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SEPARABILITY vs. DIFFERENCE: PARTS AND CAPACITIES OF THE SOUL IN ARISTOTLE

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The ancients are divided . . . about the parts of the soul, and in general what is a part and what is a capacity, and wherein their difference lies.

(Stobaeus 1. 49. 25a=Porphyry fr. 253 Smith)

1. Introduction

In the opening chapter of the *De anima* Aristotle provides a list of methodological questions that a systematic enquiry into the soul has to address. The question whether the soul has parts or not opens up a series of related questions and problems, and it seems that the way to answer them is to assume that the soul does have parts. However, if the soul has parts, two further methodological questions suggest themselves: (1) 'should one first investigate the whole soul or parts of the soul', and (2) how should one 'determine which parts are by their nature different from one another' $(402^{b}9-11)$. Question (1) has to do with the status of the whole soul in relation to its parts, whereas question (2) has to do with the status of parts of the soul in relation to one another. These two questions seem to have different

$\ensuremath{\mathbb C}$ Klaus Corcilius and Pavel Gregoric 2010

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ent underpinnings, the first one dealing with the 'vertical' whole– part relation, and the second dealing with the 'horizontal' part–part relation. Although the two questions are connected and require answers that cohere well with one another, they seem to be sufficiently distinct to be investigated independently. In this paper we shall investigate how Aristotle answers the second question.

The main difficulty for the view that the soul has parts, as we learn from the last sections of DA 1. 5, is the concern for the unity of the soul. How can the soul, which is supposed to be the principle of unity, account for the unity of the living being if it itself has parts? This seems to explain Aristotle's occasional expressions of reservation regarding the talk of parts of the soul (e.g. DA 1. 5, $411^{b}5-14$; 3. 9, $432^{a}22-^{b}7$; fuv. 1, $467^{b}16-18$). On the other hand, Aristotle himself often speaks of parts of the soul in putting forward his own views (e.g. DA 2. 2, $413^{b}7$, 27; 3. 4, $429^{a}10$; PA 1. 1, $641^{a}32-^{b}10$). Moreover, the way he sets out his positive account of the soul in books 2 and 3 of the *De anima* strongly suggests that Aristotle's answer to the aforementioned methodological question is that the soul does have parts and that he has succeeded in 'determining which parts are by their nature different from one another'.

The standard way of resolving this tension is to say that the soul has parts only in a very special or loose sense. Material objects have parts in the strict sense, parts which can be detached from the whole and which can exist separately from one another and from the whole. Not so with the soul. The soul can be divided only conceptually, namely by distinguishing various capacities of the soul. Each capacity of the soul enables a living being to perform one activity, and thus each has an account which is different from the account of the other capacities. As such, the capacities are merely logical parts or aspects of the soul, which does not imply that they can be detached from the whole so as to exist separately from one another or from the whole. Hence, Aristotle can talk of parts of the soul and yet not be worried about compromising the unity of the soul, for he is talking of parts only in a special sense.

On this view, any capacity of the soul can be called a 'part of the soul', for it is conceptually distinct from every other capacity of the soul. For example, Richard Sorabji claims that 'Aristotle's statement that the most appropriate account of the soul is the one which picks out these capacities, already suggests the thought that perhaps the soul just *is* these capacities. This thought is confirmed when we

notice that Aristotle speaks of the capacities as *parts* of the soul.'¹ This view seems to be adopted also by Jonathan Barnes: 'The language of parts need not trouble us: *morion* is used interchangeably with *dunamis* and *archē*, without any substantialist implications.'² More recently, Ronald Polansky writes of 'the soul's faculties, that is, its "parts".³ On the standard view, then, every part of the soul is a capacity of the soul, and every capacity of the soul is a part of the soul.

There is much to be said in favour of this view. It explains Aristotle's uneasiness about the idea that the soul has parts, and it intelligibly shows how Aristotle can nevertheless talk about parts of the soul without jeopardizing the soul's unity. Moreover, this view sits well with passages in which the main capacities of the soul, as they are distinguished in the *De anima*, are called 'capacities' and 'parts' interchangeably (e.g. *DA* 2. 2, $413^{a}32^{-b}8$, $413^{b}24-9$; 3. 4, $429^{a}10-15$).

In spite of its initial plausibility, we think that the standard view fails to do justice to some passages that seem to speak against the identification of capacities with parts of the soul. Let us briefly review two such passages.

T1(a) At present we must confine ourselves to saying that the soul is the principle of those [i.e. the activities of living beings mentioned in $413^{a}20^{-1}$ b¹10] and is divided into these, viz. *threptikon, aisthētikon, dianoētikon, kinēsis.* (b) But whether each one of these is a soul or a part of the soul, and if a part of the soul, whether in such a way that it is separable in account only or also in place, in some cases it is not difficult to see, whereas in others there is a problem. (*DA* 2. 2, $413^{b}11-16$)

Here Aristotle asks whether each of the capacities he has introduced in the immediately preceding passage (413^a20–^b10) is a soul or a part of the soul, and if it is a part, what that involves. Then he adds a comment that for some capacities it is easier to answer these ques-

¹ R. Sorabji, 'Body and Soul in Aristotle', *Philosophy*, 49 (1974), 63-89 at 64.

² J. Barnes, 'Aristotle's Concept of Mind' ['Concept'], *Proceedings of the Aristotelian Society*, 72 (1971–2), 101–14 at 105.

³ R. Polansky, *Aristotle's* De anima [*De anima*] (Cambridge, 2007), 8. This is also the view advocated in a recent monograph by one of the two co-authors; see P. Gregoric, *Aristotle on the Common Sense* [*Common Sense*] (Oxford, 2007), 19–27. The criticism advanced by the other co-author at the II. Kongress der Gesellschaft für Antike Philosophie in Hamburg in July 2007, by participants of the Berlin Ancient Philosophy Colloquium in November 2008, especially Christof Rapp and Ben Morison, as well as by some reviewers of the monograph, induced him to rethink his position.

tions than for others. This whole passage is rather puzzling on the standard view, not least because it should be equally easy to answer these questions for all capacities, if their conceptual distinctness were sufficient to grant them the status of parts of the soul.

The second passage is the following:

T2 For those who divide the parts of the soul, if they divide and separate them according to capacities, they [sc. parts of the soul] become very numerous, viz. the *threptikon*, *aisthētikon*, *noētikon*, *bouleutikon*, and, further, the *orektikon*. (*DA* 3. 10, 433^b1–4)

This passage is no less puzzling on the standard view. If the standard view were correct, there would be *no* alternative to dividing the soul into parts according to capacities, whereas the passage clearly implies that there is an alternative, and that in this alternative the number of parts of the soul will not be 'very numerous' $(\pi \dot{\alpha} \mu \pi o \lambda \lambda a)$, but presumably manageably small.

These two passages should suffice to show that Aristotle *did* make some distinction between capacities and parts of the soul, and that he did not think the relation between the two to be trivial. But what is this relation? Judging from the second passage, it seems true to say that every part of the soul is a capacity of the soul, but not the converse—not all capacities of the soul are also parts of the soul for Aristotle. Furthermore, it seems that both passages establish a close connection between parthood of the soul and some sort of separability, such that being a part of the soul involves being separable in some way.⁴ Unfortunately, Aristotle does not tell us explicitly, here or anywhere else, what this distinction is or what sort of separability it involves. Nevertheless, we think that the two quoted passages give us good textual reasons for thinking that Aristotle indeed distinguished between parts and capacities of the soul and that this distinction involves a particular sort of separability.

Another reason for taking the distinction between parts and capacities of the soul seriously is of a more philosophical nature. 'Parts' and 'capacities' seem to be the only pieces of terminology available to Aristotle by means of which he can draw distinctions among different aspects of the soul, and without *some* distinction among them he would be unable to organize these aspects in a systematic fashion.

⁴ The context of the two passages makes it clear that what Aristotle has in mind here is not separability of the soul, or a part of the soul, from the body, but rather separability of one part or capacity of the soul from another; see n. 13 below.

The importance of this issue is obvious. DA 2. 2 alone mentions nous, the nutritive capacity, the perceptual capacity, the locomotive capacity, imagination, the capacity for desiring, the capacity for feeling pleasure and pain, and the capacity to form opinions as capacities of the soul. Are we supposed to treat all of these capacities on an equal footing? And if so, what about the capacity for remembering, the capacity for recollecting, the capacity for dreaming, and several other capacities mentioned outside of the De anima, notably in the Parva naturalia? Or, indeed, what about the capacity for thumb-twiddling or for letting one's hair grow, not mentioned by Aristotle? Does Aristotle offer criteria for distinguishing capacities such as the latter ones from other, more fundamental capacities of the soul? And if so, what are these criteria? Without some distinction among psychic capacities, the way the Aristotelian soul is divided, as well as the number of capacities thus reached, seems to be arbitrary.5

In what follows we shall argue that, in spite of the absence of a text which expressly formulates the distinction between a part and a capacity of the soul, Aristotle *did* have a clear criterion for deciding which capacity of the soul does and which does not count as a part of the soul, and that the distinction based on this criterion is capable of saving his theory from the charge of arbitrariness. We take a start by discussing an important juncture in the argument of book 2 of the *De anima*, where Aristotle turns from the discussion of the 'most common' account of the soul to the discussion of the soul's capacities. At this juncture he takes up the *aporia* of parts of the soul, originally raised in *DA* 1. I and further elaborated in 1. 5. In contrast with 1. 5, which is largely aporetic, 2. 2 sets forth Aristotle's positive views.

Before we turn to DA 2. 2, we would like to mention another, relatively recent account of parts of the soul in Aristotle. It can be found in Jennifer Whiting's paper published in 2002, which deals with what she calls the 'locomotive part' of the soul. Because of her focus on locomotive functions, Whiting does not provide a general account of what it is to be a part of the soul, as opposed to being a capacity of the soul, yet such an account is implied in her paper. In our opinion it presents a notable improvement on the standard view, since it (i) explicitly acknowledges a difference between parts and capacities of the soul, (ii) proposes the *criteria* for distinguishing

⁵ See **T2** above and *DA* 3. 9, 432^a22-^b4, discussed at some length in sect. 6 below.

them, and (iii) does so by using different sorts of *separability*. However, her interpretation of the relevant sorts of separability and, consequently, her understanding of the criteria for distinguishing parts from capacities are importantly different from ours, as we indicate in a critical discussion of Whiting's account in the Appendix.

2. Parts of the soul in the argument of De anima 2. 2

Having provided a very general definition of the soul in DA 2. 1, at the beginning of 2. 2 Aristotle says that another enquiry is needed, one which will proceed from what is more obvious to what is more intelligible, and which will be genuinely explanatory. From 413^a20 he makes a fresh start with his enquiry. He begins by listing different ways in which life $(\tau \delta \zeta \hat{\eta} \nu)$ is said, and he does so because life is what the soul is supposed to explain. 'We take, then, as our startingpoint for discussion, that what has soul differs from what has no soul, in that the former displays life. Now this word has more than one sense, and if any one of the following [viz. activities] is present in a thing we say that it lives' (DA 413^a20–3). This is the first systematic step of the enquiry: the soul is established as the *explanans* of life.⁶

In the second step, at 413^a23–5, Aristotle identifies four different types of life-activity:

- (i) thought;
- (ii) perception;
- (iii) local movement and rest;
- (iv) nutrition, decay, and growth.

The presence of any one of these types of activity, Aristotle claims, is sufficient for the ascription of life. Aristotle does not justify this claim, presumably because he thought it obvious enough. Any of the things that people are inclined to call alive—from humble plants to exalted celestial beings—displays at least one of the four listed types of activity (or so Aristotle believed). In the second step, then, Aristotle provides an observation by means of which he establishes

⁶ This statement thereby both confirms and widens the scope of the rather tentative statement at the very beginning of the work, where Aristotle says that the soul is *'like* a principle of the living beings' (DA 1. 1, 402^a6–7).

differences in the *explanandum*: to live is to engage in at least one of the four listed types of activity.

In the third step the established differences of the *explanandum* are projected into the *explanans*; that is, for each of the four identified types of activities, a corresponding capacity of the soul is postulated. This occurs in the first section of **T1**:

TI(a) At present we must confine ourselves to saying that the soul is the principle of these [activities] and is divided into these, viz.

- (i') the nutritive *capacity* [to threptikon];
- (ii') the perceptual *capacity* [to aisthetikon];
- (iii') the *capacity* for thinking [to dianoētikon];
- (iv') local motion [$kin\bar{e}sis$]. (DA 413^b11-13)

There is only slight variation between the four types of life-activity listed in the second step and the four new items. With the exception of (iv'), local motion, the other three items are substantive adjectives ending in *-ikos*.⁷ Adjectives formed with the suffix *-ikos* allow for different semantic nuances, but it is generally agreed that in this context they designate that which enables something, in this case the exercise of the aforementioned life-activities. Thus (i'), (ii'), (iii'), and (iv') are conceived as *capacities* of the soul. But this, as we have seen, is *not* yet to say that each of these capacities also figures as a part of the soul. For the passage continues:

T1(b) But whether each one of these is a soul or a part of the soul, and if a part of the soul, whether in such a way that it is separable in account only or also in place, in some cases it is not difficult to see, whereas in others there is a problem. (DA 413^b13-16)

The four capacities of the soul, distinguished on the basis of the observation that life comes in four types of activity, are prima facie candidates for being souls or parts of the soul. More precisely, Aristotle raises two distinct questions concerning the four capacities of the soul: (i) are they souls or parts of the soul, and (ii) if they are parts of the soul, are they separable in account only or also in place? Aristotle's answer to these questions is anything but straightforward, yet we shall argue that it can be extrapolated from the following passage and confirmed elsewhere in the *De anima*. The passage comes immediately after **T1(b)**.

T3(a) For just as in the case of plants, when divided some are observed

 $^7\,$ This exception, we shall suggest later (p. 110), is not accidental.

to live though separated from one another—showing that in their case the soul of each individual is actually one but potentially many—so we see this happening also with other varieties of soul in the case of insects which have been cut in two; each of the segments has both perception and local movement, and if it has perception, then also imagination and desire; for, where there is perception, there is also pleasure and pain, and where these are, necessarily there is also appetite.

(b) We have no evidence as yet about *nous* or the capacity for theorizing, but it seems to be a different kind of soul, and it alone is capable of being separated as the eternal from the perishable.

(c) The other parts of the soul, it is clear from what we have said, are not separable in the way some claim. But that they are different in account is clear—since to be capable of having opinions and to be capable of perceiving are different, if perceiving is different from having opinions—and likewise each of the other aforementioned [capacities of the soul].

(d) Moreover, in some living beings⁸ all these [capacities of the soul] are present, in others some of them, and in still others only one (this is what makes a difference among living beings); however, the cause of this must be considered later. Something very similar happens with the senses; some [kinds of animal] have all the senses, others only some of them, and still others only one, the most indispensable, touch. ($DA 413^{b}16-414^{a}3$)

In the following two sections of our paper we shall discuss Aristotle's answer to each of the two questions by interpreting **T3**. But before we do so, we would like to underline the importance of Aristotle's discussion of these two questions for his treatment of the

⁸ All manuscripts have $\tau \hat{\omega} \nu \zeta \hat{\omega} \omega \nu$ at 413^b32 and 414^a1. Ross in his *editio maior*, 218 ad loc., writes: 'This is a careless statement, for A. undoubtedly ascribes at least the faculty of perception as well as that of nutrition to all animals (414^a32-^b3)-even to insects (413^b19–22). It would be possible to omit $\tau \hat{\omega} \nu \zeta \dot{\omega} \omega \nu$ (l. 32) as a gloss, or to read $\tau \hat{\omega} \nu \zeta \hat{\omega} \nu \tau \omega \nu$, in which case the reference would be to plants. But all the MSS. and all the ancient commentators have $\tau \hat{\omega} \nu \zeta \hat{\omega} \omega \nu$ (though Philoponus points out that it should have been $\tau \hat{\omega} \nu \zeta \hat{\omega} \nu \tau \omega \nu$).' A similar case is found at 414^b15, where all manuscripts read $\tau \hat{\omega} \nu \zeta \hat{\omega} \omega \nu$, while Ross in both of his editions decides to print Susemihl's conjecture $\tau \hat{\omega} \nu \zeta \hat{\omega} \nu \tau \omega \nu$, with some support from Themistius and Simplicius. Independently of the textual issues, we believe that in this passage Aristotle must have in mind all living beings, including plants, for plants are the class of living beings in which only one of the four capacities is found, namely the nutritive capacity; so Philop. In DA 243. 14-17 Hayduck; Themist. In DA 46. 5-8 Heinze; and Sophon. In DA 49. 29-32 Hayduck. Moreover, Aristotle says in T3(d) that an explanation of the distribution of capacities will be supplied later. The last two chapters of the De anima seem to fit this description best, as most commentators agree, and there Aristotle's discussion does include plants; cf. DA 3. 12, 434^a22-31. Finally, Aristotle opens 2. 3 with the following words: 'Of the aforementioned capacities of the soul all are found in some beings, as we have said, in others some of them, and in some only one' (414^a29-31). T3(d) is the most likely target of Aristotle's back reference, as the commentators correctly observe.

soul. So far, Aristotle's division of the soul into the four psychic capacities is based on the observation that life comes in four types of activity. This looks like a promising start, but how can we be sure that these are exhaustive, i.e. that there are no other relevant types of activity? For instance, in Plato's brief discussion of plants in the *Timaeus* (77 A $_3$ -c $_5$), being alive is indeed connected with those four activities,⁹ but also with having opinions, reasoning, feeling pleasure and pain, and having appetites. Moreover, how can we be sure that the four types of activity are fundamental, i.e. that none of them can be explained with reference to another?

A scientific principle—and the soul, we take it, is the first principle of the science of living beings-would require a stronger foundation; at any rate, what is derived from the observation that life comes in four types of activity should receive independent justification. That is to say, Aristotle must find a way to establish that the four capacities are indeed all there really is to the soul, that they are the fundamental aspects of the soul which cannot be explained with reference to one another or to any other capacity of the soul, whereas all other capacities can be explained with reference to one or several of them. Unless that is adequately established, Aristotle's programmatic idea that successive accounts of the four capacities constitute a satisfactory treatment of the soul (DA 2. 3, 415^a11–13; 2. 4, 415^a14-22) seems to rest on shaky ground. That Aristotle assumed that he had adequately established that the four capacities are indeed, in some sense, the fundamental aspects of the soul, and that his programme is thus sufficiently justified, is indicated by the fact that the structure of the rest of the De anima is governed by the list of four capacities produced in **TI**(**a**).¹⁰

We would like to argue that Aristotle established this in the course of his discussion of questions (i) and (ii). The first question concerns the *status* of the four capacities, and we shall claim that it depends on a sort of separability. The second introduces two possible *criteria* for determining whether they are parts of the soul, i.e. the

⁹ The connection between life and 'nutrition, decay, and growth' in this passage of the *Timaeus* is restricted to attributing life to 'growing things' ($\phi v \tau \epsilon \dot{v} o v \sigma v$), such as trees, plants, and seeds. However, at 41 D 1–3 nourishment, growth, and decay are closely associated with being a $\zeta \hat{\omega} o v$, and whatever is alive, including plants, Plato is willing to call a $\zeta \hat{\omega} ov$; cf. 77 B 1–3.

¹⁰ Even the order of the capacities introduced in Tt(a) is mirrored in the structure of books 2 and 3 of the *De anima*: Aristotle starts his discussion of the nutritive capacity in 2. 4, of the perceptual capacity in 2. 5, of the thinking capacity in 3. 4, and finally of animal locomotion in 3. 9.

fundamental aspects of the soul. Both of these criteria are spelt out in terms of two types of separability, namely separability in account only and separability also in place. Obviously, the notion of separability will play a central role in what follows.

3. Question (i)

The first question is whether each of the four aforementioned capacities is a soul or a part of the soul $(\psi v \chi \eta \ \eta \ \mu \delta \rho \iota ov \ \psi v \chi \eta s)$. Although this question does not seem to be answered as directly as the second question, the discussion in **T3** contains some telling indications from which Aristotle's answer can be plausibly inferred. To start with, let us consider what he says about *nous*, i.e. the capacity for theorizing, in **T3(b)**. He says that it can be separated ($\epsilon v \delta \epsilon \chi \epsilon \tau a u$ $\chi \omega \rho i \zeta \epsilon \sigma \theta a \iota$). Very generally, to say that something can be separated, or that it is separable ($\chi \omega \rho \iota \sigma \tau \delta v$), means that it can have independent existence. This notion is indebted to Plato's use of the verb $\chi \omega \rho i \zeta \epsilon u v$ and the adverb $\chi \omega \rho i s$ to express, for instance, that the soul can exist independently of the body, or that Forms exist independently of the particulars that participate in them.¹¹

Sometimes Aristotle specifies what it is in relation to which something is separable: to say that x is separable from y means that x can exist independently of y. Occasionally he also specifies the respect in which x is separable from y, e.g. 'in power', 'in place', and 'in account', whereby he introduces different types of independence relation. We shall say more about separability as we proceed, but for now it is important to bear in mind that when Aristotle says that x is separable, or separable from y—without specifying the respect in which it is separable—he always means that x can *exist* independently, or independently of y.

By saying that the capacity for theorizing is separable, then, Aristotle means that it can exist independently. Independently of what? Presumably it can exist independently of the body. Aristotle himself says something to that effect at several places,¹² and his remark that this capacity is separable 'as the eternal from the perishable'

¹¹ e.g. Phaedo 64 c, 67 c; Parm. 130 B; Arist. Metaph. M 4, 1078^b30-1; cf. D. Morrison, 'Χωριστός in Aristotle' ['Χωριστός'], Harvard Studies in Classical Philology, 89 (1985), 89–105, and G. Vlastos, '"Separation" in Plato', Oxford Studies in Ancient Philosophy, 5 (1987), 187–96.

¹² DA 1. 1, 403^a3-16; 1. 4, 408^b18-19; 2. 1, 413^a4-7; 3. 5, 430^a17-25.

(413^b26) supports such a reading. Since the capacity for theorizing is not the form of any body or part of a body, its existence is not tied to the ephemeral existence of any body or part of a body. Unlike all the other capacities of the soul, the capacity for theorizing cannot be defined as the first actuality of a natural instrumental body, and it requires a different account (cf. 2. 3, 415^a11–12). This is indicated by Aristotle's statement that the capacity for theorizing constitutes a 'different kind of soul' ($\psi v \chi \hat{\eta}_S \gamma \epsilon v \rho s \tilde{\epsilon} \tau \epsilon \rho ov$, 2. 2, 413^b26).

Although separability from body is no doubt in the background of Aristotle's claim, what seems to be in the foreground is separability from the other capacities of the soul.¹³ Let us proceed on the assumption that there is a kind of living being which lives by intellect alone, namely God and perhaps the movers of the celestial spheres.¹⁴ In such beings the capacity for theorizing is indeed found to exist without any other capacity of the soul. Now if that is true, then clearly there is nothing more to the soul of such beings than the capacity for theorizing. Hence, it cannot be a part of the soul of such beings, because it makes sense to call something a part only if it is distinct from a whole. But in this case the capacity for theorizing is not something distinct from a whole; rather it is a whole, namely the whole soul of divine beings. So the capacity for theorizing, at least as far as divine beings are concerned, is a soul, not a part of the soul. This might also be an implication of the statement that the capacity for theorizing constitutes a 'different kind of soul'.

The same applies if one proceeds on the assumption that Aristotle is talking about the theoretical capacity developed by individual human beings, as Philoponus, for instance, would insist.¹⁵ Supposing that one's capacity for theorizing continues to exist after the demise of the other capacities of the soul upon one's death, in such a state the capacity for theorizing would clearly exist without

¹³ As Barnes, 'Concept', 104 n. 4 writes: 'The ends of II I (413a3-10) and of II 2 (413b14-414a3) are superficially parallel: both deal with the *chôrismos* of psychic parts. But in fact they discuss perfectly distinct topics: II I, the separation of psychic parts *from body*; II 2 the separation of psychic parts *from one another*.' J. Whiting, 'Locomotive Soul: The Parts of Soul in Aristotle's Scientific Works' ['Locomotive Soul'], *Oxford Studies in Ancient Philosophy*, 22 (2002), 141-200 at 150-1, is of the same mind. Morrison's interpretation of this passage ('Xωριστόs', 96), starting with the claim that 'χωρίζεσθαι in line 26 means "to be theoretically distinguished", or "to be separated in *logos*", not "to be separated in space"', is peculiar.

¹⁴ Cf. DA 1. 4, 408^b18–29; 3. 5, 430^a22–5; Metaph. A 7, 1072^b26–30; NE 6. 7, 1141^a34–^b2; V. Caston, 'Aristotle's Two Intellects: A Modest Proposal', Phronesis, 44 (1999), 199–227 at 210; M. F. Burnyeat, Aristotle's Divine Intellect (Milwaukee, 2008), 28–9. ¹⁵ In DA 241. 37–242. 5 Hayduck.

the other capacities of the soul with which it used to coexist during one's life. Hence, the theoretical capacity in such a state would not be called a *part* of the soul, but a *soul*.

So whichever way we understand Aristotle's reference to the capacity for theorizing, it is said to be separable, which implies that it can be found to exist without any other capacity of the soul. And if, or when, a capacity of the soul is found to exist without any other, we submit, it should be regarded as a *soul*, rather than as a *part* of the soul.

Now there is another capacity that Aristotle frequently calls 'separable', and that is the nutritive capacity.¹⁶ For instance, at 413^a31-2 he claims that the nutritive capacity 'can be separated from the other capacities, whereas others cannot be separated from it in mortal living beings, and that is obvious from the case of growing things'. In plants, Aristotle argues, the nutritive capacity is found to exist without any other capacity of the soul, whereas no other kind of mortal living being is found to exist without the nutritive capacity of the soul. All living beings endowed with perception (animals), whether or not they are also in possession of the locomotive and the thinking capacity, have the nutritive capacity of the soul. Of course, the nutritive capacity of the soul is not found to exist in divine beings, and that is the point of restricting the claim in 413^a31-2 to 'mortal living beings' ($\theta \nu \eta \tau \dot{\alpha}$). At any rate, since the nutritive capacity is found to exist in plants without any other capacity of the soul, it follows that, in plants, it is not a part of the soul, but a soul.17 Aristotle seems to say so himself: 'The principle in plants also seems to be a kind of soul [$\psi v \chi \dot{\eta} \tau \iota s$]; for it is the only one that both animals and plants share, and it is separated from the perceptual principle, whereas nothing has perception without it' (*DA* 1. 5, 411^b27–30).

Given that Aristotle speaks of the nutritive capacity of the soul as being separable, and at **T3(b)** claims that only ($\mu \delta \nu o \nu$) the capacity for theorizing can be separated, is he contradicting himself? Not if we read the whole sentence at 413^b26–7. What Aristotle is saying there is that the capacity for theorizing is the only one separable in the particular way ($\kappa \alpha \theta \dot{\alpha} \pi \epsilon \rho$) the eternal is separable from

¹⁶ Cf. DA 1. 5, 411^b29–30; 2. 2, 413^a31–3, ^b5–8; 2. 3, 415^a2–3; Somn. 1, 454^a11–14. ¹⁷ So Polansky, *De anima*, 179: 'Surely the nutritive power can itself be a soul since it is all that plants have.'

the perishable.¹⁸ Unlike the capacity for theorizing, the nutritive capacity is the form of a particular kind or part of body, and its existence is tied to the existence of that kind or part of body. Hence, while the capacity for theorizing is found to exist for all eternity without any other capacity in divine beings, the nutritive capacity is found to exist for a limited period of time without any other capacity in plants. So both capacities are separable, and hence capable of existing independently of all the other capacities of the soul; only the capacity for theorizing is such in virtue of being a form that is not embodied, whereas the nutritive capacity is such in virtue of being the form of a kind of body that is not equipped for sustaining any other capacity of the soul, namely the body of a plant.

When it comes to the nutritive capacity and the capacity for theorizing, then, the answer to the first question is that, in some cases at least, they are souls rather than parts of the soul; the nutritive capacity is a soul in the case of plants, and the capacity for theorizing is a soul in the case of divine beings. This does not imply, however, that these two capacities therefore cannot also be regarded as parts of the soul. For instance, the nutritive capacity of the soul is found to exist in animals together with the perceptual capacity at the very least, if not also with the locomotive and the thinking capacity. In all such cases there is more to being a soul than just having the capacity to nourish oneself. Here the capacity to nourish oneself is one of the several capacities of the soul, and hence it is reasonable to call it a part of the soul. Perhaps, although this may be more controversial, the same applies to the capacity for theorizing. In those human beings who develop the capacity for theorizing, or while they exercise it, the capacity for theorizing seems to exist together with all the other capacities of the soul, and hence it can be regarded as a part of the soul.

Let us briefly add that a capacity which is found to exist without any other capacity in some cases *eo ipso* counts as a part of the soul in other cases in which it is found to exist together with one or more capacities. Although in these other cases it may not be separable otherwise, surely it remains separable in account, and that is sufficient, as we shall argue in the next section, to regard it as a part of the soul.¹⁹ In any case, the point we wish to make here is that

 $^{^{18}}$ The same use of $\kappa a\theta \dot{a}\pi\epsilon\rho,$ introducing a specification, can be found one line down, at 413^b28; cf. n. 27.

¹⁹ If C is a capacity that is found to exist without any other capacity, C must have

being a soul and being a part of the soul are not mutually exclusive categories. A capacity of the soul can be said to be both a part of the soul and a whole soul, depending on whether it is found to exist with or without other capacities, as the case may be in various genera of living beings.²⁰

So what is Aristotle's answer to the first question? According to our interpretation, it is the following: of the four capacities listed in **Tr(a)**, the nutritive capacity and the capacity for thinking (or a particular aspect of the capacity for thinking) are *souls*. They are souls in the case of living beings with no other capacities than to nourish themselves (plants) or to theorize (divine beings). The same two capacities are also *parts* of the soul in the cases where they coexist with one or several other capacities of the soul (in all animals and in theoretically minded humans, respectively).

Before we turn to the second question, we would like to make some further observations. We have seen that Aristotle characterizes the nutritive capacity and the capacity for theorizing as separable. The nutritive capacity is separable because in plants it is found to exist without any other capacity of the soul. The capacity for theorizing is separable because in divine beings it is likewise found to exist without any other capacity of the soul. By contrast, Aristotle never says that the perceptual and the locomotive capacities of the soul are separable, at least not without specifying the respect in which they are separable. In Somn. 1, 454^a17–19, he says, rather cautiously, that plants 'do not have the perceptual part [of the soul], whether it is separable or inseparable, although it is separable in power and in being'. So Aristotle is happy to say that the perceptual capacity is separable 'in power' ($\delta v \nu \dot{a} \mu \epsilon \iota$) and 'in being' $(\tau \hat{\omega} \epsilon i \nu \alpha i)$, but he is reluctant to call it just separable, separable simpliciter. Similarly with the locomotive capacity of the soul. When Aristotle comes to deal with it in 3.9, one of the opening questions

an account which makes reference to no other capacity; otherwise, i.e. if *C* had an account such that it must make reference to another capacity *D*, then admittedly *C* would not be able to exist without *D*. The fact that there may also be cases in which *C* is found to exist together with *D* makes no difference to *C*'s account; *C* remains separable in account even though in such cases it may no longer be separable from *D* in other ways. In short, *C*'s separability *simpliciter* in one case is sufficient to guarantee its separability in account in all cases. We owe the kernel of this point to Andreas Anagnostopoulos.

²⁰ So Aquinas, *In DA* §270 Pirotta (trans. Foster and Humphries, p. 192); P. Siwek (ed.), *Aristotelis tractatus De anima*, 2nd edn. (Rome, 1965), 281 ad 413^b15; H. Seidl (ed.), *Aristoteles: Über die Seele* (Hamburg, 1995), 236.

is 'whether it is some one part of the soul that is separable either in magnitude $[\mu\epsilon\gamma\epsilon\theta\epsilon\iota]$ or in account $[\tau\hat{\psi}\lambda\delta\gamma\psi]$ ' (432^a19–20). Again, he considers the possibility that the locomotive capacity is a part of the soul, whether separable in magnitude or in account, but we have no evidence whatsoever that he is ever willing to consider the possibility that it is separable *simpliciter*.

We can infer from this that separability *simpliciter*, i.e. without specifying the respect in which something is separable, is applicable only to those cases in which something is existentially independent of any other item in the relevant domain. We have seen that the nutritive capacity and the capacity for theorizing can be found to exist each without *any* other capacity of the soul, and that is why they qualify for being separable *simpliciter*. However, the perceptual and locomotive capacities are not found to exist without at least one other capacity of the soul. The perceptual capacity is never found to exist without the nutritive capacity, and the locomotive capacity is never found to exist without both the nutritive and the perceptual capacity. Therefore, Aristotle is unwilling to call them separable *simpliciter*.

Now the fact that the perceptual and locomotive capacities are not separable *simpliciter*, i.e. are not existentially independent of *any* other capacity, does not imply that they cannot be found to exist without *some* other capacity of the soul. The perceptual capacity can be found to exist independently of both the locomotive and the thinking capacity (in humble sessile beasts), or only of the thinking capacity (in more developed mobile beasts). Similarly, the locomotive capacity can be found to exist independently of the thinking capacity (in more developed mobile beasts). So, each one of the four capacities is existentially independent of *at least one* other capacity. This is important because Aristotle makes much of the existential independency relations among the capacities in **T3(d)** and in some other passages, as we shall see in Section 5.

4. Question (ii)

The second question for the four capacities runs: if they are parts of the soul, are they separable in account only or also in place $(\chi \omega \rho \iota \sigma \tau \delta \nu \lambda \delta \gamma \psi \mu \delta \nu \sigma \eta \kappa \alpha \iota \tau \delta \pi \psi)$? Let us start with observations about two features of the formulation of the second question. First, the ques-

tion has a hypothetical form: *if* the four capacities of the soul listed in **T1(a)** are parts of the soul . . . We would explain this feature with reference both to something that we have argued in the preceding section and to something that we shall argue in the present section. In the preceding section we have argued that being a soul and being a part of the soul are not mutually exclusive categories. So the hypothetical form of the question allows for the possibility that some of the four capacities, at least in some cases, may not be *parts* of the soul but *souls*. In this section we shall argue that one of the four listed capacities does not satisfy the criterion for being a part of the soul, so it would be important to formulate the question so as to allow for the possibility that some of the four capacities are neither parts of the soul nor souls, but mere capacities of the soul.

Second, Aristotle seems to presuppose that there is an *intrinsic* connection between being a part of soul on the one hand and being separable on the other. He does not consider the possibility of an inseparable part of the soul, and the way he formulates the question strongly suggests that being a part of the soul implies either being separable in account only or being separable in account *and* in place, without there being a third option. In other words, question (ii) has the form of an exhaustive disjunction which can serve as a major premiss of a disjunctive syllogism.²¹

Let us first say something about the types of separability that Aristotle introduces here. We take it that 'x is separable from y in place $[\tau \delta \pi \phi]$ ' means that x can have a location independent of the location of y, i.e. x can be found at a place at which y is not found. Another of Aristotle's ways of expressing the same relation is by saying that x is separate from y 'in magnitude' $(\mu \epsilon \gamma \epsilon \theta \epsilon \iota)$.²² On the other hand, when Aristotle claims that x is separable from y 'in account', what he means is that the account of x is independent of y, i.e. there is an adequate definition of x which makes no reference to y. The same relation is sometimes expressed by saying that x is separable from y 'in being' $(\tau \phi \epsilon i v a \iota)$: namely, what it is to be x is

²¹ The same exhaustive disjunction seems to be found at 3. 4, 429^a11–12: 'either being separable or not being separable in magnitude but in account' ($\epsilon i \tau \epsilon \chi \omega \rho \iota \sigma \tau o \hat{v}$ $\delta \nu \tau \sigma s \epsilon i \tau \epsilon \mu \eta \chi \omega \rho \iota \sigma \tau o \hat{v} \kappa a \tau a \mu \epsilon \gamma \epsilon \theta \sigma s d \lambda a \kappa a \tau a \lambda \delta \gamma \sigma \nu$; this is the text printed in Ross's editio maior, which follows MS E; other editors print $\kappa a \lambda$ before $\mu \eta$).

²² See *DA* 3. 4, 429^a12; 3. 9, 432^a19–20; 3. 10, 433^b24–5; cf. R. D. Hicks (ed.), *Aristotle:* De anima [*De anima*] (Cambridge, 1907), 475 ad 429^a12: ' $\kappa \alpha \tau \dot{\alpha} \ \mu \epsilon \gamma \epsilon \theta \sigma \sigma$ expresses the same meaning as $\kappa \alpha \tau \dot{\alpha} \ \tau \delta \sigma \sigma v$, spatially, locally, as one physical thing and its accidents are separate from another. Either phrase or both can be opposed to $\lambda \delta \gamma \omega$ or $\kappa \alpha \tau \dot{\alpha} \ \lambda \delta \gamma \sigma v$.'

independent of what it is to be *y*, so that *x* can be adequately defined without *y*.

With these tools in hand, we can turn to the text. In T₃(a) and (c) Aristotle is making a case against the view that parts of the soul are separable in place. He introduces an empirical observation that he has already submitted at the end of DA 1. 5 against those who claim that the soul has parts, and presumably Aristotle's target here is the same: the doctrine that each part of the soul is located in a different part of the body, as propounded by Plato in the Timaeus.23 The observation starts with the familiar case of plants that can be divided so that each segment continues to live at a different place, as in grafting. This shows that the soul in each plant 'is actually one but potentially many': that is, the soul of each plant can be replicated or, as we might say, 'cloned'. Then Aristotle observes that this phenomenon has a parallel in the animal world too. Some insects can be divided so that each segment carries on living.²⁴ More to the point, each segment keeps all the capacities of the soul that the insect had prior to being divided. Presumably Aristotle observed that segments of divided insects wiggle when poked, which was sufficient for him to ascribe them perception and locomotion. And having perception and locomotion seemed sufficient for ascribing to them also imagination, pleasure and pain, and appetite. Now, if each segment of the divided insect preserves all capacities of the soul that the insect had prior to being divided, this shows that all we can ever get at two separate places are two souls preserving all their original capacities, never two different capacities of the soul. Hence, the capacities of the soul are not separable from one another in place. If the soul really had parts localized in different parts of the body, it should be possible to separate parts of the soul by di-

 $^{^{23}}$ In the *Timaeus* (44 D; 69 C-72 D) Plato argues that the rational part of the soul is localized in the head, the spirited in the chest, and the appetitive in the abdomen. Although we find the same parts of the soul mentioned in Plato's other dialogues, their localization is found only in the *Timaeus*.

²⁴ This is one of Aristotle's favourite empirical observations: *DA* 1. 4, 409^a7– 10; 1. 5, 411^b19–27; *Long.* 6, 467^a18–23; *Juv.* 2, 468^a20–^b2, 4–15; *Resp.* 17, 479^a1– 7; *IA* 7, 707^a24–^b3; *HA* 4. 7, 531^b30–532^a5; *PA* 3. 5, 667^b19–25; 4. 6, 682^b27–32; *Metaph. Z* 16, 1040^b10–16. For discussions of Aristotle's observation, see R. K. Sprague, 'Aristotle and Divided Insects', *Méthexis*, 2 (1989), 29–40; D. Lefebvre, 'L'argument du sectionnement des vivants dans les *Parva naturalia*: le cas des insectes', *Revue de philosophie ancienne*, 20 (2002), 5–34; and A. P. Bos, 'Aristotle on Dissection of Plants and Animals and his Concept of the Instrumental Soul–Body', *Ancient Philosophy*, 27 (2007), 95–106.

viding the body. However, that is not how things work. With this observation, then, the second disjunct in question (ii) is eliminated.

One would expect Aristotle to confirm the first disjunct in question (ii) and thus conclude that the four capacities listed in TI(a), with the exception of the capacity for theorizing, are separable in account only, but that is not what we get in T3(c). Let us look at the whole section again.

T₃(c) The other parts of the soul, it is clear from what we have said, are not separable in the way some claim. But that they are different in account is clear—since to be capable of having opinions and to be capable of perceiving are different, if perceiving is different from having opinions—and likewise each of the other aforementioned [capacities of the soul]. (413^b27–32)

On the standard view, this passage contains Aristotle's *solution* to the *aporia* concerning parts of the soul. Having shown that the four capacities, with the exception of the capacity for theorizing, are not separable—either in place or in account only—Aristotle concludes that they are *different* in account. Talk of parts of the soul thus collapses into talk of capacities, as it turns out that capacities are merely different, not separable, in account from each other. On this view, then, the question of parts of the soul is *settled* by the end of *DA* 2. 2.

However, this cannot be the correct view. If the question of parts of the soul were indeed settled in $DA \ 2. \ 2$, why would it be reopened in 3. 9? Moreover, if all capacities other than the capacity for theorizing are inseparable from each other, how should one interpret all those passages in which Aristotle explicitly says that the nutritive capacity is separable ($DA \ 1. \ 5, 411^{b}29-30; \ 2. \ 2, 413^{a}31-3, \ b5-8;$ 2. 3, $415^{a}2-3; Somn. \ 1, 454^{a}11-14$), or that the perceptual capacity is separable (in some respects; cf. Somn. 1, $454^{a}17-19$)? More specifically, what is it in Aristotle's discussion in **T3(a)** and **(b)** that justifies the alleged conclusion in **(c)** that the four capacities of the soul are *different* in account? The argument from dissection of insects in **T3(a)** shows only this much: that the four capacities of the soul, with the exception of the capacity for theorizing indicated in **T3(b)**, are not separable from one another in *place*.²⁵ This eliminates

²⁵ With a majority of ancient and modern commentators, we take this to be the gist of the sentence 'The other parts of the soul, it is clear from what we have said, are not separable in the way some claim' at 413^b27–9; that is, the other parts of the soul are not separable in place, as Plato claims in the *Timaeus*. Gábor Bétegh suggested in discussion that the sentence could be read differently, to the effect that the other parts of the soul are not separable from the body. This would pick up the sort

only the second disjunct in question (ii), and from that we are not allowed to conclude that the four capacities of the soul are therefore *different* in account. The only conclusion logic permits us to draw is that the first disjunct is true: namely, if the four capacities are parts of the soul, they are *separable in account only*.

There seem to be two possible sources of the puzzling inference that the commentators are willing to draw from Aristotle's disjunction, namely that the four capacities of the soul are merely different in account.²⁶ First, one might think that separability in account is ruled out along with separability in place. The only ground for thinking so is that Aristotle does not specify the type of separability in the opening sentence of **T3(c)**.²⁷ True, he does not say in 413^b27-9: 'The other parts of the soul, it is clear from what we have said, are not separable in place, as some claim.' One might surmise that Aristotle did not specify the type of separability because he wanted to cover both types, separability in place as well as separability in account only. However, nothing that Aristotle says in the preceding text eliminates the possibility that the capacities of the soul are separable in account only. The fact that each segment of the divided insect has the perceptual as well as the locomotive capacity of the soul certainly shows that the perceptual capacity cannot be removed from the locomotive capacity, but it does not show that the perceptual capacity cannot be adequately defined without the locomotive capacity. As a matter of fact, the perceptual capacity is adequately defined without referring to the locomotive or any other capacity in DA 2. 12, as we shall see in Section 7, which means that it is separable in account.

of separability mentioned two lines up with reference to *nous*, and some such view could be plausibly attributed to Plato, for instance in the *Phaedo*. However, such a reading does not fit the context, since the preceding and the immediately following text talks about separability and difference of parts or capacities of the soul *in relation to one another*; cf. nn. 4 and 13.

 26 e.g. Hicks (ed.), *De anima*, 325: 'While we deny that the other faculties can have separate existence, we at the same time fully maintain that each of them is logically distinct and separable in thought'; and 'this [i.e. difference in account] was the alternative to spatial or local distinctness set forth in 413 b 14' (ibid. 327 ad 413^b29); Ross in his *editio maior*, 218 ad 413^b11–414^a4: 'He . . . maintains that the other faculties of the soul, though distinguishable, are not separable from each other'; Polansky, *De anima*, 182: 'That the functional parts of the soul differ in account, while not being separate in other ways, is manifest.'

²⁷ Actually, we would claim that $\kappa \alpha \theta \delta \pi \epsilon \rho \tau \nu \epsilon s$ $\phi \alpha \sigma \nu$ serves as a specification; cf. nn. 18, 23, and 25. However, since this is not an unambiguous reference to Plato's *Timaeus*, we shall leave this point aside.

Second, the puzzling inference from Aristotle's disjunction may rest on the confusion of separability in account with difference in account. Let us explain why it is necessary to keep these two notions apart. Aristotle is often found to say that x and y are the same in number but 'different in being' ($\xi \tau \epsilon \rho o \nu \tau \hat{\omega} \epsilon i \nu \alpha \iota$) or 'different in account' ($\xi \tau \epsilon \rho o \nu \tau \hat{\omega} \lambda \delta \gamma \omega$). What he means is that x and y are two distinct items or features which may coincide in the same subject. For instance, one and the same person can be both a doctor and a patient, but what it is to be a doctor is different from what it is to be a patient, i.e. doctor and patient have different accounts. However, their accounts are not separable from one another, since a doctor is a person who treats a patient, and patient is a person treated by a doctor. So two things can be different in account without being separable in account. To put it more generally, two things that are different in account can be (i) inseparable from one another in account (being a doctor and being a patient), (ii) separable from one another in account (being a doctor and being a musician), or indeed (iii) such that one is separable from the other in account but not vice versa, e.g. being a doctor and being a member of a professional medical association; for the account of a doctor does not include any reference to being a member of a professional medical association, whereas the account of a member of a professional medical association must make a reference to being a doctor.²⁸

Now Aristotle does not do us the favour of explicitly drawing the conclusion from the elimination of the second disjunct in question (ii). Instead of saying something to the effect that, since the four capacities of the soul (apart from the capacity for theorizing) are not separable in place, *therefore* they are separable in account only, in **T3(c)** he appends the disappointingly weak claim that the aforementioned capacities of the soul are *different* in account ($\lambda \delta \gamma \varphi$ $\xi \tau \epsilon \rho a$, 413^b29). No doubt this is the key evidence for the standard view. However, it is perfectly possible to interpret the sentence in 413^b29 ('But that they are different in account is clear') in a way that avoids attributing to Aristotle a puzzling piece of reasoning which contradicts other passages in the corpus and renders his division of

²⁸ It is important to observe that separability, unlike difference, is not a necessarily symmetrical relation. If *a* is separable from *b*, it is not necessary that *b* is also separable from *a*. For instance, the nutritive capacity is separable from the perceptual, whereas the perceptual capacity is not separable from the nutritive. By contrast, if *a* is different from *b*, it is necessary that *b* is also different from *a*. Cf. Whiting, 'Locomotive Soul', 144–5.

the soul arbitrary. We propose, therefore, to read the sentence in $413^{b}29$ not as a conclusion of the preceding argumentation,²⁹ but as a manœuvre to keep the question open: by stating that parts of the soul are merely *different* in account, he is stating much less than expected, leaving it open whether the capacities mentioned in **T1(a)** are in fact *parts* of the soul or not.

Of course, one wonders what Aristotle's motivation is for keeping the question open. Why does he not state the conclusion of his disjunctive syllogism loud and clear here, and thus settle the issue once and for all? It is hard to say anything with absolute certainty on this point, but the following two considerations suggest themselves.

First, the conclusion that the four listed capacities of the soul, if they are parts of the soul, are separable in account only would be somewhat idle in the absence of adequate definitions of these four capacities. Only with such definitions at hand can we see whether these capacities are indeed separable from one another in account, or which capacities have accounts that depend on which other capacities. However, we cannot expect to have such definitions before the necessary work has been done. It is no accident, therefore, that the question of parts of the soul, their separability in place or in account only, reappears towards the end of the *De anima*, once the definitions of the first three capacities listed in **T1(a)** are provided and it remains to find a definition of the fourth one, the locomotive capacity (*DA* 3. 9, 432^a18 ff.).

Second, there is one item in the list of the four prima facie candidates for parts of the soul which does *not* satisfy the criterion of parthood—that is, separability in account—and yet Aristotle wants to keep it in play. The item in question is the locomotive capacity of the soul. That the locomotive capacity is not separable in account is clear from the fact that, unlike the other three items, it is nowhere defined in the *De anima* or elsewhere. Also, unlike the other capacities mentioned in **T1(a)**, there is no correlated object of locomotion (a supposed *kinēton kata topon*).³⁰ And all attempts at defining it in *DA* 3. 9–10 end up referring to *other* capacities, such

²⁹ Observe that the grammatical structure and the word order of the sentence in 413^b29 ($\delta \epsilon$) speak against taking this claim as a conclusion of what precedes.

³⁰ In the case of the other three capacities mentioned in **T1(a)** there are such correlates, namely $\tau\rho_0\phi\dot{\eta}$, $a\dot{l}\sigma\theta\eta\tau\dot{o}\nu$, and $\nu o\eta\tau\dot{o}\nu$. For further arguments against considering the locomotive capacity to be a part of the soul, see K. Corcilius, *Streben und Bewegen: Aristoteles' Theorie der animalischen Ortsbewegung [Streben und Bewegen]* (Berlin and New York, 2008), 21–55, 112.

as the capacity to have desires, imagination, *nous*, and at a minimum to the perceptual capacity. So it is clear that the locomotive capacity is not separable in account from the other capacities, since all attempts at stating its account make reference to at least one other capacity.³¹ However, saying so at this point would effectively rule out the locomotive capacity at a very early stage in Aristotle's positive account of the soul. And this would significantly reduce the prima facie plausibility of Aristotle's treatment, since—as he himself notes twice in the *De anima*—locomotion is arguably one of the two most prominent features of living beings (*DA* 1. 2, 403^b20 ff., and 3. 3, 427^a17–18; cf. 3. 9, 432^a15–16). Hence, Aristotle avoids unnecessary complications by refusing to conclude from his disjunctive syllogism that the four capacities of the soul, if they are parts, are separable in account only.

In any case, and in addition to the points just mentioned, it is sufficient for our concerns that there is nothing in the text that forces us to think that Aristotle is committed to the highly problematic view according to which *difference* in account is sufficient for being a part of the soul. So we propose to take Aristotle's disjunction in the formulation of question (ii) seriously and to draw the only possible conclusion from it:

- (1) if the four capacities listed in **T1(a)** are parts of the soul, then either they are separable in account only, or also in place;
- (2) the four capacities are not separable in place; $^{3^2}$
- (3) therefore, if the four capacities listed in **TI(a)** are parts of the soul, they are separable in account only.

What clearly follows from the conclusion is that the criterion for parthood is *separability in account*: a capacity of the soul counts as a part of the soul if and only if it is separable in account, i.e. if it has an account or definition which makes reference to *no* other capacity of the soul. But instead of providing a statement of the criterion, Aristotle remarks that the four listed capacities are *different* in account. We have argued that this is a manœuvre to keep the locomotive capacity on the table and not to decide on the issue prematurely,

³¹ Cf. Corcilius, Streben und Bewegen, 243-87.

³² We have seen that this applies, strictly speaking, only in the case of living beings whose souls feature at least two of the four capacities. In the case of living beings whose souls are exhausted by the capacity for theorizing (divine beings) or by the nutritive capacity (plants), these two capacities are separable *simpliciter*.

since fully answering the question requires definitions of all of the four capacities, which is what the bulk of the rest of the *De anima* is about.

Before we proceed with our interpretation of Aristotle's answer to question (ii), it remains to comment on his execution of the manœuvre in T₃(c). Instead of drawing the correct conclusion from his disjunctive syllogism-namely that the four listed capacities, if they are parts of the soul, are separable in account only-Aristotle appends the observation that they are clearly different in account. The example he uses to illustrate this observation is the relation between the capacity to have opinions and the perceptual capacity. What it is to be the capacity to have opinions is different from what it is to be the capacity to perceive, since perceiving is different from having opinions. The same, Aristotle adds, goes for the other aforementioned capacities. An attentive reader will pause at the question why Aristotle introduces the capacity to have opinions $(τ \dot{o} \delta o \xi a \sigma \tau \iota \kappa \dot{o} \nu)$ in addition to the four listed capacities, when he could make the same point just as well with any two of the four capacities in TI(a). And apart from such concerns for economy, why the capacity to have opinions-of all the other capacities of the soul? If he must introduce a fifth one, for whatever reason, why does he not pick one of the capacities mentioned a little earlier, in T₃(a), such as imagination, pleasure and pain, or appetite? We cannot be sure, of course, but perhaps Aristotle wanted to indicate something. Remember that both Plato and Aristotle conceive of the capacity to have opinions as something different from, but dependent on, the perceptual capacity. The two capacities have different accounts, yet the account of the capacity to have opinions must make a reference to the perceptual capacity, or at any rate to the objects of the perceptual capacity, but not vice versa. The same situation, we have argued, holds between the locomotive capacity and the perceptual capacity, and that is exactly why Aristotle switches from separation in account to difference in account. So the example may be regarded as a tacit admission of the manœuvre and a hint as to why it is done.

5. Distribution of the four capacities of the soul

After the manœuvre, Aristotle adds an observation concerning the distribution of the capacities of the soul mentioned in $T_{I}(a)$ among living beings:

T₃(d) Moreover, in some living beings all these [capacities of the soul] are present, in others some of them, and in still others only one (this is what makes a difference among living beings); however, the cause of this must be considered later. Something very similar happens with the senses; some [kinds of animal] have all the senses, others only some of them, and still others only one, the most indispensable, touch. $(413^{b}32-414^{a}3)$

Before we explain the purpose of this observation, let us first say something about its content. The observation points at the fact that the distribution of capacities of the soul among living beings is arranged in an ordered series. In souls which contain a plurality of capacities, each 'higher' capacity is found to exist together with all the lower ones: in plants only the nutritive capacity is found, in animals the perceptual capacity is found in addition to the nutritive, in more developed mobile animals the locomotive capacity is found in addition to the perceptual and the nutritive, and in human beings the capacity for thinking is found in addition to the locomotive, perceptual, and nutritive. Aristotle does not explicate this series in so many words, but he clearly has it in mind here, since he claims that the senses are distributed in a similar fashion. Namely, in some animals only touch is found, in others a few other senses are found in addition to touch, and in the most developed animals all five senses are found. The ordered series of the capacities and the senses is restated in a more elaborate way at 2. 3, 414^b32–415^a11.

Now why does Aristotle mention this here? The 'moreover' ($\check{e}\tau\iota$ δ ') in 413^b32 makes it clear that he intends to introduce a further point in the sequence of arguments concerning question (ii). It seems to contain another reason for thinking that the capacities of the soul mentioned in **T1(a)** are not separable in place. Except for the nutritive capacity, which is found to exist apart from all the other capacities in plants, none of the other capacities is found to exist without at least one other capacity: the perceptual capacity is never found to exist apart from the nutritive, the locomotive apart from the perceptual and the nutritive, and the capacity for thinking (in the sublunary sphere, at any rate) apart from the locomotive, the perceptual, and the nutritive capacity.³³

Aristotle's observation in $T_3(d)$ certainly testifies to the local inseparability of the four capacities of the soul, but it does more than

³³ Apart from the nutritive capacity in the case of plants, the other exception is the capacity for theorizing in the case of divine beings. In these cases, as we have seen, the two capacities should be considered souls, not parts of the soul.

that—it suggests that the soul is naturally divided into these four capacities, namely in so far as they are distributed among living beings by way of ordered series. This distribution, Aristotle maintains, sorts out the main genera of living beings, which allows Aristotle to assume, as he does in the second half of DA 2. 3 (414^b20–415^a13), that providing successive accounts of the four capacities amounts to a satisfactory account of the soul, an account which is explanatory of the souls that actually exist in the world, namely the souls of plants, animals (sessile and mobile), and humans. The Aristotelian natural philosopher's treatment of the soul is thus sharply contrasted with what seems to have been the prevailing approach at the time, restricted to studying the human soul only (DA 1. 1, 402^b3-5).

So the observation in $T_3(d)$ brings a sort of empirical *confirmation* of the tentative list of capacities adduced in $T_1(a)$, since it is the distribution of precisely these four capacities that sorts out living beings in the main genera. As Aristotle himself says in the parenthetical remark at $4_{13}b_{33}-4_{14}a_{11}$: *'This* is what differentiates living beings.'³⁴ So the four prima facie capacities of the soul are operative in differentiating the main genera of living beings, which means that Aristotle's choice of the four capacities listed in $T_1(a)$ has strong vindication in nature, and that justifies the whole programme of the *De anima*.

6. The criteria of parthood at work in De anima 3.9

Having provided a systematic account of the first three capacities of the soul from **T1(a)**, Aristotle turns to the last one, the locomotive capacity, towards the end of the treatise, in DA_3 . 9–11. This is where the question of parts of the soul and their separability is taken up again. We have argued that this question was not settled earlier (although the right answer was in the air) because Aristotle hesitated to call the locomotive capacity a part of the soul, and yet he did not want to eliminate it from the list of topics that needed a systematic discussion in order to provide an appropriate treatment of the soul. This hesitation concerning the locomotive capacity is justified in DA_3 . 9–11. Each one of the several attempts at defining the locomotive capacity in the course of the argumentation in DA

³⁴ Cf. n. 8 above.

3. 9–11 ends up making reference to some of the psychic capacities mentioned previously in the *De anima*. Since it is not separable in account, the locomotive capacity cannot be a part of the soul. It must be something other than a part of the soul then, for instance a capacity of the animal which is to be explained with reference to one or several genuine parts of the soul. We cannot go into the details of Aristotle's treatment of the locomotive capacity here,³⁵ but we would like to discuss the passage in which the question of parts of the soul is reopened in 3. 9. Here is what Aristotle says:

T4(a) Since the soul of animals is marked by two capacities, by the discriminative, which is the work of thought and perception, and by moving by way of local motion, let this much suffice about perception and thought, and we should now enquire about the moving [capacity], what of the soul it is, **(b)** whether it is some one part of the soul separable either in magnitude or in account, or the whole soul; and if it is a part, [we should enquire] whether it is a special part in addition to those usually distinguished or mentioned by us, or one of them.

(c) The problem at once presents itself, in what sense we should speak of parts of the soul and how many [we should distinguish]. For in a sense there seem to be indefinitely many parts, and not only those that some people mention when they distinguish the rational, the spirited, and the appetitive, or with others the rational and the non-rational; for *if we take the dividing-lines by which they separate into these*, we shall find parts far more distinctly separated from one another than these, namely those we have just treated: the nutritive, which belongs to plants as well as to all animals, and the perceptual, which cannot easily be classed as either non-rational or rational; furthermore, the imaginative, which is different in being from all the others, while it presents a great problem regarding which of those it is the same or not the same as—*if one posits separate parts of the soul*; and in addition to these the desiderative, which would seem to be different both in account and in power from all the others. $(432^{a_1}5^{-b_4})$

In section (b) Aristotle uses more or less the same formulation as in $T_{I}(b)$.³⁶ With this he clearly addresses the issue he has discussed earlier, in T_{I} and T_{3} , namely the question of parts of the soul. He

³⁵ For an account of Aristotle's theory of animal motion and the locomotive capacity of the soul see Corcilius, *Streben und Bewegen*.

³⁶ There are some notable dissimilarities between $T_4(b)$ and $T_1(b)$. First, in $T_4(b)$ the locomotive capacity is said to be either a part of the soul (and as such being separable either in place or in account) or the whole soul; the latter alternative, namely a capacity being accounted for in terms of the whole soul, is not mentioned in $T_1(b)$. Second, the option that a capacity of the soul (namely the locomotive capacity) is identical with some of the other capacities or parts of the soul does not occur in $T_1(b)$.

asks whether the locomotive capacity is separable in magnitude (or place) or separable in account. Again, *difference* in account—which was introduced instead of, and often mistaken for, a conclusion of the disjunctive syllogism in $T_3(c)$ —is not even mentioned. In talking about parts of the soul here, Aristotle allows only for their *separability*, namely either separability in magnitude or separability in account. Given what we have argued so far, this is only as it should be.

However, here we are mostly interested in section $T_4(c)$, in which Aristotle puts forward his critique of the ways of partitioning the soul proposed by other thinkers, presumably Plato and his followers.³⁷ His critique is obviously methodological in character. Here Aristotle is not interested so much in *which* parts of the soul earlier thinkers have postulated, but rather *how* they arrived at these parts, i.e. what criteria they used to divide the soul. This is important because such a methodological critique seems to work only against the backdrop of a different method of dividing the soul, and hence it should be informative regarding Aristotle's view as to what the right method of dividing the soul is. And although Aristotle again does not tell us straightforwardly what he takes to be the criterion of parthood of the soul, we believe that his critique in *DA* 3. 9 presupposes that the criterion is separability in account.

The argument in **T4(c)** has the structure of a *reductio*. Aristotle, for the sake of the argument, adopts the Platonist criteria for dividing the soul in order to show that these criteria lead to undesirable consequences. He argues that, *given the Platonist criteria for dividing the soul*, we will end up with an undesirably large number of parts; hence, the Platonist criteria for dividing the soul must be wrong.³⁸

Well, what is the Platonist method of dividing the soul? According to Aristotle, the criteria employed by the Platonists are *differ*-

³⁷ Aristotle seems to distinguish two groups of earlier thinkers, those who advocate tripartite division of the soul into the rational, the spirited, and the appetitive part, and those who propound bipartite division into the rational and the non-rational part. Whereas the first group certainly includes Plato and his followers, the second group is harder to fix, not least because Aristotle himself accepts the bipartite division in his ethical works; cf. P. A. Vander Waerdt, 'Aristotle's Criticism of Soul-Division', *American Journal of Philology*, 108 (1987), 627–43.

³⁸ Brad Inwood observed that a similar line of criticism can be found in Aristotle's *Peri ideon*. Given the criteria used for postulating Forms, Aristotle shows that Plato winds up with too many Forms, including Forms of not-beings, indeterminate and indefinite things, relatives, etc. For a detailed analysis of Aristotle's arguments in *Peri ideon* see G. Fine, *On Ideas: Aristotle's Criticism of Plato's Theory of Forms* (Oxford, 1993).

ence in account and in power, both of which he later summarizes as 'division and separation according to powers' (ἐἀν κατὰ τὰς δυνάμεις διαιρώσι καὶ χωρίζωσι, 3. 10, $433^{b}2 = T2$).³⁹ These criteria are clearly not the correct ones for parthood of the soul, or at any rate not the sufficient ones, since Aristotle thinks that their application leads to an unacceptably large number of parts of the soul. It should be clear by now that what he militates against here is the division of the soul into parts according to different capacities of the soul, and that is precisely what Aristotle's own position is standardly, and mistakenly, taken to be.4° What Aristotle finds objectionable about 'division and separation according to powers', we submit, is the idea that something counts as a part of the soul only because it is a distinct capacity of the soul: if x is different in account and in power, then x is separate (=x is a part of the soul). This is clearly wrong for Aristotle, because difference in account by no means amounts to separability in account, and still less to separability in place, which is what characterizes parts of the soul in Plato's Timaeus.

It follows that, on the standard view of what parts of the soul are in Aristotle, his critique of the Platonist division of the soul in 3. 9 is either unintelligible or destructive of Aristotle's own theory. More importantly, the critique put forward in **T4** confirms our interpretation by showing that Aristotle did not content himself with *difference* in account as a sufficient criterion for parthood, but that he insisted on some sort of *separability*. And given that he elsewhere (in **T3**, but also in *DA* 1. 5, 411^b5–30) rejects the Platonic view according to which parts of the soul are separable in place, it is more than likely that *separability in account* is the criterion at work in the background of Aristotle's argumentation in *DA* 3. 9.

7. Conclusions

In **T3** Aristotle accomplishes two important tasks. First, he gives us good reasons for accepting his division of the soul into the four capacities listed in **T1(a)**. Second, he makes sure that we do not conceive of these four capacities as locally separable parts of the soul,

³⁹ What he has in mind here is, we suggest, not only the famous 'principle of contraries' of *Rep.* 436 A–c, but also the metaphysics of dispositions presupposed by the individuation of capacities in terms of their corresponding activities, which we take the formulation 'difference in power [$\delta v r \dot{a} \mu \epsilon i$]' to refer to; see *Rep.* 477 C–D; cf. *Phdr.* 270 B ff. ^{4°} See pp. 82–3 for a summary of the standard view.

as they are conceived in Plato's Timaeus, because such a conception would pose a threat to the unity of the soul. However, none of what Aristotle says against locally separable parts of the soul implies that he abandons the possibility that the four capacities listed in **TI**(**a**) are definitionally separable parts of the soul. To be sure, Aristotle is reluctant to say explicitly that they are parts of the soul on account of their definitional separability, but his reluctance, as we have explained, is motivated by two methodological concerns. On the one hand, he does not want to abandon the locomotive capacity at an early stage of his treatment of the soul, although its proper treatment will eventually show that it is not really a part of the soul, since it is not definitionally separable: it cannot be defined without making reference to other capacities of the soul, the perceptual capacity at a minimum. On the other hand, concluding expressly that the four capacities are parts of the soul on account of being definitionally separable would immediately call for their definitions, but their definitions can come only at the end of a proper enquiry into each one of them.

If we look at the first three capacities of the soul, we shall find that each one of them is defined with reference to their respective objects. The nutritive capacity is what 'maintains its possessor as such, while food prepares it for activity' (2. 4, 416^b17–19). The perceptual capacity is what 'receives sensible forms without matter' (2. 12, 424^b1–2; cf. 3. 2, 427^a14–16). The thinking capacity is more difficult, as Aristotle's account of this capacity is more sketchy, but it will not be off the mark to say that it is what receives intelligible forms or what grasps essential features (3. 4, 429^a15–18, 429^b30–1; 3. 6, 430^b27–30). We can see that each one of these three capacities is separable in account, for each has a definition that makes no reference to any other capacity of the soul. This is precisely what entitles them, in Aristotle's theory, to be called parts of the soul.

This is not to say that having a correlative object, as such, is sufficient for separability in account. For instance, sometimes Aristotle speaks about the object of desire ($\tau \partial \ \partial \rho \epsilon \kappa \tau \delta \nu$), so one might think that the capacity for desire ($\tau \partial \ \partial \rho \epsilon \kappa \tau \iota \kappa \delta \nu$) has an account that makes reference to such an object, without making reference to any other capacity of the soul, and hence one might conclude that the capacity for desire is a part of the soul. However, Aristotle would object to such an account: 'The object of thought implies that there is thought of it, but the thought is not relative to that of which it is the

thought; for we should then have to say the same thing twice. Similarly sight is the sight of something, not of that of which it is the sight (though of course it is true to say this); in fact it is relative to colour or to something else of the sort' (*Metaph. A* 15, $1021^{a}31-^{b}2$). So one would have to spell out what the object of desire is independently of being the object at which desire is directed, and in doing so one would have to say, for instance, that it is something perceived to be good or thought to be good, thus making reference to the capacities for perception and thought. It would turn out, then, that the capacity for desire is not separable in account after all, and hence not a part of the soul.

Given that separability in account is Aristotle's criterion of parthood, if we want to see whether a capacity of the soul is a part of the soul, we need to check whether its definition makes reference to any other capacity of the soul.

(1) If it does, we can conclude that it is not a part of the soul, but a capacity dependent on whatever capacity is mentioned in its definition. For example, imagination is defined as 'change which comes about as a result of actual perception' ($DA_{3.3}, 429^{a_{I-2}}$), so it is inseparable in account from the perceptual capacity of the soul. Memory is defined as the capacity to 'have an image regarded as a copy of that of which it is an image' (*Mem.* 1, 451^{a_{I4-I5}}), which means that it is inseparable in account from the capacity of imagination, which is itself in turn inseparable in account from the capacity of perception. Similarly, the criterion is not satisfied by the capacities to experience pleasure and pain, to have desires, to recollect, to dream, and indeed to locomote.

Although Aristotle does not want to rule out the locomotive capacity at an early stage of his positive account of the soul, as we have argued, he seems to have supplied subtle hints which are supposed to warn the attentive reader (or a returning reader with the benefit of hindsight) that the locomotive capacity is not really on a par with the other three capacities listed in **T1(a)**. One hint is found right there in **T1(a)**, where Aristotle uses adjectives formed with the suffix *-ikos* to designate the first three capacities, whereas the fourth capacity is not called $\kappa \iota v \eta \tau \iota \kappa \partial v \kappa a \tau \partial \tau o \pi \delta v$, the term he uses elsewhere (2. 3, 414^a32, 414^b17, 415^a7), but rather, less technically, $\kappa \iota v \eta \sigma \iota s$.⁴¹ The other hint is found at the beginning of 2. 4, where Aristotle expands on the conclusion of the preceding chapter, in which it was

⁴¹ Cf. Whiting, 'Locomotive Soul', 149 n. 8.

established that accounts of each one of the four capacities operative in sorting out living beings into main kinds (including the locomotive capacity: see 2. 3, $415^{a}6-7$) constitute an appropriate account of the soul. However, at the start of 2. 4 Aristotle simply omits the locomotive capacity:

If one has to say what each one of these [capacities] is—e.g. what is the intellective capacity, what is the perceptual, or what is the nutritive capacity—prior to that one has to say what thinking is and what perceiving is, since activities and actions are prior in account. But if this is so, and prior to these one has to consider their correlative objects, first one must determine about them for the same reason, e.g. about nourishment, the sensible object and the intelligible object. (415^a16-22)

One might reply that the locomotive capacity is omitted simply because it would not fit the illustration, since it does not have a correlative object in the way the other three capacities do. That might be correct, but if it has no correlative object in the way the other three capacities do, does that not seem to make its definitional separability problematic?

(2) If the definition of a capacity of the soul does not make reference to any other capacity of the soul—as in the case of the nutritive, the perceptual, and the thinking capacity—should one conclude that it is a part of the soul? In principle we would say yes, although we recognize that there may be cases which, on the face of it, suggest otherwise. These cases seem to threaten our view that the criterion of parthood of the soul is separability in account, so let us have a look at them.

The first case is that of the special senses. Each special sense is defined with reference to one kind of special sensible, without referring to any other capacity of the soul. Thus vision is defined as the ability to receive colours, hearing is defined as the ability to receive sounds, etc. This suggests that the special senses are separable in account, and hence that they are parts of the soul. If we find this suggestion unpalatable, as we of course do, should we not abandon the view that separability in account is the criterion of parthood of the soul? Not at all.

Although Aristotle does treat the special senses as independent capacities in DA 2. 7–11, which is methodologically a perfectly sound thing to do, in 3. 1–2 he introduces a series of considerations which are supposed to show that the special senses are not really in-

dependent capacities, but only distinct aspects of one single thing, namely the perceptual capacity of the soul. That is, questions such as how we perceive the common sensibles, or how we discriminate between objects of different special senses, can only be plausibly answered if we suppose that the perceptual capacity of the soul is really what takes on colours, sounds, and all the other special sensibles. Here is what Aristotle says in *De sensu* 7, 449^a5–10:

If, then, the soul perceives sweet with one part and white with another part, then what is made up of these parts is either some one thing, or not. But it must be one; for the perceptual part is one thing. . . . Therefore, there must be some one thing of the soul with which everything is perceived, as has been said before, each kind [of special sensible] through one [of its aspects, i.e. special senses].

This shows that the definition of the perceptual capacity as the ability to take on sensible forms is very general and only provisional, because sensible forms come in five different kinds (for simplicity, we take all tangible qualities as one kind of sensible form), and the activity of receiving different kinds of sensible forms is different in each case, corresponding to seeing, hearing, etc. It is tempting to think that these activities and their corresponding objects belong to different individual senses, but Aristotle warns us that this is a misleading way of thinking. It is the perceptual capacity of the soul that receives all kinds of sensible forms without matter. The five special senses are just names for its ability to receive five different kinds of sensible forms.⁴² Hence, our view that separability in account is the criterion of parthood of the soul is not threatened by the case of the special senses.

The second case is that of the reproductive capacity ($\tau \delta \gamma \epsilon \nu \nu \eta \tau \iota$ - $\kappa \delta \nu$), which seems to be defined as the 'ability to produce another thing such as oneself' (2. 4, 415^a27–8). Well, if this is the account of the reproductive capacity, and if it does not make reference to any other capacity of the soul, should we not count it as a part of the soul? Although this would require a more detailed discussion, we would argue that the object of the reproductive capacity is really the same substantial form that the nutritive capacity maintains for

⁴² Of course, there is more to this story because the abilities to take on different kinds of special sensibles come in ordered series. Moreover, once a living being has a perceptual capacity with these abilities, and depending on the number and refinement of these abilities, it will also have the ability to grasp features such as common sensibles and perhaps accidental sensibles; cf. Gregoric, *Common Sense*, 193–201.

the individual living being by means of taking in and processing food. What the reproductive capacity does is perpetuate this form in another individual (cf. 2. 4, 416^b14–20). Thus we would claim that the account of the reproductive capacity does make reference, if only implicitly, to the nutritive capacity of the soul, so that we should not count it as a part of the soul.

Despite some cases which may require more detailed consideration, then, it is plausible to think that if the definition of a capacity of the soul does not make reference to any other capacity of the soul, it is a part of the soul. So the view that separability in account is the criterion of parthood of the soul seems to stand up to scrutiny.

To conclude, what are parts of the soul for Aristotle? The resulting view is this. Parts of the soul are the fundamental capacities of the soul whose existence we minimally have to assume in order to be able to provide a satisfactory account of the soul on which the science of living beings will be based. There are other nonfundamental capacities of the soul which living beings may have simply in virtue of possessing the relevant fundamental capacities, or in virtue of possessing the relevant fundamental capacities and satisfying some further conditions, such as having the right sort of bodily organs or enjoying the right sort of environment. The distinction between parts of the soul and mere capacities of the soul, i.e. between the fundamental and non-fundamental capacities of the soul, lies in the fact that definitions of the former make no reference to any other capacity of the soul, whereas definitions of the latter make reference to at least one other capacity of the soul. This distinction not only saves Aristotle from inconsistency and arbitrariness, to which he would fall prey on the standard interpretation of what parts of the soul are in his theory, but allows him to proceed systematically in building a hierarchy of psychic capacities with three fundamental and irreducible capacities at the top. And quite generally, this seems to constitute a very reasonable theoretical position.43

⁴³ For instance, Jerry Fodor in *The Modularity of Mind* (Cambridge, Mass., 1983), 24, is looking for, *mutatis mutandis*, a similar distinction between what he calls 'mental capacities' and 'psychological faculties': 'There are, of necessity, far more mental capacities than there are psychological faculties on even the most inflationary census of the latter... A census of faculties is *not*, in short, equivalent to an enumeration of the capacities of the mind. What it is instead is a theory of the *structure of the causal mechanisms that underlie the mind's capacities*. It is thus perfectly possible for

APPENDIX

Whiting on Parts of the Soul⁴⁴

To start with similarities between Whiting's and our understanding of what parts of the soul are for Aristotle, Whiting (184) argues against identifying parts of the soul with capacities of the soul, i.e. against the 'standard view'. More importantly, she connects parthood of the soul with the notions of *difference* and *separability*. However, she does so in a way that is different from ours. In order to make the differences clear, it will be useful to list the types of difference/separability we have encountered so far:

- (i) *difference 'in account'* (or '*in being*' or '*in function*'): x has an account or definition which is different from y, and y has an account or definition which is different from x.
- (ii) *separability 'in account'* (or *'in being'* or *'in function'*): x is definitionally independent of y, i.e. x has an account or definition which makes no reference to y.
- (iii) *separability 'in place'* (or *'in magnitude'*): x is locally independent of y, i.e. x can exist at some location without y.
- (iv) separability simpliciter: x is existentially independent of y, i.e. x can exist without y.

We have argued that (iv) is the criterion for deciding the question whether a capacity is a *soul* or not, whereas (iii) is rejected and (ii) accepted as the criterion for deciding the question whether a capacity is a part of the soul or not. Whiting proposes to distinguish (iv) and (iii) in the following way:

For things can be separable in magnitude from one another—or separable in place from one another—without being separable $\dot{\alpha}\pi\lambda\hat{\omega}_{s:}$ a hand, for example, may be separable both in magnitude and in place from a foot in the sense that each is composed of distinct and non-overlapping bits of matter, even though neither has the kind of self-sufficiency required for separability $\dot{\alpha}\pi\lambda\hat{\omega}_{s.}$ (144)

Whiting reserves separability *simpliciter* for the theoretical capacity, and claims separability in place for the other three capacities listed in $T_{I}(a)$. That is to say, she argues that parts of the soul *are* separable in place or

all hands to be agreed about what *capacities* a mind has and still to disagree about what *faculties* comprise it' (Fodor's italics).

⁴⁴ In what follows we take the liberty of examining Whiting's paper only in so far as it contributes towards what we are interested in here, i.e. towards a *general* account of parts of the soul in Aristotle. None of our criticisms is meant to diminish the scholarly and philosophical merits of this original and illuminating paper.

magnitude from one another. Indeed, separability in place, as she construes it, seems to be the criterion of parthood of the soul on Whiting's account:

My own view is that we should model Aristotle's way of distinguishing the various parts of the soul and their fundamental capacities, however many they prove to be, on his way of distinguishing the various parts of an animal's body and their fundamental capacities, which is a strategy that makes prima facie sense given his hylomorphism. This will allow us to say that one part of soul may house multiple capacities just as the human tongue, for example, houses the capacities both to taste and to utter sounds (PA 660°18-25). But more importantly for present purposes, it will allow us to say that just as the various parts of the body cannot exist apart from one another even though they are separable in magnitude or place from one another in the sense that they are constituted by different portions of matter located in different places, so too the various parts of an animals' soul cannot exist apart from one another even though they are separable in magnitude or place from one another in the sense that they are embodied in what we might call different 'physiological systems'i.e. physiological systems involving bodily organs constituted by different portions of matter and/or located in different places. The nutritive and reproductive capacities are embodied in one physiological system (for Aristotle takes what we would call the 'digestive' and 'reproductive' systems to form a single system), while the capacities of perception, imagination, and desire are embodied in a different physiological system. Each of these physiological systems is centred in one and the same organ (namely the heart), which helps to explain their unity with one another. But each can (at least in some circumstances) function relatively independently of the other. (152)

This passage clearly shows that Whiting understands separability in place differently from us. On our view, *x* is separable in place from *y* if *x* is locally independent of *y*, i.e. if *x* can exist at some location without *y*. On Whiting's view, by contrast, *x* is separable in place from *y* if *x* is embodied in *different* portions of matter located at *different* places. Although this may be in itself an acceptable notion of local separability, we do not think that this is the notion which Aristotle employs. First, we have argued that separability and difference are two quite difference cannot. Hence, separability cannot possibly be reduced to, or interpreted in terms of, difference. Second, we have interpreted separability in terms of independence, and this interpretation seems to be borne out by the Aristotelian texts we have considered. In order to be locally *separable*, it is not sufficient for parts of the soul or their corresponding physiological systems to occupy different portions of matter, but they have to be capable of existing independently of each other. Thus the

hand and the foot may be spatially *different* from each other, but it is difficult to see how Aristotle could regard them as spatially *separable* from each other, since both of them are parts of the same living body. As the observations with the divided insects show, what Aristotle seems to have in mind when he talks of separability in place in connection with parts of the soul is local *independence* rather than mere difference in location in otherwise coherent bodies. Whiting's construal of Aristotle's notion of separability in place, however, dissociates separability from independence and associates it with mere difference.

Furthermore, the physiological systems in which different parts of the soul are realized happen to be largely overlapping. Apart from the heart, the digestive and the perceptual physiological systems, for example, share the whole network of blood vessels and channels inside the body. So, they are constituted only by *partially* different portions of matter. In fact, it seems that the portion of matter shared by these two physiological systems is larger than the portions of matter which belong to one without the other. Therefore, even the notion of difference in place, according to Whiting's construal of separability in place, is a qualified or attenuated one.

More generally, we find the suggestion that parts of the soul are separable in place, on any construal of spatial separability, implausible. The idea that the soul is divided into locally separable parts was advocated by Plato in the Timaeus, as Whiting herself agrees (150 n. 11), and Aristotle seems to find this idea fundamentally objectionable, not least because it undermines the soul's unity (cf. DA 1. 5, 411^b5-14). Moreover, the observation about divided insects is, as we have argued above, intended to show, against the Platonic division of the soul, that the capacities listed in **T1(a)** as prima facie candidates for parts of the soul are not separable in place or magnitude. However, Whiting seems to argue (149) that the observation shows that only capacities such as the perceptual and the locomotive, which are explicitly mentioned in the passage on divided insects (2. 2, 413^b21-2), are not separable in place or magnitude, leaving it open whether the other capacities listed in **TI**(a) are separable in place or magnitude or not. If that is what the observation shows, however, then it is hard to see how Aristotle's observation about the divided insects in T₃ is supposed to make it clear that 'the other parts of the soul'—presumably the capacities listed in **T**I(a) other than the capacity for theorizing-'are not separable in the way some claim' $(413^{b}27-9)$.

Moreover, looking at the shorter of the two passages from Whiting's paper quoted above, we would like to observe that, although a hand severed from the rest of the body will not be able to exist self-sufficiently, as required by separability $\dot{\alpha}\pi\lambda\hat{\omega}s$ (at any rate not as a hand properly speaking), the rest of the body, including the foot, will. That is why the hand is not se-

parable from the body either locally or $\delta \pi \lambda \hat{\omega}_s$, whereas the rest of the body is separable from the hand both locally and $\delta \pi \lambda \hat{\omega}_s$.

We also have an objection to Whiting's interpretation of **TI**(**a**). We have seen that parts of the soul, according to Whiting, are distinguished by separability in place, as she construes it. The role of difference and separability in account, according to Whiting, is to differentiate, within a single part of the soul, more basic from less basic capacities. Her example is what she calls the 'locomotive part of the soul'. The locomotive part, according to Whiting, houses a number of capacities, namely the perceptive, the imaginative, the desiderative, and the practically intellective capacities of the soul (155, 166 ff., 181 ff.). All of these capacities are (i) different in account from one another. However, the perceptive capacity is (ii) separable in account from the other ones, whereas none of the others is separable in account from it: the perceptive capacity is the only capacity which can be defined without reference to the other capacities, whereas none of the other capacities can be defined without reference to the perceptive capacity. The whole complex of capacities constituting one part of the soul is called after this basic capacity within the complex. This enables Whiting to argue that the *aisthetikon* listed in **T1(a)**, to be counted as a part of the soul, is not really the perceptive capacity, but the whole complex including the perceptive capacity as its basic component. It seems that this goes beyond what the text says and requires. Remember that Aristotle arrives at the list of four items in **TI**(**a**), including the *aisthētikon*, by specifying four types of activity such that engaging in at least one of them is sufficient to attribute life. There is no reason to suppose that *aisthesis*, as one of the activities (413^a23), refers to anything more complicated than sense-perception. Similarly, there is no reason to suppose that the other capacities of the soul in TI(a), derived from the corresponding life-activities, refer to some complexes of capacities.

Finally, Whiting includes practical *nous* among the capacities constituting the 'locomotive part', which means that it is *different* but not *separable* in account from the perceptive capacity. Indeed, Whiting claims that *phantasia*, desire, and practical *nous* are 'extensions or developments' of the perceptive capacity, albeit in different degrees of complexity.⁴⁵ However, Aristotle insists on the fundamental difference between thinking, which has to do with essential features, and perceiving, which has to do with sensible particulars. If this difference is to be of any significance, it seems unlikely that the capacity of thinking, even if 'only' practical, could be reduced to a form of perception, however complex. Although practical thinking no doubt *requires* perception, desire, and complex forms

⁴⁵ 'What distinguishes rational animals from non-rational ones is simply that they have more complex forms of perception and so more complex forms of imagination' (Whiting, 'Locomotive Soul', 186).

of *phantasia* as necessary conditions, it is not reducible to perception, at any rate not in the same way as desire and *phantasia* are. *Phantasia* and non-rational desire are both explicitly *defined* with reference to perception (DA 3. 3, 428^a10 ff., and 3. 7, 431^a8–14), whereas nothing of the sort is said or implied about practical *nous*. It follows that practical *nous*, after all, must contain at least one element which is separable in account from the perceptive capacity, namely its noetic element, which means that it cannot belong among the capacities of the 'locomotive part'.

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BIBLIOGRAPHY

- Aquinas, *The Commentary on Aristotle's* De anima, trans. K. Foster and S. Humphries (London, 1951).
- Barnes, J., 'Aristotle's Concept of Mind' ['Concept'], Proceedings of the Aristotelian Society, 72 (1971-2), 101-14.

Bos, A. P., 'Aristotle on Dissection of Plants and Animals and his Concept of the Instrumental Soul–Body', *Ancient Philosophy*, 27 (2007), 95–106. Burnyeat, M. F., *Aristotle's Divine Intellect* (Milwaukee, 2008).

- Caston, V., 'Aristotle's Two Intellects: A Modest Proposal', *Phronesis*, 44 (1999), 199–227.
- Corcilius, K., Streben und Bewegen: Aristoteles' Theorie der animalischen Ortsbewegung [Streben und Bewegen] (Berlin and New York, 2008).
- Fine, G., On Ideas: Aristotle's Criticism of Plato's Theory of Forms (Oxford, 1993).
- Fodor, J. A., The Modularity of Mind (Cambridge, Mass., 1983).
- Gregoric, P., Aristotle on the Common Sense [Common Sense] (Oxford, 2007).
- Hicks, R. D. (ed.), Aristotle: De anima [De anima] (Cambridge, 1907).
- Lefebvre, D., 'L'argument du sectionnement des vivants dans les *Parva* naturalia: le cas des insectes', *Revue de philosophie ancienne*, 20 (2002), 5-34.
- Morrison, D., 'Χωριστόs in Aristotle' ['Χωριστόs'], Harvard Studies in Classical Philology, 89 (1985), 89–105.
- Polansky, R., Aristotle's De anima [De anima] (Cambridge, 2007).
- Ross, W. D. (ed.), *Aristotle*: De anima, editio maior (Oxford, 1961). —— (ed.), *Aristotle*: Parva naturalia (Oxford, 1955).
- Seidl, H. (ed.), Aristoteles: Über die Seele (Hamburg, 1995).
- Siwek, P. (ed.), Aristotelis tractatus De anima, 2nd edn. (Rome, 1965).
- Sorabji, R., 'Body and Soul in Aristotle', *Philosophy*, 49 (1974), 63–89.
- Sprague, R. K., 'Aristotle and Divided Insects', Méthexis, 2 (1989), 29-40.

- Vander Waerdt, P. A., 'Aristotle's Criticism of Soul-Division', American Journal of Philology, 108 (1987), 627-43.
- Vlastos, G., "Separation" in Plato', Oxford Studies in Ancient Philosophy, 5 (1987), 187-96.
- Whiting, J. E., 'Locomotive Soul: The Parts of Soul in Aristotle's Scientific Works' ['Locomotive Soul'], Oxford Studies in Ancient Philosophy, 22 (2002), 141–200.