist most strongly that animals are 'not rational' (δικωγα). They lack the distinctively human quality of soul, but this quality is regarded as a modification of the minimal soul, something which gradually develops in the human infant out of the faculties which men and animals share.

We should not then think of rationality as an additional 'part' of the Stoic soul. All mortal animals have the same eight psychic parts. The soul of all animals is an ἀναθημάτις, an exhalation of breath capable of perceiving (SVF 1.141, 2.778), and this general definition seems to be consistent with its eight specific parts. Five of these are the five senses; the remainder are voice, reproduction, and the so-called ἡγεμονικόν.40

In dividing the soul into parts the Stoics were drawing attention to its diffusion throughout the body and its multiplicity of functions. But the partition of the soul is not similar to the Platonic model. What Plato distinguishes as reason, spirit, and appetite are, in the Stoic soul, all activities of the dominant part, the ἡγεμονικόν; the remaining seven parts, though physically attached to the ἡγεμονικόν, seem to be purely the in-
Instruments of its activity. The Stoic soul is not fully analogous to the brain and the nervous system; but the relationship of the ἰδéesmovikov to the other seven parts is obviously comparable, both spatially and functionally, to the brain and the nerves which unite it with all parts of the body.

On this eight-part model, voice and reproduction resemble the five senses in being πνεῦματα stretching from the ἰδéesmovikov to specific bodily organs. The counting of voice and reproduction as distinguishable parts of soul became controversial. Panaetius rejected it (fr. 36 van Straaten), but his claim that voice should be regarded as a ‘movement in accordance with impulse’, and therefore a function of the ἰδéesmovikov, does not seem to differ substantially from the earlier position (cf. Diog. Laert. 7.55). His predecessors also attributed voice to ‘impulse’, in the case of irrational animals, or to ‘thought’ (rational impulse?) in the case of men; but they probably argued that though voice is a function of consciousness, the ἰδéesmovikov needs to attach itself to the larynx and the tongue, just as its activity in sense perception requires attachment to the sense organs.

They must also have been concerned to provide the human ἰδéesmovikov, which is totally λογικόν, with the instrument for rational discourse (thought). Reproduction looks more puzzling, but only if we associate it on Aristotelian lines with the nutritive soul, as Panaetius seems to have done in explaining it as part of φύσις (fr. 86 van Straaten). Earlier Stoics did not of course claim that life at every level can only be transmitted through the soul’s activity (the seeds of plants do not require a soul). What they thought was probably that animals do not reproduce without sensing and wanting a sexual partner, and more important still perhaps, that the soul itself must control the production of seed or female fluid which is to be capable of generating offspring which themselves will have soul.

But the most interesting concept is the ἰδéesmovikov itself. I have mentioned its being located in the heart; just as the heart is said to be the source of other bodily parts, so probably the πνεῦμα of the potential ἰδéesmovikov in the embryo develops before other parts of the soul, which are described as its ‘offshoots’ (ἐκπειρώστα, SVF 2.836). The nutriment of the soul is said to be blood (SVF 1.140), or ‘the best blood’ (SVF 2.781), with respiration also contributing (SVF 2.782-3). The Stoics grasped, however perversely, the vital relation between blood and respiration, and it is interesting that the soul’s feeding requires an interaction between the heart and the ἰδéesmovikov. This also confirms the suggestion that nutrition in general is a function of the heart, not the soul, and it shows most plainly that the heart is the vital centre of an animal. Destroy the heart and you destroy both the soul’s food supply and its principal location. The importance of the heart to the unity
of the animal helps to explain Chrysippus' strenuous efforts to defend it as the seat of the soul.

This discussion of psychic functions has been but a glimpse of a very large subject. I hope it has served, however, to bring out some general points of interest. The Stoics' anatomical knowledge was extremely rudimentary; but their conception of body and soul as two independent things which are 'completely blended' clearly induced them to explore the relationship between bodily organs and the psychic functions they regarded as supremely explanatory in an animal's life. Body and soul come together, most significantly, in the heart; but although the same conjunction is characteristic throughout the entire animal, it remains no more than a conjunction. Body and soul are not two aspects of a single substance. They are separate substances.

The soul is not the activity of the heart; the heart is not the cause of the soul. Their relationship exemplifies the unity of an animal, but an animal's unity as a living thing depends on a partnership between two distinct bodies. The closer one of these bodies, the soul, becomes to cosmic λόγος = god, so much less does it have in common with flesh and bones. For a whole complex of reasons the Stoics want to emphasize the kinship between man and god. But they cannot do this, without weakening the connexion between body and soul. Paradoxically, it seems, animals turn out to be better examples of 'unified bodies' than persons. This will become clearer as we consider the similarities and differences between their souls.

V The Rational Soul

No philosophers have emphasized more strongly than the Stoics did that reason is the determinant of human life, and that it marks men off sharply from all other animals. And yet, as we have already seen, the human soul endows a human body with other psychic attributes which also belong to animals. This is not just a recognition of the uninteresting fact that men and animals alike can see, hear, etc. The human soul was conceived by the Stoics as something which has the same parts and functions as the animal soul. What differentiates them is the presence or absence of λόγος: the growth and maturity of reason are conceived as totally modifying the psychic parts and functions which, in themselves, are common to animals and men.

I think this point is established, or at least implied, by a seemingly authoritative text of lamblichus. Writing of what must be the human ἡγεμονικόν he treats it as the common substrate of four 'specific qualities'
They are, in this order, *φαντασία*, *συγκατάθεσις* (assent), ὀρμή, and λόγος. The oddity here is λόγος. It was basic Stoic doctrine that the entire human ἡγεμονικόν was rational, through and through, yet here λόγος is but the last member of a quartet. The reason for this, I suggest, is that the first three ‘qualities’ pick out permanent dispositions of any ἡγεμονικόν, animal or human. That is to say, the ἡγεμονικόν is involved in every action of the soul in at least one of these three ways. The soul’s seeing or hearing is not something independent of the ἡγεμονικόν. It is the ἡγεμονικόν, in its function as φαντασία, the awareness of sense objects, reported to it as changes to the sense organs. Frequently too the awareness of a sense object will also be experienced as a ὀρμή or ἀφορμή, an impulse to pursue or avoid the external thing causing the stimulation of the sense organs. But such impulses will not serve as causes of action independently of ‘assent’, the third of the soul’s basic qualities or functions.

There seems no good reason to question those few texts (Nemesius and Alexander of Aphrodisias, *SVF* 2.979, 991) which explicitly attribute ‘assent’ to all animals; and the treatment of assent as a quality or faculty which can be named independently of λόγος (in *SVF* 2.826 above) can best be explained on this assumption.41 The assent of non-rational animals is presumably to be analysed as some kind of non-verbalized understanding or acceptance of the φαντασία as a genuine awareness of an external object or bodily disturbance, which will give rise, often, to an impulse in accordance with the animals’ οἰκείωσις. Hence perhaps remarks in Stoic texts that animals have *simile quiddam mentis, unde orientur rerum adpetitus* (Cic. *ND* 2.29), and the ‘potential reasoning’ of Chrysippus’ dialectical dog (Sextus Emp. *PH* 1.69).

If, as I suggest, any soul’s activities consist in imaging, assenting, and impulsion, then imaging, assenting, and impulsion together pick out what it is to have a soul, or to be an animal.42 This has interesting consequences for the soul of rational beings. λόγος is something which develops gradually in the human soul. The soul of an infant has only potential λόγος, and its behaviour is governed by an as yet non-rational ὀρμή. Later ἄλογα supe-

venes as the craftsman of impulse’ (Diog. Laert. 7.86). The Stoic doctrine is not that λόγος comes into being as a new faculty to be set alongside impulse etc. What they claim rather is that the three psychic faculties which humans share with animals all become modified, in men, by λόγος. There is evidence to support this in Stoic terminology. Human φαντασία (referring to all of them) are λογικαί.43 The ὀρμή of men is also qualified by the same adjective, λογική.44 As for the ‘assent’ of men, its proper object is λεκτά, whose connexion with λόγος needs no demonstration.45 λεκτά comprise,
most importantly, the meanings of declarative sentences, alternatively called ἀξίωματα νοησεις, 'acts of thinking', are described as λογικαὶ φαντασίαι (Galen, SVF 2.89).

All of this proves that the λόγος of the human soul is not one faculty, among others, but the mode of the whole soul’s operation. Like the animals, human beings are creatures whose psychic attributes and behaviour can be analysed in terms of the three faculties, imaging, assenting, and impulsion. But the human mode of imaging etc., is invariably a rational activity. There is another way of putting this which expresses, I think, the central insight of the Stoics: the human soul is a capacity for living as a language animal.46 If I am right in my earlier interpretation of the soul in its specific sense, then the human soul does not animate the body in its structure as flesh and bones. It turns that structure into an instrument for perception, judgement, and desire (here I refer again to the three psychic faculties), where all three of these, even when mediated by the senses, are ‘rational’, in the sense that they belong to a creature whose life is irreducibly determined by its capacity to think and talk.

A soul’s rationality, it seems, is a cooperative development of ‘voice’ and ‘impression’ (φωνή and φαντασία). Both of these provide ways of distinguishing rational from non-rational souls. Human φωνή is ‘articulate’; it issues from the heart and ἄγεμορμίκων and ‘is despatched from thought’.47 Human φαντασίαι differ from those of animals in being capable of ‘combination and transference’, an obscure way of saying that human beings naturally make inferences and form concepts.48 Language is the usage of significant sounds to express thoughts (φαντασίαι). But the expression of a thought in language is something said or meant, a λέξτευ which is incorporeal, an abstraction from body.49

I allude, quite baldly I fear, to the doctrine of λέξτα here because it may raise new questions about the relationship between human soul and human body. Animals according to the Stoics appear to be granted some form of self-consciousness, as we have seen, but λέξτα can have no part to play in the animal’s psychology. Animals do not say anything, and so their image of themselves cannot be linguistic or conceptual. The object of animal awareness would seem to be exclusively its body and changes to its body. But the Stoics probably supposed that the human soul, regularly and naturally, reacts to and governs the body by talking to itself; for this purpose it employs λέκτα which, so far from being reducible to body, are actually incorporeal. The human soul can describe its experience, and so it is not restricted to a uniform set of reactions to the body. It can literally govern the body because it can decide what description and value to give to
its present, past, or future bodily states.\textsuperscript{50}

There appears then to be something irreducibly mental about the human soul, and this is due to its linguistic consciousness. The Stoics do not deny a necessary interaction between bodily states and conditions of the soul; that would be both implausible and quite out of key with their conception of body and soul as 'totally blended'.\textsuperscript{51} But I think they would say that no causal necessity links bodily changes and all of the soul's reactions to them. The soul has the capacity to give or withhold its assent to judgements about the body's condition and needs. So, while Stoics would no doubt admit that the soul cannot fail to be aware of an empty stomach, they would deny that that awareness automatically triggers a desire to eat. The hunger sensation and the desire to eat are separate states of the soul. The former is an unavoidable psychic reaction to the body; but the latter depends on the soul and the judgement that the soul makes. We could say that it is a relation between the soul or person and a proposition.

Such a distinction between body and rational soul is fundamental to Stoic ethics. Speaking strictly the Stoics said that nothing good or bad can affect the body of a man; good or bad, in the strict sense, can only be predicated of states of the soul and actions which are defined by the state of a soul. This doctrine is not a denial of bodily pain or pleasure, much less a denial that men may judge bodily pains to be bad and pleasures good. But the Stoics held that such judgements indicate a morally weak state of the soul since they confuse what is truly valuable (moral virtue) or harmful (moral weakness) with the condition of the body.

This attitude of emotional indifference to bodily pains and pleasures highlights the supposed independence and value of the soul. It explains the tendency to regard the humanity of a man, his real self, as identical to his \textit{γνώριστον}. Cleanthes allegedly called man 'soul alone' (\textit{SVF} 1.538), and Epictetus sometimes treats the body as the mere container of the 'divine' soul or the ego.\textsuperscript{52}

The dualist strain becomes still more evident when one reflects on the physical differences and functions of flesh and bones body and rational soul. If the \textit{πνεύμα} which animates a plant-like embryo must be greatly refined in order to change to an animal soul, so much finer must be the \textit{πνεύμα} of the rational soul. In its relation to the divine essence the human soul is the most rarefied of all bodies. Does this perhaps help to explain how a rational soul, while remaining corporeal, can be conscious of the incorporeal \textit{λειτουρεύει}? At any rate, its capacity for abstract thought represents some kind of transcendence over the purely corporeal which strictly is the only kind of existence the Stoics recognized. When we recall that the

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human ἰγειμονίκων is credited with limited survival in separation from the body, rising balloon-like from the corpse, the dualism and the separation of body from spirit become evident again.

So how are we to view soul and body in Stoicism? As I began by saying, their relationship is an instance of the universal principle of god pervading and giving form and energy to matter. The series, ἐς-ψυχ-το-ψυχ-σο-ν-τι-τα, soul-rational soul, gives us the means of classifying all ‘unified bodies’ as different manifestations of god’s interaction with matter. But god is only represented in propria persona in the rational soul. Human beings share properties of stones, plants, and animals; what they share with stones and plants accounts respectively for their bodies as coherent, growing entities; what they share with animals, in addition, is the capacity to behave as conscious and self-conscious bodies, but the mode of all their consciousness is distinctively rational.

Physiologically speaking, human body and soul, during a person’s existence, are interdependent and inseparable from one another. The body needs the soul in order to be a living human body; the soul needs the body, out of which it originally grows, as its location, partial source of energy (blood), and instrument for actualising consciousness. But the soul’s activities as mind — perceiving, judging, desiring etc. — though dependent on the soul’s relationship with the body, are not reducible to or equivalent to that relationship. Psychologically and morally speaking, persons for the Stoics are states of rational consciousness, or most literally and accurately, ‘intelligent warm breaths’, which inhabit flesh and bones bodies, and use them as instruments for their own life.53

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NOTES

1 Versions of this paper were presented to the Princeton University Ancient Philosophy Colloquium, in December 1978, and to a colloquy of The Center for Hermeneutical Studies of the Graduate Theological Union and the University of California, Berkeley, in June 1979. The latter, with responses from John M. Dillon, G. B. Kerferd, and David Winston, together with the discussion, was published in 1980 as Colloquy 36 of the Center. I am grateful to the Editors, Edward C. Hobbs and Wilhelm Wulffner, for permitting me to publish this further version here. It is impossible to thank all those who have helped me with their comments, but I am especially grateful to my respondents named above, and also to Michael Frede and Josiah Gould. For the leisure to work on the subject I am greatly indebted to Princeton University where I worked as a Senior Fellow of the Council for the Humanities during the first semester of 1978-9, and to the Institute
for Advanced Study, Princeton which gave me membership during the second semester of that year.

2 H. von Arnim, *Stoicorum Venerum Fragmenta* (= SVF) II 217-235, gives the fullest collection of evidence for *anima hominis* in Stoicism prior to Panaetius. Many texts in other sections of his vols. I-III provide further material (cf. the Index vol. IV), but his collection here, as elsewhere, is far from complete. In this paper I shall be concerned with later Stoicism (Panaetius onwards) only incidentally. The most extensive modern treatment of the material is by Adolf Bonhoffer, *Epictet und die Stoa*, whose entire book, from pp. 29ff., is a detailed discussion of evidence on 'anthropology and psychology' from early Stoicism as well as Epictetus. Brief accounts, from a variety of perspectives, may be found in the books by Bréhier, Gould, Long, Pohlenz, Rist, Sandbach, and Watson (the bibliographical references are given at the end of the paper).

3 This point was well brought out in Bernard Williams' paper 'Hylomorphism', which he read to the Princeton Colloquium (see n. 1 above). Two studies which illustrate Aristotle's apparent attractions are Jonathan Barnes, 'Aristotle's Concept of Mind', *Proc. Aristot. Soc.* 72 (1971-2) 101-114 and H.M. Robinson, 'Mind and Body in Aristotle', *CQ* NS 28 (1978) 105-124, which gives reference to many recent discussions of Aristotle's psychology. See also the stimulating and provocative book by Edwin Hartman.

4 The evidence on the soul's survival is well discussed by Hoven, who shows that probably all the leading Stoics posited survival of limited duration. The doctrine of periodic ἐκκαταρτισμός and reconstitution of the universe excludes any straightforward notion of immortality.

5 The Stoic ἐγκαταρτισμός, 'the principal part of the soul', is situated in the heart, which is also the primary location of the soul according to Aristotle in several different contexts; cf. Edwin Hartman, 138ff. For the Epicureans the *animum*, as distinct from the subordinate and pervasive *anima, media regione in pectoris haeret* (Lucret. 3.140). In the *Timaeus* Plato localizes 'the immortal reason in the head, the spirited part between the neck and the diaphragm, and the appetitive part in the belly (69d6 ff.).' T.M. Robinson, *Plato's Psychology*, 106.

6 A selection of texts: bonum hominis necesse est corpus sit, *cum ipse sit corporalis*. Sen. Ep. 106 = SVF 3.64, line 40; an 'animal' is οὐσία ἐμφύσεως ἀοιδήτηκη, Diog. Laert. 7.143 = SVF 2.633; ἐκ θυσίας καὶ σώματος συνεκτικεῖν (sc. ἀνθρώπου), Sextus Emp. *Adv. math.* 11.46 = SVF 3.96; the upshot of Philo's classification at SVF 2.182 is man as 'body with soul, rational and mortal'.

7 On the ἀρχαι see especially Lapidge, and Sandbach, 71-75.

8 Some descriptions of god in relation to matter: 'matter is contemporaneous with god'; god is 'the power which moves matter'; god 'pervades matter'; god 'is mixed with matter' or 'is in matter' or 'shapes each thing through the whole of matter' or 'is quality inseparable from matter' or 'is λόγος in matter': cf. von Arnim SVF vol. IV (Adler) s.v. θεός.

9 E.g. Aetius SVF 2.1027; Alex. Aphr. *SVF* 2.310.

10 For the question note also Plutarch's interpretation of the doctrine that 'each of us is two ἰσομείτεσθαι', one οὐσία, the other ποιῶν (supplying ποιῶν with Zeller), *Comm. not.* 1038C = SVF 2.762 with commentary by Harold Cherniss in Plutarch, *Moralia* XIII part 2 (Loeb ed.) ad loc., and Dexippus in *Aristoi. Cat.* p. 23. 25 Busse = SVF 2.374. The passage needs detailed discussion, but the doctrine seems to me correctly understood by Dexippus as drawing a distinction between 'unqualified matter' (οὐσία) and ἑδὲς ποιῶν e.g. Socrates — i.e., in terms of the basic ἀρχαι, ὡς θεός.

12 Mixt. p. 217.32-218.2 Bruns = SVF 2.473 p. 155.24-32. Todd, 119, translates the first sentence in my quotation marks, ‘for there is nothing in the body possessing the soul that does not partake of the soul’ (οὐδὲν γὰρ ψυχής ἄμωμον τοῦ τὴν ψυχήν ἔχωντος ἀμώμον). But word-order and the train of thought make it preferable to take οὐδὲν ψυχής as the subject of the sentence.


14 Matter, according to Chrysippus, is infinitely divisible, Diog. Laert. 7.150 = SVF 2.482, as the doctrine of total blending requires, cf. Todd, 205ff.

15 This will be cited below, and cf. Posidonius F28ab Edelstein-Kidd for ψυχικῶν πνεύμα in bones.


17 I cannot attempt to offer here a comprehensive survey of existing treatments of the Stoic concept of soul, but to the best of my knowledge, the problem of identifying the body and distinguishing between the two senses of soul has not been clearly recognised before (and I myself skated over it in Hellenistic Philosophy 171-172). A position with some resemblance to my own was briefly sketched by Ludwig Stein, as Professor David Winston noted in his published comments on the earlier version of this paper (see n.1 above). Stein (pp.105-7) quoted Sextus Adv. math. 7.234 on the two senses of soul and explained them as follows: ‘hier wird also das ηθεμονικὸν in einem gewissen Gegensatz zur ψυχή gesetzt, sofern es die Denk- und Empfindungstätigkeit repräsentiert, während die Seele als Totalität mehr die physische Existenz des Menschen ermöglicht’ (n.216). He maintains that what leaves the body on death is the ηθεμονικὸν, ‘aber ein gewisser Grad von ψυχή ... muss selbst dem Leichnam noch innenwohnen, da er noch eine Form hat’ (p. 107). Much of Stein’s work is utterly perverse, but he was more perceptive on this point than his critic, Bonhöffer, 105-6. Bonhöffer treats ‘the soul which holds the whole compound together’ as the ηθεμονικὸ and seven subordinate parts. But these, as we shall see, seem to have nothing to do with explaining the form of bodily parts such as bones and sinews. For some analogous difficulties in Aristotle, cf. Suzanne Mansion.

18 Nemesius Nat. Hom. p. 76 Matthaei = SVF 1.518, p. 117.7-11, with the same argument attributed to him in Tertullian, De an. 25 = SVF ad loc. The force of Cleanthes’ second premise is obscure to me, since there seems no reason why two δομάτα — e.g. in Stoicism, two equivalent or contrary statements — cannot be described as ‘like or unlike’ each other respectively.

19 Nemesius p. 78 = SVF 1.518, p. 117.11-14.


21 ψυχή is a living creature; for it is alive and sentient (βούλευτα δὲ καὶ τὴν ἐν ἡμῖν ψυχήν ζῶν εἶναι. ζῶν τε γὰρ καὶ αἰσθάνεσθαι) Stobaeus Ecl. 2 p. 65.1 Wachsmuth = SVF 3.306. The human soul is an offshoot (ἀπόσπασμα) of the cosmos qua living creature, Diog. Laert. 7.143 = SVF 2.633, cf. Diog. Laert. 7.156 = SVF 2.774, and for the soul’s survival Hoven (n.4 above).

22 Cf. Diog. Laert. 7.158 = SVF 2.741, Galen Def. med. 94 vol. XIX Kühn, p. 370 = SVF 2.742.


27 Calcidius *Ad Tim.* 220 = *SVF* 2.897 p. 235.30-37 does appear to attribute to Chrysippus the doctrine that soul controls ‘nutrition and growth’ (*nutriendo, adolendo* line 33 of the *SVF* text). But he does not show how this could be a function of any of the soul’s eight parts; perhaps he has conflated soul in the specific sense with soul as πνεῦμα in general. Something similar may be implicit in an obscure passage of Philo, which survives through the Armenian translation, *Quaest. et solut. in Genesis* 2.4 (*SVF* 2.802). There the body is said to have its own *habituā* (= ἔγος), but the coalescence of its constituents has a higher principle of coherence in the (all pervading) soul (*superior autem habitudo connexionis istorum anima est*).

28 My interpretation thus differs sharply from the views of Bonhoeffer, 69 (cf. 105-106) and Pohlenz 87, who suppose that the soul which comes into being on an animal’s birth takes over the functions of ἔγος and φύσις.

29 Hierocles, col. 1.31-33; Philo *SVF* 2.844; Alex. Aphr. *SVF* 2.1002 etc.


32 Col. 1.44ff.

33 Col. 1.51, col. 2.1-3.

34 Col. 1.51-61.

35 Col. 2.3ff.

36 Col. 4.27-38 with von Arnim’s commentary ad loc.

37 Col. 4.44-53; for the text and bibliography, apart from von Arnim, cf. Pembroke 142 n.22.

38 I think this may include all that is meant by ‘apprehension of all the soul’s parts’ (end of quotation in main text). But others have distinguished the soul’s consciousness of itself from its consciousness of the body, cf. von Arnim *Hierokles*, xxvi-xxviii; Pembroke, 119.

39 Hierocles col. 7.5-10 (Pembroke n. 27, 143), Sen. *Ep.* 121.8. cf. Pembroke, 119 with n. 28.

40 For the evidence cf. *SVF* 2.823-33.

41 Cf. also Cic. *Acad.* 2.37 where Lucullus, speaking for the Stoicizing Antiochus, claims that action, which distinguishes *animal* from *inanimum*, implies *sensus* and *adsensus*. I recognize that those who think assent must and can only be given to propositions may resist this claim. But the Stoics thought assent was given to παραστασις as well as to δικαιωσις. Perhaps παραστασις at all levels was thought to depend on assent, cf. Cic. *Acad.* 2.38; and, in general, *Hellenistic Philosophy*, 172-173.

42 ‘Imaging’ is but one of many unsatisfactory renderings of παραστασις. The noun expresses the state of ‘being appeared to’, but a translation needs to be wide enough to accommodate mental as well as sense impressions.

43 Diog. Laert. 7.51 = *SVF* 2.61, cf. G.B. Kerferd in *Les Stoiciens et leur logique* ed. J. Brunschwig (Paris 1978) 252-3, who has convinced me that I was wrong to argue in *Problems*, 83, that some human παραστασις might not be λογικαί.


45 Stobaeus *SVF* 3.171.

46 I have explored the implications of this more fully elsewhere, *Problems* chapter V: *Hellenistic Philosophy*, 123-125, 175-176.

47 Diog. Laert. 7.55 (Diogenes of Babylon) which is inconsistent with Sextus Emp. *Adv.*
math. 8.276, where birds are said to utter ‘articulate cries’; Galen SVF 3.894, quoting Chrysippus.

49 Evidence and discussion in Problems, 82-84.
50 Animals have only a most rudimentary concept of time, Cic. Off. 1.11; Seneca Ep. 124.17.
51 For useful discussions of the interaction cf. Lloyd, 234ff. and Rist, 37-53.
52 Bonhöffer, 29-30; see further Rist, 256ff.
53 The last pages of this essay only touch on a number of complex issues which need more thorough treatment than I have given them. Another topic which requires fuller discussion is the similarities and differences between Aristotle and Stoic psychology (cf. Philippson); that too I have only been able to hint at.

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