

*Luck in Aristotle's Physics and Ethics**Monte Ransome Johnson*

Human life is pure luck.

(*Solon apud Herodotus 1.32.4*)

He <Thales or Socrates> said that he owed thanks to luck for three things: 'first, that I was born a human and not a beast; second, a man and not a woman; third a Greek and not a Barbarian'.

(*Diogenes Laertius 1.33*)

Aristotle was the first philosopher to offer a systematic account of luck (*hê tuchê*) and to include it as a significant topic in both physics and ethics. In the *Physics* he complains that his predecessors, although they treat luck as a cause, have not explained its relation to art, nature, and necessity: 'they all speak of some things happening by luck and others not, and so they should have at least taken some note of these things' (196a15–17). Thus Aristotle repeatedly calls for an investigation of luck and the wider phenomena of spontaneity (*to automaton*). This he delivers not only in *Physics* 2.4–6, but also in several other stretches of natural philosophy (*APo.* 1.8–11; *Cael.* 2.6; *GA* 3.11; *Metaph.* 7.7–9). In his ethics, Aristotle blazes a parallel dialectical trail. Although the predecessors mentioned luck in their ethical discussions (Aristotle himself refers to Socrates¹ in Plato's *Euthydemus*), no one before Aristotle defined luck or explained how it relates to the causes of happiness. Aristotle, however, explicitly framed the problem of moral luck in several sustained discussions (*EN* 1.9–11; *EE* 7.14; *MM* 2.8).

In physics, Aristotle walks a middle course between one extreme of making luck and spontaneity the causes of everything in the universe, and another extreme of eliminating these causes. Thus although Aristotle refuses to recognise any spontaneous occurrences in the heavens, he theorised many spontaneous phenomena in the meteorological and

¹ *EE* 7.14.1247b15. See Plato *Euthydemus* 279c. Aristotle complains that Socrates focused only on 'what virtue is' and not 'how or why it comes about' (i.e. its causes) at *EE* 1.5.1216b10.

terrestrial zones, for example, accepting that some plants and animals are generated spontaneously. But he insists that most and the most important living things require reproduction of natural forms and he insists that neither spontaneity nor luck could possibly account for those things.

In ethics, Aristotle also plots a middle course between one extreme of considering human success nothing more than good luck (as Solon does according to Herodotus), and another extreme of eliminating luck entirely, as Democritus attempted to do.² For Aristotle, success is (always or for the most part) due to natural drives and intelligence, discipline and habituation, or the cultivation of intellect, art, and science. Nevertheless, there really is good and bad luck: for example, some people enjoy goods without being intelligent, while others who are intelligent suffer from unfortunate circumstances not up to them.

Recognising this as a deep problem about agency, responsibility, and fairness (and so, in a word, morality), Aristotle tried to minimise the impact of luck but is ultimately forced to conclude that some kinds of moral luck are not eliminable, even if they are reducible to causal factors like nature and intelligence. Immediately following Aristotle, beginning with Theophrastus' widely criticised work *On Happiness*, moral luck became a central issue of Hellenistic ethics. Stoic philosophers especially tried to eliminate luck from ethics, arguing against Aristotle and the Peripatetics that luck cannot affect human morality.³ The related dispute over the value of 'external goods' is in the historical background of Kant's influential attempt to resolve these issues.⁴ His perceived failure on this score is the starting point of two influential essays both entitled 'Moral Luck' (Williams 1976 and Nagel 1979), rightly regarded as modern classics. These essays revived a problem that remains as Aristotle found it, a central problem for moral theory.

What I aim to contribute to this discussion is a clarification of how Aristotle's formulation of *the problem of moral luck* relates to his natural philosophy. My first tasks will be to review well-known passages from the *Ethics* and *Physics* without being able here to enter into the usual interpretive controversies about them. Hence I do not claim originality in my presentation of the account of luck in *Physics* 2, or formulation of the

² For further discussion of the views of Democritus on these issues see Johnson 2014.

³ See the passages collected as fragments 487–501 in Fortenbaugh *et al.* 1992: 317–29.

⁴ For useful discussions of the interplay of Aristotle, the Stoics, and Kant on the topic of the value of external goods see Engstrom 1996: 122–24; Annas 1996: 240–42; and Sherman 1997: 9–20. Whiting 1996, 182–85 explicitly raises the issue of moral luck and reads *EE* 7.14 as support for her 'Kantian reading' of Aristotle's *EE* 8.3 (= 7.15).

problem of moral luck in *EN* 1/10 and *EE* 1/7. In the main I focus on *EE* 7.14 (= 8.2). I argue that Aristotle's position there (rejecting the elimination of luck, but reducing luck so far as possible to incidental natural and intelligent causes) is not only consistent with his treatment of luck in *Physics* 2,⁵ but is to be expected, given that the dialectical path of *EE* 7.14 runs parallel to that of *Physics* 2.4–6. Although Aristotle resolves some issues that he raises, he cannot avoid the problem of constitutive moral luck that, as Nagel puts it, pertains to 'the kind of person you are, where this is not just a question of what you deliberately do, but of your inclinations, capacities, and temperament' (28). The problem for Aristotle follows not only from his ethical positions, but also directly from his more general physical and political principles and assumptions. Furthermore, the problem touches the very essence of Aristotle's moral theory.⁶

Aristotle raises the problem of moral luck right at the beginning of the *Eudemian Ethics*:

First we must investigate in what the good life consists and how it is acquired, and whether it is by nature (*phusei*) that all those men to whom the term is applied come to be happy as we become tall people and short people and differently coloured people, or due to learning so that happiness will be a kind of knowledge, or due to some kind of training. For many things happen neither in accordance with nature nor learning, but by habituation (*ethistheisin*) for humans; poor things if they are habituated poorly, good if well. Or do men become happy in none of these ways, but either, like those humans the nymphs and deities possess, by oversight of a spirit (*epipnoia daimoniou tinos*), like those who are inspired? Or is it due to luck (*dia tuchên*), since many people say happiness and good luck to be the same thing? What is clear is that it is in all or some of these ways that people become happy. (*EE* 1.1.1214a14–27).⁷

The possibility that the good life might come about either by nature or by luck is later reiterated as a special problem:

If a noble life is something that comes to be due to luck (*dia tuchên*) or due to nature (*dia phusin*), it would be a hopeless dream for many people; its

⁵ Woods 1982: 167 is wrong to describe Aristotle's argument here as 'disappointingly dogmatic . . . it is evident that the use of the term "chance" by the view he rejects is quite different from its use in the *Physics* passage'. His account has been aptly criticised by K. Johnson 1997. A view closer to my own is that of Bodéüs 2000: 'clearly, the analysis of good fortune in the *Eudemian Ethics* conforms to doctrines Aristotle's natural philosophy developed elsewhere' (167). Dudley 2012: 248–49 argues, though in my view unpersuasively, that a developmental interpretation is required to account for discrepancies between *Physics* 2.4–6 and *EE* 7.14.

⁶ Thus I call into question the more sanguine conclusions of Verbeke 1985: 254 and Buddensiek 2012.

⁷ Translations from the *EE* are adapted from Kenny 2011.

acquisition would be beyond their powers no matter how strenuous their endeavours. But if it is something in their own quality (*ei d'en tōi auton poion tina*) and in accordance with their own activities, then it will be a good both more widespread and divine. (*EE* 1.3.1215a12–17)

Aristotle recognises that morality has to exclude luck and nature as causes, since they are not 'up to us', in order to define virtue and vice as appropriate objects of praise and blame.⁸ Accordingly, the scope of human agency is restricted to exclude things caused by necessity, nature, and luck.⁹ At the end of the *EN*, Aristotle repeats the point: of the causes of becoming good, what is due to nature is not up to us but results from luck (or divine oversight, which, it seems, amounts to the same thing):

Some think we become good by nature (*phusei*), some by habit (*ethei*), and others by teaching (*didachēi*). Nature's contribution is clearly not up to us (*ouk eph'hēmin*), but it can be found in those who due to some divine cause (*dia tinas theias aitias*) truly have good luck (*eutuchesin*). Argument and teaching, presumably, are not powerful in every case, but the soul of the student must be prepared beforehand in its habits with a view to its enjoying and hating in a noble way, like soil that is to nourish seed. (*EN* 10.9.1179b20–26)

Aristotle confronts luck as a cause of success in *EE* 7.14. Aristotle's articulation of the problem presupposes his earlier enumeration of the possible causes of the good life:

Since not only intelligence (*phronēsis*) produces doing-well and virtue (*eupragian kai arēten*), but we also say that the lucky (*tous eutucheis*) do well (*eu prattein*), assuming that good luck produces doing-well well, and the same things as knowledge (*epistēmēs*), we must enquire whether or not it

⁸ 'Since virtue and vice, and the works that are their expressions, are praised or blamed as the case may be (for blame and praise are not given on account of things that come about by necessity or luck or nature (*ex anankēs ē tuchēs ē phuseōs*) but on account of things that we ourselves are cause of; since if someone else is cause of something, that is the one that gets the blame and praise), it is clear that virtue and vice have to do with matters where the man himself is the responsible source of his actions. We must then ascertain just what are the actions of which he is the cause and source' (*EE* 2.7.1223a9–16).

⁹ Aristotle asserts that virtues arise either through teaching (in the case of the intellectual virtues) or as a result of habituation, but 'it is clear that none of the moral virtues arises in us by nature' (*EN* 2.1.1103a18–19). Nature, he argues, gives us the capacity to acquire them, but their perfection comes about through habituation. This is also why Aristotle is concerned to distinguish 'natural virtue' from intelligence and 'virtue in the strict sense' (*EE* 5 = *EN* 6.13.1144b1–16). 'We deliberate about what actions are up to us (*peri tōn eph' hēmin kai praktōn*), what we can do; these things are what remain to be done. For nature (*phusis*), necessity (*anankē*), and luck (*tuchē*) do seem to be causes, but so too do sense or intellect and everything that occurs through human agency (*nous kai pan to di' anthrōpou*)' (*EN* 3.3.112a30–33).

is by nature (*phusei*) that one man is lucky and another unlucky, and how things stand concerning these things. (*EE* 7.14.1246b37–1247a3)

It is clear from this network of passages that Aristotle has in mind not just limited prudential contexts, but even overall success or happiness. This has been doubted: ‘I do not think that *eupragia* in this context [*EE* 7.14] can mean anything like *eudaimonia*. Neither in the *EN* nor in the *EE* would Aristotle have agreed that true happiness could come about by mere luck’ (Kenny 1992: 57). But on my interpretation, this is exactly what is at issue. It is possible for someone to end up happy and successful, but without the causes that always or for the most part bring this about (habituation, intelligence, and art). The fact that Aristotle in *EE* 7.14 mentions ‘doing well and virtue’ (*eupragian kai aretên*) is precisely what makes the problem one of *moral* luck. If we were merely talking about some people occasionally succeeding at some practical things (like making money) without the use of intelligence (for example, by gambling), we would not necessarily have a problem of *moral* luck. But to the extent that we are talking about people ‘doing well’ in a strong sense, and even attaining virtue by luck, we clearly have a more profound problem. The problem of moral luck should thus not be seen as an afterthought that Aristotle confronts only late in the *EE*. On the contrary, determining the causal influence of luck on human success is a central concern of Aristotle’s ethics as a whole and from the beginning.

As Aristotle points out in the *Physics*: ‘good luck (*hê eutuchia*) seems to be the same or nearly the same as happiness’ (2.6.197b4). One reason for this is that those who experience very bad luck are usually said to be unhappy. In *EN* 1.9–11 Aristotle discusses how humans are exposed to luck because they need external goods such as friends, wealth, and political power over which they have at best incomplete control; lack of certain goods, like high birth, noble children, and beauty, over which no one has any control, can even ruin happiness. And although ‘a happy man will never become miserable, nevertheless blessedness will not be his if he runs into the luck of a Priam’ (1101a7–8). For such reasons, ‘because we need luck as well as other things, some people think that good luck is the same thing as happiness’ (1153b21–22), as Aristotle puts it, much more delicately than Plato in the *Euthydemus*, where Socrates sarcastically comments that ‘we are in danger of leaving out the greatest good of all . . . good luck, which everyone says is the greatest of the goods, even very despicable people’ (279c5–8). Notice, however, an ambiguity in the expression ‘good luck’. When investigating the problem about the causes of the good life, luck is

often treated as a cause, a kind of efficient cause (or co-cause, a factor) of an individual's success. But in common parlance some people identify the same efficient cause with the end: having good luck is taken to be not just a cause of doing well, but the goal itself. Aristotle, who was very conscious of this distinction, only uses 'good luck' in the latter sense when he is criticising the popular view of happiness and luck (*EN* 7.13.1153b21–25; cf. 1.8.1099b10; *EE* 1.1.1214a25–26; *Rhet.* 1.5.1360b14–26). In his own analysis, as we will see, luck is treated as a potential cause of happiness, in parallel to the way in which other things might be thought a cause of happiness, such as nature, intelligence, or divine providence.

That the lucky do not succeed by intelligence (*phronêsei*) is clear, Aristotle argues, from the fact that 'intelligence is not irrational (*alogos*), but has a reason because of which it acts; while those who are lucky are not able to give a reason because of which they succeed, for that would be art (*technê*)' (1247a13–15). In the *Euthydemus* it was debated whether wise artists (such as flute players, writers, pilots, generals, and doctors) are luckier than unwise ones, but the conclusion is reached that, insofar as they have wisdom, artists 'have no need of any good luck in addition' (280b2–3). Aristotle in *EE* 7.14 uses one of the examples from the *Euthydemus* in order to make the argument that art is not the cause of luck: 'in navigation, it is not the cleverest pilots who enjoy good luck, but it is just as in dice, where one player throws nothing, but another throws a six¹⁰ in accordance with his natural good luck (*kath' hên phusei estin eutuchês*)' (1247a21–23). The italicised expression is, given Aristotle's distinctions, paradoxical. It has just been argued that luck cannot be caused by art; how then can luck be caused by nature?

It cannot be due to being favoured by a god or a divine overseer. Although Aristotle in *EE* 1.1 raised the possibility 'of being overseen by some spirit' (*epipnoiai daimoniou tinos*) as a possible cause of success, Aristotle argues in *EE* 7.14 that it would be absurd if the lucky succeeded 'because of something external and being loved, so to speak, by a god' (*tôi phileisthai, hôsper phasin, hupo theou*), as a worse-built ship might sail much better, not because of itself, but because it has an excellent pilot (1247a23–29, using again the same example from the *Euthydemus*). The same argument is made in Aristotle's scientific investigation of divination by dreams (*Div. Somn.* 1.1.462b18–22; cf. *EN* 10.8.1179a22–32;

¹⁰ It seems necessary to adopt Jackson's supplement 'hex' at 1247a23: 'as in the fall of the dice, one man throws a blank and another a six'. Jackson's supplement (1913: 182–83, adopted by Kenny 2011) is supported by the Latin tradition.

MM 2.8.1207a6–13). But if divine oversight cannot be the cause of their luck, then the cause must be nature or intelligence: ‘if, then, success must be due either to nature (*phusei*) or intellect (*noôti*) or some kind of oversight (*epitropiai tini*), and not to the latter two causes, then the lucky must be so by nature’ (1247a29–31). But, again, how could someone be lucky by nature?

To answer that, we turn to Aristotle’s account of nature in *Physics* 2.1: ‘a principle or cause of being moved or being at rest in that to which it belongs primarily, intrinsically (*kath’auto*), and not incidentally (*kata sumbebêkos*)’ (192b21–23).¹¹ Two fundamental causal distinctions are at work here: first, between being an *internal* as opposed to *external* cause of motion or rest (which differentiates nature from art); and second, between being an *intrinsic* as opposed to *incidental* cause (which differentiates nature and art from spontaneity and luck). Nature is an internal and intrinsic cause of ends (for example, health); art is an external and intrinsic cause of the same natural ends, specifically those that nature is incapable of bringing to completion (such as the health produced by a doctor); and luck and spontaneity are external and incidental causes of artistic or natural ends (for example, luck can be the cause of health that would have been produced following the doctor’s orders for heating by rubbing, but instead was caused by a change of weather; spontaneity can be the cause of the generation and health of certain plants and insects that do not reproduce sexually).

Thus, the ends of natural things determine the ends of everything else. ‘The nature is the end or that for the sake of which. For if a thing undergoes a continuous change toward some end, this last stage is also that for the sake of which’ (194a28–30). By ‘continuous’ Aristotle means ‘without impediment’. Aristotle understands and explains such a process of continuous natural generation by analogy to artistic production:

Where there is an end, all the preceding steps are for the sake of that. Now surely as in action, so in nature; and as in nature, so it is in each action, should nothing impede it. Now action is for the sake of an end; therefore the nature of things also is so. Thus if a house, e.g. had been a thing made by nature, it would have been made in the same way as it is now by art; and if things made by nature were made not only by nature but also by art, they would come to be in the same way as if by nature. The one, then, is for the sake of the other; and generally art in some cases completes what nature cannot bring to a finish, and in others imitates nature. If, therefore, artificial products are for sake of an end, so clearly also are the natural

¹¹ Translations from *Physics* 2 are adapted from Hardie and Gaye 1984.

products. The relation of the later to the earlier items is the same. (*Physics* 2.8.199a8–20)

The process of building goes through several stages (the laying of the foundation, putting up the walls, sealing the roof, etc.), and all these stages are undertaken for the sake of a definite end (i.e. shelter and protection from weather and intruders). Now Aristotle not only argues that natural things, like plants and animals, undergo an analogous process for the sake of an end (e.g. developing from seedling, to sapling, to flourishing oak). But he goes further, holding that *all* artificial processes – without exception, including the art of building – also come about for the sake of *natural* ends. That art imitates nature or fills in where it falls short is a key principle for Aristotle (*Physics* 2.2.194a21–22, 2.8.199a15–17; *Mete.* 4.3.381b6; *PA* 1.5.645a10–15; *Metaph.* 7.9.1034a33–34; *Pol.* 7.17.1337a1–3; *Protr.* 9.49.28–50.1, 50.12, 10.54.22–23; cf. [Ar.] *Mu.* 396b11–12; Johnson 2005: 81, 148 and Johnson 2012: 120–24, 128–34). Thus, shelter and protection of human beings are the *natural* ends for the sake of which the art of building produces houses. In general nature itself completes the process resulting in natural ends, but in several cases nature cannot bring them to perfection, and so art must step up to do so. In this conception, art, and in general all rational action, has no other end, and can have no other end, than bringing about determinate and predetermined *natural* ends.

Everyone agrees that art and nature are causes, but philosophers are not agreed that luck is a cause, as Aristotle points out at the beginning of *Physics* 2.4: ‘some people even question whether it exists or not. They say that nothing happens by luck, but that everything which we ascribe to luck or spontaneity has some definite cause . . . it is always possible, they maintain, to find something which is the cause’ (195b36–196a6). As Simplicius points out, the target of this criticism is Democritus, for he attempted to eliminate luck altogether as a cause from both cosmology and ethics. He would argue, for example, that the cause of the man finding the treasure while digging was not good luck but rather his intention to plant an olive tree (Simplicius in *Physics* 330.14–20; see also Johnson 2009: 32–36). Aristotle also discusses the view of ‘others who believe that luck is a cause, but that it is unclear to human intellect (*adêlos de anthrôpinêi dianoiai*), as being something divine and more spiritual (*hôs theion ti ousa kai daimoniôteron*)’ (196b5–7). Aristotle rejects both the eliminative position, and the divine oversight explanation, in staking out two doctrines about luck.

First, luck is an incidental cause (*hê tuchê aitia kata sumbebêkos*) of things in accordance with choice and for the sake of something (2.5.197a5–6). Things that are for the sake of something include whatever may be done as a result of thought (*apo dianoiás*) or of nature (*apo phuseôs*) (196b22). In the wider case of things that normally come to be from nature, including some plants, and beasts, the incidental cause is ‘spontaneity’ (hence ‘spontaneous generation’). But luck pertains only to the subset of these things that are usually the result of thought; thus luck exists among things ‘entirely practical (*holôs praxis*)’ (2.6.197b2).

In *Physics* 2.3 the example of incidental causation is Polyclitus: insofar as he is a sculptor, he is the intrinsic cause of the statue *Doryphorus*, but insofar as he is a musical man, the musical man (*ho mousikos*) is an incidental cause of the same statue (2.3.195a32–b3). In 2.5 Aristotle repeats the example, but this time instead of a musical sculptor he talks about a musical builder: an architect is intrinsically the cause of a house, but the ‘musical’ man is the incidental cause of a house if the architect happens to be musical. In 2.4 (196a3–5) the example is of a man who goes to the agora and happens to run into someone who owes him money; although we say that it was by luck that creditor met debtor, can we say (as a Democritean might) that it is due to the creditor’s goal of collecting subscriptions for a feast and the debtor’s goal of going shopping? Aristotle’s answer is that it can, but incidentally and not intrinsically. Aristotle concludes: ‘it is clear then that luck is an incidental cause in the class of those actions that are for the sake of something which involve choice’ (2.5.197a5–6, 32–35).

Although they occur in the class of things that happen for the sake of something, spontaneity and luck are in fact just natural and intelligent moving causes, which produce incidental results that happen to be experienced by intelligent agents as good or bad luck. For example, the collection of the debt was due to an intelligent cause, the intention to solicit subscriptions, but this was *incidentally* the cause of collecting the debt; in this way luck was a cause. Aristotle summarises:

We have now explained what luck is and what spontaneity is, and in what way they differ from each other. Both belong to the mode of causation ‘source of change’. For either some natural or intelligent agent is always the cause (*ê gar tôn phusei ti ê tôn apo dianoiás aition aei estin*). But in this kind of causation the number of possible causes is infinite. Spontaneity and luck are causes of effects that, though they might result from intelligence or nature, have in fact been caused by something incidentally. (2.6.198a1–7)

That luck is an incidental cause is the first major doctrine of Aristotle's account in *Physics* 2. The second is that luck is not a cause of things that occur in the same way either always or for the most part (2.5.196b10–17). Luck is thereby opposed not only to necessity but also to regularity. Luck is said to be indefinite and irrational, and not susceptible to a scientific explanation. 'Luck is something irrational' (*ti paralogon tèn tuchên*) (197a18). The results of luck are indefinite or 'unlimited', and can be either good or bad. That is why it is considered a mysterious thing, a cause inscrutable to human wisdom. For the creditor, for example, the recovery of the debt was good luck; for the debtor, on the other hand, running into the creditor was bad luck. Good luck is therefore unstable: 'with good reason good luck is regarded as unreliable; for luck is unreliable; for none of the things which result from luck can be always or for the most part' (197a30–32).

Are these views consistent with the account of luck and nature in *EE* 7.14? Does Aristotle contradict himself by arguing in the *Physics* that the results of luck do not happen always or for the most part, and are unreliable, but in the *Eudemian Ethics* that some people actually become successful due to luck? I will argue that Aristotle's position is consistent, because he holds that those who are continuously successful succeed not because of luck but because of nature (and so an intrinsic, not incidental cause); those, on the other hand, whose success is due to luck not nature are not continuously successful, but just as often experience bad luck.

Aristotle walks a parallel dialectical path in *Eudemian Ethics* 7.14 as he did in *Physics* 2.4–6 by considering (and subsequently rejecting) both the eliminative and the divine oversight explanations of luck, and also by attempting to reduce the causes of good luck to nature:

If, then, success must be due either to nature or intelligence or some kind of oversight, and the latter two causes are out of the question, then the lucky must be so by nature. But, on the other hand, nature is the cause of what is always or for the most part so, luck the opposite. If, then, it is thought that irrational success (*to paralogôs epitugchaneîn*) is due to luck, but that (if it is through luck that one is lucky) the cause of his luck is not the kind of cause that produces the same result always or for the most part – further, if a person succeeds or fails because he is a certain kind of man, just as a man sees badly because he is blue-eyed, then it follows that not luck but nature is the cause. He then has not good luck but something like a good nature (*ouk ara estin eutuchês all' hoion euphuês*). (1247a29–38)

Aristotle wants to establish whether the lucky succeed out of some habit or condition (*apo tinos hexeôs*), or instead not because of any quality of their own (*ou tõi autoi poioi tines*) (1247a3–8). He connects this issue with the

more general problem (raised in the same terms in *EE* 1.3) of which causes of happiness are up to us, and due to our own internal and intrinsic qualities, as opposed to external or incidental influences. The proposal in the *Eudemian Ethics* is to reduce all cases of continuous good or bad luck to natural causes, just as in theory all cases of good or bad vision are reducible to natural causes. Aristotle earlier in the chapter compared people who are lucky to those who have certain qualities that distinguish them ‘immediately from birth, just as some are blue-eyed and some black-eyed, because of the necessity for one to have some particular colour (*tôi to dein toiondi echein*); so too it is necessary that some are lucky and others unlucky’ (1247a9–12). This corresponds to the examples he gave in *EE* 1.1 of people who become happy ‘as we become tall people or short people, or differently coloured people’ (1214a17–18).

In *Generation of Animals* 5.1, Aristotle presents a scientific account of ‘the affections by which the parts of animals differ, I mean such affections of the parts as blueness and blackness of eyes’ (778a16–18): some of these ‘turn out’ (*tugchanei*) similarly for whole kinds of animals, while others happen ‘as if by luck’ (*hopôs etuchen*), the latter including especially those that ‘incidentally occur’ (*sumbebêken*) to humans (a20–22). Animals generally have one eye colour only (e.g. cattle are dark-eyed, goats are yellow-eyed, unnamed other animals are blue- or grey-eyed), but humans (along with horses) happen to have several eye colours (blue, grey, black, and yellow). The eyes of humans at birth are bluish, but later they change to the colour that they then have permanently. The reason that infant eyes are initially blue and not any other colour is that ‘the parts are weaker in the newly born and blueness is a sort of weakness’ (779b10–12). Eyes are composed of water, and those with more liquid are darker or blacker, while those with less are bluer; the other colours are intermediate between these (779b12–34). Black eyes and blue eyes are thus understood in terms of excess and deficiency of liquid, and correspondingly people with these colours have eye problems (black-eyed people have difficulty with night vision, blue-eyed people with day vision); those with a more intermediate eye colour have better vision (779b34–780a25). Before going on to give his account of good and bad eyesight, Aristotle summarises why humans and horses sometimes have eyes of two different colours (780b2–12): just as humans turn grey in old age, and horses whiten with age, due to weakness of fluid in the brain and lack of concoction, so blueness or blackness of the eyes is caused by excess or deficiency of liquid concoction in the eyes.

If we apply this physical account to the analogy between lucky or unlucky people and the blue- or black-eyed people of the *Eudemian*

Ethics, the following is the result. Eye colour, although it is not produced for the sake of an end (as eyes themselves are), ends up, incidentally, in the class of things that are for the sake of an end, since eye colour affects whether one has good or bad vision.¹² Eye colour is not random, but rather is the result of matter affecting and being affected in certain ways: liquid being concocted or not, drying out, etc. That is, it is a matter of nature and necessity, and of what is always or for the most part the same. It is for this reason possible to give a scientific account of eye colour. Thus, the so-called 'lucky' people of the *Eudemian Ethics*, if they are relevantly like the blue- and black-eyed people of the *Generation of Animals*, are not those who on this or that occasion happen to suffer some good or evil, but rather those who, because of some natural and in principle scientifically determinate cause, *continually* enjoy some good or suffer some evil.

Once Aristotle has reduced this *continual* kind of good luck to nature in *EE* 7.14, he asks whether it is possible to eliminate luck entirely: 'but if this is so, are we to say that luck exists at all, or not?' (1247b1–2); 'whether it is to be wholly eliminated and we are to say that nothing is produced by luck, although we continue to say that it is a cause, because when we do not see a cause we say it is luck, which is why in defining luck some put it down as a cause inscrutable to human reasoning (*analogon anthrôpinôi logismôi*), though still being something natural' (1247b4–8).

The conclusion that the continuously 'lucky' succeed not by luck but by nature raises the possibility that luck might be eliminated entirely. But insofar as there remain some cases in which we cannot find a natural or intelligent cause, luck remains a cause: 'but it is necessary both for luck to exist and to be a cause. It is, then, a cause of goods or evils to certain people' (1247b2–4). Notice that this residual kind of luck produces not only good, but also evil, as Aristotle reminds us later: 'But since we see some getting lucky once, why should they not be so again, because they succeed and then do it again? For the cause is the same. Thus this is not a matter of luck . . . when the same thing incidentally happens, from unlimited and indefinite things (*apobainêi apeirôn kai aoristôn*), it may be good or evil' (1247b9–13).

¹² Woods' (1982: 165) comment on the *EE* passage that 'it is a gift of nature, some people being born lucky, just as some are born blue-eyed' ignores the fact that according to Aristotle all humans are born blue-eyed (most later undergoing a change in eye colour) and that blue-eyed people are not lucky but unlucky insofar as they have bad vision. Dudley 2012: 238 also seems to assume that those born blue-eyed are 'fortunate by nature'.

In *Physics* 2, the fact that luck causes goods or evils was part of the explanation of why luck is irrational or inscrutable to human reason. And in *EE* 7.14 Aristotle repeats the point:

But there will not be a science of luck that comes from experience, since then some would have learned to become lucky, or even all the sciences would be cases of good luck as Socrates said . . . What then prevents many such things happening to someone in succession, not because they should in this way, but as, for example, the dice might continually throw high numbers? (1247b13–18)

Aristotle asks whether one could be continuously successful without intelligence or nature being a cause, but like the lucky dicer who continually rolls sixes. How is the comparison to be interpreted? Most commentators seem to assume that Aristotle has gambling in mind, and just as in a hand of Craps one may throw double sixes several times in a row, so in life one might just run into a streak of good luck, perhaps discovering gold while planting olives, and then running into an overdue and difficult to locate debtor on a routine trip to collect subscriptions for a feast. According to a fragment of Sophocles, ‘the dice of Zeus fall ever luckily’ (fragment 809, attributed to *Phaedra*). This is impressive presumably because it is impossible for a human player at dice to *continually* roll well. Surely any run of good luck must eventually give way to a run of (equally) bad luck. Otherwise dicing would be a science. Possibly what Aristotle has in mind is not gambling but divination, which Aristotle is prepared to consider a science.¹³ Ancient Greeks certainly used dice as divinatory instruments. If anyone were continually to roll sixes on divinatory dice, an Aristotelian might say that this ‘natural good luck’ is caused not by luck but by the person’s nature. But all this is doubtful and, whatever Aristotle thinks about the ‘science of divination’, his rejection of any ‘science of luck’ is due to the impossibility of an object that is both caused by luck and has results that are always or for the most part the same (e.g. good or evil). Such results are exactly the objects of science, and that is why the sciences would turn out to be ‘cases of good luck’ if luck could be the cause of good or bad things continuously. But since there is no science of luck, and the sciences deal with intrinsic not incidental causes, we have to consider the causes of luck real but incidental, indefinite and unlimited, and hence unclear or

¹³ In the *Parva Naturalia*, Aristotle allows that ‘there might actually be a science of expectation, like that of divination’ (449b11–12). Aristotle does not seem excessively sceptical about divination even in relatively negative statements, e.g. *Cael.* 285a3–4; *Rhet.* 1407b2. Aristotle does not mention dice as divinatory instruments, but on their use in antiquity, see S. I. Johnson 2008.

irrational to human reason. As such we cannot integrate them into an art by means of which we might cause ourselves to become happy. And so Aristotle rejects the idea that *continually* successful people can be so by luck. But since we have determined above that there are people who continuously succeed not through any kind of learning or discipline, we are forced back to the conclusion that the lucky succeed by nature.

Aristotle thus proceeds to develop and defend that idea by searching for a natural cause that would allow the good normally achieved by intelligence to be generated by nature alone:

Are there not desires in the soul, some from reason, but others from irrational drives (*apo orexeôs alogou*) and which are prior? For if the drive arising from desire for pleasure exists by nature, then by nature everything would march to the good (*phusei ge epi to agathon badizoi an pan*). (1247b18–21)

Aristotle sketches a causal account of how the so-called 'lucky' actually succeed by nature. Although they do not use reasoning, since their desires are naturally good (i.e. moderate), they succeed simply by following their desires. What they experience as pleasurable is good by nature. The striking conclusion 'by nature everything would march to the good' in the *Eudemian Ethics* directly follows from the doctrine of the *Physics* according to which nature continually reaches its end (its good) if nothing impedes it (199a8–20; 199b25–26).¹⁴ In *EE* 2.8 Aristotle presupposes this doctrine in the context of the 'natural' sources of action:

One of our natural sources of action is reason, which will be present when development proceeds without being stunted (*mê pêrhotheisês*); and another is appetite, which is an attribute present from the moment of birth. Roughly speaking, these are the two marks by which we define what is natural to us: it is either an attribute of everyone at birth, or something that comes to us if development proceeds normally, such as grey hair and old age and the like. (1224b29–35)

It is very significant for Aristotle that in the natural order of generation appetite precedes reason, because if the lucky succeed due not to reason but to something more primitive in our nature, then it will be clearer why the 'lucky' should be thought to succeed by nature. The so-called lucky

¹⁴ In *Metaph.* 6.3, Aristotle argues that were it not for incidental causes, all things would be necessary. I agree with D. Frede's interpretation of this according to which Aristotle is not subscribing to a 'mechanistic' or 'Democritean' style determinism, but rather a 'teleological determinism': 'If there were no interference by accidental causes the *telos* would always come about, in nature as well as in human actions. But for such interference everything would always reach its proper end and could be predicted with certainty' (Frede 1985: 220; cf. 1992: 203).

succeed, then, simply because they follow their innate or congenital pleasures, which are aimed at naturally good desires, and nothing impedes them, and so they continually achieve the same goods that others achieve by intelligence and art. The lucky, then, are defined as those who succeed because of their natural drives even though their ability to reason is underdeveloped or not applied. But then those we call ‘the lucky’ are not actually lucky at all – they in fact exemplify the continual process of the natural order, achieving natural ends by natural means:

If, then, some have a good nature (like those who are musical¹⁵ without knowing how to sing), and they are driven, without using reason, their nature growing naturally (*hê phusis pephuke*), and they desire that which they should, and at the time and in the way that they should, then these people will succeed, even though they happen to be unintelligent and irrational (just as those others sing well while not able to teach singing). And this kind of people will be ‘lucky’: those who, without using reason, succeed for the most part (*hosoi aneu logou katorthousin hês epi to polu*). Therefore the people who are lucky will be so by nature. (1247b21–28)

Aristotle presents the fact that some people succeed without using reason as unobjectionable, since it is a case of nature continually marching towards its ends with nothing impeding it. Bad luck should accordingly be understood as incidental impediments to natural ends that would otherwise continually come about. For those humans who are not ‘the lucky’ (i.e. most people), nature is not capable on its own of bringing out these natural ends continually, and so habituation and learning are hypothetically necessary for them to become happy. The example of ‘musical’ people, which we saw repeatedly used in *Physics* 2 as well, bears this out. Elsewhere Aristotle describes as ‘musical’ (*oidikoi*) both a man who likes music and one who is able to perform (1238a36–37). But ‘knowing how to sing’ means knowing how to sing well, as becomes clear when Aristotle says ‘those others sing well while not being able to teach singing’. Being able to teach is an indication of knowledge, but some can evidently sing well without ‘knowing how to sing’ (in the sense of being able to teach singing). Without using reason they succeed at some good, as does a child who has a natural talent for music. The ability to sing, or at least to be musical even without being able to teach music, must then be something natural for humans, something they would continuously achieve if only nothing interferes.¹⁶ Thus, in praising a

¹⁵ Reading $\phi\delta\iota\kappa\omicron\iota$ for $\alpha\delta\iota\kappa\omicron\iota$ at 1247b22 following Sylburg (as reported in Jackson 1913: 189).

¹⁶ Aristotle does hold that music is natural for humans. For example, in *HA* 1.1 he says that, among animals that have voice, ‘some are musical and some unmusical’ (488a34). In *Poetics* 1 the voice is treated along with other components of music (including rhythm, language, and harmony) in the

naturally talented singer (as opposed to one who has become good by art), we are really praising nature, not luck. Although we do not all become excellent singers by nature, nevertheless we can all become good singers, and if we do not the cause of that deficiency should be understood as a kind of impediment to the development of a natural capability. Accordingly, arts like singing lessons and musical education are necessary to compensate for where nature falls short.

The argument of 1247b18–28, then, returns to the possibility of eliminating all luck. The phenomenon of certain people being continually lucky is to be explained by means of their natural drives and thus natural causes. It would for these people be more accurate to say they have a 'good nature' than to say that they have 'good luck'. But Aristotle does not think that this reduction eliminates all luck, because there remains another kind of person to whom the term lucky is applied:

Or is the term 'lucky' said in many ways? For some are actions from the drive (*prattetai apo tês hormês*) and deliberate acts (*proelomenôn praxai*), but others are not, but the opposite. And when those people who seem to reason badly succeed, we say they too are 'lucky', but also those people who wish for less good than they get. (1247b28–33)

We apply the term 'lucky' both (1) to people who undertake actions 'from the drive and by choice' in accordance with natural ends, and who succeed despite faulty reasoning; and (2) people who undertake actions not necessarily in accordance with their natural ends, and yet who succeed more than can be reasonably expected. The former, as we have seen, may be lucky by nature. For, since their drives and choices are for things good by nature, they succeed, even though 'their reasoning was laughable' (1247b35). In these cases, they are 'saved' (1247b37) by having naturally good drives, and the fact that nothing has impeded the natural course of development. The second group of people can be lucky on occasion, but not continually, since their luck is not natural, and they cannot fall back on their natural drives to steer them in the right direction. Aristotle thus holds that if someone else without the right kind of drives reasons as the lucky do, they will probably fail and be considered unlucky (1247b37–38). When such people are lucky they have succeeded 'contrary to all knowledge and right reasoning' (*para pasas tas epistêmas kai tous logismous tous orthous*) and not even in accordance with natural drives; such people alone succeed by luck (1247b38–1248a5).

context of mimetic art (1447a14–24), which is considered natural for humans: 'imitation being natural to us as also the sense of harmony and rhythm' (1448b20–21).

We can now summarise how this possibility relates to the *Physics* account. One can have unexpected success as a result of incidental causes, but one may not do so continuously. The actual causes will be natural and intelligent causes aimed at other ends, just as the cause of collecting the debt was the intention to collect subscriptions, though incidentally. But if one enjoys continuous success not due to intelligence then although we call these people 'lucky' the cause of their success must not be luck but nature: they exemplify what happens when human goodness unfolds without anything impeding it and without any need of intelligence to fill in where nature falls short, since in this case it does not fall short. Thus, all luck does end up being reducible to nature or intelligent causes: continual good luck to having been born with a 'good nature'; unexpected good luck to having benefited incidentally from causes intrinsically aimed at some other good (whether natural or artistic). Aristotle usefully summarises the negative results of his investigation: 'the result is that the argument does not show that to be lucky is due to nature (because not all those people who seem to be lucky succeed because of luck, but rather because of nature); nor does the argument show that luck is the cause of nothing, but only that it is not the cause of everything it seems to be the cause of' (1248a12–15).

Aristotle's treatment of moral luck in the *Eudemian Ethics* is therefore consistent with his treatment of luck in the *Physics*, not only walking a parallel dialectical path, but also arriving at a compatible outlook. The difficulty as I see it is not in the consistency of Aristotle's account of luck, but with the moral implications of his physical account of luck: if all luck is reducible to the incidental effects of natural causes, then the real effects of moral luck will also be due either to intrinsic or incidental natural causes; but either way there is no room for doubt that they are real effects. Instead of resolving the problem of moral luck, does not Aristotle thereby commit himself to recognising the reality of constitutive moral luck?

In the conclusion of this chapter I argue that he does. We already saw that Aristotle compares the lucky to people who are by nature taller, or of different eye or skin colour. It must be acknowledged, I think, that Aristotle is talking here not only about sex and age differences, but racial ones as well. Aristotle understands both one's drives and the capability to deliberate and reason to come about by nature, as he points out in the *Politics*: 'almost all things rule and are ruled by nature (*phusei*) . . . although the parts of the soul are present in all of them, they are present in different degrees: for the slave has no deliberative faculty at all; the woman has, but it is without authority, and the child has, but it is imperfect' (1.13.1260a8–14). Aristotle also thinks that the European races are characteristically brave and

spirited but lacking in intellect and art (*dianoias de endeestera kai technês*) (7.7.1327b24–25); Asians on the other hand are said to be more intelligent and inventive but wanting in spirit and slavish; the Greeks, of course, occupy the virtuous and happy middle place, being at once both high-spirited and intelligent. There are related racial or ethnic differences among the different Greek tribes: ‘for some of them have a one-sided nature (*tên phusin monokôlon*), and are intelligent or courageous only, while in others there is a combination of both these abilities’ (1327b34–36). Thus being male or female, Asian, European, or Greek, or of a certain Greek tribe are all understood as *natural* causes of both having certain drives and the ability to reason, resulting in different *natural* inclinations to moral and intellectual virtue and vice.

Consider, further, Aristotle's distinction in the *Politics* between slavery ‘by nature’ or ‘by convention’. If people were rightly considered slaves who are not born slaves by nature then the absurd consequence would follow that ‘the most well-born men would incidentally happen (*sumbêsetai*) to be slaves and born from slaves if it happened (*sumbêi*) that they or their parents were sold in captivity’ (1255a26–28). The treatment of this thesis as absurd shows Aristotle's concern to avoid the conclusion that certain races (i.e. peoples with certain ancestries)¹⁷ can by bad luck rightly be considered slaves: ‘some are slaves everywhere, some nowhere’ (1255a31–32). Clearly those that are slaves ‘everywhere’ are not so by luck or mere convention. Since slaves reproduce slaves by nature (and masters reproduce masters), natural slavery is a matter of race and ancestry, and race is a matter of nature, not convention or luck.

In the defence of natural slavery in *Politics*, Aristotle follows a parallel dialectical path as in the *Eudemian* account of moral luck. Moral luck being objectionable (since it implies unjustified and irrational success), Aristotle tries to reduce it to natural causes, hoping to show it is thereby unobjectionable (the other cases of unexpected success being irrelevant because they are incidental, not continuous, and just as often turn out bad). Similarly, slavery by convention or luck is obviously objectionable (since it implies unjustified and irrational deprivation of freedom), but Aristotle tries to show that there is a form of slavery that is unobjectionable because it is natural, that is, due to natural racial differences.

The problem remains, however, that it is a matter of constitutive moral luck whether I am born, for example, a Greek or a Barbarian (as Thales or Socrates said, according to a report from Diogenes Laertius), and thus

¹⁷ Aristotle defines ‘race’ (*genos*) in *Metaph.* 5.28.

either a master or a slave ('by nature'); the same kind of thing, *mutatis mutandis*, probably goes for being born a woman, and possibly goes even for my having been born a human and not a brute animal, but certainly goes for me being born into one or another Greek tribe.¹⁸ Arguing that the cause of these things is natural does not show that they are not real or not a problem; on the contrary, it shows that they are real and part of Aristotle's concept of nature.

Such a difficulty confronts Aristotle when in the *Eudemian Ethics*, immediately after concluding that most natural luck is reducible to natural causes (namely the right drives and desires), he presses on to ask what the cause of having the right drives and desires might be. 'This, however, one might be perplexed about: is luck a cause of this very thing, the desiring of what one should, and when one should? Or will it then be cause of everything, even thought and deliberation?' (1248a15–18). If all natural drives and desires are caused by luck, then the attempt to reduce moral luck by referring it to natural causes would fail; in effect those natural causes would themselves become matters of moral luck. But the reduction of what seems like luck to natural causes in the *Physics*, *Ethics*, and *Politics* raises the problem that nature and the cosmic order will then be the cause of what, for all human intents and purposes, is experienced as moral luck. This does not allow us to avoid the phenomenon of moral luck; on the contrary, it forces us to acknowledge it.

Aristotle does see and acknowledge this problem of natural causes producing constitutive moral luck. This is clear not only from the chapter of the *Eudemian Ethics* we are examining, but also from a passage in *Nicomachean Ethics* 3.7, in which Aristotle describes the difficulties that follow if one's capability to interpret appearances correctly and so to aim at the right ends are understood to be *due to nature*:

His aiming at the end is not up to him, but he must be born with a kind of vision (*alla phunai dei hôsper opsin echonta*), to enable him to judge nobly and to choose what is truly good. And a person has a good nature (*euphuês*) if he has this nature nobly (*touto kalôs pephuken*), since it is the greatest and noblest thing, and one cannot acquire or learn it from another; but as if it grew (*all' hoion ephu*) he has this, and when it is naturally good and noble, this will be the complete and true good nature (*hê teleia kai alêthinê an eiê euphuia*). If this is true, how will virtue be any more voluntary than vice? For how the end appears and is determined – by nature or whatever – is the same

¹⁸ For an interesting discussion of the difference between the cases of becoming a woman and becoming a slave, see Williams 1993: ch. 5.

for both the good and the bad person, and it is by referring everything else to this that they do whatever they do. (1114b5–16)¹⁹

According to this line of argument it makes little or no moral difference whether having naturally good drives and capacities comes about due to nature or luck. Either way, they will not be in the control of the agent, and so the fundamental problem of moral luck, that some moral goods (and evils) are not under our control, remains. And so Aristotle cannot avoid the moral luck problem (as he himself has framed it) by reducing it to natural causes. Even if it is by nature that certain people have a certain kind of intellectual vision (which is what Aristotle means by *opsis echonta* in the above passage), it will be a matter of luck for me whether I have a good nature such that I am able to 'see' the right thing to do. It is just as in the case of having blue or black eyes: the cause may be necessary and natural, but the result that I am unable to see as well as someone with another colour of eyes is, for me at least, unlucky. The problem becomes much worse when you realise that the ability to reason and think in order to overcome natural deficiencies (by means of the arts, sciences, etc.) might itself be due to luck:

For one does not deliberate after having deliberated, and deliberated about this, but there is a starting point; nor does one think by thinking before thinking, and this goes on to infinity. Therefore the starting point of thought is not thinking, nor is the starting point of deliberation deliberating. What else could it be, then, except luck? (1248a18–22)

Barring an infinite regress (thinking only after thinking about thinking; deliberating only after deliberating about deliberating, etc.) thought and deliberation must have a starting point. Aristotle now wonders what that starting point could possibly be, other than luck. Thus those who manage to deliberate around natural deficiencies so as to gain the same goods as 'the lucky' (who enjoy the highest goods without intelligence), would be able to do so only because of luck. But if this is the case, and all natural drives and even the capability to reason come about by luck, then 'everything will be a result of luck' (*apo tuchês hapanta estai*) (1248a22). In that case the controversial view attributed to Theophrastus would be true: 'Luck rules life, not wisdom' (*apud Cicero, Tusc. Disp. 5.ix.25*).

Aristotle's final attempt to avoid such a conclusion in *EE* 7.14 confirms that he has his physical and cosmological theory in mind as he struggles with the problem of moral luck:

¹⁹ Translation adapted from Crisp 2000.

Perhaps there is a starting point with none other outside it. And this is able to act as a result of being the very kind of thing it is. And the object of our search is this: what is the starting point of motion in the soul? Now it is clear that as in the universe it is god, so too it is here. For ‘the divine in us moves everything’. The starting point of reason is not a reason but something stronger. So what could be said stronger even than knowledge, except god? For ‘excellence is an instrument of the intellect’. (1248a22–29)

Aristotle deploys opinions of the wise (or proverbs) as warrants for an argument that rapidly reaches the conclusion that god is the primary cause of all change. Aristotle proves that god exists as the unmoved mover of all natural change in *Physics* 7–8 and *Metaphysics* 12. The relevance of this doctrine to *EE* 7.14 is that this final cause of motion is prior to all luck, and all luck is defined as an incidental cause of what the unmoved mover (and those motivated by it) cause intrinsically. The unmoved mover operates as a final cause not only of all deliberation and thought, but also of all natural appetites and desires (in this way it is ‘the starting point of motion in the soul’). Aristotle, strikingly, goes so far as to say that for those who have naturally good appetites ‘deliberation is of no advantage to them, for they have in them a principle that is better than intellect and deliberation’ (1248a31–32). These are the lucky people who, without reason, achieve a kind of success through divine inspiration, that is, they do well *because of the god* (*tôi theôi*, 1248a38). Now this expression must refer to the final causality of the unmoved mover, and not any efficient causality of any other kind of god, because Aristotle has flatly rejected the idea that anyone should succeed without the use of intelligence ‘because of being loved, so to speak, by a god’ (*tôi phileisthai, hôsper phasin, hupo theou*) at 1247a23–24.²⁰ But divine inspiration allows certain lucky people to succeed without using intelligence and intellect, but instead by following more primitive drives.²¹ Interpreted in this way as a reference to the influence of the unmoved mover on primitive natural desires, *EE* 7.14 remains consistent not only

²⁰ The apparent tension between these positions is the subject of a useful study by van der Eijk 1989. A related point is made in *EN* 10.8: the wise must be the most beloved of the gods (*theophilestatos*, 1179a30). See also Bodéüs 2000: 163 and Dudley 2012.

²¹ According to Whiting 1996: 181–85, Aristotle’s solution to the problem of constitutive moral luck has to do with ‘*nous* [intellect] identification’. While I agree with the thrust of this interpretation and find it an attractive solution, it is not sufficient either as an interpretation of *EE* 7 or as a solution to the problem of constitutive moral luck for the following reason. In *EE* 7.14, Aristotle is discussing people for whom ‘deliberation is of no advantage to them, for they have in them a principle that is better than *nous* and deliberation’ (1248a31–32). Since such people benefit from moral luck, others must suffer by the same token, that is, from being so naturally constituted as neither to have good natural desires, nor being capable of ‘increasing their *nous*’ so as to overcome their natural deficiencies.

with itself (and with Aristotle's principle barring divine favouritism), but also his overall doctrine of the *Physics*. In his summary (1248b3–7), Aristotle also calls this kind of luck 'divine' (*theia*, 1248b3) and suggests that it is 'through god' (*dia theon*, 1248b4).

Naturally lucky, then, are those 'divinely' blessed with good appetites and who succeed without intelligence or deliberation, but in accordance with nature. It is perhaps surprising that Aristotle admits a class of people who do better without reasoning but by following their natural desires (1248a29–b3). He compares them to blind people compensating for their deficiency by developing better memory than the sighted, bringing to mind the several other cases throughout his investigation in which he has compared those who are capable of using reason to succeed with those who have good vision.

Less lucky, of course, are those who require intelligence and deliberation to succeed, and who suffer from appetites not properly aligned to the unmoved mover. But such people can overcome moral luck by identifying more with their intellect and using reason to modify their natural drives and external circumstances. Positively unlucky, however, are those who use intelligence and deliberation but still fail due to circumstances beyond their control.

Unluckiest of all are those who for natural reasons such as their sex or race are not able to reason and deliberate properly in the first place. What difference does it make whether we consider their situation a matter of nature instead of luck? Whether success turns out to be something that 'comes to be due to luck (*dia tuchên*) or due to nature (*dia phusin*) it would be a hopeless dream for many people; its acquisition would be beyond their powers no matter how strenuous their endeavours' (*EE* 1.3.1215a12–15). Aristotle's realisation that nature and luck are morally equivalent as causes of human happiness shows why he might appeal to his account of the principle of nature at the end of the *Eudemian Ethics* in looking for a solution to the problem of moral luck. But the fact that the unmoved mover turns out to be the final cause of moral luck does not resolve the problem, even while it puts the blame on a cosmological or theological principle.

Thus Aristotle discovered troubling implications of the problem we now know as constitutive moral luck. The chief value of his account stems from its being the original formulation of the problem (and a problem that remains at the heart of contemporary moral theory), and Aristotle's exemplary forthrightness in confronting the moral implications of his own natural science.