

MORAL NECESSITISM AND SCIENTIFIC CONTINGENTISM

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Here is a puzzling phenomenon. The mainstream philosophical position is that moral principles are metaphysically necessary. If act utilitarianism is true then it is necessarily true. However, the mainstream position is that scientific principles — laws of nature — are not metaphysically necessary¹. If quantum field theory is true, it's not necessarily true — the world could have been Newtonian. Call this combination of scientific contingentism and moral necessitism the **Standard View**.

The Standard view is, I think, rather puzzling. Scientific contingentism and moral necessitism are both very intuitive but the discrepancy between domains is strange. Particularly so given certain similarities in the structure of those domains.

Consider the moral domain: Particular moral facts could easily have been different. Imagine Margot punched Kosta and that was morally wrong. The punch could have been morally acceptable, say if it was during a professional wrestling match. However, there seem to be underlying moral principles that could not easily have been different. The same moral principles apply in the actual world where Margot wrongly punched Kosta and in the world where her punch was acceptable. The difference between these two cases are particular descriptive facts, not a difference in moral theory. Further, it's natural to think that these underlying moral principles are 'general' in certain ways — they apply always and everywhere, and they are not about specific individuals (see, e.g. Hare (1954)). (Though there is debate about just how general or particular such principles are (see Ridge and McKeever (2020) for a survey)).

Similarly, particular physical facts could easily have been different. Imagine Hewan throws a ball at a window, breaking it. She could easily have not broken the window though, say if she threw

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¹My focus here is restricted to *fundamental* scientific laws.

less hard. However, there seem to be underlying physical principles – laws of nature – that could not easily have been different. The same physical principles apply in the actual world where Hewan broke the window and in the world where she did not. The difference between the two situations are particular, contingent, facts about the world, not a difference in physical theory. Further, it's natural to think that these underlying physical principles are 'general' in certain ways — they apply always and everywhere, and they are not about specific individuals (see, e.g., Lange (1995, section 1) for discussion). (Though there is debate about just how general or particular such principles are (see, for example, the debate arising from Cartwright (1983)).

Even in light of these similarities, the Standard View says there is a striking modal difference between the domains. My aim in this paper is to see what might motivate the Standard View.

I'll do this against the background of non-naturalist realism about morality. That will make the analogies between the moral and the scientific domains simplest. (Though toward the end of the paper I'll discuss murkiness of the distinction between naturalism and non-naturalism.)

The strategy will be to look at debate between necessitism and contingentism in the scientific domain, seeing how motivations for scientific necessitism can be transferred over to the morality. It's regarding the scientific domain where there is the most active and long-standing debate between necessitists and contingentists. So, if we are considering how to motivate necessitism about a domain then the philosophy of science literature is the natural place to look.²

Ultimately I'll suggest that there are certain intuitions about the explanatory structure of a domain that motivate necessitism and these intuitions are more powerful with respect to morality than science. This is a reason to accept necessitism about morality but not about science.

But it's important for the reader to understand the type of paper this is. I'm not suggesting that motivation with the intent of pushing you to accept the Standard View. I don't think the motivation is obligatory and, in fact, I'm very unsure whether I believe the Standard View. The aim really is to see if the Standard View *can* be motivated. If you are skeptical of the motivation I suggest then perhaps the right option will be to reject the Standard view or to reject the background assumption of non-naturalism.

More generally, I'm not doing the type of philosophy where I pressure you to believe some particular well-defined view. The intent is not to make you believe the Standard View, or necessitarianism about morality, or contingentism about science. Rather, it's the type of paper where I walk around some, relatively unnoticed, part of the landscape and hopefully you walk with me.

One last preliminary point: In what's to come I'll mainly be taking considerations developed regarding the scientific domain and seeing if they can motivate moral necessitism. But why not the other

²Thanks to Claire Kirwin for discussion.

way round? Shouldn't we start with the obvious datum of moral necessitism – it's necessary that the Rwandan genocide was wrong, for example. We could then consider what about the moral domain makes this so obvious and perhaps this would illuminate the modal status of the scientific domain.³

This is an interesting project but it's not one that I'll be taking on. The main reason is that I don't find moral necessitism obvious. In fact, very few facts about metaphysical necessity seem *obvious* to me. It's a challenging concept, one that no one except philosophers has intuitions about. It's incredibly obvious that the Rwandan genocide was wrong, just as it's incredibly obvious that I have hands. But this Moorean feel completely disappears, at least for me, when I think about the modal status of these facts. Further, juxtaposing moral necessitism with the intuitive nature of scientific contingentism makes necessitism seem even less obvious. But that's just biography about why my investigation of the Standard View has the structure that it does. If you find moral necessitism extremely obvious I invite you to, as much as you can, put that feeling aside while we think about the differences between the moral and scientific domains.

I NOMIC NECESSITISM

Let's start by considering the debate between necessitism and contingentism in science – specifically, the views that take scientific laws to be metaphysically necessary. These *nomic necessitarian* views you see in the literature don't involve the bare claim that laws are necessary. Rather, they typically generate the necessity of the laws from the claim that properties (or at least the *fundamental* properties — those that the basic laws are about) have their nomic roles as a matter of metaphysical necessity. What does that mean? The nomic role of a property is the role that property plays in the laws of nature. For simplicity, assume Newtonian mechanics is true. In that theory mass is involved in the law $F=ma$, and in the law of universal gravitation about how massy objects attract other massy objects. These laws define the nomic role of mass.

The nomic necessitarian says that it is necessary that mass plays this role. If there is a property in another possible world that is in some ways mass-like but does not obey $F=ma$ and the law of universal gravitation then *it is not mass*. In particular, if there is another possible world where it looks like $F=ma$ is violated and $F=2ma$ is true then, in fact, that is a world without mass. Other properties that are involved in the laws of nature, like force and acceleration, also play their nomic roles necessarily. Consequently, $F=ma$ is necessary — it is necessary of force, of mass, and of acceleration, that they are connected in this way.⁴ Similar reasoning holds of other basic laws – they end up being

³Thanks to Tristram McPherson and Mark Schroeder for discussion.

⁴One complexity: force, mass, and acceleration could have their nomic roles necessarily but still there are possible worlds where none of them are instantiated. Whether the law $F=ma$ still holds in such worlds depends on some complex

metaphysically necessary.

But why think that such properties have their nomic roles necessarily? Why can't mass act in any other way? The normal answer is that it's a consequence of a more substantial underlying metaphysics – that it's part of the nature or essence of the properties that they have the nomic roles that they do. Call this *Nomic Essentialism*. On one very common version of this picture it's part of the nature or essence of the basic properties that they have certain *powers* or *dispositions* (see Shoemaker (1980); Swoyer (1982); Ellis and Lierse (1994); Bird (2007a) among many others). So it's part of the nature or essence of mass that massy objects have the disposition or power to attract each other in line with the law of universal gravitation.

Given nomic essentialism the explanation for why planets attract each other derives from the mass of those planets and the nature of mass. It is because the planets have mass and it's in the nature of mass that massy objects have the disposition to attract each other, that the planets attract each other. The law of universal gravitation, then, and other such laws, are not additional entities over and above the properties. Rather, the law flows from the powers or dispositions of the relevant properties.⁵

That's the picture. But why would anyone believe nomic necessitism? There are, I think, two main motivations.

1.1 ANTI-QUIDDITISM

The first is *anti-quidditism*. Imagine that properties don't have their nomic roles necessarily, so mass could be governed by very different laws. (Continue to assume, just for simplicity, that the actual world is Newtonian.) Then, it seems, mass could have been governed by the laws that actually govern charge. After all, properties can clearly be governed by the laws that actually govern charge — so why not mass? Similarly, charge could have been governed by the laws that actually govern mass. There could be a world, then, where mass and charge 'switch roles'.

Consider a world where mass and charge have switched nomic roles and, further, they have switched their instantiations — everything that instantiated mass in the actual world instantiates charge in this switched world, and vice versa – but there are no other differences between the worlds.⁶ This world would be indistinguishable from the actual world. In both the actual world and the switched world there would be a property acting in the way we expect mass to act — affecting scales and other measurement apparatus in the way that mass does in the actual world; interacting with our

issues about the nature of properties, but these don't matter for our purposes. I'll just assume (in line with, for example, Swoyer (1982), Bostock (2003) and Bird (2007a, section 3.2)) that the law continues to hold.

⁵See Kimpton-Nye (2021) for a discussion of how exactly laws flow from the relevant properties.

⁶Strictly speaking, since mass and charge are quantities, we would switch specific mass properties with specific charge properties.

bodies and sensory organs in the way that mass does; and so on. The only difference is that in the actual world it is mass acting in that mass-like way, but in the switched world it is charge acting in the mass-like way. This difference, though, would be invisible to us since the causal effect on our sensory apparatus would not be changed. There is to be no way for us to peer directly into the identity of the property — all we can see is what the property does, not which property does those things (Lewis, 2009).

Many find such switched possibilities objectionable. Firstly, there's a classic 'empiricist' thought that the existence of such in-principle indistinguishability between worlds is a bad-making feature of a theory — some evidence that the theory postulates more structure than the world contains (e.g. Shoemaker (1980), Bird (2007a, section 4.2.3)). Secondly, can we even understand what properties are if they can switch roles? What could distinguish mass and charge, if not how they act? It's implausible, many think, to postulate that properties have some primitive identity *quiddities*, as they are known (e.g. Black, 2000; Bird, 2007b; Schroer, 2010).

The problems are avoided, though, if nomic necessitarianism holds and so mass and charge can't switch roles.

1.2 INTERNALITY

The second motivation can be described, somewhat loosely, as an intuition of 'internality'. This motivates nomic necessitism via motivating views where the nomic role of fundamental properties is part of their nature or essence.

What is this intuition? Very loosely speaking, the idea is that events are wholly explained by the properties of the entities involved. But the idea is clearer when we frame it negatively. It's a rejection of the explanatory role of certain 'external' entities — in particular, nomic entities.

For example, consider two massy objects A and B that are attracted to each other. The thought is that this attraction is wholly explained by the properties of those objects, specifically their masses (along with background conditions about the properties of other objects in the system, for example, there aren't other, larger, objects that swamp the attraction of A and B — I'll ignore this point going forward). What is not explanatorily relevant are additional *nomic* entities. There isn't some additional entity — a primitive law of nature, or a primitive nomic necessitation relation, or something similar — that we need to add to the properties of the objects to explain why the massy objects attract each other. The intuition is that such 'external' entities are not needed to explain the actions of the massy objects.

(I'm not meaning to put theoretical weight on the concepts of 'internality' and 'externality'. They

are just tools for loosely gesturing towards certain intuitions. (Though see Mumford (2004) for a related discussion of ‘externality’.)

The thought here is somewhat related to the anti-quiddistic intuitions we discussed. Properties aren’t thin and inert. They aren’t just sitting around, waiting for some separate nomic entity to imbue them with power. Rather, the thought is, such properties are powerful all on their own — they have explanatory oomph. The properties themselves, and how they are instantiated, explain events like A and B being attracted to each other.

Perhaps the most common way that this intuition exhibits itself is in an endorsement of the *inference problem* (van Fraassen, 1989, chapter 5) and, more generally, in a rejection of ‘governing’ laws — laws which ‘produce’ or ‘bring about’ the patterns of events. Let’s take some time to consider the inference problem.

The inference problem was most famously applied to Armstrong’s (1983) view of laws. His view is that laws are relations between universals — specifically, the law that all Fs are Gs is the holding of a particular relation, N, between the universals F and G. N is a primitive nomic entity – Armstrong calls it the ‘necessitation relation’. N holding between F and G is not determined by F, or G, or any other entities.

It’s an obvious fact about laws that the law that all Fs are Gs has to entail that particular Fs are also Gs. For example, if object *a* is an F, then the law entails that it’s a G. But if the law that all Fs are Gs is just a primitive relation N holding between F and G then it’s unclear how this entailment works. How does this primitive relation, N, that Armstrong just postulated, make it the case that if *a* is F then it also has to be G?

This point was famously made by Lewis (1983, p. 366):

Whatever N may be, I cannot see how it could be absolutely impossible to have $N(F,G)$ and Fa without Ga ...The mystery is somewhat hidden by Armstrong’s terminology. He uses ‘necessitates’ as a name for the lawmaking universal N; and who would be surprised to hear that if F ‘necessitates’ G and *a* has F, then *a* must have G? But I say that N deserves the name of ‘necessitation’ only if, somehow, it really can enter into the requisite necessary connections. It can’t enter into them just by bearing a name, any more than one can have mighty biceps just by being called ‘Armstrong’.

Similar arguments are commonly made against other governing views of laws. Maudlin (2009, chapter 1), for example, takes laws to be primitive, *sui generis*, entities. The inference problem applies equally to this view.

The broader idea is that these nomic entities — like the lawmaking relation N , and Maudlin-style *sui generis* laws — seem disconnected from the particular matters of fact they supposedly govern. They are primitive and seemingly completely separate from concrete objects and their properties. These governing nomic entities seem to be insufficiently connected to particular objects, like a , and their properties, to guarantee that if a is an F then it is also a G .

This ‘disconnection’ has explanatory implications too. If N holding between F and G can’t make it the case that particular F s are G s, then it seems like it also can’t explain facts about objects being G . These supposedly ‘governing’ nomic entities, then, seem unexplanatory. (Of course, defenders of such nomic entities will resist. My point is not to endorse such arguments, but to understand the motivation for nomic necessitism.)

How does this rejection of the explanatory power of ‘governing’ nomic entities motivate nomic necessitarianism? Well, if we reject governing nomic entities what are the other options for explaining why massy objects attract each other?

One option is to have a view where scientific laws are universal generalizations. This is very different from Armstrong’s view where the law that all F s are G s is the holding of the primitive necessitation relation N between universals F and G and Maudlin’s view where it’s a *sui generis* entity. This alternative view says that the law that all F s are G just is the universal generalization that all F s are G s. (Of course, on this approach not all universal generalizations will count as laws, only some subset of them.) *Humean* views of laws are typically of this form. (On the most common Humean views laws are universal generalizations that provide a particularly good summary of the patterns of events.)

This solves the inference problem — we can certainly infer from the universal generalization that all F s are G s and a is an F to a is a G . But it’s common to think that this view is unacceptable since now the law seems to merely describe events rather than explaining them. In particular, there is a striking pattern in the world, the pattern that all F s are G s. If the law just is the universal generalization that all F s are G s then it seems like it cannot explain this pattern. (Though, of course, there is more to be said for Humean-style views that we can’t go into here.)

A slight aside: Notice, then, that governing laws – those which produce the patterns of events – have to be more than just universal generalizations describing those patterns. More generally, they can’t hold in virtue of the objects and properties they purport to govern. Rather they need to involve some additional piece of metaphysics, like the primitive necessitation relation, or a Maudlin-style *sui generis* entity. This will be important to keep in mind when we discuss governing moral principles.

If we reject the explanatory role of governing laws but also Humean approaches then what enforces the regularities that we see in the world? What guarantees that massy objects attract each other?

If what enforces the regularities isn’t an external governing entity then, it seems, it has to be internal

to the properties themselves — it has to be the nature or essence of mass itself that guarantees massy objects will attract each other. This is the standard scientific essentialist position — it's part of the nature or essence of basic properties that they have the nomic roles that they do. This nomic essentialism entails nomic necessitarianism — if it's part of the essence of mass that it plays the nomic role that it does, then mass necessarily plays that role.

Again, the idea is that rejecting the explanatory power of external, governing, nomic entities, motivates the nomic essentialist in locating the explanatory power within the properties themselves. This results in the nomic necessitarianism that we have been discussing.

Interestingly, in the literature on scientific laws we don't really see views where there are external, governing laws that are metaphysically necessary. Rather, the views where laws are necessary are typically the essentialist views where laws flow from the nature or essence of the relevant properties.⁷

2 MORAL NECESSITISM

What can we learn from this about the moral case? Do these motivations for nomic necessitarianism transfer over to moral necessitism? Let's take them in turn.

2.1 MORAL ANTI-QUIDDITISM

The anti-quidditist concern was that scientific contingentism generated certain indistinguishable worlds — like those where mass and charge switched. Moral contingentism similarly generates indistinguishable worlds — there could be worlds which matched in their natural facts but where the true moral theory differed. Since these worlds have the same natural facts we could not distinguish them. But they are morally different.

Just as in the scientific case we might be concerned that if properties can switch roles, then their nature looks strangely 'thin'. If there is a world where the natural facts are the same but where rightness and wrongness switch roles, for example — things which are actually right are wrong in this world and vice versa — then it might be hard to see how such properties are more than a mere label.

A plausible response, though, is that even the moral contingentist can happily accept that moral properties do have some necessary connections to other properties. It's plausible, for example, that *rightness* is necessarily connected to what we have *reason* to do and what we *ought* to do, regardless

⁷Wilson's (2020) view where the 'many-worlds' interpretation quantum mechanics generates the space of possible worlds may be an exception. The issue is complicated but, in any case, this idea is clearly not going to apply to the moral domain since it's so tied to the specifics of quantum mechanics.

of what moral principles govern rightness. Perhaps there are other such connections too. But even one such necessary connection would make the property of rightness much less thin — the property no longer seems like a bare identity, or just a label.

But there are also epistemic worries: If there can be morally different but indistinguishable worlds how could we know the moral facts? (Bader (2017, p. 110), Dreier (2019, section 5)) However, it's not particularly clear that the necessitarian has fewer problems here. The contingentist accepts metaphysically possible worlds which have the same natural features as the actual world but different moral features. But as Rosen (2021) points out, the necessitarian's only disagreement is in claiming that such worlds are metaphysically impossible. And this difference doesn't seem to have substantial epistemic import. As Rosen puts it, 'these difficulties in moral epistemology retain whatever force they have regardless of how we classify the worlds in which the moral laws are otherwise' (p. 277).⁸

The moral analogues of the anti-quidditism worries – the worries driven by the existence of indistinguishable worlds – aren't, I think, especially forceful in motivating moral necessitism.

2.2 MORAL INTERNALITY

Internality intuitions, I think, stand a better chance at motivating moral necessitism.

Again, internality intuitions in the scientific domain suggest that there aren't governing nomic entities. Things like primitive laws or primitive nomic necessitation relations are too 'disconnected' from the events they supposedly govern. Rather, nomic essentialists suggest, explanatory power comes from the properties of the relevant objects. The attraction of oppositely charged objects is due to the nature of charge, not some additional metaphysical posit that is meant to give charge its power.

The analogous intuition in the moral case is that 'governing' moral principles don't play an explanatory role. Rather, the relevant properties of an action or event themselves have explanatory power. We don't need additional entities — primitive moral principles or necessitation relations or anything like that — to do the moral work. (Remember, governing moral principles aren't universal generalizations. The generalization that all ϕ -ing is wrong doesn't govern, but merely describes, the pattern of moral facts.)

However, some authors express completely the opposite intuition about the explanatory role of moral principles. For example, here are the opening sentences of Enoch (2019):

⁸Of course this is not uncontroversial — certain combinations of views imply that the precise location of border of metaphysical possibility matters for whether you know some fact. For example, views of justification based on safety and sensitivity combined with views where counterfactuals with metaphysically impossible antecedents are trivial have this implication.

We ought to give (much more) to famine relief. Why is this so, you ask? What, as it were, makes it so? Well, the suffering of all those starving to death and their loved ones, and the fact that giving more will alleviate it. But this is not all. What makes it the case that we ought to give to famine relief, it is very natural to say, is this suffering, and that we ought to alleviate suffering when we can...In these and in many other cases, it is very natural to refer to moral principles...in offering grounding explanations of specific moral facts.

The picture seems to be that moral principles govern and explain moral facts, analogously to governing laws of nature.⁹ I want to suggest, though, that just as there are ‘internality’ intuitions in the scientific case that suggest there aren’t governing laws of nature there are similar internality intuitions against governing moral laws.

These internality intuitions are somewhat related to a couple of familiar debate in metaethics – the debate over motivation by the good *de re* versus *de dicto* and the debate over whether we should care about non-natural properties in the way that it seems we should care about moral properties.

2.3 CONDITIONALITY OF BELIEFS AND ATTITUDES

Let’s start with this second debate. If non-naturalism is true then the moral properties are *sui generis* and non-natural. But some think that our moral beliefs and attitudes shouldn’t be conditional on such non-natural properties. It’s morally wrong, some claim, to assent to conditionals like ‘if the facts about a certain non-natural property P were different then I should not comfort by partner when they are in pain’. Your moral attitudes should not be conditional on some non-natural, causally inefficacious property.

Similarly problematic-seeming conditionals arise for the defender of governing moral principles. For specificity, think of governing moral principles on the model of Armstrong’s view – moral principles involve a primitive ‘necessitation’ relation N which might, for example, hold between the properties of *killing* and *wrongness*. (Though the points to come will apply similarly to other views of the metaphysics of governing principles.) Then, it seems, the defender of governing laws will accept counterfactuals like ‘if the facts about the primitive necessitation relation N were different then I should not comfort my partner when they are in pain’. Again, there’s an intuition some will have that this is wrong. Our moral beliefs and attitudes — my feeling that I should comfort my partner — should not be sensitive to some primitive bit of metaphysics like the relation N.

⁹Though Enoch’s acceptance of a kind of explanatory pluralism complicates matters. We will come back to this in section 3.1.

In fact, this argument targeting governing laws might be more compelling than the original argument targeting non-natural moral properties. There is plausibly a powerful response the non-naturalist has against concerns about conditionality on the non-natural moral property P. On their view the property P *just is* the property of rightness so counterfactuals like ‘if the facts about a certain non-natural property P were different then murder would not be wrong’ are completely unproblematic, since of course if the facts about rightness were different then different things are going to be right and wrong. It’s not as if what is right depends on some other strange property — it just depends on the property of rightness. (See Dasgupta’s (2017, section II) discussion of Parfit (2006), Scanlon (2003), and Enoch (2011) making similar moves.)¹⁰

Notice that this response, though, doesn’t work against the version of the argument that targets governing moral principles. In that case what is right really does depend on some strange other property — the primitive relation N. Rightness is not identical to the relation N or any facts about the relation. The non-naturalist might be able to deflect some objections by asserting that rightness *just is* the non-natural property P, but they can’t make an analogous move with respect to governing laws.

These considerations give us some reason to deny that moral facts depend upon governing moral principles — they suggest that such principles don’t have an explanatory role in the moral domain. Certainly, this line of argument is resistible. The point is just that there are somewhat compelling intuitions of internality in the moral domain. Once you see how governing laws have to involve some additional metaphysics, like the primitive relation N, then it starts to look strange that our beliefs and attitudes would be sensitive to such principles. This suggests that governing laws don’t play an explanatory role.

¹⁰Dasgupta, in fact, argues at length against the acceptability of such moves. He claims, adapting a thought expressed by Lewis (1994, p. 484) in the context of the debate about objective chance, that such moves are not ‘playing fair’.

be my guest—posit all the *sui generis* whatnots you like. But play fair in naming your whatnots. Don’t call any alleged feature of reality ‘goodness’ unless you’ve already shown that you have something we should promote. (Dasgupta, 2017, p. 301)

Analogous thoughts apply not just to *goodness* but also *rightness*, *reason* and so on. I don’t agree that such moves are unfair, though a full discussion is far too much for right now – but see Schaffer (2016) for relevant considerations.

(Though, as an aside, consider Lewis’s original thought about chance: ‘Be my guest – posit all the primitive unHumean whatnots you like...But play fair in naming your whatnots. Don’t call any alleged feature of reality “chance” unless you’ve already shown that you have something, knowledge of which could constrain rational credence.’ Interestingly, this doesn’t seem to be widely accepted in the literature on chance. It’s common to think that it’s very hard, or close to impossible, to justify the link between chance and rational credence (no matter your proposed metaphysics of chance) but that doesn’t stop people calling certain features of reality ‘chance’.)

2.3.1 EXPLANATION AND UNDERSTANDING

We can develop very similar considerations in a slightly different key – focusing on moral explanation and understanding. In particular, (Erdur, 2016) argues that it's morally wrong to take the wrongness of genocide to be explained by some non-natural property, but that is what the non-naturalist does. This kind of thought has been rejected by, for example, Blanchard (2019) and Chappell (2019) as conflating regular, first-order moral explanation with the type of explanations given by metaethics. It's not the case, these authors claim, that the non-naturalist is committed to the first-order moral explanation of the badness of genocide being about the non-natural realm.

But this type of response is less effective against an argument that targets governing laws. We might complain, analogously to Erdur, that it's wrong to take the badness of genocide to be explained by facts about the primitive necessitation relation *N*. Notice that the moral principles do seem to play a role in first-order, moral explanation. We regularly appeal to moral principles, for example that killing is (pro tanto) wrong, in first-order moral discourse. If those governing moral principles just are facts about the necessitation relation *N*, then it seems like such facts are part of the first-order moral explanation of the badness of genocide. And the Erdur-style intuition is that this is inappropriate.

We can make a similar point with respect to the epistemic analogue of explanation — understanding. It seems that your understanding of the badness of genocide shouldn't depend on a strange property like the primitive necessitation relation *N*. To adapt some rhetoric from Jackson (1998, p. 127) we can ask 'Are we supposed to take seriously someone who says, "I see that this action will kill many and save no-one, but that is not enough for me to understand why it is wrong; what really matters for my understanding is the holding of a primitive second-order universal *N* between the universals of killing and wrongness"?' Given the close connections between explanation and understanding (see, for example, Friedman (1974), Strevens (2013), de Regt (2017)) the intuition that there is something wrong about this person's moral understanding suggests that the facts about the necessitation relation *N* don't have an explanatory role to play.

Again, what we have here is a type of internality intuition — a reason to think that governing moral principles don't play the relevant explanatory role.

2.3.2 MOTIVATION

There are also internality intuitions that relate to the familiar debate over motivation by the good *de re* versus *de dicto*. The question is, very roughly speaking, whether we should be motivated to act by the rightness of an action, or by the features that make the action right. Many people have the intuition that we should be motivated by the rightmaking features – 'the weal and woe of their

children and friends, the well-being of their fellows, people getting what they deserve' etc. (Smith, 1994, p.75). Being motivated by the rightness of an action itself seems, some say, strangely thin and morally superficial.

There's a vast debate here, though, with others claiming that it's perfectly acceptable, perhaps even obligatory, to be motivated by rightness itself (see Johnson King (2020, section 1) for a brief survey). Regardless of what position we want to take about this debate there is something related we can say about governing moral laws.

Consider some action ϕ that kills many and saves no-one (and doesn't have anything else going for it). This feature of ϕ seems to be a good reason to be motivated not to do it. There seems to be something inappropriate about, in addition, needing access to the governing moral principle, for example, the primitive necessitation relation that holds between the property of being a killing and the property of wrongness, in order to be motivated. (This point is very close to one made by Salinger (2022).) Even those who would happily say that we should be motivated by rightness itself may, I think, find it uncomfortable to say that we should be motivated by facts about the primitive relation N.

If we add the reasonable-looking (though controversial) premise that we should ideally be motivated to do or not do an action by the reasons that the action is right or wrong (see, e.g. Arpaly (2002, chapter 3)), then this tells us that the moral principle is not part of the explanation of, for example, ϕ being wrong.¹¹

Again, we have a reason to think that governing moral principles don't play an explanatory role.

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We have seen a variety of ways in which internality intuitions come out in the moral domain. Again, these intuitions are not obligatory, but I think they have some force.

These internality intuitions motivate moral necessitarianism in roughly the same way as the analogous intuitions motivate nomic necessitarianism. Once we reject the explanatory role of governing moral principles there is still an explanatory task. There are moral patterns in the world – killing is typically wrong, for example. These patterns are not coincidental. If governing moral principles do not explain such patterns then the natural alternative is to appeal to something internal to the

¹¹ Perhaps better is the weaker premise that we should ideally be motivated to do or not do an action by a set of reasons that entails that the action is right or wrong. Even so, most real-life actions will not be motivated by this full set of reasons – there are likely to be just too many factors – but it does seem ideal for actions to achieve this goal. However, it is not the case, it seems, that ideally we should be motivated not to ϕ by facts about the primitive relation N. (Thanks to Mark Schroeder for discussion.)

properties themselves — it is in the nature or essence of killing and wrongness that killing is (under normal conditions) wrong. The moral principles, instead of being governing entities, follow from the nature or essence of the relevant properties. And, since the nature or essence of the relevant properties is necessary, then moral principles are necessary.

This, I think, is a compelling motivation for moral necessitism (though, as we will discuss shortly, there may be other ways to make sense of these internality intuitions without forcing you to necessitism). And, importantly, this motivation starts to make sense of the question we started with, about the apparent modal discrepancy between the moral and physical domains. What we were looking for, remember, was a rationalization of the Standard View.

If we take the view, gestured at earlier, that these internality intuitions are more compelling in the moral case than in the physical case, then this motivates being a necessitist in the moral case but not the physical. But why take this view? Part of the answer, I think, is that in the physical case the internality intuitions can seem a bit bare. What, really, is so unacceptable about the idea that properties like mass and charge are pushed around by external governing laws? In section 1.2 the key idea was an appearance of disconnection between the governing laws and the entities that they are supposed to govern. How exactly is a primitive necessitation relation N that holds between universals supposed to guarantee, for example, that planets attract each other? Suspicion about this motivates an endorsement of the inference problem.

I agree that there is *something* compelling about these disconnection intuitions – something compelling, for example, about Lewis’s claim that ‘Whatever N may be, I cannot see how it could be absolutely impossible to have $N(F,G)$ and Fa without Ga ’. But it’s really not clear how far that takes us. In particular, notice that the doubt that $N(F,G)$ could guarantee that actual F s are G s seems to be an instance of the general thought that there are no necessary connections between distinct existences. The reason, one suspects, that Lewis cannot see how it could be absolutely impossible to have $N(F,G)$ and Fa without Ga is not because of the specific characteristics of $N(F,G)$ and a . Rather, it’s that $N(F,G)$ and a seem to be distinct existences, and so, Lewis thinks, they must be able to vary independently of each other — there can’t be a necessary connection between them.

In the physical case, I suspect, internality intuitions come down to a denial of necessary connections between distinct existences. And while many people have such anti-necessary connections intuitions, many don’t. It’s a highly controversial thought, and I think we shouldn’t be particularly confident in bare intuitions about such a difficult metaphysical issue.

In the moral case things are different. Our reasoning there didn’t involve these bare metaphysical intuitions. Rather, it involved moral judgments about how a good person would reason, what they would be motivated by, and so on. These judgments suggested certain things about the nature of

moral principles and the explanatory structure of the domain. I think these moral judgments are more compelling than the bare metaphysical intuitions of the physical case.

But reasonable people can disagree, and perhaps even trying to judge the relative forcefulness of intuitions across these domains is a fool's errand. The point is just that this kind of view of the differential force of these intuitions is a reason to accept the Standard View – in my opinion quite an attractive one.

When we talked about internality intuitions in the scientific case we mentioned that part of the thought is that properties aren't just thin and inert. They aren't just sitting around, waiting for some separate nomic entity to imbue them with power – they are powerful all on their own, they have their own explanatory oomph. That moral properties like wrongness are lacking in a substantial nature or essence – and are pushed around by some distinct entity, like a primitive necessitation relations – strikes me as a strange way to think about the moral domain. One that, as we have discussed, doesn't fit with natural thoughts about moral motivation, moral understanding and so on. But the thinness and inertness of mass, on the other hand, seems consistent with our understanding of the scientific domain.

3 SOME NUANCES

The structure, up to this point, has been relatively simple. What motivates the Standard View? Here's a suggestion: internality intuitions motivate necessitism, so if such intuitions are more compelling in the moral case than the physical case then that suggests moral necessitism but physical contingentism.

But there are a few complexities, or perhaps they are better understood as objections, that we should consider in this section.

3.1 METAEXPLAINERS AND PLURALISM

The first is whether there is a way to do justice to internality intuitions while still retaining some explanatory role for governing moral principles.

In particular, there are a couple of views which, in effect, locate the explanatory power of the moral principles in a different place. The first says that moral principles do not explain moral facts, but rather they act as metaexplainers — they explain why particular natural facts explain particular moral facts. The second involves a type of explanatory pluralism — moral principles are not part of the *moral* explanation of moral facts, but they are part of the *metaphysical* explanation of moral facts.

Let's start with the metaexplainer view. Salinger (2022) suggested that this view was favored by appeal to considerations about moral motivation of the kind discussed in section 2.3.2.

The idea is that the wrongness of ϕ is fully explained by the relevant natural features of the situation — for example that it kills many and save no-one — but the relevant moral principles — for example, that killing is wrong — explain why the wrongness of ϕ is fully explained by the fact that it kills many and saves no-one.

This view perhaps captures some of the internality intuitions that we described. Salinger makes a good case that the meta-explainer view does make sense of moral motivation. The idea that we should be motivated by what explains the rightness or wrongness of the relevant actions, combined with the meta-explainer view, gets the correct result that I should be motivated to not ϕ by the fact that it kills many and save no-one — I should not also need access to some governing moral principle.

But it has a harder job with the other internality intuitions. The view still seems committed to the problematic conditionals like: if the facts about the primitive necessitation relation N were different then I should not comfort my partner when they are in pain'. On the metaexplainer view the particular moral facts are still sensitive to the the governing moral laws. Locating the explanatory force of those laws one level deeper doesn't change that.

Similarly, the concerns about explanation and understanding from section 2.3.1 remain. For example, the view has problems with the idea that our understanding of the badness of ϕ should not derive from the primitive relation N. When the meta-explainer view is developed in literature on scientific laws (Skow, 2016; Hicks, 2020; Hicks and Wilson, forthcoming) it comes with a view that understanding of a proposition P derives not just from the facts that explain P, but from the facts that explain what explains P. (The thought being that it is obvious that the scientific laws, e.g. Newton's laws, are part of what we need to understand why e.g. the ball accelerated at that rate when dropped. So if laws are meta-explainers then meta-explainers must be needed for understanding.) Applying this view in our context would lead to the bad result that we do need to grasp some governing law, say, for example, some primitive necessitation relation that holds between the property of being a killing and the property of badness. (Perhaps the defender of the meta-explainer view could try to take a different view in the moral and the scientific case — saying that scientific meta-explainers generate understanding but moral ones do not. It's hard to see what could motivate this though.)

So, the metaexplainer view doesn't fully capture these internality intuitions. This is not to say that the view is not viable, but that internality intuitions favor the view where governing principles do not play such an explanatory role.

What about the explanatory pluralist view? The view, that is, that governing laws aren't part of the *moral* explanation of moral facts but they are part of the *metaphysical explanation* of moral facts.

We discussed one type of pluralist view earlier — that of Blanchard (2019) and Chappell (2019). Their views take the border between moral and metaphysical explanation to overlap with the border between first-order moral and metaethical discourse. This, we noted, suggests that moral principles *are* part of the moral explanation of particular moral facts.

Enoch's (2019) explanatory pluralist approach has the border between moral and metaphysical explanation crosscut the border between first-order moral and metaethical discourse, since he explicitly puts moral principles on the side of metaphysical explanation. This crosscutting is slightly unintuitive but, putting that aside, perhaps Enoch's view does seem to help with the concerns about explanation and understanding from section 2.3.1. However, it doesn't seem to help with the seemingly problematic conditionals, for much the same reason as the metaexplainer view.

Does the view help with the motivation problem? Consider again the premise that we should ideally be motivated to do or not do an action by the reasons that the action is right or wrong. Perhaps Enoch would claim that this premise should be adapted so that only the moral explainers of an action are relevant for motivation, not the metaphysical explainers. That would help the view avoid the problems with motivation. This is a natural enough adaption on Blanchard and Chappell's versions of the view, where the border between moral and metaphysical explanation lines up with the border between first-order and metaethical discourse. But it's maybe a little less intuitive given than Enoch's view crosscuts this border. But full discussion would take us too far afield.

Either way, the Enoch-style metaexplainer view does reasonably well at capturing some of the motivating internality intuitions, but it's not as thoroughgoing as the view where governing laws don't have an explanatory role.

3.2 THE NATURALISM/NON-NATURALISM BORDER

A second nuance to consider. We were having this discussion against the background of non-naturalist realism about morality. But is the view of the moral domain that we have been discussing properly classified as a naturalist view?¹²

It's clear that the moral facts are explained, at least in part, by the natural facts. That a particular act has certain natural features, for example, it is a killing, explains why it is wrong. Is anything else needed, in addition to the natural, to explain the moral? The most plausible candidate are moral principles — they, together with the natural facts explain the moral. However, the view we have been discussing denies that moral principles are explanatory. So, it seems, on this view the natural facts wholly explain the moral facts. If the relevant type of explanation is metaphysical explanation

¹²Thanks to Alisabeth Ayers for pressing this point.

or grounding then the moral facts are wholly grounded in the natural facts and such a grounding claim looks like a commitment to naturalism. (See Rosen (2017b) for a discussion of this type of argument.)

Two points on this. Firstly, the question of how to properly classify views as natural or non-natural is not very important for the overall discussion of the paper. If some will call the view I discuss here a naturalist view that's not a problem.

Secondly, the picture we have developed about the moral domain is analogous to the nomic essentialist story about the scientific domain where, for example, it's part of the essences of mass, force and acceleration that they are connected via $F=MA$. Governing laws don't play an explanatory role. Similarly, in the moral case, the principle that killing is wrong flows from the essence of killing and wrongness. We can endorse this, I think, while still thinking that moral properties are *sui generis* and different in kind from physical properties – just as we can accept the nomic essentialist position while accepting the distinctness of force and acceleration. Perhaps the best way for non-naturalist way to fill this out is by claiming that the explanatory relationship between natural and the moral is not one of grounding, but rather some distinct type of moral explanation (Fine, 2012; Rosen, 2017b, section 2). But I won't discuss this further – the issue of what counts as naturalism and what doesn't is very complicated and unclear, both for reasons that are distinct to metaethics but also because of considerations about how to formulate reductive metaphysical theses more generally. (See Leary (2022) and Rosen (2017a) for discussion of various formulations of non-naturalism.)

3.2.1 ROSEN'S CONTINGENTISM

In fact, this discussion helps illustrate the connections between this paper and the recent literature on moral contingentism, notably Rosen's (2020; 2021) influential defense of contingentism.

On the face of it, there is a conflict between the project of this paper and Rosen's work since my project has been to see what can motivate the combination of scientific contingentism and moral necessitism while Rosen defends moral contingentism. But Rosen doesn't really argue for moral contingentism — rather his main point is that moral necessitism is *not obvious*. In particular, in Rosen (2021), after rehearsing his core line of argument in support of contingentism he notes that 'None of this amounts to a full-dress argument for contingentism. The point is simply to show that the view is not insane...My claim is that so conceived, contingentism is not obviously mistaken.' He leaves open the possibility that moral necessitism is (non-obviously) true.

As I noted in the introduction, I completely agree that moral contingentism isn't obviously mistaken. In fact, the comparison of the moral case to the scientific case is another way to see the

non-obviousness of moral necessitism. So, the discussion here is consistent with the spirit of Rosen's project, rather than being in conflict with it.

In fact, if we think, as mentioned in the last subsection, that the best way to classify the view I've been discussing is as a naturalist view then trying to motivate moral necessitism has ended up pushing us towards naturalism. If this is so, then discussion of this paper seems to give more support to a view, that Rosen seems to accept, that the non-naturalist should be a contingentist while the naturalist should be a necessitist.

But again, I want to remain somewhat agnostic about precisely locating the naturalist/non-naturalist border.

3.3 SCHMASS AND SCHMORALITY

One final nuance, or objection, to the discussion here. The motivation I gave for moral necessitism was modelled on a motivation for nomic necessitism. But perhaps there is an important disanalogy between these necessitisms. Part of the nomic necessitarian reasoning was that properties have their nomic roles necessarily – if there is another possible world where it looks like $F=ma$ is violated and $F=2ma$ is true then, in fact, that is a world without mass. However, in that world there is some 'mass-like' property – call it 'schmass'. So, even though it's necessary that mass connects to force and acceleration in the way that it does, there could have been some other property that acts differently.

However, some might have the intuition that the moral domain is not analogous. Rightness, some might think, is necessarily instantiated. It can't be the case that, instead, some other property, governed by different principles, is instantiated. There is a sense, then, in which the necessitism of nomic necessitism might not be as thoroughgoing as the necessitism that some intuited about morality.¹³

But should the non-naturalist want to commit to this more thoroughgoing necessitism? I'm not sure. It's highly plausible, for a non-naturalist, that there could be other non-natural, *sui generis*, somewhat morality-like properties that are governed by different principles. In fact, such properties might actually exist but we call them aesthetic or epistemic properties, rather than moral ones.

But still, isn't it necessary that moral properties, like rightness, are instantiated? I find it somewhat hard to see what the motivation for this is, given a non-naturalist picture where these properties are *sui-generis* and fundamental. What could it be that guarantees that such properties are instantiated?

I won't discuss this further though. I'll just note that some may object to the motivation I discussed on the grounds that it doesn't achieve a thoroughgoing enough necessitism. (Though notice that internality intuitions are consistent with this more thoroughgoing necessitism, they just don't get us

¹³Thanks to Stephanie Leary for raising this issue.

all the way there.) But whether this type of necessitism is one that the non-naturalist should want is not obvious.

4 CONCLUSION

So, where does all that leave us? The aim of the paper was to explore the discrepancy in the mainstream views about the modal status of the moral and scientific domains and, in particular, to see what could be said for the Standard View.

I made a suggestion for how the Standard View can be motivated. Necessitism, about both moral and scientific domains, is naturally motivated by ‘internality’ intuitions. And, given that these intuitions are more forceful in the moral domain than in the scientific domain, that motivates the Standard View.

Along the way we noted a series of other interesting points. Firstly, the Standard View is really rather strange – the discrepancy between the scientific and moral domains needs motivation. Secondly, a class of motivations for necessitism can be understood as all related to certain intuitions about the explanatory structure, particularly the ‘internality’ of explanations, of the domains. Thirdly, while one major motivation for scientific necessitism – anti-quidditism – doesn’t seem to transfer over well to moral necessitism, internality intuitions do better. And fourthly, internality intuitions come out powerfully in the moral domain when considering moral motivation, moral understanding, and so on.

As I noted in the introduction, I don’t think anything I’ve said forces you to accept the Standard View. I’ve suggested a motivation but I don’t think it’s obligatory. It’s perfectly possible to be an essentialist in the physical domain, for the type of reasons discussed in section 1. And it’s perfectly possible to reject the ideas about epistemology, moral motivation, and so on that lead us towards necessitism in the moral domain.

There is another interesting option if you are skeptical of the motivation I’ve suggested. You could accept the Standard View but reject non-naturalism. Non-naturalism was our starting assumption but if we start with a naturalist picture there seems to be an easier path to the Standard View.

Consider a naturalist picture where moral facts are fully grounded in, and hence nothing over and above, the natural facts. Given the commonly accepted principle that if A grounds B then necessarily if A then B, naturalism seems to generate necessary conditionals linking the natural and the moral – these look like moral principles. So, there is a case to be made that naturalism results in moral necessitism.

Further, this kind of motivation doesn't carry over to the scientific case. Principles linking the natural and the moral might plausibly hold in virtue of the moral being reduced to the natural but it's not plausible that principles linking mass and charge, for example, hold in virtue of reduction. So, a discrepancy in modal status between moral and scientific principles is rather unsurprising.

Perhaps the ease with which naturalism accords with the Standard View constitutes a powerful argument for naturalism. This is especially so if, as we discussed in the last section, the view of the moral domain I've been developing is best classified as a naturalist view.

I think there is something attractive about the motivation for the Standard View I've given. If you don't find this motivation compelling though, then the standard-ness of the Standard View becomes even more puzzling. Perhaps the right reaction in that case is to reject the Standard View or reject non-naturalism.

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