CHAPTER 4

Crafting the Cosmos Plato on the Limitations of Divine Craftsmanship

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I Introduction

The Demiurge made the whole cosmos as a living being, with a body and a soul. But he didn't create man or the other mortal creatures. This task he left to the 'lesser' gods. Why? The question is a classic in the scholarship on the *Timaeus*. However, the way I shall approach it in this chapter, from the viewpoint of craft, is, I believe, novel.

It is clear from several works that Plato thinks that craftsmen generally work to make the best possible product. So, in the *Gorgias*, Socrates says that a craft considers not just the good but what is best for its subject (501b). Again, in *Republic* I (345d, 347a), Socrates says of crafts that they aim at the best (to beltiston) for that which they are concerned with. In the *Timaeus*, the divine craftsman, the Demiurge henceforth, makes the cosmos to be as beautiful and fine as possible (29a, 30a–b). Yet he only creates parts of it himself, leaving the creation of mortal beings to his first creation, the heavenly bodies, who are themselves gods, the so-called lesser gods. But if the Demiurge was the best of all causes, seeking to make the finest cosmos possible, why did he not make the mortal beings too? Here is the passage where Timaeus raises and answers the question:

TI When all the gods were born, both those whose circuits we see in the sky and those who only appear to us when they wish, the father of this

¹ See Nawar (Chapter 2) and Barney (Chapter 3) in this volume for more detailed consideration of this claim.

² Though Plato shows no awareness of the distinction in these passages, one might in general distinguish between making the best possible product and doing the best possible for the subject. Perhaps forcing your child to be the best possible pianist is not the same as doing what is best for your child. However, where Y is also what X essentially is, it is reasonable to say that making X the best possible Y will also be doing what is best for X. So it seems intuitively right to say that making somebody the best possible human being is also doing what is best for her. These (making the best possible cosmos, making the best possible human being, etc.) are the sorts of cases the *Timaeus* is concerned with.

universe addressed them as follows: 'God among gods, works whose maker and father I am, what was created by me cannot be dissolved without my consent. Anything bonded together can of course be dissolved, though only an evil will would consent to dissolve anything whose composition and state were good. Therefore, since you have been created, you are not entirely immortal and indissoluble; but you will never be dissolved or taste death, as you will find my will a stronger and more sovereign bond than those with which you were bound at your birth. Hear therefore what I now make known to you. There are three kinds of mortal creature yet uncreated, and unless they are created the world will be incomplete, as it will not have in it every kind of living creature which it must have if it is to be sufficiently complete. But if these were created and given life by me, they would be equal to gods. In order therefore that there may be mortal creatures and that the whole may be truly a whole, turn your hands, as is natural to you, to the crafting [dêmiourgia] of living things, imitating my power when I created you. And in so far as there ought to be something in them that shares the name with the immortals, something called 'divine' and guiding those of them who are always ready to follow you and justice, I will begin by sowing the seed of it and then hand it on to you; it remains for you to weave mortal and immortal together and create living creatures. Bring them to birth, give them food and growth, and when they perish receive them again. (*Tim.* 41a-d)³

The argument seems to be the following:

- (1) The cosmos has to contain mortal creatures (otherwise it won't be complete).
- (2) Anything created is created by either (a) the Demiurge or (b) the lesser gods.
- (3) Anything created by the Demiurge will be immortal.
- (4) Anything created by a created creature (even if it is de facto immortal) will be mortal.
- (5) The lesser gods are created.
- (6) Therefore, the mortal creatures are created by the lesser gods.

The argument bears a superficial similarity to the famous Theodicy problem. We are familiar with this problem in the following form:

- (a) God is all powerful.
- (b) God is all good.
- (c) God is all knowing.
- (d) Therefore, the world is as good as possible.

³ Translations of the *Timaeus* with some adaptations from Lee (revised Johansen) 2008.

- (e) The world contains evil.
- (f) So not (d).

Therefore, not (a) or not (b) or not (c).

Like the Theodicy, Plato seems to argue from an aspect of the world that is less than ideal to showing that God's abilities in some way must be limited.

However, the similarity with the Theodicy is superficial. The Theodicy is not a problem for Plato in the *Timaeus*. Plato's God may be entirely good, (b). But he nowhere suggests (a), that God is all-powerful. Indeed, Timaeus recognises that the divine intellect made the cosmos good only in so far as Necessity allowed it (48a). Nor does Timaeus claim that (c) God knows everything, if this claim is taken with its most general scope: for particular sensibles as such are not knowable according to Timaeus (51c–e).

However, there is a problem to be constructed about God as a craftsman. We might call it the 'Technodicy': how does a good craftsman as such make a product that is worse than what he is capable of? Consider the following argument:

- (i) God is a craftsman.
- (ii) A product created by a craftsman (as such) will be the best possible.
- (iii) An eternal product is better than a mortal one.
- (iv) Therefore, a craftsman will create an eternal product if possible.
- (v) At any time, it was possible for God to create an eternal product instead of a mortal one.
- (vi) Therefore, God will never create a mortal creature.

One question here is about the scope of (vi). Does it mean (vi)* God will never *himself* create a mortal creature.

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(vi)** God will never himself or with the help of others create a mortal creature?

Construed as (vi)*, the argument is consistent with the Demiurge's reasoning: the Demiurge realises that he himself can't directly make mortal creatures, but that doesn't prevent him from letting the lesser gods to do so, even though the lesser gods were his own creation and will do as they're told by him.

However, construed as (vi)**, the claim seems inconsistent with the Demiurge's reasoning: for if it was in the Demiurge's power to create further creatures in such a way that they were immortal, then he should as

a craftsman, that is, according to (i)–(iii), have done so. Handing the job over to the lesser gods, who are able to create mortal creatures, hardly alters the situation. Imagine a craftsman who oversees the work of his assistants, allowing them to make a poorer product than he himself would have made. One would surely be right to blame him as a craftsman for allowing his assistants to proceed in this way. So the Technodicy seems to reemerge on reading (vi)**: the Demiurge, as the perfect craftsman, should in no way allow mortal beings to be created.

II Craft and Holistic Goodness

So why does the Demiurge allow for the creation of mortal creatures? The answer lies in Timaeus' holistic conception of goodness. The thought is that the cosmos *as a whole* is better because of the existence of mortal creatures. This consideration overrides the concern one might have for individual beings. So even if it would be better for any individual creature to be immortal, it is better for the cosmos as a whole to contain mortal beings. Since the Demiurge's primary concern was always with the cosmos as an ordered whole – indeed *kosmos* comes close to meaning 'ordered whole' in Greek – his practice seems justified.

Plato shows his awareness of the distinction between what is good for the individual and what is good for the whole in other dialogues. In *Phaedo* 98b Socrates says that he expected that Anaxagoras, when he said that Reason (*nous*) was the cause of the cosmos, would explain 'what is best for each and what is good for all in common'. Here Socrates does not say that such a cause would be a craftsman. However, in *Laws* X Plato presents a craftsman's primary concern as the good of the whole: 'every skilled craftsman always works for the sake of some end-product as a whole' (903c, trans. T. Saunders). Of course, such holism allows also for the individual itself to be seen a whole, though we would still expect priority to go to the greater whole, which is not itself a part, or at least a whole of more wholes.

Factoring in the craftsman's concern with the whole, Timaeus' argument would go:

- (a) God is a craftsman.
- (b) A product created by a craftsman qua craftsman will be the best possible.

⁴ See also *Tim.* 30b, *Grg.* 504a.

- (c) The goodness of the whole is greater than the goodness of the part.
- (d) Therefore, when making a product a craftsman is always primarily concerned with the goodness of the whole.
- (e) There is a whole (the cosmos) which is the best possible and contains both immortal and mortal creatures.
- (f) God can create such a whole.
- (g) Therefore, God will create a whole containing both immortal and mortal creatures.

This argument gets the Demiurge off the hook of the Technodicy. However, it doesn't reflect Timaeus' thinking in T1. For (f)–(g) claim that God can create such a product and that he will do so. But T1 tells us that the Demiurge did not and cannot create mortal creatures.

Why he can't do so is not immediately obvious, since holism now allows him as the best craftsman also to create mortal creatures. Compare the case of the lesser gods' creation of the human skull (75c–d): they decided to make the human skull thinner than it could be in order to increase man's intelligence, although it has the negative consequence of making human life briefer than it could have been. This is a way of maximising the good of the whole arrangement that is perfectly in line with the expectations of a craftsman. Similarly, the Demiurge might have created mortal creatures to improve the quality of the whole cosmos, even if mortal creatures considered in isolation are less good than immortal ones.⁵

Why, then, is the Demiurge not himself able to create mortal beings as part of a better whole? Given holism, the problem is no longer why God didn't make everything in the world as good as it could have been, but why God did not himself make all the world given that it as a whole is as good as it could have been.

I want now to consider three kinds of answer to this problem. The first tries to give an answer in terms of the Demiurge's role as a father, the second focuses on his goodness, while the third returns to his function as a craftsman.

⁵ See in this vein Plotinus, *Enneads* III.2.3 'It is, therefore, impossible to condemn the whole on the merits of the parts which, besides, must be judged only as they enter harmoniously or not into the whole, the main consideration, quite overpassing the members which thus cease to have importance. To linger about the parts is to condemn not the Kosmos but some isolated appendage of it.' (trans S. Mackenna and B. S. Page).

III God As a Father

Now there is a significant detail in T1 that may help explain why the Demiurge couldn't create the mortal creatures: he is not just a craftsman but also a father. He is the father of the lesser gods (41b7). This helps explain why the lesser gods are themselves gods (41c2–3): they are the children of a god. Admittedly, the lesser gods are qua generated in principle subject to dissolution, but as children of the Demiurge they are so well put together that it would take an evil will to dissolve them. As far as the mortal creatures are concerned, the Demiurge will create what is immortal about them, namely, their rational soul. Because the lesser gods are generated, and so in principle mortal, they in turn will create the mortal creatures' mortal soul and body. Again, the Demiurge puts the point in T1 in a way that highlights that whatever is the offspring of an immortal god is itself divine:

And in so far as there ought to be something in them that shares the name with the immortals, something called 'divine' and guiding those of them who are always ready to follow you and justice, I will begin by sowing the seed of it and then hand it on to you.

There is something divine about human beings too, our immortal reason, which appropriately the Demiurge created, not the lesser gods. So we might say that the answer to why the Demiurge can't make the mortal creatures is that while he could produce them as a craftsman, he can't do so as a father.⁷ For a father only creates something like himself, in this case, something divine and immortal.⁸

But why then does Timaeus choose to make the Demiurge a father as well as a maker? One answer lies in the basic principle of Timaeus' cosmology. At 29e2–3 Timaeus said that the Demiurge 'being without envy wishing all things to be as like himself as possible. This indeed is the most proper principle of becoming and the cosmos' (my emphasis).

⁶ The double role of the Demiurge as craftsman and father was mentioned early on in Timaeus' account: 'to discover the maker *and father* of this universe is indeed a hard task' (28c3–4, my emphasis).

⁷ Cf. Plutarch, *Platonic Questions* 2, 'Also in the case of a maker, such as a builder . . . his work when done is separated from him, whereas the principle or force emanating from the parent is blended in the progeny and constrains its nature, which is a fragment or part of the procreator.' (trans H. Cherniss).

⁸ Later Platonists assign a higher status to the father than the maker, cf. Opsomer 2005: 52.

⁹ Druart 1999: 169 claims that the Demiurge's 'fatherhood cannot be construed as a begetting' since he doesn't create but orders the chaos he finds. If this were true, Aristotle's father, who orders the matter provided by the mother, would not count as a begetter either.

'Making another like oneself' is a favored description of procreation in Plato (as in Aristotle), ¹⁰ so it should not surprise us that Timaeus uses the notion of fatherhood to express the distinctive manner in which the Demiurge creates the cosmic god, the whole cosmos or the gods within it, in his own likeness. ¹¹

We might think that here the artistic and biological models of causation are on a collision course with one another. As a rule, craftsmen aren't like their products, while parents are like their children. Even if we allow for the special case of an artefact that is like its maker, we would think of this as an accident from the point of view of craft itself.¹² However, the Demiurge says that when he produces an ensouled being, it necessarily becomes divine, like himself. There is no indication that the Demiurge is engaged in reproductive processes – no mention of copulation or such as in earlier cosmogonies – which would ensure or explain this necessity. Rather, the mixing, molding and bonding by which he creates both the world soul and the immortal human soul are all processes of traditional crafts (41d).

To be sure, Timaeus talks about the Demiurge's planting the seed of the soul but the image here is agricultural, and so technical, rather than reproductive. This is made clear also when the Demiurge hands over the seed (*sporos*) of the immortal souls to the lesser gods for them to plant them in mortal bodies (41d1, 42d6).¹³ There is no suggestion that the seed he plants is his own sperm, and so no suggestion that he is reproducing himself in the creation of the souls.¹⁴ And, as I said, craft as such gives no reason why the offspring should necessarily be just like its parent.

Consider this point also from the perspective of the distinction between being and becoming, the fundamental ontological distinction Timaeus draws at the beginning of his account (27d–28a). Alongside the Forms, the Demiurge belongs to the kind 'eternal and changeless being', while the cosmos including the created gods belongs to the kind 'becoming' (cf. 37a1–2). When the Demiurge creates the cosmos he shapes becoming in the likeness of being (29b–c). Time, for example, is a moving image of eternal being (37d). This sort of creation is in line with the craftsman model: in general, craft causes something to come into being by modelling

¹⁰ Cf. Symp. 207d–208b, Aristotle, DA II.4 416b15–17.

¹² Rather in the way that for Aristotle it is an accident when the doctor cures himself (cf. *Ph.* II.8 199b31–32): there is nothing in the notion of a doctor to suggest that he will also be the patient.

¹³ Plato may here be appropriating the role of Anaxagoras' *nous* as a 'farmer god', cf. Sedley 2007: 23–24.

¹⁴ Timaeus' vocabulary (sporos, sperma, speirô) is itself ambiguous between the planting and reproducing.

it on a formal paradigm. Yet when we think of the father as the cause of something that comes into being, we expect the cause necessarily to make an offspring of the same sort as himself, and so the offspring would share certain essential characteristics of the father, including, say, his immortality, divinity, goodness. But these are characteristics that the offspring cannot possess since it belongs to the category of becoming.

Timaeus' solution to this problem, such as it is, is to stress the likeness relation across the ontological divide between being and becoming. Sphericity is an image of the completeness of the Forms (33a–b), time of eternity (37d), so by bestowing on becoming features analogous to those of being, Timaeus can maintain that the crafted product is like its cause, and so within the remit of paternity. Compare the Image of the Sun in *Republic* VI: the Sun belongs to the world of becoming but is an image of the Good, and therefore not inappropriately also called the 'offspring' (*ton ekgonon*) of the Good (508b13), and a 'god' (508a9).

A key reference in the *Timaeus* for thinking about the notion of fatherhood across the ontological divide is the 'receptacle passage' (50b), where Timaeus compares the so-called receptacle to the mother, the model to the father and the likenesses of the model in the receptacle to the offspring. No reference to the Demiurge here, but the point of immediate interest is that something belonging to the category of eternal being can be seen as the father of offspring belonging to the category of coming into being, exactly in so far as the one causes the other to be like it.¹⁵ This likeness can be limited to a specific feature and need not include the basic ontological characteristics of the father, such as his eternity or divinity.

The apparent exception is the case we are interested in where the Demiurge creates another living being. Here the father must make something that is immortal and divine like himself. However, the exception is only apparent: it is not hard to see why this case is still compatible with the others. Here again are the exact words of the Demiurge:

Anything bonded together can of course be dissolved, though only an evil will would consent to dissolve anything whose composition and state were good. Therefore, since you have been created, you are not entirely immortal and indissoluble; but you will never be dissolved or taste death, as you will find my will a stronger and more sovereign bond than those with which you were bound at your birth. (*Tim.* 41a8–b5)

¹⁵ So Timaeus here refers to the forms as 'that from which, by being made in its likeness, what comes to be is born' (50d1-2).

The Demiurge does not confer the same immortality onto the lesser gods that he himself possesses. He makes them immortal like himself but contingently so in that they could be dissolved if he himself wanted so. The likeness between the Demiurge and his offspring is then comparable to the examples above, the likeness between the completeness of the forms and the sphericity of the cosmos or the likeness between the eternal being and time. The lesser gods' immortality is modelled on the Demurge's own, but not the same as it. And the reason why the lesser gods' immortality can be no more than contingent is again their ontological status as created and so as necessarily dissolvable.

Rather than saying that the craft model and the biological model are in conflict with each other here, one might maintain that the biological model *requires* the complement of the craft model to explain how this kind of reproduction happens. The biological model explains why the offspring resembles the parent. But it doesn't capture how an offspring resembles the parent in the manner of an image or likeness. For here the image belongs to another ontological category, so it cannot possess the same features in the same manner as God himself, but only ones that are merely *like* or analogous to his across the ontological divide. But this is what craft can explain. For craft, as we know from *Republic* 10, is a cause that looks to eternal being and makes an image of it in the realm of becoming.

In making the cosmos like himself, the formal paradigm serves as a kind of proxy for God himself. We see this in God's first creative act. The Demiurge sets out to make the world as good as possible in the sense of as good as *something visible* can be. This requires the world to have reason (nous), and therefore soul and a body (30b). In this way, the world ends up also being an animal or a living being ($z\hat{o}ion$). There is no indication that the Demiurge himself is an animal or that he has soul, but he certainly has or is reason (nous). So, we can say that the Demiurge makes the cosmos like himself by endowing it with reason but works this out for the cosmos in the manner that is appropriate and best for a visible being, that is, by its being a rational animal with a soul and a body. The question next arises for Timaeus which animal the cosmic animal was modelled on, and we are told that it was a complete one, containing all the intelligible animals (30c). For this is the model that would make the cosmos complete and so best and most beautiful. The model helps the Demiurge find the sort of

Though I shall use 'animal' for simplicity, I take no position in this chapter on whether zôion should be understood as 'living being' or as 'animal', see further Sedley 2007: 108n36.

goodness that is appropriate to the cosmos, and so indirectly for the cosmos to become like himself. We might say that the model directs the Demiurge in his attempt to assimilate the cosmos to his own goodness. If world-making was simply a matter of standard reproduction, there would be no need for a model: the likeness of the offspring to its father would be established simply by the transfer of the father's own form.

Consider in this light 37c6-d1, where Timeaus begins his account of the creation of time:

T2 When the father who had begotten it perceived that the universe was alive and in motion, an image [agalma] of the eternal gods, ¹⁷ he was glad, and in his delight planned to make it still more like its pattern; and as this pattern is an eternal living being, he set out to make the universe resemble it in this way, as far as was possible.

Timaeus could not have confronted us with a more striking juxtaposition of the biological with the technical: a father generating an offspring that is an *agalma*, an image or statue. Yet the forms on which the image is modelled is referred to as 'eternal gods', like the father himself. So while the product is an image of the model, in accordance with the craft model, the image is also a reproduction of a living being, the forms. It is as if the forms work here as a proxy for the Demiurge. But this is not so surprising if, as I argued, the forms of intelligible animals (at 3 oc) are the model by which the Demiurge makes an image of his own goodness. The craft model helps explain, then, how the father creates an offspring that is like himself but still only as an image.

I have argued that the craft model and the biological model are mutually implicated for Timaeus. ¹⁸ The biological model is appropriate to the Demiurge's wish to make the world like himself, but it does not constrain him in a way that precludes the craft model. ¹⁹ For the craft model helps explain how the likeness relation can hold across the ontological divide, through the notion of a craftsman looking to an eternal model to make a particular image.

By the same token, the solution to the question why the Demiurge didn't make the mortal creatures does not lie, as one might have thought, in saying that while God as a craftsman could make something lesser, like the mortal beings, he couldn't do so as a father. For being a father is not

¹⁷ D. Lee followed Cornford who had 'shrine for the eternal gods' in his first edition of the Penguin translation. My reasons for the reading adopted here are given in the revised edition, Lee 2008, comment on 37d.

Plato is no doubt developing a tradition going back to Hesiod and Empedocles 'of locating our biological origins in divine management decisions', as Sedley 2007: 57 puts it.

¹⁹ For the coupling of father and craftsman, see also *Plt.* 273b.

supposed, for Timaeus, to exclude producing likenesses of a lower ontological standing.

IV God As Good

I have considered one answer to the question why the Demiurge couldn't create mortal beings directly, his status as a father, and that answer seemed on its own insufficient. I turn now to another possible answer: God as the best can only produce the best things, and therefore only divine and not mortal souls. I think a version of this answer is right but it is important to be clear about which.

In relation to the creation, God's goodness has in some respects explanatory priority over his role as a craftsman. This is made clear when Timaeus asks why we should say that the cosmos was made by a craftsman looking to an eternal paradigm (28c6-29a2). A craftsman could, in principle, look to a generated paradigm, but if so, his product would not be beautiful (28b1-2). We can be confident that the maker of this cosmos looked to an eternal paradigm because he was good (29a3). It is God's goodness that in turn justifies the denial of envy (phthonos) as well as the assertion of his wish to make everything as like himself as possible (29e1-3), what Timeaus called the principle of becoming and the cosmos. One could read the priority of God's goodness as determining also his role as a craftsman. So, the thought might be that God wants to make a good world, being good, and chooses to do so as a craftsman because that is the best way to make the world good. When he is confined to making only immortal beings it may follow directly from his goodness: as good he makes only the best, but that means only immortal offspring.

However, it would be wrong to say that God's goodness is fundamentally prior to his status as a craftsman. There is no suggestion that God chooses to be a craftsman because he is good. The assumption that he is a craftsman is brought in primarily as the only imaginable cause of the generation of a beautiful cosmos. God's goodness is mentioned at 29a3 to explain why he chose to exercise his craftsmanship the way he did rather than in the bad way that is, in principle, possible for any craftsman. But given the general aim of craft, which I noted at the outset, of doing the best possible thing for its product, God's choice may be seen to be just his choice to exercise his craft properly.

²⁰ Cf. Rep. I 342e. As Nawar (Chapter 2) and Barney (Chapter 3) in this volume highlight, as a general claim about the crafts this assumption is not unproblematic. However, in the case of the Demiurge we may also resort to the notion of an architectonic craft, the highest technê that includes an

This point may in turn help explain why Timaeus conspicuously formulates God's motivation for creating the world negatively: it would be *phthonos* or envy not to make a world. The thought may be that since it follows naturally from God's status as a craftsman that he would want to use his craft for the good, it would take a defeating circumstance such as envy to prevent him from so exercising his craft. Or as one might say: only an actively preventing factor like envy could stop a craftsman, and particularly one so well qualified as God, from exercising his skill for the good. God's goodness is then more a guarantee that he will act properly as a craftsman than it is an extra factor explaining his motivation to do so.²¹

Timaeus may have a similar point in mind when the Demiurge explains in T1 why his creation won't be dissolved:

what was created by me cannot be dissolved without my consent. Anything bonded together can of course be dissolved, though only an evil will would consent to dissolve anything whose composition and state were good. Therefore, since you have been created, you are not entirely immortal and indissoluble; but you will never be dissolved or taste death, as you will find my will a stronger and more sovereign bond than those with which you were bound at your birth.

The question addressed in these lines is, to be clear, not the same as the question why God made the world. Rather the question here is why God wouldn't allow his creation to be dissolved. This question, as we saw, is premised on the fact that the lesser gods qua created are not strictly or necessarily immortal. However, as artefacts of the Demiurge they are well put together and so have the potential to persist unless interfered with.²² Again the point is made negatively: it would be an exercise of an evil will to dissolve the beautiful product, just as earlier it would have been an act of

understanding of the ends of other *technai*. Given both his divine status and the range of crafts employed by the Demiurge it is in any case reasonable to ascribe the highest craft to him. On this suggestion more below.

²¹ Cf. here Barney (Chapter 3) on the motivational commitments that being a craftsman entails.

Admittedly, it is not clear from these lines whether God's good will just ensures that he doesn't actively dissolve his own work, or whether it also means that he will, more positively, step in to maintain his own work given its fundamental goodness. On the second reading the words 'you will find my will a stronger and more sovereign bond than those with which you were bound at your birth' may seem appropriate in the following way: It is relevant that God's will is stronger than the bonds exactly because those bonds may not themselves be sufficient to ensure continued life. On the first reading, the greater strength of God's will might look like a threat: exactly because of its strength he could dissolve the bonds if he wanted to (but he won't because he is good). But, less menacingly, one might also take him, on the first reading, simply to emphasise the strength of his good will by saying that it is still (eti) greater than the bonds by which the lesser gods were bound, great as we have seen those bonds to be.

envy not to have made it in the first place. Indeed, it is tempting to identify the evil will imagined here with the envy mentioned earlier. However this may be, God's good will serves as a guarantee of the continued existence of the cosmos rather than as a positive factor in actively maintaining it. No craftsman other than one who also happened to be a bad person would wreck an artefact that had been beautifully made and was still in fine condition. A craftsman normally respects and cares about craftworks. In letting the lesser gods live perpetually, the Demiurge behaves as any proper craftsman would.

What these considerations show is that there is a sort of goodness that characterises God, his good will, or his absence of envy, which is not so much an added explanatory factor but an assurance that God's craftsmanship was properly realised. But then we need to turn to God's craftsmanship again to explain why it could be realised in the manner only of creating immortal beings, and not also mortal ones.

V God As a Craftsman, Again

Though we have added to the craftsman model, we have not moved away from it by describing the Demiurge either as a father or in attributing to him good will. So when we turn to the following lines in T1 there is reason to think that we still need to think of what God would or could do as a craftsman: 'if these [sc. the mortal creatures] were created and given life by me, they would be equal to gods'. The point would still be that a craftsman of his sort could not make living beings that were less than gods, though the lesser gods could. But why that should be remains to be seen.

When Timaeus said at the beginning of his account that the maker of the world was the best of causes (29a6) or that it was just (*themis*) for the best only to do the finest (30a6–7), we may take him to refer to what the best cause in the sense of the best *craftsman* would do. The best craftsman possesses the best craft, which is the craft to produce the best. If the best is the divine, then it is right for this craftsman only to produce the divine. This reading depends on taking craftsmen to be the only causes under consideration, but this appears already to have been assumed from the outset of Timaeus' account (28a6–b2) where the only possible causes of the world are two kinds of craftsman. The restriction on what God can create comes then from the craft he possesses as the best craftsman.

This argument seems abstract and rather a priori, and leaves us wondering what this craft is that the Demiurge possesses. Thankfully, there is a more specific notion of God's craft that connects specifically with our text T1. Notice how Timaeus in T1 describes the creation of the lesser gods in terms of being 'bound together' (deomai) and their being dissolved in terms of being 'dissolved' or 'untied' (luomai). The exercise of a special skill in combining and dissolving can reasonably be seen as the most general description of God's creative activity in the Timaeus.²³ Throughout the creation, God divides and mixes. We see this in the creation of the world soul whose different elements were fitted and bound together,²⁴ and before that, in formation of the world body. Here the Demiurge bound the four elements together by proportion, the strongest of all bonds:

T₃ So for these reasons and from these four constituents the body of the world was created to be at unity through proportion; and from these the body acquired friendship, so that having once come together in unity with itself, it is indissoluble by any but him who bound it together. (32c)

T1 clearly refers back to the thought in T3 that something bound together in the manner of the world body is dissoluble only by God himself. But T₃ gives us the reason: this sort of geometrical proportion is a bond of the sort that will otherwise last. As F. Cornford argued, it is the same kind of geometrical proportion that is involved in the formation of the world soul.²⁵ So both in body and soul, the gods are formed by a bond that is indissoluble because of its peculiar geometrical character.

When we ask why God is not able to create something mortal, the answer would seem to lie in the sort of craft or skill he has: it is the ability to bind elements together proportionally so that they form an unbreakable unity. It must be this power that the Demiurge refers to when in T1 he bids the lesser gods to 'turn your hands, as is natural to you, to the crafting [dêmiourgia] of living things, imitating my power when I created you' (41c4-5).

The Demiurge's power does not imply having the power to create something mortal. Describing him as the 'best of all causes' and the producer only of the finest would suggest rather that his power is limited to immortal beings. But, independently, it is also reasonable to say that the craft that is the power to produce the finest products isn't also exercised in the production of lower quality products. One case where the same craft is involved in producing lower quality products would be where, since, as

²³ For the thought that God has as special knowledge about combining and dissolving, cf. also *Tim*. 68d. For a discussion of the range of arts that the Demiurge employs, see Zedda 2000.
24 35a8: *sunarmottôn*; 37a4: *sundetheisa*.
25 Cornford 1937: 68–69.

Aristotle says, a craft allows you to produce two opposites, ²⁶ the craftsman produces the worse of the two, a doctor killing rather than curing, a cook spoiling the broth. But these are cases where the worse opposite is to be understood as the privation of the first. But mortal life is not simply the privation of immortal life: it is an imitation and likeness of immortal being.

There are clearly also cases where we think that there is a distinct craft related to producing another product, which happens to be of a lower quality. This would be the case where we see the product not just as an inferior version of the higher product but as a kind of product in its own right. So a hot dog may be inferior to *cailles en sarcophage*, but it doesn't follow that the art of making *cailles en sarcophage* allows you to make a good hot dog. The case of the Demiurge's craft would seem to be like that: his craft is related to the product of immortal living beings, while the lesser gods are assigned the crafting of mortal living beings, and these, as we were told are *distinct* kinds, both contained in the complete kind of living being (T1, cf. 30c–d).

Recall the notion of distinctness of powers from *Republic* V: powers are distinct if and only if they are set over against distinct objects and produce different things.²⁷ On this criterion, the Demiurge's and the lesser gods' crafts are clearly distinct powers. An immortal creature is a different kind from the various kinds of mortal creature. We do not arrive at an understanding of the mortal creatures simply by negation of the immortal. Nor is the similarity between the immortal and the mortal creatures such that we can simply derive the features of the mortal from our knowledge of the immortal, as we shall see. It makes sense therefore to see distinct crafts as involved in the production of the two kinds. The Technodicy arises, we might say, from the restriction of the Demiurge's craft to the production of immortal creatures. His limitation is primarily a practical-cognitive one. Mortal creatures are beyond the field of his expertise.

It is common in Plato and Aristotle to think of the arts as forming a hierarchy. ²⁸ At the top presides an architectonic craftsman, giving instructions to the lower crafts about how and when to execute their crafts. The architectonic craftsman clearly has a general understanding of the ends and uses of the lower crafts. But his craft doesn't include theirs: he couldn't do *their* job. ²⁹ One may similarly compare the Demiurge to an architect who

²⁶ On the notion of *technê* as a two-way capacity, see further Nawar (Chapter 2) in this volume.

²⁷ Cf. Tim. 51c–e, which seems to rely on this criterion. See also Barney (Chapter 3) in this volume on the proper object of technê.

See Plato, Plt. 260a; Aristotle, Metaph. I.1, EN I.1; and Barney (Chapter 3) in this volume.

²⁹ Cf. *Plt.* 305c–d.

knows what is required to build a house, who may also himself be able to build the structure and the foundation, but lacks certain technical skills in, say, plumbing, plastering or carpentry to complete the house, and therefore needs the assistance of lesser craftsmen. It is of a piece with such a hierarchical view of the arts to think that the Demiurge is not able to execute all the tasks of the creation.

To sum up the argument of this section. The problem faced by the Demiurge was a Technodicy after all, rather than a Theodicy. It was the problem of how a good craftsman could make a world containing less than perfect things rather than how a craftsman who is also good could do so. God's goodness was primarily referred to as a way of ensuring that the craftsman acted properly as a craftsman, rather than as a distinct motivating factor, and it was the limitations of God's craft that prevented him from creating mortal creatures, even though their presence made the cosmos as a whole better. But as the problem arises from the limitations of the Demiurge's craft, so the answer to the problem seemed to lie in positing another limited craft, that of the lesser gods, which is such as to create mortal creatures. What exactly this craft looks like is our next subject.

VI The Craft of the Lesser Gods

When the Demiurge in T1 bade the lesser gods imitate his own power, the point was not that they should exercise the same power in a similar but lesser way, but that they should exercise a different power that resembles his. So what are the points of community and difference between the powers of these two crafts?

One shared feature must be looking to an eternal, formal model. The Demiurge reminds us (41b7–8) that 'there are three kinds of mortal creature yet uncreated, and unless they are created the world will be incomplete'. This is clearly a reference back to 30c where Timaeus said that the Demiurge sought to make the universe complete by looking to a model that contained intelligible animals of all kinds. The state of play now is that, looking to the model, the Demiurge has created one of these kinds, that is, the lesser gods themselves, and they, the lesser gods, are now to make the remaining kinds. If they didn't do so by also looking to the eternal model, then, given what Timaeus said earlier about craftsmen in general (28a–b), their product would not be beautiful, the cosmos would not be beautiful and they would not be working as proper craftsmen.

However, in addition to the two creative scenarios mentioned at 28a-b, that is,

- (1) A craftsman produces something by looking at an eternal model;
- (2) A craftsman produces something by looking at a created model; we can now add a third:
- (3) A craftsman produces something by looking at how an eternal model was used in the production of something created.

We can rule out, as I said, that (2) applies to the lesser gods. ³⁰ But there is reason to think that (3), as well as (1), as I said, applies to the lesser gods. For consider two passages in addition to T1. Having created the immortal soul for mortal beings, the Demiurge hands over the production of the human body to the lesser gods:

T4 his children remembered and obeyed their father's orders, and took the immortal principle of the mortal creature, and in imitation of their own maker borrowed from the world portions of fire and earth, water and air — loans to be eventually repaid — and welded together what they had borrowed; the bonds they used were not the indissoluble ones by which they were themselves held together, but consisted of a multitude of rivets too small to be seen, which held together in a unity the part of each individual body. (42e–43a, my underlining)

The words 'in imitation of their own maker' echoes the Demiurge's command to imitate his creation of them, that is, the way they themselves were put together. The primary reference, as we saw, is to the composition of the world body where the four elements were tied together by 'the best of bonds' (31c), a specific proportion with two middle terms. In this way 'having once come together in unity with itself, [the world body] is indissoluble by any but him who bound it together' (32c). The lesser gods imitate the Demiurge in taking all the four bodies and bonding them together. The manner of their doing so is different though: where the Demiurge had used geometrical proportion, the lesser gods weld and rivet the bodies together. The result is a less durable unity, and so a mortal being.

The other, related passage where Timaeus refers explicitly to the lesser gods imitating the Demiurge in creating mortal beings is this:

³º Contrast Druart 1999: 173, who says that the imitators of the Demiurge 'will not even bother looking at [his model]'.

T₅ [The Demiurge] made the divine with his own hands, but he ordered his own children to manufacture the generation of mortals. They took over from him an immortal principle of soul, and, imitating him, turning it [peritorneusan] into a mortal physical globe, with the body as a whole for vehicle. And they built on to it another mortal part, containing terrible and necessary affections. (69c)

Here again there are clear echoes of the Demiurge's creation of the world body at 33a-b, particularly the way in which the gods in both cases make the body spherical by using the highly specific notion of turning something with a lathe or chisel (cf. etorneusato, 33b5). However, there are also two differences. First, whereas the world body is just the sphere that perfectly accommodates its rational circulations, the human head containing our rational motions is added to an elongated body as its vehicle (cf. 44e2). Second, through this body the soul is exposed to a range of irrational affections. The lesser gods confine these affections within the mortal soul, separate it from the rational soul and set up various structures to minimise their influence on the rational soul (69d–72d).

It is clear from T5 that the lesser gods do not simply imitate the Demiurge in that they look to the eternal model and make living creatures on that model. That they look to the relevant forms must be assumed: their task is after all to produce those three kinds of living being contained in the paradigm that are so far missing from the cosmos. However, they also look to *how* the Demiurge worked. And in this we can distinguish two aspects: imitating the object of the Demiurge's creation and imitating the manner in which he made the object. The lesser gods imitate both his creation and his creative act: they make a head that is round like the world body, but they also do so in a way that recalls the Demiurge's production: by bonding and chiseling.

The lesser gods are like apprentices who have observed the master's actions and now seek to follow his example. However, there is a crucial difference between a normal apprentice and the lesser gods: for they are not going to make the same product as their master, but a mortal one. Their power (*dunamis*) is set over mortal beings, just as the Demiurge's is set over immortal, divine beings. The lesser gods have then to make a mortal being in imitation of an immortal, and this cannot be a matter of straightforward or automatic copying. The lesser gods have to think through how best to make the semblance. As good an example as any is the shaping of the marrow:

T6 In [the marrow] he firmly implanted the different kinds of soul, dividing the marrow in his initial distribution into as many different varieties and the particular forms as it was destined to bear. And he moulded into spherical

shape the part of the marrow (the ploughland, as it were) that was to contain the divine seed and called it 'the brain', indicating that when each creature was completed the vessel containing the brain should be the head. The rest of the marrow that was to contain the mortal parts of the soul he divided into long, cylindrical sections, called by the general name 'marrow', to which the whole soul was bound, as if to anchors. And around brain and marrow, for which he first constructed a bony protective covering, he went on to frame our whole body. (73c–d)

Recall that the mortal part of the soul contains the various irrational affections that Timaeus figures as linear motions. They contrast geometrically with the circular revolutions of the immortal rational soul (cf. 43a–e). But the marrow is constructed to accommodate both: a spherical part in the head, which is continuous with the elongated cylindrical sections that extend down along the spine.³¹ The result is an integrated psycho-somatic system with reason set apart in the head, on the 'acropolis', but connected and integrated with the rest of the soul through a single marrow.³² One might say then that the life principle of a mortal being is contained in the marrow as a whole: immortal and mortal together.

Setting aside the details, what is of interest here is the way the lesser gods³³ have not copied the Demiurge, but *extrapolated* on the basis of his example: just as he made the world spherical to accommodate its rational soul, so the lesser gods made the head spherical to house its motions, but also the rest of the body elongated to accommodate the characteristically linear motions of the irrational soul. The principle here is that of geometrical suitability: it is this thought that the lesser gods adopt and extend from the Demiurge's paradigm. Imitating the Demiurge's creation is then not a matter of copying his work but of understanding the rationale underlying it and extending it in a manner suitable to the mortal product.

The same reasoning applies to another of the lesser gods' tasks: that of creating the remaining animals, the air, land and water creatures required to make the cosmos complete. In T1 the Demiurge told the lesser gods:

it remains for you to weave mortal and immortal together and create living creatures. Bring them to birth, give them food and growth, and when they perish receive them again.

³¹ For this interpretation, see Johansen 2004: 150-52.

³² The integration through the marrow is illustrated again in the account of the emission of the seed (91a-b).

³³ The singular 'god' (*theos*) should not detain us: it is the job of the lesser gods, not the Demiurge, to create the human body, one god or other happens to do the job. The singular may also be used for the collective, 'all gods', or the generic, 'deity', cf. van Riel 2013: 37–38.

The brief is to create animals (zôia), not just human beings. It might come as a surprise, then, that the entire account of the mortal body up until the final pages apparently concerns the human body only. The creation of the non-human animals is only sketched at the very end of the work in the context of a reincarnation story (91d-92c). And here the account does not take the form of an account of the different parts of the various animal bodies, but simply a brief reference to the features by which the soul in question is punished. The main thought is that the soul is reincarnated in a body suited to the soul's particular deformation. The sort of body a soul acquires is then entirely dependent on the sort of intellectual shape it is in, with 'shape' taken quite literally. The rational soul originally moved in perfect circles but was upon embodiment twisted out of shape by the linear impulses affecting it from without (43c-e). Our mission in life is to re-establish those circular motions in our heads to the extent possible; failure to do so will lead to reincarnation in a body that reflects the manner and degree to which we have allowed our souls to lose shape. So Timaeus says that the skull of the animal accommodates the particular way the soul's rational circles have been deformed:

T7 Wild land animals have come from men who made no use of philosophy and never in any way considered the nature of the heavens because they had ceased to use the circles in the head and followed the leadership of the parts of the soul in the breast. Because of these practices their fore-limbs and heads were drawn by natural affinity to the earth, and their fore-limbs supported on it, while their skulls were elongated into various shapes according to the particular way in which each man's circles had been crushed through lack of use. (91e–92a, my underlining)

We have then a further application of the principle of embodiment through geometrical appropriateness,³⁴ the principle which, as we saw, the lesser gods learnt from the Demiurge and applied in the first instance to the human head. When Timaeus concludes in the lines following T7 that 'these are the principles on which living creatures change and have always changed into each other', it is this principle he is primarily referring to. For it is this principle that explains how and why a soul is removed to the body of a particular kind of animal.

³⁴ For a discussion of the notion of geometrical appropriateness in the *Timaeus* and how it differs from Aristotle's hylomorphism, see Johansen 2016.

VII The Technodicy of the Lesser Gods

We have seen how the Demiurge, given his craft, could not create mortal beings. He left this task to the created gods, who could do so, as created and so in principle mortal. We have also seen how the lesser gods created man in imitation of the Demiurge's creation, and how the other animals arose from man.

How far down, as it were, does the lesser gods' craft reach? The lesser gods are never called 'the fathers' of human beings, though the language of creating, nurturing and receiving the mortal beings (41d) calls to mind parenthood (including motherhood?).³⁵ One might suspect that the focus on the creation of man again reflects the lower limit of what gods can do. Just as the Demiurge can only create immortal creatures, that is, gods, so the lesser gods too are limited to creating the best mortal beings in so far as they are good, that is, human beings. As craftsmen, they are constrained to produce the best possible product within their range.

The Demiurge said in T1 that the lesser gods

were to fashion mortal bodies and, for the rest, to devise the necessary additions to the human soul and their consequences, and so far as they could control and guide the mortal creature for the best, except, that is, insofar as it because a cause of evil to itself. (42d-e, my underlining)

The lesser gods will guide mortal creatures for the best and will not be responsible for the evils that befall them. When a soul becomes reincarnated as a lower animal, it is clearly then the result of the mortal creature's own efforts or lack thereof. It is man who is himself responsible for the creation of the other animals.

We might still say that the lesser gods create the other living beings by creating man. Also, the lesser gods create the animal bodies, as we have seen, that match the souls that have emerged from human lives, and they anticipate that some humans will be embodied as lower animals. The lesser gods facilitate the incarnation of souls in suitable animal bodies, bodies that, as the case of the fangs show (76d–e), will help these animals lead their characteristic, less rational lives, but they do not directly cause any individual human being to become reincarnated as a lower animal. This could only mean making some souls worse, ³⁶ since the only factor that

³⁵ Cf. 'receive' (dexesthe) with 50d3: 'Indeed we should liken the recipient (to men dekhomenon) to the mother.'

³⁶ There is no suggestion that being reborn as a lower animal provides correctional punishment and so in the longer run makes the soul better.

determines whether a soul is reincarnated as an animal is the state of their soul. So, for the lower gods to cause a human soul to be reborn as a lower animal would require that they made a human soul worse. Nor, on the other hand, is there any indication that the lesser gods give the lower animals a leg up to help them return to a more rational state. All of these demotions and promotions are the direct result of the soul's own efforts.

The lesser gods' position is a delicate one. It is one familiar also from *Laws* X, mutatis mutandis,³⁷a text we looked at earlier in connection with holism. The Athenian Stranger continues his argument by explaining how god's world order ensures that the virtuous are rewarded and the vicious punished:

T8 since a soul is allied with different bodies at different times, and perpetually undergoes all sorts of changes, either self-posed or produced by some other soul, the divine checkers-player has nothing else to do except promote a soul with a promising character to a better situation, and relegate one that is deteriorating to an inferior, as is appropriate in each case, so that they all meet the fate they deserve With this grand purpose in view he has worked out what sort of position, in what regions, should be assigned to a soul to match its changes of character but he left it to the individual's acts of will to determine the direction of these changes. (903d–4c, trans. T. Saunders)

Here in the *Laws* the talk is of souls' moving location in the cosmos according to their just deserts, rather than, as in the *Timaeus*, their assuming various animal bodies. However, the fundamental thought seems the same in the two works. Humans are themselves responsible for the consequences of their actions. The role of God is limited: applying the rules of the game, he responds to the individual's acts by moving him to the appropriate place, but it is the individual who determines where he ends up. The moves on the checkerboard are in a sense made by the pieces themselves, the gods ensure that the rules are enforced.³⁸

³⁷ The Athenian stranger operates with one cosmic god, not the Demiurge, nor the plurality of lesser gods, yet as immanent in the cosmos his world soul is comparable to the lesser gods. The world soul of the *Laws* was commonly identified with the Demiurge of the *Timaeus* by Plato's successors, see Dillon 2003.

³⁸ Plotinus expresses a similar thought using the image of actors whose characters determine the roles they play in a drama: 'Thus, every man has his place, a place that fits the good man, a place that fits the bad: each within the two orders of them makes his way, naturally, reasonably, to the place, good or bad, that suits him, and takes the position he has made his own. There he talks and acts, in blasphemy and crime or in all goodness: for the actors bring to this play what they were before it was ever staged.' (Enn. III.2.17, trans. S. Mackenna and B. S. Page).

We can see this view as a response to the same sort of worry that made the Demiurge step back from creating man. The lesser gods cannot take direct creative responsibility for outcomes that, taken individually, are less than ideal, even if these outcomes work collectively for the greater good of the whole. They are responsible instead for the mechanism that ensures that individual bad outcomes lead to the greater good of the whole: that by which individual souls are reallocated to other animals. It is this mechanism that ensures that the cosmos contains all the different living species. Again, this is a proper exercise of craft: ensuring given the materials available the greater good of the whole product.³⁹

Given the hierarchy of crafts involved in the generation of the cosmos, one might wonder if there is a craft by which the humans themselves produce the lower animals. There are indications in the *Timaeus*, though no explicit reference, that there is a craft of living well. A Stoic reader, for example, might well find inspiration in passages such as 47b-d and 88b-89d, where Timaeus describes the various motions, psychic and somatic, that one should cultivate to become a well-formed human being. Knowing how to order oneself clearly involves imitating the cosmic soul and body. However, if this is a human craft of living, it is also a craft meant to ensure no less than a human life, and by preference, a better astral life; it is most definitely not a craft meant to ensure one's own passage to a lower animal. There is then no craft of producing lower animals, other than the one possessed by the lesser gods. Here we seem to have arrived at bedrock as far as craft is concerned: both the Demiurge and the lesser gods make something better out of the materials they find. That is what craft does. But to make oneself worse, to order the materials and potentials one is given into something worse, less ordered or less rational, can be the proper work of no craft, only ignorance.

³⁹ Another way to put the point is in terms of necessity: the disorderly motions of irrational souls are the product of necessity, not design. When using souls deformed by these motions to form non-human animals, the lesser gods are making the best possible use of this fait accompli. Thereby the irrational souls might be seen as a contributory cause (*sunaition*) of the greater cause (*aitia*) of an ordered cosmos (46d–e).