Progress and the argument from evil

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Abstract: The argument from evil, though it is the most effective rhetorical argument against orthodox theism, fails to demonstrate its conclusion, since we are unavoidably ignorant whether there is more evil than could possibly be justified. That same ignorance infects any claims to discern a divine purpose in nature, as well as recent attempts at a broadly Irenaean theodicy. Evolution is not, on neo-Darwinian theory, intellectually, morally, or spiritually progressive in the way that some religious thinkers have supposed. To suppose so, indeed, is to misidentify the evils we should fear. But though we should neither conceal the evils of the world nor offer any consequentialist justification of them, we may still reasonably maintain an orthodox theism. Evil is not created so that otherwise unattainable goods may come, but is an unavoidable byproduct of creation which it is – or may be – God's purpose to redeem.

The existence of evil

The existence of evil (more particularly, the existence of suffering) is the one fact most often used against the existence of a divine intelligence at work in nature. We may grant the elegance of nature, or even at times its beauty, but its agonies are hard to think away. Charles Darwin's example was the ichneumon wasp, paralysing caterpillars to be living food for her young (not that the wasp exactly intends that result). How could a loving God, hating nothing that He has made, design a world like that? The example, repeated in many atheistical textbooks, is in fact an odd one - the writers rarely suggest, in any other context, that either wasps or caterpillars are sentient, and rarely do they themselves treat even supposedly 'higher' creatures well. It is far more common to assert that hardly anything but human beings feels or thinks (and almost everything can therefore be used without compunction).¹ If the caterpillar's fate should worry us, it must itself be a distinct, sentient entity, with its own would-be life. If it is only a 'mechanism', why is it a problem for theodicists? In a world imagined by Terry Pratchett, a gifted engineer has chosen to create a robot replica of living things: a pseudo-fly stumbles into a pseudo-spider's web and is carefully dismantled.²

The two together make a single toy, and the Rabbi Judah ha-Nasi would have been right to say 'for this they were created'.

But this response, however apt *ad hominem*, is flawed. When Judah made that remark about a calf being taken off to slaughter (in the second century AD), he was rebuked for his heartlessness, suffered severe toothache for thirteen years and was only relieved of his pain when he stopped his daughter killing a stray weasel³ – but what sort of God is it that can rebuke *human* heartlessness, and yet do nothing to assist the victim? Though we may be hesitant about wasps or caterpillars, there seems no good reason to think that larger animals are insentient. Certainly the fact that they can't *talk* about their sufferings is not to the point – if creatures cannot feel unless and until they talk, human infants could not *learn* to talk, and aphasia would be an anaesthetic. Their pains are real, and long preceded any *human* sin. Why does God sustain a world of predators, plagues and parasites if He means His creatures well? If Judah was heartless to rebuke the calf's complaint, must not the calf have had right on its side? And why then did not God rebuke, repudiate, or simply halt the slaughter?

'If God can do whatever He wants, and all that He wants is good, whence then is evil?' That Epicurean puzzle is sometimes misrepresented as a logical conundrum: He can't do everything, or else He doesn't want what's good, or else there is no evil. As a *logical* argument, it is a failure. We neither know enough about what's good, nor yet about the logic of omnipotence, to reject the possibility that a God who wants His creatures' good, and is entirely competent to achieve that good for them, may still have sufficient reason to allow the risks and injuries, and even the mortal sins, of mortal life. George Berkeley's mockery is perhaps the only intellectual answer:

 \dots he who undertakes to measure without knowing either [the measure or the thing to be measured] can be no more exact than he is modest, \dots who having neither an abstract idea of moral fitness nor an adequate idea of the divine economy shall yet pretend to measure the one by the other.⁴

We may *feel* that there is just 'too much' evil in the world, but that judgement is neither well-informed nor objective. Nor do we know what is to come.

We should not therefore repine at the divine laws, or show a frowardness or impatience of those transient sufferings they accidentally expose us to, which, however grating to flesh and blood, will yet seem of small moment, if we compare the littleness and fleetingness of this present world with the glory and eternity of the next.⁵

It is worth adding that Berkeley, like Darwin, suffered the loss of a much-loved child. Wiser than Darwin, he did not thence conclude that God obviously had no care for His creatures. It is at least not ridiculous to think that some good end is served even by events that are otherwise than we wish, nor that the dead child has been spared other evils and is now raised to an eternal life. This is not to say that we should seek to imagine explanations – such speculation may well be bad

for us. We do not know, for example, and should not ask, what good can only be obtained by allowing, or assisting, torture. Discovering the detailed reasons for existence is beyond us. But for that very reason, some have argued, the claim that 'God has made it so' is inscrutable – if we don't know what His reasons are, we don't know what He did, and cannot guess what He would or will do. Saying 'God made it' means little more than 'That is how it is'.

But maybe things are not quite so obscure. If the world really were such that no benevolent Creator could permit its continued being but would instead long since have 'put it out of its misery', it is difficult to see how we ourselves can defend our own continued involvement. If there is truly nothing to be gained from being, then all schemes to 'improve' the world are vain. We should be planning genocide instead, or at least abandoning those practices that demonstrably make an ill thing even worse.⁶ If, on the other hand, we can excuse ourselves for being, we may also pardon the Creator for *sustaining* us in being, and grant that He may have reasons for His patience. Orthodox Christians may also console themselves with the thought that at least He subjected Himself to this continued being as well. 'If, obscurely, He would not cease to preserve us in the full horror of existence, at least He shared it. He became as helpless as we under the will which is He.'⁷

We can also recognize, however uncomfortably, that a world in which the omnipotent is *always* intervening on behalf of potential victims would itself be utterly intolerable – though we should of course, in that situation, tolerate it because He made us to. If He shouldn't *always* intervene, who but the omniscient could put a limit on His action? There are depths of suffering and depravity that, apparently, He does *not* permit – that is the moral of horror stories. That He permits as much as He does may upset us, but we cannot demonstrate that He should permit still less, or that He could. We may even wonder whether God Himself could possibly know *what* it is we are until we actually are: the idea that God first contemplates all possible worlds and only then *creates* the ones He wants may be incoherent, since mere *possibilia* are not identifiable entities. Until the creation there is nothing there to contemplate, and once they have been created they exist in their whole lifespan. Does it even make sense then to demand that they be unmade?

The dream of Eden

Even if we dare not say how 'all things work together for the good', we can at least identify the forms of being. God's reason for creating, or the world's excuse for being, may be, as tradition says, to display the *forms* of being: all the ways, that is, of being beautiful. Those ways, those forms, are somehow in eternity compatible, but cannot, it seems, exist all at the same time here without discovering how hard it is to be. As Augustine said, there's nothing bad about there being scorpions – the difficulty comes when mammals and scorpions come together.⁸ Religion is the dream of Eden, or of something better – where the lion lies down with the lamb without becoming merely lamb-like.⁹ We need the dream – if we were simply to abandon the conviction that all good things are somehow compossible we should have to agree that nothing is expressly and absolutely demanded of us all (since anything that was thus demanded would also demand the exclusion of some other, equal good) – and therefore that there is no content in morality (including, of course, the hardline scientist's demand that we abandon superstition in the name of 'truth', and the indignant rebel's insistence that it must be *wrong* to permit the misery we see).

But our ignorance remains. The more we agree that God, by definition, can do anything He chooses, and may have good reason for anything at all, the less we know what God would do, what worlds He would create. To that extent, the postulate of divine design *is* vacuous – and so is the postulate of natural selection. The fittest survive and prosper (by and large) – but anything at all may be the decisive factor. Our nearly-apeish ancestors were probably pushed aside by monkeys, because monkeys can digest unripe fruit more easily than apes.¹⁰ Caucasians possibly had the edge in Northern Europe because they accidentally retained – or most of them retained – an infantile capacity to digest raw milk. Current theory suggests that this provided a useful source of Vitamin D – other tribes who migrated north found other ways of coping (Inuit, for example, by consuming cod liver oil).¹¹

The original and easy thought was Herbert Spencer's: those who can secure the largest share of whatever goods they seek will generally have most offspring, and transmit their 'fitness' to new generations. But Darwin recognized that the poor might have more offspring than the rich (even if many of them die) – the rich may even prosper (in a sense) *because* they have no children, or only a few. If there is any connection between individual wellbeing and 'inclusive fitness' it goes the other way: those who have more children because they *want* children more than they want holidays or a tidy house, will thereby leave more children with those tastes (if those tastes are genuinely inheritable). The economically disadvantaged may turn out to be prosperous after all (because they actually have what they have been bred to want). 'Fitness' is whatever has positive results for long enough to have an effect on the gene pools in question. The Darwinist's conviction that the world 'makes sense' (even if we can't see why, nor ever predict the future) is no less vacuous, in a way, than the theist's.

But too much speculation of this sort may lead us to forget that there are real evils. If there were always a real, justifying reason for any mortal ill, those ills would not be evil, but rather the best that can be managed in the circumstances. If *anything* can be justified (at least in the light of eternity), then nothing can be absolutely and in all circumstances bad. Stoic philosophers have usually thought this true (or rather, that nothing but ill will or rebellion is really bad – and also

supremely ineffective). Utilitarian philosophers are likewise in no position to complain about the levels of misery that God the Omniscient permits for His good ends: *any* amount could be the right amount to spare the world a greater evil (including the absence of a greater good). The alternative response is to insist that, even though God might have good reason to *allow* our plight, it really is an evil one. There are some things that cannot ever be justified by the 'good' they do. Some things *shouldn't* be as they are – and so it must have been possible, somehow, for them not to be like this. We recognize that some things, some acts, are evil, and so that they should not really exist at all. God's will must be to remove or to redeem them, and not just to bring good out of them by the swiftest way. The world as it is, in brief, is 'fallen', and needs to be redeemed – which is not the same as saying it needs to be excused or even justified.

This is readily interpreted as an historical claim. Once upon a time, things were unfallen, Yeats's 'kindly and perfect world'.12 It is this notion that seems most at odds with modern evolutionary thinking. The first crisis of nineteenth-century Christendom was the discovery that there had been living things - and predatory living things - long before there were human beings around to fall. Philip Gosse's argument - that those earlier ages were no more than virtual - seemed an evasion rather than a solution.¹³ The argument open to convinced Cartesians – that there was no thought or feeling in those earlier ages, and hence no evil - seems not to have occurred to anyone (witness the easy acceptance of the ichneumon wasp as an argument against a kindly God). Instead, the notion gradually took shape that these were earlier experiments: sketches for an eventual masterpiece, which is the human age. Adam Sedgwick could view those earlier ages simply as alternatives, and maintained that 'the reptilian fauna of the Mesozoic period is the grandest and highest that ever lived'.14 As those earlier forms began to seem ancestral, it was axiomatic that they must have been more 'primitive'. The great sin of the Victorians, as Chesterton remarked, was that they thought that history ended happily, because it ended with them.¹⁵ It is a delusion not unknown in other times.

Progress towards virtue

The earlier experiments established the broad context for the human age, and took, subjectively, however long they took. Despite the popularity of timecharts comparing terrestrial ages to a solar year (in which humanity turns up in the last few seconds of 31 December), there is a sense in which time wasn't invented then. In the material world no scale is privileged – a 'long time' or a 'long distance' are relative terms, and have no application when nothing exists to be bored or tired by travel. Time of a sort appeared as soon as there were creatures with life spans or attention spans, but even then, no mortal intelligence (as far as we can see) was there to count the seconds or the years. We could even say, if we chose, that it took six days to pass from first light to the birth of Adam. Survivors from each day's afternoon shared the earth with new creations. Each age retained bad habits from the old – or what were now bad habits. Evil, it came to be conceived, lay in backsliding, and good in transcending the old animal.

New occasions teach new duties; Time makes ancient good uncouth: They must upward still and onward Who would keep abreast of truth.¹⁶

In identifying the 'new' with 'good' and the 'old' with evil, and insinuating that we prove our cause is just by being persecuted, Lowell has corrupted many adolescent souls! Alfred Tennyson's claim that

The old order changeth, yielding place to new, And God fulfils himself in many ways, Lest one good custom should corrupt the world ... ¹⁷

at least makes no suggestion that the new order is an *improvement*.

The dream of inevitable progress is relatively new. The notion that human virtue lay in not being animal had been around for centuries. Behaving like wolves, or sheep, or apes was vice.

When do we act like sheep? When we act for the sake of the belly, or of our sex organs, or at random, or in a filthy fashion, or without due consideration. When we act pugnaciously, and injuriously, and angrily, and rudely, to what level have we degenerated? To the level of wild beasts, solitary carnivores.¹⁸

If sanctity, conversely, depends upon there being an animal nature to control, suppress, or extinguish, that nature has to exist, and be attractive. Only creatures capable of vice are virtuous, by this account, since virtue consists in controlling one's inner beast. Creatures that are merely 'animal' aren't vicious, but any *human* creature who 'acts like an animal' is. The unchronicled ages before humankind, on this account, created an animal nature to control, so that there could be *persons*. We have not fallen from heaven, but risen up from earth. As Wells, inaccurately, remarked: 'We can realize now, as no one in the past was ever able to realize it, that man is a creature changing very rapidly from the life of a rare and solitary ape to the life of a social and economic animal'.¹⁹

Whether this could be an answer to the emotional 'problem of evil' is at least uncertain. Uncounted billions of living creatures must have suffered and died (and more significantly, killed), it seems, in order that human beings might struggle with temptation. Creating 'persons' is apparently so important that nothing that happens to non-persons counts. Why couldn't the Omnipotent create them without a past (or only with a virtual past)? Why couldn't the Omnipotent have created compatible natures? Why couldn't it have happened more quickly? Why couldn't they *really* have been insentient machines? The story creates a further problem: if there can be *persons* only at the close of evolutionary ages, how can God be a person, or even personal?

But evolutionism of this progressive kind is probably what most recent Abrahamists have preferred – indeed, it may be what most *Darwinists* preferred. Our ancestors were fishes (tree shrews, apes) but we are at once a different kind than they, and one that exists to put aside our past. Standard works on evolutionary history, till very recently, assumed that there had to be all those earlier ages before the first true humans could get up and walk. In that moment we escaped from 'nature'. The idea long preceded the Victorians. It was 'a mixed up and bestial existence' that some god saved us from, giving us understanding, language, agriculture, shelter, sea voyages, trade, and augury.²⁰ Previously, so Cicero reports, our ancestors had been at the mercy of the wild beasts,²¹ creatures who live by violence. Till then the stronger killed and ate the weaker - but the weak banded together, and now seek to resolve their differences by law.²² The war with beasts (and with human outlaws who make beasts of themselves) is fundamental to human civil order. Without law and order we should all be savages, undiscriminating in our casual affections, violent in our revenges, and philistine in our attitude to art and science alike. Because they thought that we would be like that without the constant presence of the law, generations of Europeans have convinced themselves that non-Europeans actually were like that. So Samuel Johnson: 'Pity is not natural to man. Children are always cruel. Savages are always cruel. Pity is acquired and improved by the cultivation of reason.'23

By one account (the 'Augustinian') nature is depraved – perhaps by the fall of cosmic powers; by another (now more popular), the 'Irenaean', it's only incomplete - but we are always in danger of our falling back.²⁴ Denys Cochin, a French Catholic thinker turned politician, found Darwin consoling: though he offers us monkeys for ancestors, 'at least he promises that we will not have them for children'!²⁵ Augustinians could suppose that the course of human or prehuman history was not what had to happen, but Darwinists suggested that the course it took must always have been marked by struggles to the death. It seemed to follow that any living creatures that there were Out There, on other worlds, would be as incomplete, or as depraved, as we. The new progressivism identifies vice with being behind the times, by failing to domesticate the natural. Sin is, for us, behaving 'like an animal'. Sin in the older view is pride, insistence on a private world, the conviction that all things are mine. The type of sin for the older view is Lucifer; for the newer, it is the savage, or the ape. Cesare Lombroso supposed, for example, that 'we can identify born criminals because they bear anatomical signs of their *apishness*'.²⁶ For the older, salvation is through repentance, turning back; for the newer, 'reason'. Some fantasists have even encouraged the thought that 'science' will one day make a god to resurrect us all (so it's really important to keep the research grants rolling).²⁷

Which is a more plausible picture? Is 'sin' just acting thoughtlessly, or violently, or without due regard for current fashion? Is virtue just not acting on the spur of sudden lust or temper? Is it a coincidence that *thoughtless* crimes (or ones that we consider thoughtless) are not the ones that civilized people relish? The ages of deliberate torture are the ages of high civilization.²⁸ Civilized people, whose dress, diet, and manner of speech are calculated to be as different from naked savages as they can make them, are also less harmless than savages. Even their occasional beneficence (it did not take the sociobiologists to see) is often more to do with their own high opinion of themselves than to do others good. There is no need to reckon that only the civilized are sinners, but the notion that to be civilized is to be free of sin would be funny if it weren't so painful. The Holocaust was not a return to 'savagery', or something only 'animals' could do-on the contrary, it required considerable thought (both technical and managerial) and was founded in the conviction that civilization needed discipline and direction. The Nazis acted out the advice that Western intellectuals had given: to dispose of the 'retarded', whether these were imbeciles, or sodomites, or Jews, or gypsies.29

At some future period, not very distant as measured by centuries, the civilized races of man will almost certainly exterminate and replace throughout the world the savage races. At the same time the anthropomorphous apes ... will no doubt be exterminated. The break [between man and his nearest allies] will then be rendered wider, for it will intervene between man in a more civilized state, as we may hope, than the Caucasian, and some ape as low as a baboon, instead of as at present between the Negro or Australian and the gorilla.³⁰

Darwin, on balance, reckoned that there was only one, variegated human species – but he also supposed that 'the Negro and the European are so distinct that, if specimens had been brought to a naturalist without any further information, they would undoubtedly have been considered by him as good and true species'.³¹ Even the poor of his own islands were almost another species, who needed to be restrained. Other commentators wished the strategy to be yet more ruthlessly employed. 'The elimination of crime can be effected only by the extirpation of the physically, mentally, and morally unfit, or by their complete segregation in a socially aseptic environment.'³²

And for the rest – those swarms of black and brown and dirty-white and yellow people who do not come into the needs of efficiency? Well, the world is not a charitable institution, and I take it they will have to go. The whole tenor and meaning of the world, as I see it, is that they have to go.³³

Progressivists don't have to believe (although they may) that *we* are the end of history – perhaps humanity, as Nietzsche said, is only a rope between the beast and superman.³⁴ Back in the old days, human beings were hominids: we lived, like our close relatives, in family groups and troops, most probably selecting new members from the pool of banished males. No doubt we squabbled and

remembered fancied slights. No doubt, as soon as language had emerged, we lied about our prowess, cheated our friends and fantasized whole worlds to walk in on long winter nights. We had, in short, our own peculiarities. Sometimes we went to war, as chimpanzee troops also do, for reasons that we can now only guess. If we had perished then no alien archaeologist could have told that we were ever 'human'.

Civilization, settled life, created different classes. Some worked immensely harder than 'savages' ever had, while others invented leisure.³⁵ Living in larger units, we had to discover more than family affections and unwritten law to keep the wheels turning. Domestication and civilization came together: we bred ourselves, and coached ourselves, to do what wasn't 'natural'. Other species have succeeded 'better': social insects invented castes (or 'castes') before us, and use chemical controls to keep the colony, the swarm together; rats respond to body odour only, not to individual identity. We have not yet discovered the right rules, nor bred them into us. So far, we are experiments in living, and will be surpassed. It may be that our civilization has been a long detour, and supermen will be a lot like savages. It may be, as has often seemed, our future lies in caste society. It may be there is something else to come (as must be the Abrahamic, and specifically the Christian hope). The sins of civilization, in any case, are not less than those of savages. It is neither literal bestiality nor savagery that *civilized* folk should fear.

A new world

Virtue - as every moralist since Socrates has noticed - is not hereditary, and even Darwin usually only hopes that it may perhaps become so.³⁶ It does not follow that it is not persistent. The prophets of the past have realized that, left to ourselves, we may indeed become fat, lazy, and indifferent to the pains of others, and only rouse ourselves for the sake of our own kin. It has been their claim that something new is always being intruded into history and the natural world, the radical claim that virtue is not measured by expectable, worldly triumph. They have claimed, in brief, that the world of nature is not closed, that something different interferes to remind us whence we came. They may, of course, have been mistaken - maybe their words are only mental microbes of the sort that interfere in a decent Darwinian 'progress'. But this claim is as metaphysical, and as value-laden, as its opposite. Those of us who hold to the faith have at least this comfort - that it is not the expectably successful who have left their mark most clearly on our history. When the great, self-praising empires have all fallen, it is still the wandering Aramaean, summoned at seeming random from the nations of the Middle East, or the mendicant princeling who abandoned palace, wife, and child to seek enlightenment, or else the Crucified Himself, who have preserved such images of decency as we still have.

And if that is so, might it not be as well to consider the cosmology that has been associated with those icons? The point is not to *justify* or even *excuse* evil, but to redeem it. The possibility of evil is an unavoidable by-product of God's withdrawal - a withdrawal that is logically required if anything other than God is ever to exist - 'God has only been able to create by hiding Himself.'37 The extent of such evil may be constrained in ways that we don't know, but any Creator-God must allow or assist His creatures to deal with the evils they have helped engender - or else abandon all creation and make it never to have been at all (if that makes sense). An omnipotent, omniscient, and benevolent creator must still work His purposes out through mortal helpers. Their task, in turn, is not to abandon what is *past* in the name of an uncertain future, but to insist that everything is valued as itself, not merely as a route to somewhere else. To despise the past is also to despise the present. It does not follow that the evils were created or allowed merely to make possible a greater good: the point is rather that they exist, and need to be transformed. They shouldn't exist, but granted that they do, we should create good out of them. God chooses to confront the possibilities, since to ignore or to unmake them would be to admit defeat. How many He chooses to confront merely in His own person (how many horror-movie scenarios are never shared with finite spirits) must remain unknown.

Whence then is evil? If the *right* attitude is to recognize that every thing that is at all is good, and chosen for itself alone, how can it be that anything at all is evil? Some say that the *belief* that any entities are evil, because savage or unprogressive, is itself an error - but it is an error that must be expected of the very things we are. The 'wise', it is said, will not regret, repine, repent, nor will they pity. But that very belief, the Stoic or Spinozistic, or Nietzschean, is one that few of us can tolerate. The world itself *demands* that we complain - not to see any contrast between what is and what *should* be, is exactly what should *not* be. Every individual entity is beautiful, perhaps - but that leaves ugliness in plenty to be transformed or salvaged. Whatever really is, is something that should be - but it does not follow that everything it *does* is what should be done. Ugliness, by Plotinus's account, is a failure to achieve Form.³⁸ The individual creature does not not always do what's right, and neither do individual creatures always achieve the higher unity their presence together makes possible. Progressivism is not the point, and neither is the past something to be dismissed as being 'uncouth'. Our role is rather to try to redeem the time in which we find ourselves - by recognizing and, if possible, living up to what is good and beautiful. Wells was almost entirely wrong: 'the whole tenor and meaning of the world' lies in the constant reemergence of remembered beauty. According to Chesterton, 'the whole object of history is to make us realize that humanity can be great and glorious, under conditions quite different and even contrary to our own'.³⁹ The object of science, or prehistory, equivalently is to make us realize that humanity is but one form of life and being, that every sort of creature, however trivial, has something wonderful and beautiful about it,⁴⁰ that no such beauty lasts in this world forever, and that the will of God is not to excuse evil but to redeem it. How that is done, or to be done, is another story.⁴¹

Notes

- See Bernard Rollin *The Unheeded Cry: Animal Consciousness, Animal Pain and Science* (New York NY: Oxford University Press, 1989) for a discussion of post-Darwinian attitudes to the feelings of animals.
- 2. Terry Pratchett The Dark Side of the Sun (London: New English Library, 1978), 138.
- 3. Dan Cohn-Sherbock Medieval Jewish Philosophy (Richmond VA: Curzon Press, 1996), 21-22.
- 4. Crito speaks, in George Berkeley's dialogue, 'Alciphron or The Minute Philosopher', in A. A. Luce and T. E. Jessop (eds) *Complete Works of George Berkeley* (Edinburgh: Nelson, 1948–1956), vol. 3, 251–252.
- 5. Berkeley 'Passive obedience', in Luce and Jessop Complete Works, vol. 6, 40.
- See S. R. L. Clark 'God, good and evil', Proceedings of the Aristotelian Society, 77 (1977), 247ff; repr. in J. Houston (ed.) Is it Reasonable to Believe in God? (Edinburgh: Handsel Press, 1984), 113–128.
- Charles Williams 'The Cross', in A. Ridler (ed.) Charles Williams: Selected Writings (London: Oxford University Press, 1961), 94–105, 96.
- Augustine De Moribus, 2.8.11; scorpions, he pointed out, don't do themselves any harm; see also idem City of God, 11.22. See Gerald Bonner St Augustine of Hippo: Life and Controversies, 2nd edn (Norwich: Canterbury Press, 1986), 206.
- 9. G. K. Chesterton Orthodoxy (London: Fontana, 1961; first publ. 1908), 97, after Isaiah 11.6 though strictly it is the wolf that shall dwell with the lamb, and the lion, according to Isaiah 65.25, shall eat straw like the ox (which does seem to require a radical transformation). See also William Blake Marriage of Heaven and Hell, §24, in G. Keynes (ed.) Complete Writings (London: Oxford University Press, 1966), 158: 'One Law for the Lion & Ox is Oppression'.
- R. W. Wrangham, N. L. Conklin-Brittain, and K. D. Hunt 'Dietary response of chimpanzees and cercopithecines to seasonal variation in fruit abundance: I Antifeedants', *International Journal of Primatology*, 19 (1998), 949–970. My thanks to Robin Dunbar and R. W. Wrangham for this reference.
- See William H. Durham Coevolution: Genes, Culture and Human Destiny (Stanford CA: Stanford University Press, 1991), 229ff.
- 12. W. B. Yeats Mythologies (London: Macmillan, 1959), 104.
- 13. Philip Gosse *Omphalos* (London: J. Van Voorst, 1857). See Stephen Jay Gould 'Adam's navel', in *idem The Flamingo's Smile* (New York NY: Norton, 1985), 99–113.
- 14. Adam Sedgwick 'Objections to Mr Darwin's theory of the Origin of Species', *The Spectator*, 7 April 1860, in David Hull *Darwin and his Critics* (Chicago IL and London: University of Chicago Press, 1983), 159–166, 162f.
- 15. G. K. Chesterton Chaucer (London: Faber & Faber, 1932), 38.
- 16. J. Russell Lowell's hymn, 'Once to every man and nation', quoted from the Social Service section of Percy Dearmer, Ralph Vaughan Williams, and Martin Shaw (eds) Songs of Praise (London: Oxford University Press, 1974), 371.
- 17. Alfred, Lord Tennyson 'The Passing of Arthur', lines 408–410, in T. H. Warren (ed.) *Poems 1830–1870* (London: Oxford University Press, 1912), 712.
- 18. Epictetus Discourses 2.9.2, in The Discourses as reported by Arrian, the Manual, and Fragments, tr. W. A. Oldfather (London: Loeb Classical Library, Heinemann, 1926).
- 19. H. G. Wells *Mr Belloc Objects to the Outline of History* (London: Watts, 1926), 53: 'inaccurate', because it is absurd to suppose that our immediate ancestor was a solitary ape. If we have a problem of that sort it is rather that our ancestors were as tribal as we are. Inaccurate also, in that this mythological image was, in essence, coined by Democritus in the fifth century BC. See further, A. O. Lovejoy and G. Boas *Primitivism and Related Ideas in Antiquity* (Baltimore MD: Johns Hopkins University Press, 1997).
- 20. Euripides *Suppliants*, 201ff (Theseus speaks), in *Bacchanals; Madness of Hercules; Children of Hercules; Phoenician maidens; Suppliants*, tr. A. S. Way (London: Loeb Classical Library, Heinemann, 1912).
- 21. Dicaearchus, cited by Cicero in De Officiis, 2.5.

- 22. Ps.Lysias, 2.18f, cited by W. K. C. Guthrie *History of Greek Philosophy*, vol. 3 (Cambridge: Cambridge University Press, 1969), 74.
- 23. James Boswell Life of Samuel Johnson (Oxford: Clarendon Press, 1953), 309 (20 July 1763).
- 24. John Hick Evil and the God of Love, 2nd edn (London: Macmillan, 1977).
- L'Evolution et la Vie (Paris, 1886), cited by Harry W. Paul The Edge of Contingency: French Catholic Reactions to Scientific Change from Darwin to Duhem (Gainesville FL: University Presses of Florida, 1979), 67.
- 26. Stephen Jay Gould The Mismeasure of Man (New York NY: W. W. Norton, 1981), 124 (my italics).
- 27. Frank Tipler *The Physics of Immortality: Modern Cosmology, God and the Resurrection of the Dead* (Basingstoke: Macmillan, 1994).
- 28. G. K. Chesterton *Short History of England* (London: Chatto & Windus, 1917), 87; Chesterton did not intend this as a compliment.
- 29. See D. Gasman The Scientific Origin of National Socialism (London: Macdonald, 1971).
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- 31. Darwin Descent of Man, vol. 2, 388.
- 32. Ernest A. Hooton *The American Criminal*, vol. 1 (Cambridge MA: Harvard University Press, 1939), 309: cited by Gould *Mismeasure of Man*, 111.
- 33. H. G. Wells *Anticipations* (London and New York: Harper & Bros, 1902), 212; cited by Paul Crook *Darwinism, War and History* (Cambridge: Cambridge University Press, 1994), 101.
- 34. F. Nietzsche Thus Spake Zarathustra, tr. A. Tille and M. B. Bozman (London: Dent, 1933), 7.
- 35. Marshall Sahlins Stone Age Economics (London: Tavistock Press, 1972).
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- 37. Simone Weil Notebooks, tr. A. F. Wills (London: Routledge & Kegan Paul, 1956), vol. 1, 230.
- 38. Plotinus Enneads, I.6.2.
- 39. G. K. Chesterton Fancies versus Fads (London: Methuen, 1923), 176.
- 40. Aristotle On the Parts of Animals, 1.645a15ff.
- 41. My thanks to an anonymous reviewer for this journal for helping me to clarify my thoughts. Some of the issues addressed here were also discussed in my *Biology and Christian Ethics* (Cambridge: Cambridge University Press, 2000).