

The Story in the *Protagoras*:

Sketching a Naturalistic Ethics

The story about Prometheus and Epimetheus that Plato puts in the mouth of Protagoras presents us with a disguised version of a rationalist and naturalist account the origin of animals and the early development of human beings. It combines a general account of animal biology with a theory about the origin of our ethical practices, and it is the joining together of those two different areas of thought that gives the allegory a special philosophical importance. My aim in this paper is to explore that combination.¹

¹ For treatments of the story see: M. Nussbaum, *The Fragility of Goodness*, revised ed., Cambridge University Press, Cambridge 2001, p. 100-6; C. C. W. Taylor, 'Nomos and Physis in Democritus and Plato', *Social Philosophy and Policy* 24.2 (2007), p. 9-20; N. Denyer, *Plato, Protagoras*, Cambridge University Press, Cambridge 2008, commentary on 320c3-328d2; W. C. K. Guthrie, *A History of Greek Philosophy Vol. III*, Cambridge University Press, Cambridge 1969, p. 63-8, 255ff; F. Heinemann, *Nomos und Physis: Herkunft und Bedeutung einer Antithese im Griechischen Denken des 5. Jahrhunderts* (Schweizerische Beiträge zur Altertumswissenschaft 1) Verlag Friedrich Reinhardt, Basel 1945, p. 115-6; A. W. H. Adkins, 'Arete, Techne, Democracy and Sophists: Protagoras 316b-328d', *JHS* 93 (1973), 3-12; E. R. Dodds, *The Ancient Concept of Progress and Other Essays on Greek Literature and Belief*, Oxford University Press, Oxford 1973, p. 9-23; G. B. Kerford, 'Plato's account of the relativism of Protagoras', *Durham University Journal* 42 (1949-50), p. 20-6; A. Levi, 'The ethical and social thought of Protagoras', *Mind* 49 (1940), p. 284-302; A. E. Taylor, *Plato, The Man and His Work*, Dial Press, London 1927, p. 241-7. My treatment is in close sympathy with Nussbaum, Guthrie, and Taylor, in being a rejection of Plato's criticisms of Protagorean meta-ethics (whereas as the great majority of commentators largely support those criticisms). My special interest is in exploring connections between the story and Darwinian ideas.

1. The Rationalist Theory behind the Story.

First let's consider our various reasons for seeing the story as a version of Ionian rationalism. That means, above all, assuming that all gods in the story have a strictly symbolic role, as we would expect given Protagoras' well-attested, aggressive agnosticism.²

(1) Protagoras says that he can answer Socrates' question with a story (*mythos*) or a straight account (*logos*), and then says that he prefers the former. He must mean that there exists a non-mythical version of the claims that he is about to make. It seems extremely likely that there would be no gods in that version. (If it contained gods, then it would surely be, *ipso facto*, a myth rather than a *logos*.) That clear suggestion is then reinforced by his choice of two gods with manifestly allegorical names, Prometheus and Epimetheus, as well as his use of the well-established symbolism of Athena and Hephaestus.³ Then, from the moment the story ends and he passes back into *logos*, he makes no further mention of any gods in any part of his speech or anywhere else in the dialogue.

(2) Various later sources give us a reliable picture of rationalist Presocratic theories about the origin of life and of human society.⁴ A passage preserved by Diodorus Siculus (1.7-8), and independently by John Tzetzes, serves as well as any other text as an indication of what a non-allegorical version of Protagoras' story

² Protagoras claimed to have no idea if any gods existed (DK80 B4). The fact that he stated this in public made him a very bold opponent of theism by the standards of the day.

³ Greek listeners easily grasp that Athena stands for the arts, Hephaestus for metallurgy, etc. These gods' only role in the story (321d-e) is to supply those things (indirectly, when Prometheus steals them and gives them to humanity). Zeus likewise almost certainly has a definite allegorical meaning, but it is a little less easy to discern (see below).

⁴ For a useful collection of these sources, see G. Campbell, *Lucretius on Creation and Evolution*, Oxford University Press, Oxford 2003, p. 331-33.

might have looked like. Although we cannot be certain of Diodorus' source, it seems probable that his text derives from Democritus — Protagoras' compatriot, fellow-humanist, and near contemporary⁵ — and offers us the standard rationalist theory of origins, widespread in the fifth century enlightenment.⁶ Diodorus' cosmogony asserts that after the formation of the world through purely physical and material necessity, animals formed spontaneously within bubbling, womb-like cavities just below the surface of the ground, when the flat and muddy earth was acted upon by the heat of the sun. It describes the subsequent gradual evolution of humanity through their discovery of fire and technology, and the development of agriculture and language,

⁵ Some sources claim that Protagoras was Democritus' pupil. See Diog. Laert. 9.51: διήκουσε δ' ὁ Πρωταγόρας Δημοκρίτου; likewise Philostr. *V S* 494.1; Clem. Al. *Strom.* 1.14.64.4; Ath. 8.50.14; Eus. *Praep. evang.* 10.14.16. The testimony is late and the chronology seems awkward (Democritus was apparently the younger of the two, by twenty odd years) but the claim apparently goes back to Aristotle and Epicurus (see Diog. Laert. 9.53.6). In any case, if it had no historical basis then it must have arisen from speculation based on their written work, as with most ancient biographical claims about philosophers. So it provides solid evidence that Protagoras' writings were Democritean.

⁶ See DK68 B5. DK treats the passage in Diodorus and the closely related passages in John Tzetzes' commentary on Hesiod as deriving from Democritus. Tzetzes and Diodorus agree closely, but independently, and are using the same single written source. The connections with Plato's text (see next note) point to an early source. Democritus seems the best candidate by far. See also W. C. K. Guthrie, *In the Beginning: Some Greek Views on the Origins of Life and the Early State of Man*, Methuen, London 1957, p. 29-46, and *A History of Greek Philosophy Vol. II. The Presocratic Tradition from Parmenides to Democritus*, Cambridge University Press, Cambridge 1965, p. 471-4. I agree broadly with Guthrie (*History II*, p. 473): 'This evolutionary view of culture...is to be found, identical in outline and in many of the details, in Aeschylus, Euripides, Critias, Protagoras, the Hippocratic *On Ancient Medicine*, and the evidently fifth-century source of the pre-history in Diodorus 1.8. It is therefore difficult to trace its origin to any particular thinker. The substance of the chapter in Diodorus has been thought to have originated with Democritus, but must [also] have been current earlier'. It is of interest here that Tzetzes presents his version of the Democritean source as an explanation of the Prometheus myth in Hesiod's *Theogonia*. Thus, he not only gives us part of the *logos* behind Protagoras' story, but also explicitly states that it is a non-allegorical version of a Prometheus myth. It is tempting to think that the *Protagoras* somehow caused Tzetzes to connect this Presocratic cosmogony with Prometheus. Any decent ancient commentary on the *Protagoras* would have reproduced the Ionian material in its exegesis of the myth. Perhaps Tzetzes had access to such a commentary and from it got the idea of explaining Hesiod's Prometheus with the same material, or perhaps the two Prometheus stories had some how become muddled together in the earlier scholia.

and proposes that they began to cooperate and to form communities as a means of defending themselves against wild animals. The account is thus strikingly similar to Protagoras' story both in outline and in detail, even to the point of several verbal echoes that leave no reasonable doubt that there is a close link, a textual relationship of some kind, between Diodorus' source and the material that is being quoted, imitated, or paraphrased by Plato in the *Protagoras*.⁷ Many of the details of the Diodoran passage are also closely paralleled in Lucretius' *De Rerum Natura* (5.772-1104),⁸ presumably because of Epicurus' heavy reliance on Democritus, and that means that we can use Lucretius as a secondary witness to some of the ideas that lie behind the allegory as well (and in some cases must do so, as he is our only surviving detailed source).

These various witnesses not only show us what the story was saying, but also gives us good reason to think that it represents authentic Protagorean material (even if we cannot identify its exact source) and for the purposes of this discussion let's assume that such is the case. A work attributed to Protagoras, *Περὶ τῆς ἐν ἀρχῇ*

⁷ Some particular verbal echoes: (1) Diodorus (1.8.2) uses the unusual metaphor of warfare to refer to attacks by wild animals on human beings: καὶ πολεμουμένους μὲν ὑπὸ τῶν θηρίων ἀλλήλοις βοηθεῖν [sc. τοὺς ἀνθρώπους]. Cf. *Prot.* 322b4: πρὸς δὲ τὸν τῶν θηρίων πόλεμον ἐνδεής [sc. ἡ δημιουργικὴ τέχνη] – πολιτικὴν γὰρ τέχνην οὕτω εἶχον, ἧς μέρος πολεμική. (Plato seems to exaggerate, and so to make fun of, the metaphor, which he would only do if it were not his own.) (2) Diodorus (1.8.1) says of the first people: τοὺς δὲ ἐξ ἀρχῆς γεννηθέντας τῶν ἀνθρώπων...σποράδην ἐπὶ τὰς νομάς ἐξιέναι. Cf. *Prot.* 322b1: κατ' ἀρχὰς ἀνθρωποὶ ὥκουν σποράδην. (Note that σποράδην occurs nowhere else in Plato.) (3) In Diodorus (1.8.3) we find διαρθροῦν τὰς λέξεις used of language development; cf. *Prot.* 322a5: ἔπειτα φωνὴν καὶ ὀνόματα ταχὺ διηρθρώσατο. (4) Diodorus (1.8.3) has ἀθροίζομένους δὲ διὰ τὸν φόβον, speaking of the first communities, formed out of fear of wild animals; cf. *Prot.* 322b: ἀπώλλυντο οὖν ὑπὸ τῶν θηρίων... ἐζήτουν δὲ ἀθροίζεσθαι... (5) Describing the foods of the first people, Diodorus (1.8.1) gives τῆς τε βοτάνης τὴν προσηνεστάτην καὶ τοὺς αὐτομάτους ἀπὸ τῶν δένδρων καρπούς. Cf. Protagoras describing the foods of the animals (321b2): τοῖς μὲν ἐκ γῆς βοτάνην, ἄλλοις δὲ δένδρων καρπούς.

⁸ See G. Campbell, *Lucretius* (as above, n. 2) for an excellent and very helpful commentary on the Lucretian material and survey of its Epicurean and Presocratic sources.

καταστάσεως, usually taken to mean *On The Original Condition <of Humankind>*, must have expressed some of these ideas. But it seems certain that this was not in the form of a myth, and therefore it could not be a direct model for our story.⁹ The allegorical version of the theory was either some other Protagorean work, or Plato's own invention. The latter seems a fair possibility, given Plato's own fondness for composing myths — but why should we not take the dialogue at face value, historically speaking? Plato presents the story not as a written work, but as an *epideixis*.¹⁰ His reporting of such an *epideixis* — however exactly he came to know of it — would be a matter of imitation rather than of mere transcribing, and it would then be like the several other imitations in the corpus: e.g., his imitation of Lysias in the *Phaedrus*, of democratic orators in the *Menexenus*, and of Socrates' defence speech in the *Apology*. On this view, the story records Protagorean ideas and style, with an accuracy in proportion to Plato's remarkable skill as an imitator and reporter of ideas, even if we can't untangle the web of transmission.

So, leaving aside more speculative proposals, we shall assume here (a) that Plato has provided us with a good imitation of the historical Protagoras, and (b) that his Protagoras is setting out, behind a veil of myth, a Presocratic theory about the non-divine, natural origins of life, humanity and morality, and (c) that Plato's readers would have connected the story with the views of Democritus in particular. The purpose of this allegorical disguise is not just to make the speech 'more agreeable' (χαριέστερον) as Protagoras disingenuously claims, but also to conceal, or at least soften, the godlessness of the underlying theory. Earlier in the dialogue (316-17) Protagoras alluded to the hostility and resentment aroused by 'sophists' — by which

⁹ It has also been suggested — not without some plausibility — that this title may have arisen in the reports only on the basis of the *Protagoras* myth itself.

¹⁰ Thus, at the end of the speech (328d3): Πρωταγόρας μὲν τοσαῦτα καὶ τοιαῦτα ἐπιδειξάμενος ἀπεπαύσατο τοῦ λόγου.

he meant, simply, public intellectuals and philosophers — and said that sophists in the past often disguised their ideas (using poetry as a cover, for instance) to avoid such controversy. There can be no doubt that he was referring to the intolerance faced by humanists and agnostics like himself, because so many Greeks assumed, like the prosecutors of Anaxagoras, and later of Socrates, that atheists and agnostics were corruptors of public morals.¹¹ Thus, he gives a very clear indication that he might be inclined to disguise his anti-theistic views; and the reference to poetry implies the use of myth for that purpose. Admittedly, the myth amounts to a flimsy disguise (all but the slowest listeners will understand what Protagoras is saying) but that is only to be expected. His purpose is not to conceal his ideas entirely, but to pre-empt the charge of atheism, which the allegory does by a clever technicality: it co-opts the gods themselves to express this controversial idea that we don't need them, either to explain our existence or to be the basis of our morality.

(3) In the story, the gods 'mould' the animals 'inside the ground', from earth and fire and their compounds (320d). These are subtle references to the spontaneous moulding of the animals from the elements in those sun-baked cavities in the primordial ooze. The same connection explains the choice of Epimetheus as the designer of the animals — a role that he is assigned uniquely here. The rationalist theory underlying the myth aims to remove the gods from the picture.¹² This was the 'most fundamental and universal' tenet, as Guthrie put it, of the fifth century enlightenment: 'the substitution of natural for divine causation everywhere'. And an

¹¹ Protagoras was an agnostic rather than an atheist; but as such he treated ethics as a strictly human concern (which is what I mean here by 'humanist') and that is one of the central implications of the story. Plato himself was hostile to humanists (in addition to merely disagreeing with them). Cf. *Leg.* 887d: "It is impossible not to be intolerant of, not to hate, the people who are responsible for these claims" [sc., that there are no gods, or that the gods do not concern themselves with human morality]. He declares that ideally people who persist in making such claims should be *put to death*, even if they defend morality fully (909a). Protagoras certainly falls into this category of humanist; so do Aristotle, David Hume, Bertrand Russell, and Daniel Dennett, as it happens.

¹² W. C. K. Guthrie, *History II* (as above, n. 1) p. 354.

important part of the theory (if we may rely on Epicurus) was the idea that since the animals that emerged from the mud were generated by mindless and purely natural forces, very large numbers of them were bizarre, ill-formed monstrosities, unable to survive and reproduce. Those that did survive were lucky winners of nature's lottery: amid the myriad failed experiments, a few animals happened to emerge with features that enabled them to persist.¹³ This was, as it seems, an ingenious attempt to account for the obvious fitness and functionality of animals and their parts without recourse to gods, teleology or design. So in the allegorical version of the same theory Protagoras needs to find a god who can, paradoxically, represent this absence of divine providence and of deliberate design. But how can any god stand for the absence of gods? He chooses Epimetheus, whose name expressly signifies *lack of forethought*: the careless and thoughtless god who is 'not intelligent at all' (321b7: οὐ πᾶντι σοφὸς ὢν) and who never notices a problem until it is too late. To underline the point, he remarks that Prometheus was originally assigned the task with his brother, but Epimetheus insisted on embellishing the animals *all on his own* (320d). That is the story's way of emphasizing the *total* absence of foresight and intelligent design from the formation of the animals. Epimetheus is the god who blunders, and learns from his mistakes,¹⁴ and no god could more neatly personify the

¹³ Cf. Lucr. 5.837-65. E.g., Multaque tum tellus etiam portenta creare | conata 'st mira facie membrisque coorta | androgynum, interutrasque nec utrum, utrimque remotum | orba pedum partim, manuum viduata vicissim....necquiquam, quoniam natura absterruit auctum. ... Multaque tum interiisse animantum saecula necessest. The idea that nature must have failed in these spontaneous productions far more often than it succeeded goes back at least to Empedocles (DK31 B57, B59, B61; Arist. *Phys.* 2.8.) Finding it again in Epicurus, we can be confident that it was part of the thinking of Democritus and Protagoras in between.

¹⁴ E.g., these scholiasts on Hesiod (see H. Flach, *Glossen und Scholien zur hesiodischen Theogonie*, Teubner, Leipzig 1876, 334 and 402) show us clearly that the name was understood as standing for trial and error or for learning from mistakes: (1) Ἐπιμηθέα δὲ λέγει τὴν ὕστεροβουλίαν καὶ τὸν μετὰ τὴν πράξιν ἐπισυναγόμενον νοῦν. (2) καλῶς δὲ ὁ μῦθος ἀδελφὸν τῷ Προμηθεῖ τὸν Ἐπιμηθέα παρίστησιν. ἀληθῶς γὰρ ἡ ἀπὸ Προμηθέως ὁ ἄνθρωπος ὠφελούμενος οὐ περιπίπτει κακῶ ἢ ἀμαρτῶν

trial and error process described by Democritus. (In that sense, it is equally the Darwinian view that biological evolution is Epimethean, not Promethean. That is to say, Darwin proposes that biological evolution proceeded mindlessly, stumbling upon good design by making blind, unguided modifications and suffering the consequences, usually bad, but occasionally good. This basic idea, that countless blind trials will generate a tiny number of lucky successes — eliminating the need for a conscious designer — is thus common to both ancient and modern biological naturalism, regardless of the considerable differences in the mechanisms of generation that they propose, and it is a central philosophical insight of both.)

(4) Protagoras carefully and repeatedly stresses that *all* the features and powers handed out by Epimetheus aided each species it *in its survival*. He sets up the striving for survival as the fundamental principle of the distribution. In Epicurus that detail forms a very important part of the wider argument against design. Existing animals have exactly those features that enable them to persist, originally assigned to them randomly by nature. There was nothing special or miraculous about the way they were given those features; no divine intelligence was involved. Nor should we on that account be surprised or amazed that they fit the animals to their environment so perfectly. After all, if they did not have those features, then those animals would not be here, and if nature was constantly experimenting in the earliest period of the earth's history, then such lucky accidents were bound to arise.¹⁵

ἀνακτᾶται πάλιν δι' ὑστεροβουλίας. διὰ γὰρ τοῦτο καὶ ἀμαρτίνοον τοῦτον ἔφη, παρόσον ἀμαρτάνοντός τινος ἐπέρχεται ἡ ὑστεροβουλία καὶ ἡ ἐκ ταύτης ὄνησις.

¹⁵ Lucretius emphasizes this experimentation not only in the formation of animals (5.792: nova tum tellus...mortalia saecula creavit | *multa modis multis varia ratione* coorta) leading to the extinction of most of them (see above, note 13) but even in the formation of worlds, and it appears that the idea of constant random experiments of matter *at all levels of organisation* was a general and important Democritean principle. Thus, Democritus thought there were infinite worlds (Diog. Laert. 9.44.3, DK68 A1: δοκεῖ δ' αὐτῷ ἀπείρους τε εἶναι κόσμους καὶ γενητοὺς καὶ φθαρτοὺς) many of them not fit for life (DK68 A40: εἶναι δὲ ἐνίους κόσμους ἐρήμους ζώων καὶ φυτῶν καὶ παντὸς

(5) Aristotle, in the *Parts of Animals*, appears to quote from the story. He criticizes certain unnamed philosophers — representatives of a distinct school of thought? — who claim that human beings are poorly constructed, because they come into the world ‘naked and without shoes and without weapons’.¹⁶ It seems likely that Aristotle has the *Protagoras* in mind here, not least because it was evidently one of his favourite works,¹⁷ and it is obvious that he is treating this claim as part of the wider argument against teleology in nature. He is right to see the story as implying that human beings are in some respects inferior to the other animals, but he may also have in mind a more complex Democritean argument that must have used similar terms. The fact that human beings are so helpless in their natural state, especially as infants, recurs in Epicurus as one of his less convincing arguments for the view that we have been rather carelessly put together.¹⁸ Contrary to Aristotle’s reading, which may be influenced by his knowledge of Democritus, our story does not seem to be

ὕποῦ) the implication being that the suitability of this world for life is a matter of chance, not of divine providence. For this important general principle, see also Lucr. 5.188ff: *Ex infinito iam tempore percita plagis | ponderibusque suis consuerunt concita ferri | omnimodisque coire atque omnia pertemptare | quaecumque inter se possent congressa creare | ut non sit mirum si in talis disposituras deciderunt*. Cicero confirms that this idea comes from Democritus. Cf. *Nat. D.* 1.73.5: quid est in physicis Epicuri non a Democrito? nam etsi quaedam commutavit...tamen pleraque dicit eadem, atomos, inane, imagines, *infinitatem locorum innumerabilitatemque mundorum*, eorum ortus, interitus, omnia fere quibus naturae ratio continetur. See also D. Dennett, *Darwin’s Dangerous Idea*, Simon and Schuster, New York 1995, p. 176–81 for this idea of the cosmic extension of Darwinian thinking.

¹⁶ 687a23: ἄλλ' οἱ λέγοντες ὡς συνέστηκεν οὐ καλῶς ὁ ἄνθρωπος ἀλλὰ χεῖριστα τῶν ζώων (ἀνυπόδητόν τε γὰρ αὐτὸν εἶναί φασι καὶ γυμνὸν καὶ οὐκ ἔχοντα ὄπλον πρὸς τὴν ἀλκὴν) οὐκ ὀρθῶς λέγουσιν. A. L. Carbone (*Aristotele, Le Parti degli Animalì*, Rizzoli, Milano 2002, p. 753–5) thinks that Aristotle is referring to the *Protagoras* itself, and that seems plausible. But note that οἱ λέγοντες suggests a school or group of thinkers. It is what we might expect if he were quoting the *Protagoras* while also aware that the idea really came from the Ionian materialists more generally.

¹⁷ He quotes from or alludes to or borrows from the *Protagoras* at *Eth. Nic.* 1116b4, 1144b28, 1145b22, 1147b15, *Eth. Eud.* 1229a14, 1230a7, 1246b34, *Pol.* 1283a30.

¹⁸ Lucr. 5.223ff: Tum porro puer...nudus humi iacet, infans, indigus omni | vitali auxilio, cum primum...nixibus ex alvo matris natura profudit. The weakness of the argument is in the fact that helpless infants are cared for by their parents, and any theist (or biologist) could point out that parental care is part of the divine design (or the extended phenotype) of the animal.

making that claim. Protagoras does not mean that we are badly constructed overall, but rather that because of our lack of *bodily* strengths and endowments, we rely on our ingenuity and survive by our wits, just as the animals that lack strength rely on speed, and animals that lack speed rely on bulk.¹⁹

So, let's proceed with this reading of the allegory. Our technical ingenuity is given to us, in the story, by Prometheus. That is to say that *our own intelligence* and foresight, our ability to think ahead, allows us to survive in the way we do, and occupy our ecological niche — the niche of the versatile, inventive, tool-making animal. This is once again strikingly close to Darwinian thinking, in that it casts intelligence itself as just another biological endowment, similar to the endowments of other animals and dispensed under the same natural rules; and two important philosophical ideas are implied by this view of things. First, Protagoras is saying that there is nothing special about humanity in the larger order. We are not the centrepiece of the cosmos, but just another animal muddling along with the rest of them. They have their ways of surviving, and we have ours. Other animals have not been created for our sake any more than we were created for the sake of other animals. Second, the story implies that our intelligence is something that we have because it is a mechanism of survival. *We think in order to live*. This reverses the Platonic and Aristotelian view that, ultimately, human beings *live in order to think*. For Plato and Aristotle, the workings of the mind, human or divine as the case may be, are primary and fundamental in the

¹⁹ Compare this part of the story with the following passage from the evolutionary biologist, Ernst Mayr (*What Evolution Is*, Basic Books, New York 2001, p. 244): “The environment slowly shifted to a bush savanna. This deprived the australopithecines of their retreat to safety, for in a treeless savanna they were completely defenseless. They were threatened by lions, leopards, hyenas and wild dogs, all of whom could run faster than they. They had no weapons such as horns or powerful canines, nor the strength to wrestle with any of their potential enemies successfully. Inevitably most australopithecines perished... [But] some populations survived by using their wits to invent successful defense mechanisms... (p. 248) They could no longer escape carnivores by climbing trees, and so had to depend on their ingenuity.”

structure of the cosmos. For Aristotle the exercise of reason, which in its purest form is a kind of imitation of the mind of God, is the ultimate human biological function. It is thus the final cause of every other biological feature of the human animal.²⁰ For Plato the divine mind preceded, created, and sustains all the order of the cosmos.²¹ Protagoras' story, or at any rate the theory behind it, proposes that the cosmos has a mindless and godless origin, and that human intelligence — which he surely thinks is the only kind there is — arose from material causes as a tool of survival of one particular animal in one particular world.

2. Protagorean Ethical Naturalism: *Nomos* and *Physis*

But the most important part of the story is its explanation of the development of morality. Human beings, we are told, were able to use their technical ingenuity to provide themselves with food, but they could not form communities because they did not yet possess 'the art of being citizens' (*politikê technê*), which is to say that they did not yet possess the ethical dispositions that govern and enable our interactions with the people beyond our own families. So they were slaughtered by wild animals and the species was in danger of dying out, until Zeus gave them 'shame and a sense of right', thereby enabling them to cooperate and make common defence against their attackers. So morality (just like intelligence) is essentially a tool for survival, and that fact explains how it arose in a completely amoral, material universe. Very well,

²⁰ Aristotle thinks of the *psuche* as 'the thing for the sake of which' living things are the way they are: providing the purpose of all its strivings (*De an.* 415b 14-21). He also considers activity of the soul to be the human 'function' (*Eth. Nic.* 1. 7), which apparently means natural function, and identifies reason and thought as the 'goal of our nature' (*Pol.* 1334b15). He also claims that contemplative reason is the finest and highest activity of the human soul (*Eth. Nic.* 10.7). It follows that he thinks that the human animal exists *so as to exercise reason*, from the point of view of our nature.

²¹ This is the view set out fully in *Timaeus*. It is also implied by the idea that the Form of the Good is the cause of everything in the universe (cf. *Resp.* 508-9). The same idea is stated more succinctly at *Phd.* 98b, and *Leg.* 884-906.

but by what mechanism did it ‘arise’? What does this part of the story amount to exactly? It is often treated as a version of the social contract theory, and with good reason. It resembles the versions of that theory presented elsewhere by Plato, and it seems likely that Plato himself assumes that it *is* such a theory, subject to the same (in his view) fatal weaknesses. We also know that the social contract theory was favoured by other ancient ethical naturalists (by the Epicureans, for example) as the best available natural explanation of morality’s origin. But the theory as stated by Calicles in the *Gorgias* (483b) or Glaucon in the *Republic* (358e) involves no discussion of human biology, and still less of the origin of other animals, because none is required. The contract theory has nothing directly to do with biology. Rather, it asserts precisely that morality is cultural, *not* biological. It is the idea that human ethical standards arose from some kind of communal deliberation: people grasped at some point that they would do better for themselves by cooperating than by exploiting one another, and they instituted appropriate habits, practices, and laws. If that is the idea behind this part of Protagoras’ allegory, then it seems that the earlier, biological section is meant to show the boundary of human nature: where *phusis* ends and *nomos* begins.

But that way of reading the story very much undermines the larger point that Protagoras is trying to make. He is trying to defend democratic practices, and he wants to show that it makes perfect sense for Athenians to assume that a sense of fairness and respect for others are universal features of humanity. Clearly it would be easier to defend that view by claiming that ethical qualities have some connection with human *phusis*, and far harder if what he means is that they are universal through the action of *nomos*. It is a cliché of the philosophical discourse of the time that those things that are the result of *nomos* are *not* universal, but subject to change from place

to place, and capable of being discarded when we wish.²² So the story would have to somehow also explain why this particular *nomos* — the tendency of human beings, other things being equal, to treat each other fairly — manages to behave like a product of *phusis* in being, as he claims, both universal and immutable. Perhaps that is what the story aims to do. Protagoras may mean that cooperation is so essential to our existence that people in all cultures invariably *figure out* its value and transmit the necessary social norms, by the processes that he describes in the later part of the speech. But we should also consider a different reading. We might try taking the two halves of the story together, and let the biological ideas of the first part extend into the ethical portion. If Protagoras is saying that human ethical qualities are a partly natural endowment, given to us under the same principle as the natural endowments of other animals, then the resulting theory is a much stronger response to Socrates, and a much more plausible form of ethical naturalism than the contract theory.

How credible is it, then, that Protagoras sees morality as at part of, or tied to, human nature? At first glance this seems implausible, since right after the story Protagoras states clearly that morality (that is to say, ethical ἀρετή) is not a product of *phusis* (οὐ φύσει...εἶναι) but arises from instruction, training and effort.²³ That explains, he says, why we blame people for failing to acquire it and exercise it (323c). After all, we don't blame people for defects that are a result of their nature. Nevertheless, there are several good reasons for thinking that this claim of his is

²² That 'throwing off' of moral conventions is vigorously advocated by Callicles (*Grg.* 484a): ἐὰν δέ γε οἶμαι φύσιν ἱκανὴν γένηται ἔχων ἀνὴρ, πάντα ταῦτα ἀποσεισάμενος καὶ διαρρήξας καὶ διαφυγὼν, καταπατήσας τὰ ἡμέτερα γράμματα καὶ μαγγανεύματα καὶ ἐπωδὰς καὶ νόμους τοὺς παρὰ φύσιν ἅπαντας, ἐπαναστὰς ἀνεφάνη δεσπότης... Similarly, in the *Protagoras* itself Hippias describes *nomos* as 'the tyrant of humankind' which often 'violates our nature' (337d). Also, see especially F. Heinemann, *Nomos und Phusis* (as above, n. 1).

²³ 323c5: ὅτι δὲ αὐτὴν οὐ φύσει ἡγοῦνται εἶναι οὐδ' ἀπὸ τοῦ αὐτομάτου, ἀλλὰ διδακτόν τε καὶ ἐξ ἐπιμελείας παραγίγνεσθαι ὥς ἂν παραγίγνηται, τοῦτό σοι μετὰ τοῦτο πειράσομαι ἀποδείξαι.

somewhat misleading, and that Protagoras does intend Zeus's gift to stand for a natural or partly natural endowment.

(1) First, Protagoras says elsewhere in the *logos* that ethical qualities do depend on our nature. He says, for instance, that some people have a nature that makes them exceptionally able to develop these dispositions, while others may have rather less ethical talent, so to speak.²⁴ He treats that idea as uncontroversial, and uses it to explain why some people grow up (ethically) better than others, even though the amount of ethical instruction we all receive is, according to him, roughly equal (327a-c). But clearly, if our ethical dispositions depend on our individual nature, then they must also depend more broadly on our human nature.²⁵ Some swallows fly better than others, and some wolves hunt more successfully than others, and those difference may depend on differences in their natural talents; but the ability of the swallows to fly, and of the wolves to hunt, depends in general, and far more, on the universal biological endowments of swallows and wolves.

(2) It's true that Protagoras thinks that teaching and practice are vital to our ethical development (if we may assume the rough authenticity of the *logos* part of the speech). But that view is fully compatible with a belief in innate ethical tendencies, because his idea could be that the finished virtues are a product of instruction and training acting upon natural predispositions. That is Aristotle's view, after all: that

²⁴ Cf. 327b7-c1. The claim comes as part of a complex analogy. He proposes that in a world where flute playing was as crucial to our existence as morality is in the real world, teaching of the flute would be constant, public, and universal. In that case, only differences in innate talent would account for differences in adult players: ἀλλὰ ὅτου ἔτυχεν ὁ υἱὸς εὐφυστάτος γεγόμενος εἰς αὐλήσιν, οὗτος ἂν ἐλλόγιμος ἠὲ ξήθη, ὅτου δὲ ἀφυῆς, ἀκλεῆς. The implied claim is that there are, in the real world, corresponding differences in *ethical* talent. Note, though, that this idea still has a strongly egalitarian flavour. Protagoras asserts that this talent is distributed unpredictably: a good father often has a bad son, and a bad father a good son. This suggests the Periclean (and un-Platonic) idea (see Thuc. 2.37.1) that one's parentage should have no bearing on political opportunity.

²⁵ For this important idea of *common* biological nature, as opposed to individual nature, cf. Hippoc. *Epid.* 1.3.10: τὰ δὲ περὶ τὰ νοσήματα, ἐξ ὧν διαγιγνώσκωμεν, μαθόντες ἐκ τῆς κοινῆς φύσιος ἀπάντων, καὶ τῆς ἰδίας ἐκάστου.

virtues are neither purely natural nor purely cultural, but that ‘nature primes us to receive them, and the forming of habits perfects them’ (*Eth. Nic.* 1103a23). And it is useful to note his exact language here. He says, just like Protagoras at 323c, that ethical traits ‘do not arise in us by nature’ (δῆλον ὅτι οὐδεμία τῶν ἠθικῶν ἀρετῶν φύσει ἡμῖν ἐγγίνεται) when what he clearly means is that are not, as we would say, *purely* innate, or that they do not develop *all by themselves* like fingers and toes. Elsewhere (*Eth. Nic.* 1144b4) he makes it clear that he thinks our ethical virtues are indeed, as we would say, *partly* innate: ‘Everyone thinks that all traits of character exist, to some degree, by nature (πᾶσι γὰρ δοκεῖ ἕκαστα τῶν ἠθῶν ὑπάρχειν φύσει πως). Right from birth we have some inclination to fairness, moderation, bravery and so on’. Protagoras’ use of φύσει at 323c can and should be understood in the first sense: as his gloss (οὐδ’ ἀπὸ τοῦ αὐτομάτου) helps us to see, he means that good qualities do not develop ‘all by themselves’;²⁶ he does not mean that they have no basis in our nature at all. That reading fits with the view attributed to him elsewhere: that ‘<ethical> instruction requires both nature and practice’.²⁷ The same view is also stated clearly later in this dialogue, in his remarks on bravery, which he says arises ‘both from our nature and from the proper nurturing of the soul’ (351b). In fact, Protagoras may have influenced Aristotle quite strongly here.²⁸ Aristotle thinks

²⁶ For another clear instance of this use of φύσει in connection with moral dispositions, cf. Pl. *Meno* 89a5: Οὐκοῦν εἰ ταῦτα οὕτως ἔχει, οὐκ ἂν εἶεν φύσει οἱ ἀγαθοί. Socrates has just argued (81a-86c) that ‘opinions’ (δόξαι) exist in our souls before birth and enable us to grasp things through mere prompting rather than detailed teaching. He makes it clear that he thinks this applies to ethical understanding (81c8, 98a4). These ethical δόξαι are obviously innate, in modern terms, and ‘natural’ even in ancient terms. So at 89a5 Socrates must just mean that moral goodness is not a *purely* natural (i.e., fully automatic) development. In his view, our innate ‘opinions’ need to be developed by philosophy (whereas Protagoras thinks they can be developed by mere social interaction).

²⁷ DK80 B3: ὁ Πρωταγόρας εἶπε· ‘φύσεως καὶ ἀσκήσεως διδασκαλία δεῖται’.

²⁸ For the similarities between Aristotle and Protagoras this and on several other points, see, Nussbaum, *Fragility of Goodness* (as above, n. 1), p. 102-4; Guthrie, *History III* (as above, n.1), p. 67.

that virtues substantially depend on natural predispositions, and that ethical education is a matter of habituation (through reward and punishment, beginning in childhood) rather than a product of philosophical argument or instruction. He thinks that by the time we start moral philosophy we should already have acquired, through human nature, good upbringing, and good habits, an unreflective grasp of the basic moral facts (*Eth. Nic.* 1095b). He also claims that there is no rational justification (no *logos*) of the ethical ‘starting points’ (*archai*) that derive from human character (*Eth. Nic.* 1151a). The same view is very clearly implied here by Protagoras, who does not include philosophical instruction in his detailed account of moral education (325c–328b) and instead talks only of the ways that parents, teachers, culture and law *instill* morality, from earliest childhood, not by argument, but by habituation, by the training of our emotions, and even by the use or threat of force. Aristotle and Protagoras see moral education as a blunt instrument, and in that respect their view differs very starkly from the Platonic and Kantian idea that morality only emerges from some form of philosophical enlightenment or rational justification.

There are two things to note about this ‘blunt instrument’ view of education. The first — whether or not Protagoras is thinking along these lines — is that it works best in tandem with a theory of innate dispositions, and probably requires such a theory. It is a profound mystery how these crude and non-rational forms of teaching (repetition, parental anger, peer pressure, threats of physical punishment, the *Odyssey*, etc.) could possibly succeed in producing cognitively complex virtues in twelve year-olds, unless we suppose that human beings are predisposed to develop those virtues and that these simple forms of teaching are more strictly forms of *triggering*. In the same way, we develop our linguistic capabilities at lightning speed, merely by exposure to other speakers, even though the data we are exposed to is far from sufficient to enable us to deduce the complexities of grammar from scratch so quickly. We accomplish this feat because we possess an innate language organ: a

hard-wired grammar and other prefabricated linguistic tools.²⁹ Likewise, in the ethical case, the success of blunt forms of training suggests that innate dispositions are doing a large chunk of the work.³⁰ Protagoras gives no clear indication that he has thought this through. But it is nonetheless a theoretical implication of the Protagorean portrait of education.³¹

That portrait is also central to his defence of democracy (something that he certainly *has* thought through). Since moral education is a blunt instrument (for whatever reason) it follows that it is widely available: ordinary cultural practices and everyday modes of ethical thinking — messy and muddled as they are — will be perfectly sufficient to turn us into good people, capable of taking full part in civic and ethical deliberation. In fact, Protagoras goes so far as to claim that *everyone* is a moral educator (an idea that Plato closely identified with the democratic view) exactly as every speaker of a language is also a completely competent, even if unwitting, teacher of that language (327e). On his view, you don't need to do any dialectic to become morally competent, just as you don't need to study formal grammar before you can master a language, or Newton's laws before you can walk or throw a ball.

²⁹ See S. Pinker, *The Language Instinct*, Harper-Collins, New York 2000; especially p. 1-11 and 265-340.

³⁰ For the idea that moral development resembles language acquisition, see M. D. Hauser, *Moral Minds, How Nature Designed Our Universal Sense of Right and Wrong*, Harper-Collins, New York 2006, p. 37-75 (and *passim*, since this a central idea of the book); J. Rawls, *A Theory of Justice*, revised ed., Harvard University Press, Cambridge, 1999, p. 41, 430.

³¹ Note that this point also addresses the old worry (shared by Plato) that such blunt education must give us the wrong *reasons* for acting ethically. E.g., N. Denyer, *Plato, Protagoras* (as in n. 1), on 324b5: "If I punish some kind of behaviour in order to turn people away from it, then I must certainly suppose that people can refrain from such behaviour, and that I can get them to refrain from it. But I need not suppose that anyone can make people virtuous—whether by education or by any other means. For I may suppose that virtue requires not only correct overt behaviour, but also correct motivation." The objection assumes that the resulting motive is bound to be simply our *fear of the punishment*; but that need not be the case at all, if the punishment triggers innate dispositions or otherwise activates some fully ethical part of our character. And our belief in the efficacy of punishment may be precisely a belief in its ability to do just that.

(3) The fact that in the story Prometheus is unable to give us any ethical sense (321d) suggests the same nativist reading. Prometheus represents human cleverness and cultural invention. So the prominent detail that Prometheus did not have the power to dispense morality suggests, according to the grammar of the allegory, that human ingenuity is not capable of devising (for example, by an agreement) the moral dispositions that sustain social existence. If morality were a cultural artefact, a product of cleverness alone, then Prometheus would be the right god to dish it out. As it is, Protagoras seems to say that our Promethean talents were not up to the task: some source other than human foresight was required. In the story, that other source is Zeus himself (322c). But what does Zeus's gift stand for, then, if not for the social contract? (Let's take it for granted that Zeus doesn't just stand for Zeus.) Plausibly, the gift of our sense of right and wrong represents another natural endowment, this time of ethical instincts; something deeper in our psyche than the products of cleverness. That the most authoritative of the gods gives us these instincts need not imply a different source for morality, so far unmentioned. Rather, this looks like a reference to the authority that our ethical ideas hold over us. If we were to convert that detail back into a *logos*, then it would correspond to Aristotle's claim that *politikê technê* is the governing art, standing in command over our other skills, sciences and goals³² — just as Zeus sits in command over Athena, Hephaestus, Ares, and Aphrodite.

It is useful here to note another detail of the later Aristotelian theory, one that seems to express a similar view, to show that this interpretation is not just a projection onto Protagoras of Darwinian thinking: Aristotle uses the term *phronêsis* to refer to ethical and political wisdom, and so treats *phronêsis* as almost synonymous

³² *Eth. Nic.* 1094a24: πειρατέον τύπω γε περιλαβεῖν αὐτὸ [sc. ἡ εὐδαιμονία] τί ποτ' ἐστὶ καὶ τίνος τῶν ἐπιστημῶν ἢ δυνάμεων. δόξειε δ' ἂν τῆς κυριωτάτης καὶ μάλιστα ἀρχιτεκτονικῆς. τοιαύτη δ' ἡ πολιτικὴ φαίνεται.

with *politikê technê* (*Eth. Nic.* 1141b23, *Eth. Eud.* 1218b14). He says that *phronêsis*, although it is closely tied to deliberation, is not the same as mere cleverness (*Eth. Nic.* 1144a20). Cleverness, *deinotês*, enables us to figure out how to accomplish our goals, but no amount of cleverness on its own, no amount of mere reasoning, can make our goals ethically good. To have the right goals we also need goodness of character (1144a30) — the original sense of ‘ethical’ goodness — which Aristotle thinks is tied to pre-rational and natural emotional dispositions. Moral wisdom, as opposed to cleverness, requires ‘natural goodness’ (φυσικὴ ἀρετή), by which he means innate ethical tendencies of the right kind, as he makes clear (1144b4-6). This corresponds closely to our reading of the story. Prometheus (our own cleverness) cannot deliver ethical wisdom; before we can develop ethical wisdom we need something more: we need a gift from Zeus (the natural endowment of normative instincts). This interpretation also makes fuller sense of the choice of Zeus as the god for that gift. Prometheus is a god who shows us *how* to do things. He is the god of deliberation and reasoning; but deliberation is about means, not ends. To have the right goals, and hence to be morally good, we need the god who tells us *what* to do, rather than how to do it. Zeus is pre-eminently the god who commands.

(4) The same natural principle is invoked in the story to account for the development of these ethical dispositions as Protagoras earlier used to explain the biological endowments of the other animals: namely, the drive to survive. Human beings, without an ethical sense, were dying out, he says, until Zeus stepped in to prevent their extinction. Likewise, the other animals were given their various features to prevent *their* extinction.³³ So, shouldn’t this ‘gift’ imply the same process

³³ Compare 321a1: ταῦτα δὲ ἐμηχανᾶτο εὐλάβειαν ἔχων μή τι γένος ἀϊστωθείη (Epimetheus equipping the animals) and 322c1: Ζεὺς οὖν δέισας περὶ τῷ γένει ἡμῶν μὴ ἀπόλοιτο πᾶν (Zeus giving us our moral sense). We find the same verbal underlining of the uniformity of the causal principle in Lucretius (probably indicating the same in Democritus): compare *DRN* 849 (why animals have the features they do): multa videmus enim rebus concurrere debere | ut propagando possint

as in those other cases? — namely, the blind experimentation of nature, and the perpetuation of natural traits (in this case behavioural instincts) that enabled or promoted our survival. Protagoras would then mean something like this: that human beings who happened not to possess cooperative instincts perished; those who happened to possess them flourished — and we are all the descendants of the latter. Our ethical predispositions, on this reading, arose by the same natural process, *whatever exactly that was*, as did human physiology, and in the same way as the physical organs of the other animals as well, as described in the first half of the story.³⁴ If we read the story in this way, then the significance of the allegorical motif of divine gifts is consistent. Our physiology is natural, and is given to us by a god (Epimetheus); our cleverness is also a feature of our nature, and is likewise given by a god (Prometheus). The *products* of our intelligence (clothing, shelter, agriculture) are by definition artificial, and cultural, and in the story are *not* given to us by any god. (We discover them on our own.) Then the final gift from Zeus refers once again to a given feature of our nature — consistently with the rest of the allegory.

(5) Notice that one of the things that Zeus gives us is shame. Shame is, among other things, an emotional response, a feeling that arises in us when we treat someone wrongly or are thinking of doing so. It is just the kind of thing that

procudere saecula, and 1026 (why human beings acquired fairness): aut genus humanum iam tum foret omne peremptum | nec potuisset adhuc perducere saecula propago;.

³⁴ G. Campbell (*Lucretius*, as in note 2, p. 252–61) argues persuasively that *DRN* 5.1011–27 implies exactly this view. The following details dispose him to a biological reading: (1) Epicurus (Lucretius) always treats human beings as just another animal. (2) He explicitly treats *behavioural dispositions* of animals as having been formed by their contribution to survival, just like their physical organs. (Thus, lions have courage, deer are flighty, and foxes have cunning, because without those behavioural dispositions their species would not have persisted (5.855–63)). (3) He says (5.864–70) that some species (domesticated animals) persisted by cooperating with human beings (i.e., by acquiring *that* behavioural disposition). The claim, then, that human beings survived by cooperating *with one another* cries out to be connected with these other claims. In the case of lions, deer, foxes, sheep and cows, Epicurus is clearly referring to behavioural instincts. We should probably take the human case the same way. Once again we may note that if this theory goes back to Democritus (as seems extremely likely) then it formed part of Protagoras' immediate intellectual context.

plausibly depends on instinct, exactly like other basic human desires and emotions that we are happy to ascribe to our nature. It is a quite different thing from written laws and agreements, or from any sort of calculation of our interests, and something much more basic than what we normally mean by a social convention. For that reason, for sake of symmetry, we should also probably assume that *dikê* refers to our *sense* of fairness, and our emotional attachment to fairness, rather than signifying law or contract. Rather than being the product of *nomos*, these things — feelings about right wrong — form the human character at the most basic level, and are the foundation upon which we construct our consciously articulated conventions.

(6) There are also positive philosophical objections to reading the allegory as standing for the contract theory as it is construed by Glaucon or Callicles. First, innate behavioural tendencies would be vastly more effective at aiding our survival than a morality that depends on faulty human calculation and agreement. So according to the principle employed in the story, a morality arising from *phusis* would make more sense. It would be deeper, less reflective, and more dependable; so it would make the groups of the people who had it much more likely to persist.³⁵ Second, the contract theory takes it for granted that people have a large set of complicated but *selfish* desires, and that on the basis of those they devise their attachment to fairness. This is supposed to be a plausible simplification of morality's origin. But why are these selfish instincts any easier to account for than an interest in

³⁵ In fact, this 'survival principle' doesn't just tell against the idea of the conscious social contract; it works equally well against *any* theory that makes the foundation of morality something that has to be consciously articulated. A theory like Plato's or Kant's that makes morality depend on a particular kind of knowledge or particular rational principles, or a religious view that ties morality to any particular religion, ends up asserting that at least some people *now* have no morality (since they obviously lack that knowledge, or those principles, or that religion) and that most people in the past (and certainly our more distant ancestors) must have been pre-moral, because they lived long before our recent intellectual and philosophical (or religious) progress. But if this naturalist hypothesis is correct, that morality is a tool of survival, then it follows that there *never has been*, and *never could be*, *any* functioning and persisting human society that did not have morality.

fairness itself? It is just an illusion that our love of survival, food, sex, honour, power or money is somehow simpler than the ethical likes and dislikes that the contract theory is trying to account for. Be that as it may, there is also the larger problem of explaining how we would get from selfish desires to codes of fairness by way of calculation (implied by the idea of contract or convention). The sketch of this process offered by Glaucon and Callicles is wholly inadequate. They propose that people figured out exactly how and why fairness would best serve their individual interests (on average) more than the countless other behavioural strategies they could have chosen. This is at best only superficially plausible. On closer examination it is quite fantastic. True, with our strong attachment to fairness already in place it is easy enough to spot its beneficial effects and figure out roughly how it functions. But if we propose on that basis that at some time in the past we actually instituted it, then we may as well claim that our ancestors instituted the circulation of the blood as well, on the grounds that we know roughly how that works, too, and have the desires and goals that would motivate us to design it. That would be a huge overestimation of our abilities as engineers; and our willingness to believe that we engineered our own sense of fairness is hardly any less deluded. Plato's attacks on ethical naturalism are insufficiently charitable: we should not rush to attribute to Protagoras the straw-man theories of Callicles and Glaucon if we do not need to. His story contains no claims about human beings basing fairness on their selfish interests. Rather, it states that Zeus gives our sense of fairness to us, and it is an open question what that means when extracted from his allegory, and we should attribute to him the most plausible theory that we can within the bounds of his historical and intellectual context.

For these several reasons I propose that we see in the story an outline of the idea that our attachment to fairness is a biological endowment, something very like the

idea currently proposed by Darwinian theory.³⁶ What Protagoras means, on this reading, when he says that Zeus gave us morality to prevent our extermination, is that our ethical sense arose, somehow, because it did as a matter of fact aid our survival, exactly as the endowments of the other animals aided their survival, but *not* that we ever figured out its value ourselves, or ‘internalised’ it by some essentially cultural process. In the same way, a bear’s sharp and powerful teeth came into being because they enabled it to perpetuate its kind, but the bear never had any thoughts at all about that fact, and did not need to because, fortunately for the bear, it was not responsible for designing its own teeth.

3. The Strengths of ‘Protagorean’ Naturalism

Let’s suppose that we have read the story correctly. Now we may consider the important differences between this ethical theory and the social contract theory as Plato understands it. The essential difference is this. On the view that the story seems to sketch out for us, there is a separation of *biological explanation* and *human deliberation*. The story can explain morality in terms of its biological contribution — that is, its contribution to our survival — without thereby implying that the same

³⁶ There is now a broad consensus, at least among evolutionary biologists, that we have both an instinctive sense of fairness and an instinctive emotional response to it, which evolved because, on average, they maximised the material interests and reproductive fitness of the individuals who possessed them, or perhaps of the groups in which they predominated, in competition with other less co-operative groups. For a sample of the work on our innate sense of fairness, see R. Axelrod, *The Evolution of Cooperation*, Basic Books, New York 1984; L. Cosmides & J. Tooby, ‘Cognitive adaptations for social exchange’, p. 163-228 in J. Barkow & L. Cosmides & J. Tooby eds. *The Adapted Mind: Evolutionary psychology and the generation of culture*, Oxford University Press, Oxford 1992; R. Dawkins, *The Selfish Gene*, Oxford University Press, Oxford 1989, p. 202-33; M. Ridley, *The Origins of Virtue*, Penguin, London 1996, p. 53-84; S. Pinker, *How the Mind Works*, Norton, New York 1997, p. 402-6, 502-6; M. D. Hauser, *Moral Minds* (as above, n. 30) p. 59-110, 251-63, 383-92. It is obviously *not* part of this view that all societies have exactly the same ideas about fairness. Rather, the idea is that different cultures generate parametric variations of universal principles, just as they do in the case of language. See M. D. Hauser, (as above, n. 30) p. 72-4, 83-5.

facts provide us with our *reasons* for treating each other fairly. That idea has the potential to remove what Plato sees as the central flaw of naturalist theories. That flaw is articulated in the opening books of the *Republic*, where Glaucon gives a version of the theory as an argument against morality. Suppose that some time in the past, says Glaucon (358e), before we yet had any ethical tendencies at all, we adopted moral rules, by a kind of convention, only so as to maximize our own amoral and selfish interests. In that case we clearly have no reason to act fairly, if we can be sure that acting unfairly will benefit us (without cost). If fairness is ultimately based only on selfishness, then we should simply cast off our moral commitments (and all the more vigorously if they have been ‘internalised’) and be as selfish as possible, consistently with our original purpose, if we find ourselves strong enough to exploit others and avoid punishment.

This argument seems to show that there can be no purely material justification of morality that would not collapse under certain conditions. By material justification I mean one that explains its importance by appeal to its material benefits to purely selfish (i.e., not yet ethical) individuals³⁷ — by appeal to its promotion of our physical survival, for instance. If we believe in the absolute value of morality, and are looking for a commitment to justice that will be able to survive any test — even the ring of Gyges — then we have to find some altogether different, and equally absolute basis for its value. To Plato’s mind, it follows that any theory that posits a non-moral origin for morality must in the end lead to the hedonism advocated by Calicles and Thrasymachus, since any such defence seems to entail

³⁷ Plato’s challenge applies to any theory that bases moral interests on more basic desires, reasons, or interests (or any other item of *our psychology*) by whatever mechanism. Nussbaum (*Fragility*, as in n. 1, p. 447, n.32) is right to see that the problem applies even to the more subtle Humean idea of justice as an ‘artificial virtue’: ‘It [follows] from the Humean account that we have reason to be just and law-abiding only when we are convinced that it is advantageous, in terms of other, more fundamental ends, to be so’.

that we do not value morality for its own sake, but only if and when it suits our amoral desires and needs.³⁸

But Plato is probably wrong about this. The biological version of naturalism that is arguably sketched in Protagoras' story does *not* lead us to hedonism or amoralism. It has the potential to dissolve Plato's worries about the social contract and his (and our) broader fear of naturalism. Protagoras has imagined material and non-moral *causes* for morality in our ancient biological evolution, but not materialist (and hence amoral) *reasons* for morality in current human deliberation. Selfishness doesn't come into it. Protagoras can be claiming that ethical predispositions came to be part of human character because they enabled us to survive, and that those predispositions themselves, combined with an upbringing that activates them, provide us with our reasons — the familiar, *fully ethical* reasons — for treating each other the way we do. We can have an interest in fairness itself, as Plato assumes we must, and as introspection demands, *and* claim that we have acquired that interest not because it was given to us by god, or by the rationally guided cosmos, but because without it we would not have made it this far.³⁹

³⁸ That, I suspect, explains the presence of hedonism in the *Protagoras*. Protagoras by all accounts, including his portrayal in this dialogue, was neither a hedonist nor an amoralist. But Plato's view is that any materialist world-view must ultimately be equivalent to hedonism, whether its advocate acknowledges this or not. The dialogue shows us Plato's mixed feelings about Protagoras by having Socrates foist the hedonistic view on him to his obvious discomfort. Plato is saying "Protagoras may not have been a hedonist, but he really should have been."

³⁹ It is on this point I disagree with Nussbaum. She defends the Protagorean view by taking him to mean that human nature is social and ethical *all the way down*, so to speak (see *Fragility*, as in n. 1, p. 102) but she sees the claim that justice is a means to *survival* as contradicting that idea. The problem is that there are two sense of 'human nature' here: (1) fundamental human psychological instincts, and (2) human biology. My proposal is that we can treat human *psychology* as ethical all the way down, but also say that our psychological tendencies themselves are essentially a means (from the *biological* point of view) to something non-ethical, our survival. The whole point of ethical naturalism, after all, and Protagoras' principle aim, is to explain the ethical in non-ethical terms, so it makes no sense to sideline that part of his theory, as Nussbaum does.

Such a theory cannot provide us with a philosophical justification for those ethical interests, of the kind that Plato may be looking for; the kind that equates moral truths with mathematical truths, or that sees morality as tied to some aspect of rationality itself, or as part of the wider universe. But it can easily defeat Plato's enchanting *reductio* of ethical naturalism: the arguments of Callicles, Glaucon and Thrasymachus. On this view it makes no sense at all to imagine ourselves opting out of or 'shaking off' our morality. To use the central idea of the story, that makes as much sense as imagining that a swallow could opt out of growing its feathers, or that a tortoise could cast off its shell. It also allows us to dismiss Callicles' idea that only our selfish desires are natural, and that ethical interests have to be pasted over our nature, or internalised, by social conventions. Protagoras offers an account (at least a sketch of such an account) of how ethical interests might themselves have come to be an important part of our nature, biologically rather than culturally internalised, and on an exactly equal footing with our other interests. And on that view we obviously have every reason to endorse and support the laws and cultural practices that express those interests. His theory also succeeds in its main purpose of vindicating the democratic approach to the political and civic task, because it explains why the ethical talents required for good citizenship are *bound to be* the common property of humanity, the result of our universal nature and of a common and uncomplicated upbringing, rather than the product of rare cognitive attainments and elite philosophical training.