'UNDER THE INFLUENCE' – THE PHYSIOLOGY AND THERAPEUTICS OF AKRASIA IN ARISTOTLE'S ETHICS*

In Aristotle's Nicomachean Ethics disturbance in a person's physiological constitution is presented as a possible root of that person's vicious behaviour. Questions of health and illness are therefore common in the treatise. Despite this there is reluctance in scholarship to pursue the connections between biology, medicine and ethics in Aristotle's work. Aristotle's akratês is the person who knows he should do one thing but does otherwise due to pathos. This paper takes up Aristotle's invitation to investigate the mechanism of this physiologically. I argue that the status of the akratês can be illuminated with reference to medicine and biology: after all, the akratês is described as being like someone who is mad, drunk or asleep, the melancholic counts among their number, and akrasia itself is said to be like epilepsy. These are not just analogies; they indicate that the akratês is physiologically affected in such a way that his cognitive faculties may be disturbed. Furthermore, Aristotle's statement that the akratês may be 'cured' is not just metaphorical but points to a physical regime that goes hand in hand with moral instruction. I argue that Aristotle borrows from a medical tradition that is seen not only throughout his own works but also in the Hippocratic corpus. In presenting the akratês as he does Aristotle provides important and far-reaching ideas on how physiology and illness affect the human in his attempts to be ethical.

INTRODUCTION

A central aim of Aristotle's *Nicomachean Ethics* (*EN*) is to demonstrate how we might attain *eudaimonia* through virtuous action that is led by rational thought. With this in mind, Book 7 of Aristotle's treatise is dedicated to describing various character types that we should avoid – vice (*kakia*), intemperance (*akolasia*), brutishness (*thêriotês*) and softness (*malakia*). In addition, Aristotle offers an extensive consideration of 'lack of self-control' (*akrasia*). In *akrasia* the agent acts on appetite knowing that the action that he undertakes is wrong.² Aristotle recognizes

- * The research on which this article is based was supported by the Wellcome Trust. I am grateful to Philip van der Eijk, Richard Sorabji, Peter Adamson, Hynek Bartoš and Malcolm Heath for their comments on earlier versions of this paper, and to David Charles, Pierre Destrée and Gábor Betegh for discussing this subject with me at an early stage.
- ¹ Aristotle begins *EN* 7 by saying that vice, *akrasia* and brutishness are to be avoided (1145a15–17). He goes on to note that vice has been considered in previous books so greater consideration is to be given here to *akrasia* and brutishness, along with softness and effeminacy (*truphê*), 1145a33–6. He touches on *akolasia* at different points within *EN* 7, although it serves mainly as a comparison with *akrasia*, e.g. *EN* 1147b28.
- ² Aristotle gives variations of this definition throughout *EN* 7. It is refined at 1151a11–13 where the *akratês* pursues excessive bodily pleasures against correct reason while not fully believing what he does to be correct.

two types of *akrasia*, rash *akrasia* and weak *akrasia*,³ and he seeks to define their natures and causes, and the kind of people in which they are most commonly seen. *Akrasia*, in the simplest terms, is the name given to action that is based on appetite and against what might be called 'better judgement'. It is characterized by a lack of resolve in the face of strong *pathos*,⁴ or bodily pleasure, which propels the agent to undertake a course of action not sanctioned by rational decision. It is its sporadic, unpredictable nature and disregard for rationality that makes it a threat to the person who hopes to be virtuous, while at the same time it is precisely because the *akratês* person does not follow rationality in *akratic* behaviour that there is some hope that this person can either be persuaded to change,⁵ or be 'cured' (*iatos*).⁶ It is only when the agent rationally chooses to follow a strong appetite or *pathos* (as can be seen in the case of *akolasia*) that he can no longer be shown the error of his ways and is therefore 'incurable' (*aniatos*).

There has been much discussion about *akrasia* in the *EN* but relatively limited attention has been paid to the way in which Aristotle thinks *akrasia* comes about and may be 'cured'.⁷ This is despite the fact that Aristotle gives us clues to this

³ EN 1150b19–22; I take it that this is where the preliminary, 'dialectical' stage of the investigation stops and where the discussion of *akrasia* proper begins.

⁴ Pathos is difficult to translate because of the variety of meanings it has in Aristotle. While in the ethical works pathos may be taken to mean 'emotion', it can refer to any affection of the body (because for Aristotle emotions have physical elements), hence to translate it exclusively as 'emotion' would be to play down its physical properties, which are vital to a consideration of akrasia, as we shall see. In fact at EN 1145b29 Aristotle describes akrasia itself as a pathos. In On the Soul Aristotle concludes that all pathê of the soul are also of the body (De an. 403a5-25) and in his wider corpus he counts a variety of physical conditions as pathê: in On Sleep and Waking Aristotle lists health and disease, strength and weakness, sight and blindness, and hearing and deafness (453b29-31) under pathê. Elsewhere he refers to recollection (Mem. 453a15), sleep and waking (e.g. Somn.Vig. 454a21; 456a22) and emotional states such as fear and lust (e.g. Insomn. 460b4) as pathê. Melancholy is also a pathos, along with drunkenness (Insomn. 461a23-4), both important conditions in an investigation of akrasia.

⁵ EN 1151a14.

⁶ EN 1150b29-35.

With the notable exception of M. Pickavé and J. Whiting, 'Nicomachean Ethics 7. 3 on akratic ignorance', OSAP 34 (2008), 323-71 and P. Destrée, 'Aristotle on the causes of akrasia', in C. Bobonich and P. Destrée (edd.), Akrasia in Greek Philosophy (Leiden, 2007), 139-165. Pickavé and Whiting consider the possible mechanism of akrasia as indicated by the discussion of physiological types described at EN 1147a10-24 as part of a progressive explanation of the condition; they note the importance of these states as involving a change in the agent's body and how this impacts on knowledge (341-3) and how, in turn, some analogous disturbance of knowledge may be possible in the akratic character, particularly with regards to the disturbance caused by epithumia; however, there is no discussion of the melancholic type which so clearly shares these attributes and is named as an akratic by Aristotle in EN 7. Destrée examines how a consideration of epithumia with reference to On the Soul and On the Movement of Animals may illuminate the akratês' failure to follow through his initial decision and considers that the physiological states of the types mentioned by Aristotle give us some clue as to how knowledge remains inactive during akratic action; J. Owens, 'Aristotelian ethics, medicine, and the changing nature of man', in J. Catan (ed.), Aristotle: The Collected Papers of Joseph Owens (New York, 1981), 169-79, thinks that EN 1147b6-9 has not received much attention because it is considered to be outside the proper field (ethics) but considers it vital to understanding Aristotle's ethics and its relationship to medicine and the nature of man; A. Preus, 'Aristotle on healthy and sick souls', The Monist 69 (1986), 416-33, considers the medical elements of the EN and the Eudemian Ethics; P.J. van der Eijk, Medicine and Philosophy in Classical Antiquity (Cambridge, 2005), at 139-68, examines the akratês with reference to Aristotle's concept of 'the melancholic'; and to some extent J.C.B. Gosling, 'Mad, drunk or asleep? - Aristotle's Akratic', Phronesis 38 (1993), 98–104, at 100, argues that in his description of akratic action Aristotle is

mechanism in his references to medicine and physiology. Aristotle says that someone who is suffering from akrasia is like one who is mad, drunk or asleep, that an investigation of this condition requires recourse to $phusiologoi^9$ and that it can be studied $phusik\hat{o}s$. He speaks about the 'curability' of akrasia and describes akrasia and akolasia as being like diseases $(nos\hat{e}mata)$. Furthermore Aristotle says that melancholic people $(hoi\ melankholikoi)$ are prototypical of one of the two types of akrasia and this is caused by their peculiar physiological condition. While Aristotle does not expand on the relevance of these conditions to akrasia within the EN itself there are several passages in Aristotle's wider corpus that indicate the way in which knowledge and cognitive ability can be affected by such conditions.

My aim in this paper is to show that for a proper understanding of Aristotle's views on *akrasia* we have to consider Aristotle's own physiological views as well as the medical and scientific tradition to which he is indebted. This will give us a better insight into Aristotle's account of *akrasia* both in establishing the place of knowledge in this condition and the way in which Aristotle thinks the condition arises and may in turn be corrected. Such an investigation is important because Aristotle's ethical works are often treated separately from his works on physiology, yet his frequent references to medicine and natural science within his ethical works as a whole (including the *Politics*) show that areas that may seem to exist independently for the purpose of theoretical classification can in matters of practical application be closely connected.¹³

AKRASIA IN EN 7

The opening chapters of *EN* 7 are constituted of a dialectical discussion followed by a description of, what Aristotle believes to be, the two types of *akrasia*. Both sections are also peppered with hints about where else we may look for information about the condition. It is the opening dialectical discussion, rather than Aristotle's description of the two types of *akrasia*, that has concerned most scholarship on the subject¹⁴ but this is only a precursor to Aristotle's division of *akrasia* into two types where we find much of the mechanism of *akrasia* laid bare.

referring to some sort of physiological change. J.T. Tracy, *Physiological Theory and the Doctrine* of the Mean in Plato and Aristotle (Paris, 1969) provides an account of how Aristotle's theory of the mean (mesotês) has its roots in ancient medicine and, subsequently, how physiology plays an important part in his investigation of virtue and vice.

- ⁸ EN 1147a13-17.
- ⁹ EN 1147b8-9.
- 10 EN 1147a24-5.
- ¹¹ EN 1150b29-35.
- 12 EN 1150b25-8.
- ¹³ My sincere gratitude goes to Hynek Bartoš whose correspondence on this particular issue was invaluable.

¹⁴ One main reason for this is that it is only in *EN* 7 that we find any debate on Aristotle's part about whether *akrasia* is actually possible. On the whole in his corpus Aristotle appears to be content that there is on occasion a conflict between rationality and physical or emotional drives and that this is not unusual (*EN* 1102b13–15; *De an.* 433a1–3, 433b5–7). However in *EN* 7, by way of an answer to Socrates (1145b22–9), Aristotle sets about discussing how *akrasia* may actually be possible (how knowledge may be ruled by the body). This particular issue does not concern me much here and is itself the subject of a vast literature (most recently Bobonich and Destrée [n. 7]).

Aristotle does not question whether the akratês has knowledge, rather he asks whether the person who is doing something he should not do has knowledge and is attending (theôrounta) to it, or has knowledge and is not attending to it.15 He says there are various ways in which the latter may happen. An agent may use universal knowledge rather than the practical knowledge required for action.¹⁶ Alternatively there may be two types of universal knowledge, one concerning the matter in hand and the other concerning the agent himself, and the agent either has this knowledge and is not using it or he may not know that this universal knowledge refers to the matter in hand.¹⁷ Aristotle further proposes¹⁸ that those in an akratic state both have and do not have knowledge 'such as the person who is asleep, mad or drunk' and he continues 'Yet they truly are in a similar state to those who are in these states of pathos, for spirited emotions, sexual desires, and other [desires] of this sort quite evidently also cause a change in the body, and in some even cause episodes of madness'. 19 Aristotle says that this is a 'similar' (homoiôs) way to the way in which the akrateis have knowledge;20 the fact that both people in these states and those in akratic states may say words that imply that they have knowledge (apo tês epistêmês) is a sign of nothing:21 'For people who are in these affected states even recite proofs and verse of Empedocles, and even those who are in the first stages of learning string words together, but do not yet know; for it is necessary for this to grow into them, and this needs time. Thus one must suppose that those who lack self-control speak in this way, just as actors do.'22

Aristotle concludes his initial discussion by saying that *akrasia* may be considered *phusikôs*,²³ and as illustration of this he sets up a contrast between the practical syllogism followed by someone in a 'normal' state and that followed by someone who acts in an *akratic* way. In non-*akratic* action there is a universal opinion (*katholou doxa*) and an opinion concerning particulars (*kath' hekasta*), which are properly related to perception (*aisthêsis*).²⁴ 'When one [conclusion] is generated from the [opinions] it is necessary for the soul in one instance to confirm the conclusion, while in the case of practical things [it is necessary] to act immediately.'²⁵ The *akratic* syllogism, however, seems to be constructed as follows: a universal opinion tells the *akratês*, for example, 'Do not taste', while another (*hê de*)²⁶ tells the *akratês* that all sweet things are pleasant, and a further

```
15 EN 1146b33-4.
```

¹⁶ EN 1146b35-1147a3.

¹⁷ EN 1147a4–10.

¹⁸ He introduces this as allon tropon, 1147a10.

¹⁹ οἷον τὸν καθεύδοντα καὶ μαινόμενον καὶ οἰνωμένον. ἀλλὰ μὴν οὕτω διατίθενται οἵ γε ἐν τοῖς πάθεσιν ὄντες· θυμοὶ γὰρ καὶ ἐπιθυμίαι ἀφροδισίων καὶ ἔνια τῶν τοιούτων ἐπιδήλως καὶ τὸ σῶμα μεθιστᾶσιν, ἐνίοις δὲ καὶ μανίας ποιοῦσιν (ΕΝ 1147a13–17).

²⁰ EN 1147a17.

²¹ EN 1147a18-19.

²² καὶ γὰρ οἱ ἐν τοῖς πάθεσι τούτοις ὄντες ἀποδείξεις καὶ ἔπη λέγουσιν Ἐμπεδοκλέους, καὶ οἱ πρῶτον μαθόντες συνείρουσι μὲν τοὺς λόγους, ἴσασι δ' οὔπω· δεῖ γὰρ συμφυῆναι, τοῦτο δὲ χρόνου δεῖται· ὤστε καθάπερ τοὺς ὑποκρινομένους, οὕτως ὑποληπτέον λέγειν καὶ τοὺς ἀκρατευομένους (ΕΝ 1147a19-24).

 $^{^{23}}$ ἔτι καὶ ὧδε φυσικώς ἄν τις ἐπιβλέψειε τὴν αἰτίαν (EN 1147a24-5).

²⁴ EN 1147a26.

 $^{^{25}}$ ὅταν δὲ μία γένηται ἐξ αὐτῶν, ἀνάγκη τὸ συμπερανθὲν ἔνθα μὲν φάναι τὴν ψυχήν, ἐν δὲ ταῖς ποιητικαῖς πράττειν εὐθύς (EN 1147a26-8).

²⁶ EN 1147a32.

belief tells the *akratês* that this is a sweet thing. It is this last opinion that is active (*energei*) and appetite is present, so although something tells the *akratês* to avoid this thing he follows his appetite, which is capable of moving (*kinein*) his bodily parts.²⁷ It is the appetite, not the opinion, that is contrary to correct reason.²⁸ Aristotle concludes²⁹ that because the final premise (*teleutaia protasis*) is an opinion (*doxa*) about the object of perception (*aisthêton*), and is in charge of practical action (*kuria tôn praxeôn*), it is this that the person who is affected (*en tôi pathei ôn*) does not have, or the state in which he has it is as if he does not have knowledge (rather it is in the way that a drunk recites poems). Therefore the knowledge that the *akratês* has is perceptual knowledge.³⁰

Aristotle's discussion up to this point establishes several important conditions that typify akratic action. The akratês is one who has knowledge that he fails to attend to;31 this is some sort of particular, as opposed to universal, knowledge,32 a particular knowledge that can be deemed an opinion (doxa) about the object of perception (aisthêton) on which an action is based.³³ The person who is affected (en tôi pathei ôn) does not have this knowledge, or has it but it is not active (ouk energei),³⁴ or one type of premise is active (energei) at the expense of another, and appetite acts on the active premise.35 However, while the symptoms of the condition are laid before us it is still not clear how the condition of akrasia arises.³⁶ This is a vital consideration because in the midst of his preliminary discussion Aristotle advises his audience that if they wish to know how the akratês loses his ignorance and regains his knowledge they must listen to the phusiologoi because it is the same account (logos) that concerns the drunk (oinômenos) and the sleeper (katheudôn), and it is not peculiar (idios) to that way of being affected.³⁷ In his wider corpus (commonly in his works on biology and natural science) Aristotle often refers to the phusiologoi³⁸ (and phusikoi)³⁹ when discussing matters of natural

```
27 EN 1147a35.
```

²⁸ EN 1147a35-b3.

²⁹ Omitting 1147b6–9 for the time being (I will come back to this below).

³⁰ EN 1147b9–12, and thus Socrates' maxim is not jeopardized (EN 1147b13–17).

³¹ EN 1146b33-4.

³² EN 1146b35-47a3.

³³ EN 1147b9-10.

³⁴ EN 1147b10–12 and 1147a5–10.

³⁵ EN 1147a33-4.

³⁶ I consider this to be a different question than that which addresses how someone may act against their own better judgement.

³⁷ EN 1147b6-9.

³⁸ According to Aristotle the investigative area that concerns the *phusiologoi* is varied: the creation of the world (*Cael.* 297a14, 298b29), the generation of animals (*GA* 742a16), aspects of reproduction (*GA* 763b31, 769a7), the nature of all things (*Metaph.* 988b27), substance (*Metaph.* 992b5; *PA* 641a7 and 11), the infinite (*Ph.* 203b15), and matters relating to sense perception (*Sens.* 441b2, 442a30). The *phusiologos* is one who writes *phusikon* (*Po.* 1447b16–19). Aristotle is quick to note and correct the mistakes of the earlier *phusiologoi* (*De an.* 426a20; *Ph.* 265a3; *Sens.* 442a30) as well as commenting on their limitations (*Metaph.* 986b14), and he assesses whether they are the source of some opinion he is faced with (*Metaph.* 1062b22). He names various figures among their number or in addition to them: Timaeus (*De an.* 406b26), Empedocles (*EE* 1235a10), Anaxagoras (*GA* 763b31), Anaximander (*Ph.* 203b15), Democritus (*Sens.* 442a30) and Leucippus (*Ph.* 213b1), and sets them in contrast to the Pythagoreans (*Metaph.* 989b31, 990a3).

³⁹ Aristotle does not mention the *phusikoi* in these passages but they may be implied in *EN* 1147a24–5 when he says that the reason for *akrasia* can be considered *phusikôs*, i.e. that it should be considered as a matter for natural science (see below, n. 165). The difference between

science, usually giving a survey of their ideas before he embarks on his. These works themselves frequently discuss types of people whose physical conditions impact on their cognitive ability. Aristotle's accounts of people whose physiology affects their psychological condition often includes many of the types of people that he uses in his dialectical discussion of akrasia. Therefore Aristotle's nod to the phusiologoi in his discussion is a sure sign that akrasia has a peculiar physiology that underlies the unstable psychological functioning which is symptomatic of the condition. Aristotle shows that certain physical conditions weigh heavy in his account of akratic knowledge: he says that the cause of akrasia may be considered phusikôs, 40 a qualification which recalls his discussion in On the Soul 1 where, having drawn the conclusion that the pathê of the soul are enmattered accounts (logoi enuloi), Aristotle (using anger as an example, in that a full explanation must give account of its physical properties and its formal cause), says that the study of the soul by necessity must be considered to be of the science of nature.⁴¹ He continues that 'The phusikos and the dialectician would define each of these (pathê) differently from another, such as what sort of thing anger is. For one [the dialektikos] would define anger as a desire for causing pain in retaliation for pain or something of this sort, while the other [the phusikos] would define it as a boiling

a phusikos and a phusiologos is not clear and sometimes they appear in the same passages (e.g. Ph. 203b3-15). The phusikos studies 'the infinite' in common with the phusiologos (Metaph. 1067a6; Ph. 203b3), and Democritus is named as phusikos when he discusses breathing (Juv. 472a3). Aristotle does not consider Melissus and Parmenides to be phusikoi because they discuss subjects outside of nature (Cael. 298b18). He does mention additional areas to those of the phusiologoi (although they are not wholly removed) such as the physical nature of an emotion (De an. 403a28), animal movement (GA 741b10), and environment (Pol. 1335b1), and considers what the limit of the phusikos' investigations should be (e.g. the soul at PA 641a21, or form and essence at Ph. 194b10). Aristotle acknowledges that being a phusikos requires experience (EN 1142a18), and discounts certain arguments because they are not proven by experience as those of natural science must be (GA 748a14); and he criticizes Anaxagoras, a phusikos, for holding an opinion not substantiated by fact (GA 756b17). In On Respiration Aristotle starts his account of respiration by reviewing the ideas of earlier phusikoi who have been mistaken on their facts (Resp. 470b7) and this begins his critique of their mistaken views. Yet it seems that whereas Aristotle would have no difficulty referring to himself as a phusikos, the same may not be said about phusiologoi. The phusikos has experience in matters phusika and seems to be interested in more practical physical matters (but see my discussion on p. 149). In the Politics Aristotle discusses how the phusikos can give advice to prospective parents on good environmental conditions for reproduction (Pol. 1335b1). And in the Parva Naturalia Aristotle compares the phusikos with the doctor: thus in On the Senses 436a17-b2 and in On Respiration 480b22-30 he points out how the doctor (iatros) and the phusikos must be able to give some account of health and sickness. Learned doctors, he says, can give an account of the natural principles of health and illness, while learned phusikoi can give an account of medical principles (cf. the reference to phusikê philosophia in Long. 464b32-34). Aristotle clearly considers the classification to belong to the subject area and notes in the Poetics that the men who write medical works or works of natural science in metre are often called poets when they should be named according to their subject area (Po. 1447b16-19).

⁴⁰ EN 1147a24–5. Destrée (n. 7), 148–9 concedes that *phusikôs* must point to a study of causality in addressing how the better judgement of the *akratês* fails. He takes the reference to the *phusiologoi* at 1147b8–9 as an indication that Aristotle considers there to be another issue about *akrasia* to be addressed, yet he concludes that this is a separate issue to the matter in hand: 'It hasn't been sufficiently remarked on that our passage, a particularly brief account of the cause of akrasia, appears to be presented by Aristotle himself as a sort of résumé of another problematic, where he refers his reader to the "physiologists" who will be able to explain to him in greater detail how the akratic can recover his knowledge.'

 $^{^{41}}$ De an. 403a25-8 (καὶ διὰ ταῦτα ἤδη φυσικοῦ τὸ θεωρῆσαι περὶ ψυχῆς, 27-8).

of the blood and heat around the heart.'42 Furthermore Aristotle does not mean for this account to be separate from the dialectical account of pathê; continuing his account in On the Soul 1 he argues that the true phusikos takes into account both the physical and non-physical properties and gives an account according to both; beyond this the qualities inseparable of matter are treated by craftsmen such as the carpenter or the physician, while the qualities which exist separable of matter are to be investigated by the mathematician and the first philosopher.⁴³ Hence Aristotle's call at EN 1147a24-5 to consider the matter phusikôs means that we need to look to give an explanation that takes into account both the physical and non-physical attributes of the condition. Finally Aristotle tells us that the state of the akratês is like that of the sleeper, the madman and the drunk;44 and such a state sees the body undergo a change (to sôma methistasin)⁴⁵ under the influence of certain pathê. 46 Furthermore this state appears to cause a kind of disconnection even in those who have knowledge, and Aristotle says that knowledge needs to 'grow into' (sumphuênai) an agent, as it does with young children.⁴⁷ We should therefore look to Aristotle's works on natural science because in writing these he has surveyed and developed the opinions of the phusiologoi, a group which, from his remark at 1147b8-9, he believes has something to say about akrasia.

There is a more compelling reason to consider that physiology is central to an investigation of *akrasia*. In the account that starts after the initial dialectical discussion has been completed, a prominent role is played by the melancholic, a person who not only typifies one of his two types of *akrasia* but who also appears in Aristotle's works as an example of someone whose physical nature impinges on his cognitive ability. At *EN 7.7* Aristotle says: '*Akrasia* is either rashness or weakness. Some (the latter) deliberate but do not stand by that deliberation because of *pathos*, while others (the former), through not deliberating, are led on by *pathos*. For some people are like those who, by preparing themselves to be tickled, are not tickled, and thus by observing beforehand, looking ahead, and rousing themselves and their rational faculty, they do not give in to the affection,

 $^{^{42}}$ διαφερόντως δ' ἃν δρίσαιντο ὁ φυσικὸς $[\tau\epsilon]$ καὶ ὁ διαλεκτικὸς ἔκαστον αὐτῶν, οἶον ὀργὴ τί ἐστιν ὁ μὲν γὰρ ὄρεξιν ἀντιλυπήσεως ἥ τι τοιοῦτον, ὁ δὲ ζέσιν τοῦ περὶ καρδίαν αἵματος καὶ θερμοῦ (De an. 403a29–b1).

⁴³ De an. 403b7–16. D. Ross, *Aristotle de Anima* (Oxford, 1961), 169 says that Aristotle's use of *dialektikos* at 403a29 is disparaging, recalling *De an.* 402b25–3a2 where Aristotle says that an explanation of the essence of the soul which does not involve its attributes (*sumbebêkota*) speaks *dialektikôs* and *kenôs*.

⁴⁴ EN 1147a13–14, 17–18. While Aristotle presents 1147a10–17 as 'another way' in which people have knowledge but do not use it, it will become clear, by looking at Aristotle's works on natural science, that he believes that an understanding of akratic mechanism requires recourse to natural science. Pickavé and Whiting (n. 7), 356–7 acknowledge the importance of the phusiologoi here; they believe that this is a firm indication that the failure to use knowledge, typical of the akratês, is a state that somehow comes about and goes again, in the same way as the sleeper or drunk may regain their knowledge. R. Robinson, 'Aristotle on akrasia', in J. Barnes, M. Schofield and R. Sorabji (edd.), Articles on Aristotle: II Ethics and Politics (London, 1977), 79–91, at 84–6 thinks that the reference to phusiologoi at 1147b8–9 indicates that this is a question for physiology, not ethics. Aristotle's description of the akratês provides us with several reasons for considering this condition to be the result of his/her physiology, primarily in the first part of the argument (1146b35–47b24) where he details how knowledge seems to be affected by the state of the agent, or their perceptual ability, which is often influenced by bodily conditions.

⁴⁵ EN 1147a16.

⁴⁶ EN 1147a15-16.

⁴⁷ EN 1147a22.

whether it is pleasant or painful.'⁴⁸ The difference between rash *akrasia* (*propeteia*) and weak *akrasia* (*astheneia*) is the difference of whether the agent deliberates or not. The weak *akrateis* 'deliberate' (*bouleusamenoi*) but 'do not stand by it' (*ouk emmenousin*) because of *pathos*, whereas the rash *akrateis* are led on by *pathos* (*agontai hupo tou pathous*) through not deliberating. Aristotle goes on to describe the case of people who, by anticipating that they are about to be tickled, rouse their rational capacity and do not succumb to their feelings. He clearly describes the self-controlled (*enkrateis*) here who make an effort to be strong in the face of feeling, by way of contrast to both types of *akrateis* people. It is the irritable people (*hoi oxeis*) and the melancholics (*hoi melankholikoi*), Aristotle continues, who are particularly *akratic* in respect of rash *akrasia*: 'For some (the irritable), through being too hasty, and others (the melancholics), through being too intense, do not wait for reason because they follow their mental impression.'⁴⁹

The melancholic is not only prototypical of rash *akrasia* but, in the *EN* as well as Aristotle's wider corpus, he shares qualities with the drunk and the sleeper and is (by virtue of his peculiar physical condition) a subject of interest for the *phusiologoi*. Not only does the *akratic* condition in general share aspects of the conditions of inebriation, sleep, madness and childhood; if the melancholic shares qualities with any of these types then these qualities must be present in one type of *akrasia*, for instance rash *akrasia* (*propeteia*). This common ground should illuminate why perceptual (or particular) knowledge is not present – or present and not active – in *akratic* action, and it is this common ground which comes to light in Aristotle's works on natural science.

THE EVIDENCE OF NATURAL SCIENCE

The starting point of our investigation of *akrasia* is the melancholic, typical of *propeteia*, one who acts on 'mental impressions' (*phantasia*) because of his/her 'intensity' (*sphodrotês*).⁵⁰ In the *EN* the melancholics are marked by an excessive quality that directly influences their behaviour; in 7.14 Aristotle says that they, along with children, are among the people whose physical nature causes them to pursue physical pleasures: 'For nor do they have other things which they enjoy, but for many a neutral state is painful by their nature. For a living creature is always suffering, as the natural scientists (*phusiologoi*) testify, claiming that sight and hearing are painful, but by now (they say) we are composed. Likewise, those who are young, because they are growing, are in a state like drunkards, and youth is pleasant. The melancholics always need remedies for their natures for their body constantly gnaws at its fulfilment because of its mixture and they are always in intense desire. Pain is driven out by its opposite, pleasure, and any chance pleasure, if it is strong, and it is for these reasons that people become intemperate and

⁵⁰ EN 1150b26-8.

⁴⁸ ἀκρασίας δὲ τὸ μὲν προπέτεια τὸ δ' ἀσθένεια. οι μὲν γὰρ βουλευσάμενοι οὐκ ἐμμένουσιν οις ἐβουλεύσαντο διὰ τὸ πάθος, οι δὲ διὰ τὸ μὴ βουλεύσασθαι ἄγονται ὑπὸ τοῦ πάθους ἔνιοι γάρ, ὤσπερ προγαργαλίσαντες οὐ γαργαλίζονται, οὕτω καὶ προαισθόμενοι καὶ προῖδόντες καὶ προεγείραντες ἑαυτοὺς καὶ τὸν λογισμὸν οὐχ ἡττῶνται ὑπὸ τοῦ πάθους, οὕτ αν ἡδὺ ἦ οὕτ αν λυπηρόν (ΕΝ 1150b19-25).

⁴⁹ οι μέν γὰρ διὰ τὴν ταχυτῆτα οι δὲ διὰ τήν σφοδρότητα οὐκ ἀναμένουσι τὸν λόγον, διὰ τὸ ἀκολουθητικοὶ εἶναι τῆ φαντασία (ΕΝ 1150b26-8).

bad.'51 Aristotle says that owing to the nature (*phusis*) of the melancholics they always need remedy (*iatreia*) on account of their mixture (*krâsis*); they have intense (*sphodrai*) desires and choose any pleasure strong (*iskhura*) enough. It is clear from looking at this passage that Aristotle thinks the intensity of the impetuous *akratic* at 1150b26–8 (which causes the melancholic people not to wait for reason) is a result of their physical constitution or mixture.⁵²

This is not an account peculiar to the *Ethics*; disturbed psychological function that is the direct result of disturbed internal physiology is the key characteristic of the melancholic in Aristotle's wider corpus, ⁵³ and this physiology directly impinges on character, which has important consequences for the melancholic's ethical behaviour. ⁵⁴ Van der Eijk notes that Aristotle uses the melancholic to illustrate the role played by human nature (*phusis*) 'both in the sense of "natural predisposition" and of "physiological constitution", in the moral, sensitive and intellectual behaviour of man', ⁵⁵ an account borne out by his position in the *EN* as someone whose *phusis* has detrimental effects on his ethical development by fuelling his *akratic* behaviour.

Aristotle's concept of the melancholic condition⁵⁶ is connected with the physiological theory concerning black bile (*melaina kholê*). He tells us that the melancholic

51 οὔτε γὰρ ἔχουσιν ἔτερα ἐφ' οῗς χαίρουσιν, τό τε μηδέτερον πολλοῖς λυπηρὸν διὰ τὴν φύσιν. ἀεὶ γὰρ πονεῖ τὸ ζῷον, ὥσπερ καὶ οἱ φυσιολόγοι μαρτυροῦσι, τὸ ὁρᾶν, τὸ ἀκούειν φάσκοντες εἶναι λυπηρόν ἀλλ' ἤδη συνήθεις ἐσμέν, ὡς φασίν. ὁμοίως δ' ἐν μὲν τῆ νεότητι διὰ τὴν αὔξησιν ὥσπερ οἱ οἰνωμένοι διάκεινται, καὶ ἡδὺ ἡ νεότης. οἱ δὲ μελαγχολικοὶ τὴν φύσιν δέονται ἀεὶ ἰατρείας· καὶ γὰρ τὸ σῶμα δακνόμενον διατελεῖ διὰ τὴν κρᾶσιν, καὶ ἀεὶ ἐν ὀρέξει σφοδρᾳ εἰσίν· ἐξελαύνει δὲ ἡδονὴ λύπην ἥ τ' ἐναντία καὶ ἡ τυχοῦσα, ἐὰν ἦ ἰσχυρά· καὶ διὰ ταῦτα ἀκόλαστοι καὶ φαῦλοι γίνονται (ΕΝ 1154b5–15).

 52 It is important to note that this passage calls on the *phusiologoi* (as in *EN* 1147b8–9); this shows that Aristotle thinks that the evidence of natural science will clarify the points he is making in the *EN*.

⁵³ e.g. Mem. 453a18–26; Somn.Vig. 457a27–33; Div.Somn. 464a32–b5. Tracy (n. 7), 256 lists his characteristics as excessive moisture in the cardiac region leading to overactivity and instability, poor memory, violent emotional response to phantasms, and a lack of control (Mem. 45bb8–11). Van der Eijk (n. 7), 151 makes the connection between the ideas explicit and says that when Aristotle attributes the pursuit by melancholic people of remedial pleasures to their krâsis he refers to their physiological state: 'As Aristotle makes no mention of a mixture of humours anywhere else, but does mention a particular mixture of heat and cold as the basis for a healthy physical constitution, it is appropriate to think of a mixture of qualities. In this theory, melancholics are characterised by a mixture of heat and cold (either too cold or too hot) that is permanently out of balance, something which Aristotle clearly regards as a sign of disease.'

⁵⁴ The literature on the melancholic is varied but an account of *melancholia* in specifically ethical theory is very rare. For Aristotle's account of melancholy see van der Eijk (n. 7), ch. 5 (see also ch. 8 for the melancholic and divine movement). Other work concentrates on the pseudo-Aristotelian account of melancholy given in *Pr.* 30.1, e.g. P. Gravel, 'Aristote sur le vin, le sexe, la folie, le genie. Melancolie', in *Etudes françaises Montréal* 18 (1982), 129–45; R. Klibansky, E. Panofsky and F. Saxl (edd.), *Saturn and Melancholy* (Edinburgh, 1964); and P. Toohey, 'Some ancient histories of literary *melancholia*', in *ICS* 15 (1990), 143–61. B. Simon, *Mind and Madness in Ancient Greece: the Classical Roots of Modern Psychiatry* (New York, 1978) examines Aristotelian melancholia as mental illness while Preus (n. 7), 422 is critical of some translations for hiding the presence of mental illnesses by translating *melankholikos* as 'excitable'.

⁵⁵ Van der Eijk (n. 7), 141. In the pseudo-Aristotelian *Pr.* 30.1, he continues, this is called 'the character-affecting aspect (to êthopoion) of phusis'.

⁵⁶ Van der Eijk (n. 7), 139 says that although Aristotle discusses people called melancholics (*hoi melankholikoi*) he never gives a definition of melancholy, nor does he use the term *melankholia*. In fact although he uses psychological and physiological features of the melancholic he does not provide a systematic 'underlying physiological theory'.

suffers from the dark bile in his body, which is cold.⁵⁷ This notion of black bile developed in Hippocratic theory and was often associated with mental disturbance; as a result the verb 'melankholân' was sometimes used metaphorically to denote madness.⁵⁸ However, it is quite clear that in Aristotle the word has a meaning which is related to the physiological constitution of the individual. Aristotle discusses black bile; he says that it is a residue (perittôma) located near the heart, which is the nutritive region.⁵⁹ This coldness of the melancholics' internal parts hinders the evaporation of food and, according to Aristotle, this means that they are less likely to sleep. Aristotle lists the melancholic with the drunk and the feverish, subject to confused visions in sleep due to a spirituous nature (pneumatôdê onta),⁶⁰ however the melancholic differs from the drunk in that he does not sleep much owing to his cold nature.⁶¹

The cognitive ability of the melancholic is clearly affected by his condition. In On Divination in Sleep Aristotle says that the melancholics have clear and prophetic dreams because of their nature (phusis), 62 a point also stated in the Eudemian Ethics, where he discusses the clear dreams (euthuoneiria) of the melancholics. 63 Yet with respect to waking intellection the melancholic struggles to have a clear thought process. In the EN we saw that the peculiar krâsis of the melancholics explains their intense desire⁶⁴ which in turn causes them to pursue their mental impressions over rationality.65 Aristotle clarifies this disrupted process in On Memory where the melancholic acts as proof that recollection is of the body (sômatikos) because their matter affects their ability to use recollection as they should.⁶⁶ The melancholic is one type of person who feels pain at recollection yet once he has begun the process of searching for a mental picture (phantasma) he is unable to stop it. Here again Aristotle says that the melancholic is the most powerfully moved by images (phantasmata kinei malista),67 an affliction suffered mostly by those who have moisture around the central sense organ (aisthêtikos topos) because once the moisture is set in motion it is not easy to stop.⁶⁸ This is the reason why there are those who, when angry or afraid, find it hard to stop their initial movements, despite their attempts to the contrary.⁶⁹ Aristotle says that recollection is a kind of 'syllogism' (sullogismos), albeit one the agent has experienced before, and it is

⁵⁷ Somn. Vig. 457a31.

⁵⁸ J. Burnet, *The Ethics of Aristotle* (London, 1900), 322 translates *melankholikoi* at *EN* 1150b25 as 'excitable' or 'hot-headed' citing the use of *melankholân* in Aristophanes' *Av.* 14 and *Pl.* 12, 366, 903. He contests that it was only with its first appearance in Galen's theory of the four temperaments that it came to have a different meaning. However, his theory ignores Aristotle's own frequent references to this type in his biological works. These references show a person whose physiology influences, if not causes, this 'madness'. This may be one reason why Aristotle compares the *akratic* character to a madman, as someone who shares melancholic physiology.

⁵⁹ Resp. 474b3; Juv. 469a5–7.

⁶⁰ Insomn. 461a22-4.

⁶¹ Somn. Vig. 457a27.

⁶² Div.Somn. 463b17-20; 464a32-b5.

⁶³ EE 1248a39-40.

⁶⁴ EN 1154b5-15.

⁶⁵ EN 1150b26-8.

⁶⁶ Mem. 453a14-31.

⁶⁷ *Mem.* 453a19.

⁶⁸ Mem. 453a23.

⁶⁹ Mem. 453a26-8.

an ability that animals do not have because it belongs to the deliberative faculty (to bouleutikon). To It is important to note that recollection is a process that is like intellection so the melancholic's failure to recollect shows some failure in using intellectual faculties.

The melancholic provides our best example of a person whose ability to construct some sort of syllogism is disrupted (as it is in the akratês), and this is clearly a result of a physical process. As we noted earlier, black bile is a residue found both in the nutritive region (threptikos topos)71 and in other areas such as the aisthêtikos topos, where it is characterized by moisture (hugrotês), 72 As the aisthêtikos topos is essential in establishing a clear thought process, any disturbance in this area is likely to give rise to problems. Aristotle also indicates that, owing to his nature, the melancholic suffers from some sort of 'disconnection' from normal thought processes that explains certain 'gifts' he has, such as prophetic dreams.⁷³ He says that the nature (phusis) of the melancholics causes them to see many mental pictures (phantasmata), the result of which is that there is a greater likelihood that they will see one similar to an actual event.74 However, later on in the same treatise,75 this coincidence turns out to be a gift where Aristotle notes that the melancholics have an ability to make connections (eustokhia) between images owing to their intensity (sphodra). This melancholic eustokhia takes on a more sophisticated intellectual dynamic in the Eudemian Ethics,76 where Aristotle says that even those who lack rational and deliberative capacities may still be able to do the right thing, such as the melancholic who may make the right decisions owing to some divine movement in him.77 This principle (arkhê), he says, is stronger (iskhuein) when the rational faculty is 'loosened' (apoluein), a condition that arises in the melancholic. Aristotle calls this good fortune 'euphuia', 78 a quality 79 that can

```
<sup>70</sup> Mem. 453a9-14.
```

⁷¹ e.g. Resp. 474b3; Juv. 469a5-7.

⁷² See van der Eijk (n. 7), 141-5.

⁷³ Div.Somn. 463b17–20; 464a32–b5. On the apparent contradiction between Div.Somn. where the melancholic is said to have clear dreams and Somn.Vig. where Aristotle claims that the melancholic's dreams are confused see van der Eijk (n. 7), 143–8.

⁷⁴ Div.Somn. 463b12-22.

⁷⁵ Div.Somn. 464a32-b5.

⁷⁶ For a discussion of these passages see van der Eijk (n. 7), 238–58.

⁷⁷ EE 1248a39-40.

⁷⁸ EE 1247b39.

⁷⁹ This quality cannot be learnt (Po. 1459a6–7, also stated at EN 1114b5–12, although this passage is not related to akrasia or melancholia). The connection of melancholia with gifted ability is seen in the pseudo-Aristotelian Problems at 30.1, where a more extensive account of melancholia is given. Here melancholia is also a condition that arises owing to some upset in the mixture (krâsis), and that melancholia is a disease (e.g. 953a13, 15). However, the author makes more of the connection between melancholia and gifted ability, such as philosophical, poetic and political; he classes the likes of Socrates and Plato among the famous melancholics. Importantly, van der Eijk (n. 7), 156-7, notes that the author differentiates between melancholic disease (nosos, nosêma, arrôsthêma) and melancholic nature (phusis) although those with a melancholic phusis are more likely than other people to get a melancholic disease (953a12-15, 29-31). The author seems to draw on Aristotle again when he says that the melancholic phusis is a mixture (krâsis) of the body (953a30) which he goes on to describe as a mixture of hot and cold (954a13). Van der Eijk says that although the author does not mention humours he does mention krâsis several times, with reference to a blend of hot and cold (953a30; 954a13, 29, 30; 954b8, 12, 25, 33; 955a14). Furthermore, in common with the melancholia we see in the EN, he says that the effect of a melancholic nature is like the effect of wine in that it affects character (953b17-33.).

also be seen in his *Poetics* where it is needed by tragedians to master metaphors,⁸⁰ and that poets need to be *euphueis*.⁸¹ Aristotle clearly posits melancholic nature (*phusis*) as the cause of these peculiar psychological qualities.

Not only does the melancholic suffer from a disturbed thought process owing to his physical nature but this quality is also seen to extend to those who are asleep, drunk, and inflicted by certain types of madness.⁸² Indeed, in the same contexts Aristotle discusses how each of these parallel states also has a material cause that affects the type of knowledge that the agent has. The most striking of these are Aristotle's discussions about the nature of sleep.83 In the EN the sleeper is a useful analogy for the akratês because neither is able to activate their universal premise concerning what is good for them, and sleep is the state in which the characters of good and bad people are least discernible.84 However, in his works on sleep, the analogy goes beyond a lack of moral action as the physical process of sleep affects the senses and subsequently the cognitive faculty that would allow moral action. Here sleep is a state of the body caused by the process of digestion in the body; in nutrition food is changed into blood and moves upwards in the body (in animals the hot - to thermon - naturally moves upwards) and upon reaching the upper regions is cooled by the brain and driven back down. 85 The accumulation of blood in the lower parts of the animal causes sleep to come on; and the motion of the blood being driven back down by the cold explains why the upper parts nod and people close their eyes, 86 as can be seen in infants: 'for children sleep deeply because all the food is carried upwards.'87 Sleep can be explained teleologically in that it is meant to give respite to the central sense organ;88 but it is mechanical because the movement of the matter of nutrition causes the body to fall into a state of unconsciousness. Aristotle says that the senses are in a state of 'incapacity' (adunamia)89 in sleep, and in the absence of actual sense perception the sleeper has dreams, which are 'appearances' (phantasmata). The sleeper clearly has something that might be deemed knowledge, because his phantasmata have replaced waking knowledge.90 Aristotle describes how dreams arise and what

```
80 Po. 1459a6-7.
```

⁸¹ Po. 1455a32.

⁸² Among the examples of 'madness' I count 'melancholy'; see above, n. 58.

⁸³ On Sleep and Waking, On Dreams, On Divination in Sleep. Pickavé and Whiting (n. 7), 340–3 think that the sleeper is the central example to Aristotle's discussion of akrasia as knowledge that is not actualized; they point to Aristotle's discussion of the sleeping geometer of GA 735a9–11 who does not actualize his knowledge, although it is obvious that he has it. Destrée (n. 7), 14 notes that Aristotle's use of the conditions of sleep, madness and drunkenness demonstrates that, by analogy, the akratês only has knowledge in potentia.

⁸⁴ EN 1102b5-6.

⁸⁵ Somn. Vig. 457b21-6.

⁸⁶ PA 653a12-19 and Somn. Vig. 455b17-28.

 $^{^{87}}$ τὰ γὰρ παιδία καθεύδει σφόδρα διὰ τὸ τὴν τροφὴν ἄνω φέρεσθαι πᾶσαν (Somn.Vig. 457a4–5).

⁸⁸ Somn. Vig. 454b10, 458a20-32.

⁸⁹ Somn. Vig. 454b5, 458a29, 455b3-12; see also On Dreams (Insomn.458b5-9), where there is no sense perception in sleep.

⁹⁰ Owens (n. 7), 177–8 uses the parallel between sleep and *akrasia* as an example of why we should consider Aristotelian ethics with an eye on natural science. Sleep shares with *akrasia* a bodily change that prevents a definite type of cognition (cf. *luetai*, *EN* 1147b6), but he believes that the parallel must stop at this point because: i) the 'block' is located in the functional failure of the central sense organ (*Somn.Vig.* 455b8–12); ii) sleep is natural and necessary for the preservation of the living creature (*Somn.Vig.* 455b13–28); and iii) the physical cause is a recoil

kind of 'knowledge' we actually have in a dream state. 91 'Movements' (kinêseis), he says, arise from sense-impressions within the body. This happens all the time but especially during sleep;⁹² the reason for this is that in the daytime when the senses and mind (dianoia) are active (energousôn) the internal movements are 'forced back' (ekkrouein), but at night sense perception is in a state of incapacity (adunamia) and then these traces reach the heart (because of the movement of to thermon during sleep). 93 Aristotle says that sometimes opinion (doxa) can confirm that the visions we have in sleep are false, as it does when we are awake, but at other times it is 'restrained' (katekhein) and 'follows an appearance' (akolouthei tôi phantasmati).94 In his dream state the dreamer thinks that what he perceives is reality. However, Aristotle says that in dreaming the visions only become clear when the blood clears.⁹⁵ In fact the actual physical nature of the agent plays a key role in sleeping and dreaming overall, 96 children sleep deeply because of their internal physical nature,97 and, Aristotle continues, the physical nature of the infant is like the nature of the drunkard: 'Thus in this way the upper parts of children are full of food so that during five months they do not even turn the neck, for in them, just as in people who are exceedingly drunk, there is a lot of moisture being carried upwards.'98 Both the drunk and the child are affected by a great deal of moisture (hugrotês) that 'carries up'. Elsewhere Aristotle explains that the physical nature of an individual affects the content and production of dreams; those who are extremely young or those who have just eaten do not have dreams 'for there is great movement because of the increased heat from their food',99 and if they do have dreams these are very confused and disturbed, 100 'as in the case of the melancholics, the feverish and the inebriated, for all these ways of being affected, being gassy, cause great movement and disturbance'. 101

of heat inwards (Somn.Vig. 457b1–2 and 458a25–8): 'None of these three specific explanations will apply in the case of weakness of will' (178). However, while the physical account for sleep describes certain causes for sleep that cannot be applied to an account of akrasia, the important point here is that there is clearly some sort of internal physical movement manifest in the sleeper which is having an effect on his waking knowledge, and this movement can also be seen in the drunkard and the madman, both of whom are used along with the sleeper as analogies for the akratic condition. It is therefore necessary to investigate this movement and its effect.

⁹¹ D. Gallop, Aristotle On Sleep and Dreams: A Text and Translation with Introduction, Notes and Glossary (Warminster, 1996), 35 on Aristotle's account of how dreams occur: 'They are explained as due to traces from waking perception, which linger unnoticed in the sense-organs for some time after the external stimuli have departed, and later become reactivated during sleep ... Aristotle describes at length the process whereby 'movements' (kinêseis) travel from the sense-organs towards the heart, and (under certain conditions) mislead the sleeper into supposing that he is perceiving real external objects ([Insomn.] 461b7–462a8).'

- ⁹² Insomn. 460b28–32.
- 93 Insomn. 460b32-461a8.
- 94 Insomn. 459a6-8.
- 95 Insomn. 461a25-9.
- ⁹⁶ As we saw in the case of the melancholic; see above, p. 154.
- 97 Somn. Vig. 457a4-5.

 $^{^{98}}$ οὕτω δὲ τὰ ἄνω πλήρη τροφῆς τοῖς παιδίοις, ὥστε πέντε μηνῶν οὐδὲ στρέφουσι τὸν αὐχένα: ὥσπερ γὰρ τοῖς σφόδρα μεθύουσιν, ὑγρότης ἀναφέρεται πολλή (Somn.Vig. 457a17-20).

 $^{^{99}}$ πολλή γὰρ ή κίνησις διὰ τὴν ἀπὸ τῆς τροφῆς θ ερμότητα (Insomn. 461a13–14).

¹⁰⁰ Insomn. 461a14-22.

 $^{^{101}}$ οΐον τοῖς μελαγχολικοῖς καὶ πυρέττουσι καὶ οἰνωμένοις· πάντα γὰρ τὰ τοιαῦτα πάθη πνευματώδη ὄντα πολλὴν ποιεῖ κίνησιν καὶ ταραχήν (Insomn. 461a22–5).

These physiological peculiarities seen in the disturbed internal physiology of the child, the drunk, the sick and the melancholic are ascribed variously to the hot (to thermon), mixture (krâsis), moisture (hugrotês) and a spirituous quality (pneumatôdês), which cause some kind of strong movement (kinêsis) and disturbance (tarakhê). These qualities, particularly the excess amount of them seen in the types described, not only determine the quality of the sleep for the individuals but also the production and clarity of dream images. Moreover, in On Dreams Aristotle says that sometimes opinion (doxa) cannot confirm that the visions seen in dreaming are false because it is restrained (katekhein). 102 This has some relation to EN 1147b9-12, where Aristotle says that there may either be no opinion about an aisthêton or it may be inactive. In the case of the sleeper the 'restraint' of the opinion (doxa) appears to be caused by the physical upset which means that the blood is not clear, a quality that causes the sleeper to think that his dreams are real.¹⁰³ Opinion counts as knowledge for the sleeper as in EN 7 Aristotle is satisfied that opinion counts for knowledge, because for some people opinion is knowledge.¹⁰⁴ Therefore the opinion of the sleeper with upset internal movements and of the akratês is restrained. Furthermore there is a direct correlation between the account of impetuous akrasia and what is reported to happen during the activity of dreaming at On Dreams 459a8, where Aristotle says that when opinion is restrained in dreaming it just 'follows the appearance' (akolouthei tôi phantasmati), an attribute used at EN 1150b26-8 to describe the behaviour of the melancholic akrateis, who were inclined not to deliberate but rather to follow their mental impressions.

In the light of these observations it is clear that Aristotle holds a full explanation of *akrasia* to be impossible without recourse to his works on natural science. Indeed, in these Aristotle acknowledges certain types of behaviour which are also within the remit of an ethical discussion.¹⁰⁵ A case in point is *Generation of Animals* 774a3–6 where he says that women who are *akrateis* with regard to sexual intercourse will lose this desire once they have had many children, because then the 'seminal residue' (*spermatikê perittôsis*), which causes the desire, is drained off. In turn Aristotle discusses the ethical, rather than physical, nature of female sexual behaviour at *EN* 1148b31–4 where he says that a woman cannot be called *akratês*

¹⁰² Insomn. 459a6-8.

¹⁰³ Insomn. 461a25-9.

¹⁰⁴ EN 1146b24-30.

¹⁰⁵ Destrée (n. 7), 153–4 says that the *akratic* and the drunk, madman and sleeper all suffer from some sort of disability to judge rightly owing to their physical condition. He notes Aristotle's comparison of the good man to the healthy man who judges rightly (*EN* 3.4, 1113a25–b1) and says that the same idea can be found in the passages on *akrasia*: 'the akratic, affected by appetite, is like a madman, a drunk, or a sleeping person, whose bodies are altered. Since representation, as a sensitive faculty, depends upon the bodily state of the sensitive organs, we can understand why these bodily alterations can affect it. These various comparisons are intended to make us understand why the *akratic* is incapable of making use of his faculty of representation of the deliberative type. Just as the sleeper or the madman is incapable of using their knowledge because of an alteration in their faculties, the akratic is incapable of using his practical knowledge, more exactly incapable of putting his *phantasia logistikê* to work.' Likewise Pickavé and Whiting (n. 7), 341 note that the common feature of the sleeper, drunk and madman described by Aristotle in *EN* 7.3 is that they all undergo changes in the subject's body. They go on to note that, as a result of these conditions, they cannot actualize their knowledge, although they do have something that counts for knowledge.

for being too passive in her sexual behaviour because this is her natural state. 106 Comparison of the two passages shows that Aristotle considers the passive nature of the female to be the natural state and akratic behaviour on her part is likely the result of excess of 'seminal residue', hence the ethical behaviour cannot be fully accounted for without the physical explanation. Likewise at EN 1154b5-15, Aristotle directly acknowledges the evidence of the phusiologoi when remarking on how certain types are driven to pursue pleasure by their nature. Children, 107 he says, are not suited to ethical development because of their physical nature which, unsettled by the process of growing, overrides their rational faculties. Children pursue pleasure, 108 appetite is a quality that we see especially in them, 109 and while their actions are voluntary, 110 they are without rational choice (proairesis), 111 furthermore their pleasures are the pleasures of the vegetative soul¹¹² and these characteristics are detrimental if they are not used in accordance with intellect.¹¹³ In the Rhetoric Aristotle attributes the desires of youth, and in consequence their characters, to their unstable physical nature: 'The bodily appetites that they are most likely to follow are those concerned with sexual desire and they are akrateis in this. They are easily swayed and are fickle in their appetites, and they desire intensely but stop suddenly (for their wishes are sharp but not powerful, like the thirsts and hungers of sick people). They are passionate, quick-tempered, and of the sort to give way to anger.'114 These physical temperaments cause them to be optimistic (euelpides), Aristotle says, because 'like people who are drunk, the young are warmed by their nature, 115 and this state causes them to be easily deceived. 116 There is no consistency in their characters or actions and they are buffeted about by their physical drives, they are 'easily swayed' (eumetaboloi), 'fickle' (hapsikoroi) and 'desire intensely but stop suddenly' (sphodra men epithumousi takheôs de pauontai).117

Aristotle calls the young *akrateis* in their actions, and his examples of the way in which children act are paralleled with some of the other physical conditions that

¹⁰⁶ Aristotle does not specifically speak about female *akrasia* in the *EN* and presumably, in light of these passages, female sexual assertiveness counts as *akrasia* for Aristotle.

¹⁰⁷ I count 'children' in with an account of 'the young' here; on the whole, Aristotle, in the *EN*, uses 'neos' for young and 'pais' for child, although he also uses teknon and paidion. The difference between the child and the youth seems to be an increased amount of social behaviour. The youth is the agent in questions of friendship (e.g. *EN* 1155a12; 1156a26–7; 1158a5, 20) and experience (*EN* 1095a3; 1142a12, 20) whereas the child is associated with appetitive behaviour. The youth seems to show the progressing abilities of the child to function as he grows. However, the states of both owe much to their physical nature and as such they should be treated together.

```
<sup>108</sup> EN 1152b19–20.
```

¹⁰⁹ EN 1119b5-7.

¹¹⁰ EN 1111a24-6.

¹¹¹ EN 1111b8-9; EE 1226a23-4.

¹¹² EE 1216a3-7, see also EN 1098a2-3. In History of Animals (HA 588a31-b2) Aristotle says that children and animals are alike in many ways.

¹¹³ EN 1144b8-9

¹¹⁴ καὶ τῶν περὶ τὸ σῶμα ἐπιθυμιῶν μάλιστα ἀκολουθητικοί εἰσι τῆ περὶ τὰ ἀφροδίσια καὶ ἀκρατεῖς ταύτης, εὐμετάβολοι δὲ καὶ ἀψίκοροι πρὸς τὰς ἐπιθυμίας, καὶ σφόδρα μὲν ἐπιθυμοῦσι ταχέως δὲ παύονται (ὀξεῖαι γὰρ αἱ βουλήσεις καὶ οὖ μεγάλαι, ὥσπερ αἱ τῶν καμνόντων δίψαι καὶ πεῖναι), καὶ θυμικοὶ καὶ ὀξύθυμοι καὶ οἶοι ἀκολουθεῖν τῆ ὀργῆ (Rh. 1389a4-9).

 $^{^{115}}$ ὤσπερ γὰρ οἱ οἰνωμένοι, οὕτω διάθερμοί εἰσιν οἱ νέοι ὑπὸ τῆς φύσεως (Rh. 1389a18–19).

¹¹⁶ Rh. 1389a24-5.

¹¹⁷ Rh. 1389a6–7. The immaturity of childhood is not restricted to the body; in the *Politics* Aristotle describes the child's imperfect (*atelês*) capacity for deliberation (*Pol.* 1260a13–14).

he uses as parallels for *akrasia*. In his treatises concerning sleep and dreams, 118 their psychophysical condition is counted along with that of the drunk 119 and, in the *EN*, with that of the melancholic, 120 and this internal upset impinges on their ability to use rationality. In *EN* 7 Aristotle describes how childhood is like being drunk, 121 and when discussing the *akratês*' failure to integrate his knowledge of what is good for him with his appetite, he says that the *akratês* is like 'those who are in the first stages of learning' or the 'drunk who recites proofs and verse of Empedocles'. 122 He clearly means here that the *akratês* is rather like a child, or a drunk, further showing that both failures for cognition are rooted in internal physical upset. 123

Furthermore, in common with the melancholics, the young have difficulty remembering. In On Memory Aristotle says that the very young and the very old are in a state of flux (rhein), the young owing to growth (auxêsis), and the old owing to decay (phthisis), 124 which impacts on their memory. The old and young are discussed along with dwarfish people (hoi nanôdeis) whose poor memories are due to the 'great weight' (polu baros) on their central sense organ (to aisthêtikon); this does not allow the movements (kinêseis) of recollection to keep in one direction but breaks them up (dialuein). 125 Aristotle repeats the earlier reason for poor memories in the young and the old but adds that small children are also dwarfish (nanôdês), and we must discern from this that they suffer the same difficulties as dwarfish people. Aristotle makes a similar connection in his discussion of the posture of animals in Parts of Animals, where he says that children's failure to be rational is due to their physical nature which precludes the movement of rationality in them. 126 Man, he says, stands upright because 'it is the characteristic activity of that which is god-like to think and be wise'127 and this is not easy under the burden of a heavy body pressing down on it which makes movement of the thought and central sense difficult.¹²⁸ Aristotle goes on to describe how excessive weight forces some animals to walk on all fours and for this reason all animals, with the exception of man, are dwarflike (having larger upper parts than lower body parts, as seen in children).¹²⁹ Animals, being dwarflike, are less intelligent than men, he says, and even if we compare human children with adults they are also less intelligent: 'And the reason is just as we said previously, that the first principle of the

```
118 e.g. Somn. Vig. 457a4-5.
```

¹¹⁹ Somn. Vig. 457a18-20.

¹²⁰ EN 1154b5-15.

¹²¹ EN 1154b9-11.

¹²² EN 1147a19-24.

¹²³ Pickavé and Whiting (n. 7), 344 do not believe that the young person, or more specifically the 'learner' is a good parallel for the *akratês* as the *akratês* has clearly reached 'first actuality knowledge' like the geometer of *GA* 735a9–11 (see n. 83); however, this paper argues that the physical condition of the young person and the change which growth and education have on this condition are intrinsic to a discussion of the mechanism of *akrasia*, especially if this is a result of failure at some stage in the agent's early ethical habituation.

¹²⁴ Mem. 450b5-7.

¹²⁵ Mem. 453a31-b7.

¹²⁶ PA 686a24-8.

¹²⁷ ἔργον δὲ τοῦ θειστάτου τὸ νοεῖν καὶ φρονεῖν (PA 686a29).

¹²⁸ PA 686a30-2.

¹²⁹ PA 686a32-b11.

soul in many of them moves with difficulty and is corporeal.'¹³⁰ He thus connects the physical nature of the child with their impaired cognitive condition,¹³¹ just as we saw in the case of the melancholic.

PHYSIOLOGICAL BALANCE FOR MORAL AND PHYSICAL HEALTH

It is clear from the passages discussed that Aristotle thinks that each of the types described in EN 7.3 has some 'excess' of a particular physical quality (such as heat) which impinges on the moral character of the individual, and therefore the implication is that a similar account may be provided for akrasia. There is nothing problematic about considering a character type, such as akrasia, to have a physical basis because Aristotle believes that the thought process of an individual has a material element and that the condition of the material parts that impinge on this process is of paramount importance, because upset in the material causes upset in the mental process.¹³² This relationship is not peculiar to his *Parva Naturalia* and, as can be seen in his language in the ethical works, Aristotle values internal stability in matters that range from cognitive function to health. His discussion of the mean $(mesot \hat{c}s)^{133}$ is probably the most famous example of this and the theory itself can be traced back to the Hippocratic writings and carries through Plato to Aristotle. 134 The theory of mesotês follows the theory of equality (isonomia) seen in Alcmaeon who believes that an equality of powers/elements (dunameis) in the body constitutes health.¹³⁵ The body is constituted of dunameis including (amongst others) the moist (to hugron), the dry (to xêron), the hot (to thermon) and the cold (to psukhron) and Aristotle considers these to be the material of ensouled bodies. 136 These powers are the potentialities of the body as compared to the actuality (energeia) and are subject to certain affections (pathê) resulting from external sources such as nutrition, environment and exercise. Health is achieved when the elements exist in an appropriate blend in whichever body parts they constitute; this allows for optimal functioning of the body as a whole and of its individual parts. Conversely excess and deficiency result in imbalance that equals vice and ill health. Repeated action strengthens the dunameis and results in a state (hexis), and if the dunameis are in correct proportion (summetria) then the body is healthy. 137 Therefore, on a

 $^{^{130}}$ αἴτιον δ' ὥσπερ εἴρηται πρότερον, ὅτι ἡ τῆς ψυχῆς ἀρχὴ πολλῷ δὴ δυσκίνητός ἐστι καὶ σωματώδης (P4 686b27–8).

¹³¹ I follow A. Coles, 'Animal and childhood cognition in Aristotle's biology and the *scala naturae*', in W. Kullman and S. Föllinger (edd.), *Intentionen, Methoden, Ergebnisse* (Stuttgart, 1997), 287–324, at 316–7, in believing that Aristotle's words at *PA* 686b27–8 refer back to *PA* 686a31 where Aristotle says that pressure in the upper body can hamper the movement of the mind (*dianoia*) and the common sense (*koinê aisthêsis*).

¹³² See discussion in van der Eijk (n. 7), 206–37 and Owens (n. 7), 173–66. Owens notes that as a composite we must recognize that Aristotle's man is subject to change all the time and this impinges on his emotional state, as well as his strictly physical state.

¹³³ e.g. EN 1104a12-27.

¹³⁴ Tracy (n. 7) provides a comprehensive analysis of Aristotle's application of the doctrine of the mean (*mesotês*) throughout his works.

¹³⁵ Aëtius 5.30.1 (Diels, *Doxographi Graeci*, 442).

¹³⁶ PA 646a15-17.

¹³⁷ See Tracy (n. 7), 231-7.

larger scale both health and virtue depend on an appropriate blend, or *krâsis*, of qualities.¹³⁸ Within this theory, the internal powers (*dunameis*) of those who are said to be internally 'unstable' are essentially responsible for their behaviour, or at least their abnormal reactions. There is a direct correlation between an inappropriate condition for ethical development and internal instability.

It is also clear that physical instability does not just drive incorrect behaviour, but obscures the rational faculties that would allow for correct behaviour (as seen in akrasia). Aristotle believes that knowledge can only come about when a state of internal stability is reached. Thus in the Physics 139 he discusses the effect that upset in the body has on the psychic faculties; states that come about through being drunk (methuein), asleep (katheudein) and sick (nosein) are examples of how psychic faculties are affected by restlessness and as such people in these conditions only regain knowledge when they regain their stable physical state.¹⁴⁰ He says that knowledge is dependent on the soul coming to be in a state of rest from its natural restlessness (phusikê tarakhê), and this is the reason why children have inferior cognitive faculties to adults, because they suffer from a great deal of restlessness (tarakhê) and movement (kinêsis). 141 Therefore when Aristotle says that we need to ask the phusiologoi how the akratês regains consciousness, 142 it must involve some sort of settling. Aristotle clearly thinks that this settling has a physical basis; in Parts of Animals he says that the intellect (dianoia) depends on thin and pure blood, 143 and he also notes that the size and texture of the heart has some bearing on the character of an individual.¹⁴⁴ As we saw, Aristotle says that the blood must be clear for dream visions to become clear to the sleeper. 145

While it is not obvious exactly how instances of unrest actually impair cognition, it is clear that in the accounts of instability we have seen so far the difficulty lies in the competing elements in the body. In *On Dreams* Aristotle says that, owing to the inactivity of the senses at night, the movements produced internally (which are normally subsumed by waking sensation) drive out (*ekkrouein*) movements of waking perception. This notion of one movement 'driving out' another, or being 'more powerful' than another, is used in the *EN* as well as the works on natural science to describe instances where an irrational element in rational action is a consideration. Aristotle says that if children have strong innate appetites that are not checked, they will drive out (*ekkrouein*) rationality; that bodily pleasures seem more choiceworthy because they drive out (*ekkrouein*) pain; and that pleasure often drives out (*ekkrouein*) rationality (here he gives the example of

 $^{^{138}}$ In the case of bodily virtues such as health and fitness Aristotle says that these depend on a blending ($kr\hat{a}sis$) of hot and cold in proportion ($Ph.\ 246b3-8$). In fact a failure in $kr\hat{a}sis$ leads to such fundamental 'mishaps' of nature as the production of female offspring instead of male, which is, according to Aristotle, a direct result of a failure in the proportion of hot to cold ($GA\ 767a16-20$).

¹³⁹ Ph. 247b1-248a6.

¹⁴⁰ Ph. 247b14.

¹⁴¹ Ph. 247b17-248a1.

¹⁴² EN 1147b8-9.

¹⁴³ PA 650b18-27.

¹⁴⁴ PA 667a11–21.

¹⁴⁵ Insomn. 461a25-9.

¹⁴⁶ Insomn. 460b32-461a8.

¹⁴⁷ EN 1119b3-10.

¹⁴⁸ EN 1154a27.

someone whose love of flute-playing drives out the pleasure of rational activity).¹⁴⁹ Similarly in cases where Aristotle deems that rationality is not powerful he uses the term *iskhuein*, a term that has physiological parallels in his biological works.¹⁵⁰ He acknowledges that rational argument (*logos*) is not strong (*iskhuein*) with all people,¹⁵¹ and is stronger (*iskhuein*) in the more civilized youth.¹⁵² In the *Eudemian Ethics* Aristotle notes that memory is stronger (*iskhuein*) in the blind because they are free from the competing sense of the visible.¹⁵³

In the light of the evidence of the passages about the different types of people whom Aristotle describes as parallels to or examples of *akrateis*, it is clear that *akrasia* is a condition of upset within the body that interferes with the normal process of action based on rational deliberation, in that internal movements drive back rationality. Initially we sought to demonstrate that the unstable qualities seen not only in the melancholic but also in the drunk, the sleeper and the child shed light on the condition of rash *akrasia* (*propeteia*) because Aristotle names the melancholic as one who characterizes this condition. However, Aristotle names the drunk, sleeper and madman when talking about *akrasia* in general, not just when discussing *propeteia* and it is important now to refine this account in order to show how the two particular types of *akrasia* may both come about from a disturbed physiology, and how they might be cured.

THE PSYCHOPHYSICAL MECHANISM OF *PROPETEIA*AND *ASTHENEIA*

In EN 1147b9–12 Aristotle says, by way of summarizing his discussion on what it means to have knowledge, that the *akratês* (being *en tôi pathei*) does not have an opinion (*doxa*) about the object of perception, or he has it in such a way that he does not have knowledge of it. While it seems initially that the true *akratês* must answer to one or the other of these possibilities, Aristotle's description of the two different types of *akrasia* at EN 1150b19–28 shows that one type (namely *propeteia*) does not have a *doxa* at all while the other (*astheneia*) has it but does not use it. *Propeteia* is characterized as *akratic* action where the agent does not deliberate but is led on by *pathos*. ¹⁵⁴ Furthermore the irritable people (*hoi oxeis*) and the melancholics, who are typical of this condition, do not wait for reason but

¹⁴⁹ EN 1175b8. See also EE 1224b24 where, in the case of *akratic* behaviour, Aristotle says that if rationality and appetite were separate (presumably not integrated as we would hope might be achieved by education) they would force each other out (*ekkrouein*).

¹⁵⁰ In Generation of Animals Aristotle uses the term iskhuein to describe the power, or lack of power, to change something else; e.g. in speech the part that moves the air 'strengthens' with age to affect a change in the voice (GA 787b6), the skin of the human is not 'strong' enough to affect the colour of the hair (GA 785b9), and in male animals that do not emit semen their weakness means that the movements of the semen are not 'strong' enough to have hold over the matter (GA 730b29). There is a clear parallel in this final example between rationality (as the formal nature of the human being) not being strong and the way in which sometimes the formal cause of reproduction, usually passed through the sperm, is not strong enough to affect the appropriate perfection (telos) of the creature.

¹⁵¹ EN 1179b23-4.

¹⁵² EN 1179b8.

¹⁵³ EE 1248b1.

¹⁵⁴ EN 1150b21-2.

pursue *phantasia* instead. With regard to the irritable this is due to their hastiness (*takhutês*) and with regard to the melancholics their intensity (*sphodrotês*). It is clear that Aristotle attributes the melancholic intensity to a physical imbalance, and in the *EN* this causes him to pursue strong pleasures.¹⁵⁵ In the process of recollection he is especially moved by images,¹⁵⁶ just as the melancholics and irritable are in *EN*, and Aristotle ascribes this quality to those whose opinion is restrained from judging.¹⁵⁷ The melancholic is like one asleep because he is disconnected from any opinion (*doxa*) about the object of perception (*aisthêton*). This 'disconnection' is also, according to Aristotle, the reason why sometimes the melancholic is able to make correct inferences quickly; a divine principle works inside him owing to this 'disconnection'.¹⁵⁸

The reason why rash akratic behaviour occurs in the melancholic must in some way be connected to what, according to Aristotle, happens about his attempts to recollect (which is in itself a kind of syllogism). The moisture around the central sense organ makes the process of recollecting difficult, because the melancholic cannot stop the movements that come about from the act of searching for a mental image (phantasma).¹⁵⁹ We can apply this explanation to non-melancholics who suffer from propeteia because Aristotle says in the passages on memory that this (the inability to stop movements once they have started) is also the reason that those who produce such movements when angry or afraid find it hard to stop them.¹⁶⁰ Apparently those who are not melancholic but particularly ill-tempered or fearful have the same disturbed internal movements. Aristotle connects the emotions of anger and fear with the physical qualities of hot and cold, 161 and he says that those who suffer from anger and all other emotions are easily tricked about what they see – just as sometimes those who are feverish think that the patterns on the walls are animals. 162 Importantly, Aristotle notes here that the intensity of the emotion determines whether the person realizes that what he sees is false. The melancholic and the rash, like those with propensities for fear or rage, have no knowledge at all, which is shown in EN by their total failure to deliberate, and this in itself is probably caused by the extreme movements of hot and cold in their bodies.

The same account can be given for *astheneia* as for *propeteia* but the cause differs slightly. The *akratês* who suffers from *astheneia* (who has an opinion about the *aisthêton* but does not stand by it) clearly has two elements competing in him, rationality and another unspecified desire that comes to the fore and pushes rationality back. Aristotle makes it clear that all living beings undergo internal movements, not just those who suffer by some extreme, ¹⁶³ but the *akratês* is like those who get drunk quickly on less wine than most. ¹⁶⁴ Thus the *akratês* does not seem to be entirely composed and is likely to feel the pull of internal movements more than others. Aristotle thinks that internal movements that involve physical elements, such as hot and cold, are inevitable in action. He explains this in *On Movement*

```
155 EN 1154b11-14.

156 Mem. 453a19.

157 Insomn. 459a8.

158 Div.Somn. 463b17-20 and 464a32-b1; EE 1248a39-40.

159 Mem. 453a14-27.

160 Mem. 453a26-8.

161 e.g. Rh. 2.12.

162 Insomn. 460b8-13.

163 EN 1154b7-9.

164 EN 1151a4-5.
```

of Animals, 165 where he discusses the mechanism of intentional action in animals (human and non-human). 166 Movement involves a series of alterations which in turn are caused by mental impressions (phantasiai), sense perceptions (aisthêseis) and thoughts (ennoiai).167 Objects thus conceived impart heat or cold in such a way that we shiver (phrittein) and feel fear (phobeisthai) just by thinking about such things. 168 This alteration, Aristotle says, occurs in the area of the heart (kardia), and even if this is 'in an imperceptible part' (en anaisthêtôi moriôi) it produces a great difference in the body, such as blushing (eruthêma), paleness (ôkhrotês), shuddering (phrikê) or trembling (tromos), or the opposites of these. 169 At MA 8 he reiterates the point that these temperature changes may be imperceptible but heating or cooling follows almost all pleasant and painful things, as is clear from the fact that all bodily affections are followed by heating and cooling, either in a particular part or throughout the whole body, and this also counts for recollection and hopes (elpida) which cause more or less the same effects. 170 Aristotle's aim here is to show how simultaneous action is produced from alterations caused by temperature changes within the body rather than how akrasia may come about. Yet what is clear is that someone who perceives an aisthêton, which he has some desire for, will be affected by some internal heating, however imperceptible. In the case of the akratês this may be more perceptible than with most, or may have a stronger effect on the internal stability of elements because, as Aristotle says, the akratês is like the one who gets drunk on less wine than most.¹⁷¹ If these internal movements are not the result of an illness (such as melancholia) and allow rationality to be present (even in a restrained form) then they must arise when action is going to take place. This is compatible with Aristotle's belief that the akratês suffers the same state as those whose emotions cause their bodies to undergo some sort of change.¹⁷² This is particularly important if we consider what Aristotle says at MA 702a5-7 (that recollections and anticipations cause the same affections of the body) and likewise where he says that the amorous character might mistake any figure for his beloved.¹⁷³ Considering what we have seen of the influence of any internal 'imbalance', it is clear that if the akratês is one who is more likely to be affected by such internal movements, his ability to rationalize may be jeopardized. And the reason for this is, as Aristotle points out, that movements in the body, even different sense perceptions, are sometimes apt to compete with each

¹⁶⁵ A treatise that he must be referring to at EN 1147a24-5 when he says that the reason for action can be examined phusikôs. Destrée (n. 7), 148-9 considers that the adverb is a sure sign that we should look to MA and De an. D. Bostock, Aristotle's Ethics (Oxford, 2000), 127 notes that the important thing about Aristotle's use of the drunkard et al. is that these are particular physical states and that phusikôs may mean that we should pay attention to the 'causality' involved, 'just how the body is set in motion', and that Aristotle must be referring to MA.

¹⁶⁶ MA 8 is concerned with how thought may or may not result in action and this passage is often considered in accompaniment to EN 8.3 because it describes action based on syllogism. However, there is little to link it with akratic action; there is no conflicting premise in the agent who decides whether he needs a coat or whether to drink. However, in $\overline{M4}$ 7-8 Aristotle is clearer on the role of the hot and the cold in action.

¹⁶⁷ MA 701b16-17.

¹⁶⁸ MA 701b17-23.

¹⁶⁹ MA 701b28-32.

¹⁷⁰ MA 701b35-702a7.

¹⁷¹ EN 1151a4-5.

¹⁷² EN 1147a14-18.

¹⁷³ *Insomn*. 460b1–9.

other.¹⁷⁴ It may even be the case that the pre-existing propensity of the individual means that he makes an 'incorrect' judgement about the *aisthêton*, or creates his own *phantasia* to follow.

If we take into account Aristotle's description of internal change from *MA* when examining *akrasia* in *EN* it seems that when the *akrateis* are confronted with an object that they have strong feelings about, they heat up in such a way that the mechanics of their bodies overcome any intellectual debate that may occur.¹⁷⁵ Therefore the *akratês* person who has the universal premise that sweet things should not be tasted, when faced with a sweet thing will heat up in such a way that his rational calculation will be driven back by the heat in his body. His persistent pursuit of that which causes him pleasure means that this heating up becomes strengthened and his *akratic* state becomes more difficult to rectify. Aristotle's conclusion that it is perceptual (*aisthetikê*) knowledge that is dragged around by the body¹⁷⁶ is exactly what has happened in the instances of physiologically based action that we have seen. The body does appear to use desire for its own ends; it drags *perception* (not universal knowledge) about because of the altered state of the agent. Rationality is not absent but it is not strong enough to be active and this is what is happening in the case of the weak *akratês*.

THE ISSUE OF A CURE

Scholarship on Aristotle's akrasia has, on the whole, steered clear of looking to failed physiology as the cause, and this probably stems from an anxiety that a physical cause for the condition may absolve the agent from responsibility, which would be incompatible with Aristotle's account because he thinks that the akratês agent can be held responsible for his actions.¹⁷⁷ However at EN 1114a1-16, while discussing the issue of responsibility, Aristotle says that it may be necessary to punish someone who commits a wrong action even if they are in a state in which they do not know what they are doing, if their ignorance was brought about by their own carelessness (di' ameleian agnoein) - such as in the case of the drunk. Thus initially it is the responsibility of men not to commit acts which will lead to the formation of a bad character. It is only after that character is formed that the agent will no longer be able to act otherwise. Likewise, he notes, someone who is ill through living in an uncontrolled fashion (akratôs bioteuôn) and disobeying his doctors (apeithôn tois iatrois) cannot just become healthy. Aristotle believes that vices of the soul are voluntary, as some vices of the body are, through want of self-care.¹⁷⁸ It is clear that Aristotle considers akrasia to be like an illness, a parallel which is clearly seen in the case of the melancholics whose propensity

¹⁷⁴ e.g. EE 1248b1.

¹⁷⁵ Pickavé and Whiting (n. 7), 353 think that the involvement of a particular desire (*epithumia*) peculiar to the agent, which triggers their *akratic* behaviour, is what allows the agent to make rational decisions about most things but fail on the occasions when they are presented with that to which they are particularly 'vulnerable'.

¹⁷⁶ EN 1147b13-17.

¹⁷⁷ Preus (n. 7), 420 thinks that Aristotle avoids using the terminology of 'psychic maladies' in *EN* (in contrast to *EE*) for vicious conditions because it would raise questions of responsibility in Greek society.

¹⁷⁸ EN 1114a21-31.

to pursue any chance pleasure in order to heal themselves of internal pain leads them to become intemperate and bad.¹⁷⁹ In the case of non-melancholic *akrasia* we must blame the *akratês* whose repeated acts of self-indulgence have led to a disturbed internal state that now leaves him unable to undertake rationally led action.¹⁸⁰ Thus Aristotle clearly believes a person can be responsible for their moral condition, as they are for their physical condition, and where this physical condition causes a moral condition they must be culpable for both. With this in mind when Aristotle talks about the 'curability' of *akrasia* we must consider whether this 'cure' is not just a metaphorical cure but rather one that, at least in part, involves physical remedy.

Aristotle raises the issue of curing akrasia on more than one occasion. He discusses whether a person who acts through rational choice is easier to cure (euiatoteros) than one who acts akratês, 181 and he points out that the akratês is easier to cure than the akolastos person. 182 In EN 7.8 Aristotle says that the akratês person is a 'better' person than the akolastos person because the akolastos is not the sort to have regrets because he stays with his choice, and this makes him incurable (aniatos), whereas the akratês is curable (iatos):183 'For wickedness seems of the illnesses to be like dropsy and consumption, while akrasia is like epilepsy; one is a continuous ill condition and the other is not.'184 Aristotle compares akrasia to epilepsy because it is a condition that manifests itself sporadically. The akratic is not in an akratic state all the time because he has regrets, the very thing which marks him out from the akolastos, 185 who, on the other hand, is permanently affected by his condition and is resolute in his choices; hence his is an incurable condition like dropsy or consumption. It is worth noting that in On Sleep and Waking epilepsy is described as a kind of sleep and often begins during sleep due to the motions in the body, 186 further connecting it with Aristotle's physiological

Aristotle does not give any indication as to a possible cure although presumably it is one which ensures that in future the *akratês* will act with a stable constitution. A 'confused' internal state interferes with rational action and, as we noted above, when Aristotle tells us to consult the *phusiologoi* in deciding how an *akratês* regains his consciousness¹⁸⁷ he clearly refers to a return to internal stability. Aristotle also requires that an agent have regret about his action in order for him to be curable, ¹⁸⁸ for this shows that his condition is not permanent and his knowledge is only temporarily overcome. Aristotle thinks that the nature of

¹⁷⁹ EN 1154b13-15.

¹⁸⁰ Note Destrée's (n. 7) comments on the good man and the healthy man (above, n. 105).

¹⁸¹ EN 1146a31-b2.

¹⁸² The difference between the *akratês* and the *akolastos* person is that the *akolastos* always thinks it is necessary to pursue the present pleasure (*to paron hêdu*) through rational choice (1146b22–3), whereas the *akratês* does not think it is necessary but pursues it anyway (*ho d' ouk oietai men, diôkei de*), 1146b23–4.

¹⁸³ EN 1150b29-32.

 $^{^{184}}$ ἔοικε γὰρ ἡ μὲν μοχθηρία τῶν νοσημάτων οἷον ὑδέρω καὶ φθίσει, ἡ δ' ἀκρασία τοῖς ἐπιληπτικοῖς ἢ μὲν γὰρ συνεχὴς ἣ δ' οὐ συνεχὴς πονηρία (EN 1150b32–5).

¹⁸⁵ EN 1150b29-31.

¹⁸⁶ Somn.Vig. 457a8–11. Aristotle says at EN 1149a12 that epilepsy is one of the possible causes of foolishness that comes about through sickness, as opposed to through nature.

¹⁸⁷ EN 1147b8–9.

¹⁸⁸ EN 1150a16-22.

humans means that they are constantly in some state of internal instability 189 and this is the reason we have necessary desires to eat etc., for these bring us back to a natural 'fulfilled' state from which we can undertake rational action. To this end in the EN he describes remedial pleasures, natural and necessary pleasures which perform this function. 190 Tracy argues that the stabilizing process needed in order for cognitive functioning to work effectively can be achieved externally or internally and that in the case of the stable states that allow for cognitive function (for example, maturity) 'some may be produced by natural processes alone' while others like health and moral excellence 'may require assistance from the physician and trainer, the moral guide and statesman'. 191 What a stable physical state involves is not clear, although it seems from the passages examined that it includes such elements as clear blood. 192

Yet akrasia is a more extreme case of physical upset which goes beyond the fulfilment of natural requirements. In the case of the melancholic akrasia can be considered a type of behaviour symptomatic of illness and in this case Aristotle would undoubtedly consider some sort of medical treatment.¹⁹³ In the case of weak akrasia the treatment must require something similar to the regulation of children because it clearly stems from some sort of failed ethical development. Children behave in an akratic fashion because, as we saw, their internal instability causes them to act on appetite, and this is why training children physically as well as mentally is so important to Aristotle. In the Politics Aristotle recommends the practice of some countries in using mechanical instruments to ensure that children's limbs are not distorted. 194 Physical training brings the youth into an appropriate condition in adulthood so that he no longer makes decisions based on bodily appetites. Therefore the way to 'cure' the akrateis seems to involve the process that failed in the initial stages of their ethical development. It is necessary to demonstrate to children the right way to respond to their physical desires because their physical condition forces them to pursue some respite from this instability. This is Aristotle's concern when he says that children and melancholics pursue physical pleasures in response to their unstable physical conditions.¹⁹⁵ As we noted

```
<sup>189</sup> EN 1154b7-9.
```

¹⁹⁰ EN 1152b31-5.

¹⁹¹ Tracy (n. 7), 276.

¹⁹² See van der Eijk (n. 7), 220-1 and Tracy (n. 7), 276.

¹⁹³ The Hippocratic author of *On Regimen* 35 describes a condition which sounds very similar to that of the rash akratic. The chapter itself describes how disproportionate blends of fire and water in the soul may cause some mental incapacity, and prescribes treatment for these conditions accordingly. The type of person whose psychic water is mastered by fire has a quicker soul than normal and, as we saw with the rash akratic, is inclined to pass judgement rapidly on the things that appear to him and rushes after many things on account of this intensity (*dia takhutêta*). The cure for the condition involves a regimen of water, barley bread, fish, well-diluted drink, infrequent sexual intercourse, plenty of natural exercise, vomiting after overindulgence, and weight loss. All these treatments aim to rebalance the proportions inside the soul. As Aristotle clearly thinks that some internal disproportion has resulted in the behaviour seen in the *akratês* it is likely that he too would prescribe some sort of physical regime to rebalance the qualities as much as possible.

¹⁹⁴ Pol. 1336a10-2.

¹⁹⁵ EN 1154b5–15. Preus (n. 7), 422 claims that this passage is important because it warns that a failure to constrain the physical desires of these people will cause them to develop habitual vices that are a direct result of their appetites. The example he thinks Aristotle means to imply here is inebriation, because it is compared with youth and melancholy in 1154b5–6: 'From this passage I derive the proposition that melancholics, like some young people, if left to their own

above, Aristotle believes that this is an ongoing process even in adulthood, so even relatively successful childhood training is not a guarantee of non-akratic behaviour, and once given the appropriate tools for right action in adulthood it is up to us to maintain a good moral character even in the face of strong drives. 196 When discussing the two types of akrasia Aristotle says that there is no surprise if someone gives in to strong (iskhuros) and excessive (huperballôn) pleasures and pains, 197 and then he gives the example of 'people who, though trying to contain their laughter, burst out laughing all at once'. 198 This theme of physical restraint from laughing is seen again a few lines later when Aristotle describes how some people (the enduring) are able to endure being tickled by seeing what is going to happen and preparing themselves so as not to be affected by it.¹⁹⁹ Aristotle clearly thinks that there is some kind of rational control that can be instilled on physical reactions and that some are better at this than others; and the ability of the enduring people to exercise this marks them out as praiseworthy. The failure of this in the akratês is something of a vicious circle, and a failure of top-down control on impulses leads to impulses obscuring deliberation. This seems to be what Aristotle means when he says that the feelings that are seen in akratic action cause a change in the body leading to madness (mania). 200 Subsequently mania will result in further failure of deliberation and the akratês will sink deeper into the abyss. Clearly then the akratês is incapacitated with regard to virtue owing to a difficulty in restraining his physical impulses to such an extent that his body reacts before, or against, his will. If the agent can restrain his physical impulses early he will manage to enforce some sort of stability on his appetites.²⁰¹

Theoretically, in cases where the cure is to be imposed on the agent and where he cannot control himself, the process must involve pain which, Aristotle tells us, absolutely destroys the state of the person.²⁰² With this we might hope to return our *akratês* to a clean slate. There is disagreement at this point. On the one hand, Preus says that although *akrasia* has a physical basis Aristotle 'takes a verbal approach to curing it' in contrast to the melancholic who he thinks is cured by pleasures and pains.²⁰³ On the other hand, Owens claims that Aristotle may not

devices will attempt to "cure" their own disturbances in ways which will lead them toward worse vices than they had before; from a physical illness with psychic consequences they go on to habitual vices.'

¹⁹⁶ Although there is some reason for thinking that rational argument is only suited to the student who has overcome his physical impulses, M. Burnyeat, 'Aristotle on learning to be good', in A. Rorty (ed.), *Essays on Aristotle's Ethics* (Berkeley, Los Angeles and London, 1980), 69–92, at 84, argues that even the young student has some traces of *akratic* behaviour when he reaches Aristotle's lectures.

¹⁹⁷ EN 1150b6-10.

¹⁹⁸ οἱ κατέχειν πειρώμενοι τὸν γέλωτα ἀθρόον ἐκκαγχάζουσιν (ΕΝ 1150b10-11).

¹⁹⁹ EN 1150b22-5.

²⁰⁰ EN 1147a13-17.

²⁰¹ D. Charles, *Aristotle's Philosophy of Action* (London, 1984), 184 believes the starting point to be physical impulses and says that the *akratês'* motivation is different to the rational agent's whose rational structure is defined by sources of training such as habituation in pleasure and pain, punishment, reproach and exhortation, and shame; when using past experience to judge actions a man will lean towards activities that he has found consistently enjoyable and for the *akratês* these seem to have been fulfilment of what started out as physical responses.

²⁰² EN 1119a23-4.

²⁰³ EN 1154b12. Preus (n. 7), 421. M. Nussbaum, 'Therapeutic arguments: Epicurus and Aristotle', in M. Schofield and G. Striker (edd.), *The Norms of Nature* (Cambridge, 1986), 31–74, also thinks the cure is verbal.

consider education sufficient for some men whose underlying nature remained strong despite habituation: 'For him [Aristotle] there are situations in which wisdom is powerless to rid the soul of a passion, and recourse must be had to the type of knowledge that is applied by medical science.'204 There is certainly good reason to think Owens is correct. Aristotle describes punishment as a cure for individuals²⁰⁵ and also says that medicine is a type of punishment,²⁰⁶ and his use of medical terminology indicates that there is room for medical intervention in these matters. He does not shy away from considering medical expertise (in addition to the advice of the *phusiologoi*) in matters of the *polis*. In the *Politics* he advises parents to listen to doctors (*iatroi*) and natural philosophers (*phusikoi*) on matters concerning successful reproduction; doctors give good advice about appropriate conditions of the body (*kairous tôn sômatôn*), whilst the natural philosophers give good advice about the winds.²⁰⁷

The chance of curing akrasia differs between the two types which seems to have some connection to Aristotle's belief that one type is better than the other: 'Of these (akratic types) the ones who lose their senses are better than those who have reason but fail to stand by it, for the latter are overcome by weaker feeling and do not act without previous deliberation like the others.'208 The akratic without deliberation is clearly the rash akratês. One reason why Aristotle may judge the rash akrateis to be better is because he thinks that the condition may result from some physical state that they are not responsible for, especially in the case of the melancholic. Aristotle says that conditions caused by nature are not culpable, 209 and this is confirmed by his words at EN 7.10, where he considers which of the two types of akratês is easier to cure: 'The easier of the akratic types to cure is that type of akrasia by which the melancholics are akratic, rather than those akrateis who deliberate but do not stand by the result. And those who are akratic through habituation (are easier to cure) than by their natures, for it is easier to change habit than nature and for this reason habit is hard to change, because it is like nature, as Euenus said: "I say, friend, it is long-lasting training, and this finishes up as nature for human beings". '210

In 1152a27–9 Aristotle establishes that the melancholic type of *akrasia* (*propeteia*) is easier to cure than those who deliberate but fail to stand by this deliberation (*astheneia*). If we consider that Aristotle thinks the melancholic to be

```
<sup>204</sup> Owens (n. 7), 176.
```

²⁰⁵ EE 1220a35; EN 1140b17.

²⁰⁶ EE 1214b30-4.

²⁰⁷ Pol. 1335a39-b2.

 $^{^{208}}$ αὐτῶν δὲ τούτων βελτίους οἱ ἐκστατικοὶ ἢ οἱ τὸν λόγον ἔχοντες μέν, μὴ ἐμμένοντες δὲ ὑπ' ἐλάττονος γὰρ πάθους ἡττῶνται, καὶ οὐκ ἀπροβούλευτοι ὥσπερ ἄτεροι (EN 1151a1 $^{-}$ 3)

²⁰⁹ EN 1114a25. See also EN 1148b31–4, where Aristotle says that conditions caused by nature are not to be called *akratic*. While this might seem to be contrary to his belief that melancholics are *akrateis*, even though *melancholia* is natural because it is an illness, the example he gives here is of women's passivity, which he considers to be a result of their natural state. The melancholic may suffer an illness which is natural, but it cannot be called their natural state (NB Aristotle does not consider epilepsy to be a natural cause of foolishness, EN 1149a11–12).

²¹⁰ εὐιατοτέρα δὲ τῶν ἀκρασιῶν, ἣν οἱ μελαγχολικοὶ ἀκρατεύονται, τῶν βουλευομένων μὲν μὴ ἐμμενόντων δέ, καὶ οἱ δι' ἐθισμοῦ ἀκρατεῖς τῶν φυσικῶν ρҳον γὰρ ἔθος μετακινῆσαι φύσεως. διὰ γὰρ τοῦτο καὶ τὸ ἔθος χαλεπόν, ὅτι τῆ φύσει ἔοικεν, ὥσπερ καὶ Εὔηνος λέγει φημὶ πολυχρόνιον μελέτην ἔμεναι, φίλε, καὶ δή

ταύτην ἀνθρώποισι τελευτώσαν φύσιν εἶναι. (ΕΝ 1152a27-33)

someone whose condition is naturally unbalanced, Aristotle means here that he can be cured by purely physical means. If a cure can be administered which returns him to a level of stability then we might see an end to the *akratic* condition that follows from this ill health, especially if we contrast his case with the weak *akratês* who suffers from years of failed restraint despite engaging, in part, with a rational process. However, in lines 1152a29–33 Aristotle says that *akrasia* through habituation is the easier to cure, which is the cause that we attribute to weak *akrasia*. Aristotle here favours altering habit over trying to administer correction to those with naturally faulty stability. So is it possible to resolve the apparent contradiction in 1152a27–33?²¹¹

I would like to posit a tentative solution which relies on Aristotle's interest in medicine and obvious knowledge of medical theory. In the Hippocratic text *On the Sacred Disease* a bilious nature seems to be congenital. The Hippocratic author is discussing the nature of epilepsy and notes: 'It is also curable, no less than other illnesses, unless by long lapse of time it be so ingrained as to be more powerful than the remedies that are applied. Its origin, like that of other diseases, lies in heredity. For if a phlegmatic parent has a phlegmatic child, a bilious parent a bilious child, a consumptive parent a consumptive child and a splenetic parent a splenetic child, there is nothing to prevent some of the children suffering from this disease when one or the other of the parents suffered from it; for the seed comes from every part of the body, healthy seed from the healthy parts, diseased seed from the diseased parts' (*Morb.Sacr.* 2[=Jones 5].4–12).²¹³

²¹¹ P. Demont, 'About philosophy and humoural medicine', in P.J. van der Eijk (ed.), *Hippocrates in Context* (Brill, 2005), 271–86, at 285, argues that this is an example of Aristotle 'discovering' the limits of ethical theory and humoural medicine. Van der Eijk (n. 7), 150 argues that Aristotle's point here may be rather that 'of the types who suffer from rash *akrasia* (*propeteia*) [which he has just concluded is the easier to cure of the two types] the ones who suffer this type of *akrasia* (rather than both types of *akrasia* in general) through habituation are easier to cure than those who suffer from this condition through nature'.

²¹² Instances of akrasia or being akratês do occur in the Hippocratic writings but usually refer to weakness/loss of control over/paralysis of a particular body part or faculty: urethra (Acut. (Sp.) 23), legs (Epid. 2.4.3; 6.4.11; 6.7.1; Prorrh. 2.16), side/part of body (Epid. 4.1.12; Morb. Sacr. 4; 9), neck (Epid. 4.1.14), hands (Morb. Sacr. 7; Prorrh. 2.10), hips (Epid. 4.1.20), arms and legs (Art. 48), lung (Loc. Hom. 26), and the whole body (Art. 48; Morb. 2.8; 3.3; Int. 10; Prorrh. 1.152); or a general lack of physical control (Epid. 4.1.14; Epid. 5.1.79; Epid. 7.1.35; Epid. 7.1.67; Morb. 1.18). Children, if conceived in wrong environmental conditions, are said to be akratea and sickly (Aër. 10; Aph. 5.16). There are instances where akrasia appears either to share something with the psychophysical affection described by Aristotle, or to accompany psychological symptoms: in *Epidemics* 6 the Hippocratic author lists being *akratês* as a psychological symptom of a disease along with being fearful (phoberos) (Epid. 6.8.24) and in Aphorisms 5.16 the author says that the consequences of using heat too often is a softening of the flesh, akrateia of the muscles, followed by a numbness of the intelligence (gnômês narkôsin - a similar account is given at Liqu. 1). In On Humours the Hippocratic author says that akrasia in drink and food is a symptom of a disease of the psukhê (Hum. 9). In addition to these examples the Hippocratic notion of akrasia also arises in connection with epilepsy, or in affections caused by black bile: in Aphorisms the Hippocratic author says that if a patient's tongue is suddenly akratês or he suffers a stroke in part of his body, this affection is melancholic (melankholikon to toiouton, Aph. 7). In Diseases 1 the patient who becomes paralysed from black bile also suffers being akratês in the voice (Morb. 1.3); likewise in Diseases 2 a patient becomes speechless and akratês with respect to himself when black bile is set in motion in his head (Morb. 2.6). In Prorrhetic 2 the child whose hand becomes wasted and akratês, the author says, is usually epileptic (Prorrh. 2.10).

 213 Translation by W.H.S. Jones, *Hippocrates. Vol. I* (London, 1923): καὶ ἰητὸν εἶναι, καὶ οὐδὲν ἦσσον ἐτέρων, ὅ τι ἂν μὴ ἤδη ὑπὸ χρόνου πολλοῦ καταβεβιασμένον ἔῃ, ὥστε

The author does not discuss *melancholia* as such but traditionally *melancholia* is a disease of the bile (*kholê*) and can be counted among the *kholôdês* diseases. Even if we employ a cure for the *melankholikos*, his condition may arise in his offspring, and this makes it a naturally caused disease; and the disease of the bile becomes hereditary. This may be in part behind Aristotle's belief that it is hard to cure. What is particularly notable about this passage is the Hippocratic writer's initial comment that the sacred disease can be cured unless practice has made it so strong that no remedy can cure it because the sacred disease is epilepsy and Aristotle has already compared *akrasia* to epilepsy.²¹⁴ If Aristotle holds with the Hippocratic theory on the cure and 'strengthening' of epilepsy then it is likely that he holds *akrasia* to be of the same nature in that it can be cured, but repetition of *akratic* acts can result in a condition that cannot be cured.²¹⁵ If this is the case it sheds light on the question why Aristotle says that habituation becomes like nature – even if the *akratês* is not born an *akratês* his repeated acts of *akrasia* become as if he were born with an *akratic* nature.²¹⁶

Aristotle's concern for how unstable *dunameis* impinge on the physical and mental well-being of the individual has its roots in early medical theory, so a nod to Hippocratic medicine in questions of remedy cannot be discounted.²¹⁷

ήδη εἶναι ἰσχυρότερον τῶν φαρμάκων τῶν προσφερομένων. ἄρχεται δὲ ὥσπερ καὶ τἄλλα νουσήματα κατὰ γένος: εἰ γὰρ ἐκ φλεγματώδεος φλεγματώδης, καὶ ἐκ χολώδεος χολώδης γίνεται, καὶ ἐκ φθινώδεος φθινώδης, καὶ ἐκ σπληνώδεος σπληνώδης, τί κωλύει ὅτῳ πατὴρ καὶ μήτηρ εἴχετο, τούτῳ τῷ νοσήματι καὶ τῶν ἐκγόνων ἔχεσθαί τινα; ὡς ὁ γόνος ἔρχεται πάντοθεν τοῦ σώματος, ἀπό τε τῶν ὑγιηρῶν ὑγιηρὸς, ἀπό τε τῶν νοσερῶν νοσερός.

- ²¹⁴ EN 1150b32-5.
- ²¹⁵ As was established by EN 1114a1-15.
- ²¹⁶ A similar idea can be found in a passage from the Hippocratic treatise Airs, Waters, Places that shows how genetic predisposition may result from traditional practice. In this passage the author describes the tribe called the Longheads (hoi makrokephaloi) who, at one time, shaped their babies' heads by applying bandages and appliances in order to make the head long rather than round. The author says: 'In this way convention at the start pressed hard, so that by force such a nature came into being; but as time went on it happened by nature, so that convention no longer exercised force' (Aër. 14.11-14). The author explains that this is because the seed (gonos) comes from all parts of the body and transfers all physical characteristics, such as grey eyes, from parents to children. Aristotle raises a very similar issue in GA 721b29-34 when, in discussing a child's resemblance to its parents, he says that children do not only resemble their parents in respect of inborn characteristics but also in respect of acquired characteristics, and he uses the example of a man from Chalcedon who was branded on the arm and that mark also appeared on the arm of his child. This, he continues, is the reason that some believe that the semen is drawn from the whole body of the father - a clear reference to the Hippocratic idea seen in Airs, Waters, Places. While Aristotle clearly does not agree with the Hippocratic belief that semen is drawn from the whole body of the parents, he shares the idea that convention can become nature. In fact Tracy (n. 7), 60 thinks that this concept of inherited acquired characteristics seen in the early medical writers 'may help to explain the aristocratic bias of many ancient thinkers, and the great interest of political philosophers like Plato and Aristotle in the training of the youth'.
- ²¹⁷ Aristotle believes that the learned *phusikos* finishes his account with a medical explanation (*Sens.* 436a17–b2 and *Resp.* 480b22–30 see above, n. 39), and perhaps here follows that tradition himself.

CONCLUSION

This paper set out to show that Aristotle's account of *akrasia* in the *EN* benefits from an examination of his medical and biological ideas as well as looking at the philosophical tradition of *akrasia*. In doing so, the *akrateis* turn out to be people whose condition is typified by an internal physical disability which may be the result of an incomplete transition from childhood to adulthood. The *akrateis* are not just distracted from what they know to be right; their rational capacities are physically driven back by stronger forces within the body. The example of the melancholic is a powerful illustration of the more general principle that, according to Aristotle, there is a physiological basis to *akrasia* and possibly a cure that goes beyond rational instruction, in the same way that the habituation of children must go beyond rational instruction if their rational *phusis* is to become strong enough to function in their bodies.

University of Liverpool

SARAH FRANCIS

sfrancis@liv.ac.uk