

Norms, Natures and God

Alexander R. Pruss

Contents

Acknowledgments	5
Acknowledgments	6
Chapter I. Introduction	7
1. Introductory Remarks	7
2. Aristotelian Natures	8
3. Mersenne Problems	10
Chapter II. Ethics	13
1. Normative ethics and boundaries	13
1.1. The rule of preferential treatment	13
1.2. Other examples	16
1.3. Standard normative systems	16
1.4. Vagueness	16
1.5. Necessity	16
2. Metaethics	17
3. Flourishing	17
4. Supererogation	17
5. The great chain of being	17
Chapter III. Applied ethics	18
1. Double Effect	18
2. Medical ethics	18
3. Environmental ethics	18

CONTENTS	4
4. Marriage and other natural relationships	18
Chapter IV. Epistemology	19
1. Priors	19
2. Infinity, self-indication and other limitations of Bayesianism	19
Chapter V. Mind	20
Chapter VI. Semantics	21
Chapter VII. Metaphysics	22
Chapter VIII. Laws of nature and causal powers	23
Chapter IX. Harmony, Evolution and God	24
1. Harmony	24
2. Explaining harmony by natures and evolution	24
2.1. Number of natures	24
2.2. Nomic coordination	24
2.3. Fit to DNA	24
2.4. Fit to niche	24
2.5. Nature zombies	24
3. Explanations of moral norms	24
3.1. Global aesthetic-like features	24
3.2. Family	24
3.3. Restitutive justice	24
4. Explaining harmony theistically	24
Chapter X. Eternal Life and Fulfillment	25
Chapter XI. Aristotelian Metaphysical Details	26
1. Introduction	26
2. Individual forms	26

	CONTENTS	5
2.1.	Distant conspecifics	26
2.2.	Ethical counting	27

Acknowledgments

Central ideas for this paper were developed as part of the Wilde Lectures in Natural and Comparative Religion at Oxford University, Trinity Term, 2019.

Acknowledgments

I would like that thank ... Nicholas Breiner??

CHAPTER I

Introduction

1. Introductory Remarks

I have a human nature or human form that governs my voluntary and involuntary activity. Much as the government governs the activity of the people *both* by legislating norms and encouraging people to follow the norms, my nature's governance also has the dual role of setting norms for me and influencing my activity to follow these norms. This nature is something real and intrinsic to me, something that makes me be what I am, a human being.

When extended to other fundamental beings besides humans, the above is the center of Aristotle's metaphysics. I will show that this center is extremely fruitful, providing compelling solutions to problems in ethics, epistemology, the philosophy of mind, semantics, metaphysics and philosophy of science. Many of these are prominent problems that have been the subject of much discussion, such as the problem of priors in Bayesian epistemology or of vagueness in semantics, while others are problems that have not attracted much attention, such as the problem of seemingly arbitrary detail in moral rules. I shall discuss these solutions in Chapters II–VIII.

The ability to give unified solutions to an array of problems spread through many areas of philosophy gives one a very good reason to accept the central Aristotelian theses. However, in Chapter IX, I will also argue that this center cannot hold on its own, and the way to be an intellectually satisfied Aristotelian, especially after Darwin, is to be a theist as well.

There are several lines of thought readers attracted to the unified Aristotelian solutions may follow. Some may deny that the problems facing the central Aristotelian theses are as

serious as I contend. Some may agree that the problems are serious, and regretfully reject the Aristotelian apparatus, either because they take the cost of the theistic solution to be too great or are unconvinced that the theistic solution works on its own terms. Others may agree that the problems are serious but find some other solution than the theistic one. But some, I hope, will conclude that the Aristotelian solutions are so attractive, and the theistic solution to the problems is sufficiently plausible, that this book provides not only a good reason to accept the Aristotelian center but also to accept theism.

We will be elaborating the metaphysical apparatus of what I have been calling the “Aristotelian center” gradually?? as we move through the problems and details of their solutions. At the same time, not every detail of the solutions needs to be adopted by the reader to find the general Aristotelian strategy compelling. Finally, in Chapter XI we will collect together the needed aspects of the Aristotelian metaphysics and discuss in greater detail the metaphysics needed.

??paths through the book?

In the rest of this chapter, we will do two things. First, I will sketch the central Aristotelian metaphysics in slightly greater detail. Second, I will discuss a neglected science-based argument from the 17th century polymath Marin Mersenne for the existence of God. This argument does not work, I will argue. However, an important thread running through this book will be how “Mersenne problems” analogous to the problems in science raised by Mersenne arise in many areas of philosophy and provide a compelling case for the existence of Aristotelian natures or forms.

2. Aristotelian Natures

According to Aristotle, reality is fundamentally built out of substances, which are real mind-independent entities. These substances are not limited to microphysical entities like

quarks and photons—indeed, it is not even clear that the microphysical entities are substances at all¹—and indeed Aristotle takes biological organisms like oak trees and human beings to be paradigm cases of substances.??ref

Each material substance has a form or nature—I will use the terms interchangeably in this book. This form or nature performs a number of roles including unifying the matter of the substance into a single thing, setting norms for the structure and activity of the substance, and guiding the actual development and activity of the object. The nature of the oak tree is not merely an arrangement of its particles, since an arrangement lacks normative force. In living things, the form of the substance is its life or soul: it makes the substance be alive.

Natures are innate to their substances. Nonetheless, this statement underdetermines an important question, namely whether substances of the same sort—say, red oaks—all numerically share one nature or each individual substance has its own nature, albeit in relevant respects??forwardref they are all exactly alike in substances of the same kind. For two things could in principle share something innate to them. It could be that all people have the same soul, much as two conjoined twins could have the same stomach. Aristotle scholarship is divided on the question whether Aristotle believed in “individual forms”, one per substance. However, at least one of the advantages of an Aristotelian theory of form will be accentuated if we accept individual forms, as we shall see.??forward Further, there is good philosophical reason to take natures to be individual, as we shall see in ??forward. Thus, I shall take natures to be individual. Nonetheless, if you like shared forms, *many* of the benefits I will draw out for a theory of forms will be ones you, too, can have.

¹The fact that in quantum mechanics, one can have a superposition of states with different numbers of particles is evidence that particles are not substances.??

3. Mersenne Problems

Marin Mersenne was a monk, philosopher, theologian and the 17th century equivalent of the arXiv preprint archive—he was a crucial line of communication between a broad variety of thinkers and scientists. He drew on his broad knowledge of the science of the time to offer an argument that begins with many pages of questions, of which the following are representative:

Who gave more strength to the lion than to the ant? Who made it be that earth is not in the moon's place, and that the planets aren't larger or smaller, closer or further? Who has ordered all the parts of the world as we see them? ... Why is the moon 56 earth-radii away from the earth? Why is the sun 1182 [earth-radii] away from us at its apogee? ... and why is its distance at perigee not other than 1101 [earth-radii]? ... I could equally ask you about Saturn, and Jupiter, and Mars ...²

These “Mersenne questions” go on and on, with a mind-numbing number of examples. And Mersenne has one answer to all these questions, posed in a rhetorical question: “Was it not God?”^{ref}

The argument sounds similar to fine-tuning arguments for theism which became popular in the late 20th century. These arguments, too, list a variety of physical parameters and offer God as an explanation of them all.^{ref} But there is a crucial ingredient that the fine-tuning arguments, namely that the parameters listed are needed for intelligent life as we know it, or for some other valuable trait of the universe, like its amenability to scientific investigation.^{ref} The basic idea behind the fine-tuning argument is, very roughly, that nature is indifferent to value but God cares about value, so the fact that the parameters are valuable provides evidence for theism over naturalism.

It is, thus, natural to look in Mersenne for arguments that it is particularly valuable for the moon to be 56 earth-radii from the earth, but at least in this work, Mersenne does not

²The moon-earth distance is approximately correct. The earth-sun distance is an order of magnitude off.

supply them or even hint at them. Nor is there any argument that it is better that lions are stronger than ants, or that it is better for the moon to orbit the earth rather than the other way around. If Mersenne is giving a fine-tuning argument, the argument is oddly incomplete. And Mersenne's penchant for adumbrating detail at great length makes it unlikely that he has simply omitted such a crucial part of the argument.

Rather, it appears that Mersenne is simply looking for an explanation of the scientific details he cites, sees no prospect of a scientific explanation, and offers theism as the alternative. And indeed it is only in the 20th century with computer models of solar system formation that we have much in the way of plausible answers to Mersenne's questions about the distances between solar system bodies. For instance, the leading theory of lunar formation involves the earth being hit by another body and a large chunk being pushed into orbit. Given assumptions about the impact, one can then explain the resulting distance between the earth and the moon. But notice that such an explanation only gives an answers to the Mersenne question about the earth-moon distance at the cost of raising similar Mersenne questions about the parameters of the impact such as the mass distribution of the pre-impact earth, the angle and location of impact, the mass distribution of the impacting body, etc.

Mersenne gives a dizzying number of examples, and he seems to relish the sheer arbitrariness of the numbers like "56" and "1182". While this has some rhetorical force, it also has argumentative force. The more arbitrary-looking parameters the parameters are, the less epistemically likely it is that they are what they of necessity or that good scientific theories will predict their exact values. And the greater the number of parameters, the less likely it is that science can provide an explanation of them all.

But Mersenne has a fatal argumentative flaw. Even if we grant that it is very unlikely that a future science will predict these exact numbers, there is always the possibility of a stochastic explanation, one that does not predict exact values, but supposes a random natural process that generates a set of values at random. Now, if Mersenne had an argument showing that the values of the parameters are suspiciously valuable—say, necessary

for intelligent life—then a stochastic explanation might not be as good as a theistic one. From a Bayesian point of view, we might be able to argue that it is extremely unlikely that a random selection of parameters would have such value, but not nearly so unlikely that God would choose such parameters and hence the data supports theism over randomness. But given that Mersenne makes no case that the parameters have anything to recommend them to God for creation, we have no reason to think that the probability of God choosing is these parameters is any higher than the probability of them arising randomly, and hence we have no support for theism.

Suppose, however, that we had a Mersenne-type case where randomness was not a satisfactory explanation. Then there would still be one more problem with the argument. If one is willing to deny the Principle of Sufficient Reason, one could simply say that the parameters are what they are and there is no reason why they are like this—that they are a *brute* fact. This, however, is less satisfying than the stochastic answer, for adverting to brute fact should be a last resort, to be chosen when no explanation is available. But here there is an option, namely theism.

In the rest of the book we will find that if we turn our attention away from science and towards philosophy, we will find a myriad of cases like Mersenne's where there are seemingly arbitrary parameters. But these will be cases where a randomness explanation is implausible and bruteness is not satisfactory. However, unlike in Mersenne's case, I won't be arguing for theism as providing the solution. Rather, the solution will be Aristotelian metaphysics of form.

CHAPTER II

Ethics

1. Normative ethics and boundaries

1.1. The rule of preferential treatment. Let us begin with a more detailed discussion of an example from Thomas Aquinas's discussion of the order of charity. Aquinas thinks, along with common sense, that those who are closer to us have a greater moral call on us. Thus, if it is a question of bestowing the same good on one of two people, where one is more closely related to us, we should benefit the closer one. But Aquinas writes: "The case may occur, however, that one ought rather to invite strangers [to eat with us], on account of their greater want."^{ref} And then he raises the question of what one should do "if of two, one be more closely connected, and the other in greater want."^{ref}

We might hope that here Aquinas would give us some clever rule for weighing connection against need. But instead he writes very sensibly: "it is not possible to decide, by any general rule, which of them we ought to help rather than the other, since there are various degrees of want as well as of connection".^{ref} It is tempting at this point to throw up one's hands and simply say that in these in-between cases there is no fact of the matter as to what should be done, or both options are permissible, or else relativism applies to the case. But that would not do justice to the way we agonize when we find ourselves in such a difficult situation, trying to discover the truth of the matter. (It is interesting to note that the most common real-life moral dilemmas tend to be

like these kinds of cases, rather than highly controversial questions about trolleys, strategic bombing or bioethics much discussed by philosophers.) And indeed Aquinas maintains a realist attitude to the question while simply offering this advice for how to figure out the answer in a particular case: “the matter requires the judgment of a prudent man.”?https://www.newadvent.org/summa/3031.htm#article2

We can think of this as the problem of specifying a function $f(r, a, s, b)$ of four variables, two of them, r and s , being degrees of relation and the other two, a and b , being degrees of benefit, where the function takes one of three values corresponding to whether it is obligatory, permissible but not obligatory or impermissible to bestow a benefit of degree a on a person with relation of degree r to the agent in place of bestowing a benefit of degree b on someone related to degree s .

In fact, the problem of a rule of preferential treatment is much more complicated than the above indicates. First, the *kinds* of benefit and relation also matter: “we ought in preference to bestow on each one such benefits as pertain to the matter in which, speaking simply, he is most closely connected with us.”?ref So the function will depend not merely on quantitative features but qualitative ones. Second, although Aquinas does not mention it here, the evaluation will no doubt depend on various features of the circumstances. And, third, in practice instead of choosing between two certain benefits, we are choosing between two probability distributions over the space of possible benefits.

Now, as Aquinas admits, we do not know what the moral evaluation function for choices between benefits to different people is. But abstractly speaking there is some such function, even if we do not know what it is, just as there is a function that assigns to each person alive now the number of hairs they now have, even though we cannot specify any of the values of the function. And we have good reason to expect the moral evaluation function to be very complicated. Indeed, probably the only serious proposal for a relatively simple function f here is the utilitarian suggestion that $f(r, a, s, b)$ yields obligation when $a > b$, mere permission when $a = b$ and prohibition when $a < b$. But this utilitarian

suggestion betrays the intuition that the degrees of relation r and s , much less the kinds of benefit and relation, are relevant to the moral evaluation.???

Indeed, the function is apt to look arbitrary. Fix the degrees of relationship to be one's parent and a total stranger, and fix a specific and certain financial benefit of \$100 to one's parent, and fix the circumstances. Then as we vary the financial benefit to the stranger from zero to infinity, we will presumably initially have a requirement of benefiting the parent (it would be wrong to give \$1 to a stranger instead of \$100 to a parent in ordinary circumstances), then a permission either way, and then a requirement to benefit the second party. There will be boundaries between these regions of logical space, and these boundaries will look as arbitrary and contingent as the boundaries between different tax brackets. Like the tax brackets, some proposals for boundaries will be *clearly* unreasonable, but there will be many proposals that appear reasonable. And whatever the actual boundaries will look arbitrary.

Of course, seemingly arbitrary numbers can come out of an elegant and simple rule: it seems arbitrary that the fifth and sixth digits of π are 5 and 9 respectively, but there is an elegant mathematical explanation. But apart from the utilitarian proposal, we do not have any at all plausible simple proposal for f .

These seemingly arbitrary boundaries in the order of charity raise call out for an explanation at least as much as the exact distance between the earth and the moon does. Just as it seems implausible that the distance between the earth and the moon *must* be exactly what it is, it seems implausible to think that the boundaries must be exactly where they are—unless the utilitarian is right about f being very simple.

In fact, the ethics case calls out for an explanation even more than Mersenne's scientific examples did. For we might be able to swallow the earth-moon distance being a contingent and brute unexplained fact. But a brute fact seems unfitting for a moral rule. A claim that it just so happened, with no explanation at all, that you should ϕ undercuts the moral force of the alleged moral obligation. We expect anything seemingly arbitrary in our moral norms to have an explanatory ground.

To further argue for this point, consider a version of Divine Command Theory on which obligations are divine commands, and God rolled indeterministic dice to decide which actions to command, and by chance God's commands coincided with our common-sense morality, though they could just as well have commanded cruelty and dishonesty. A Divine Command Theory on which it is mere chance that cruelty is forbidden rather than commanded provides an unacceptable answer to the Euthyphro problem.?? Intuitively, a set of injunctions that is as arbitrary as that cannot constitute morality. But this point generalizes beyond divine command theory. Suppose that that we have some preferential treatment rules that are brute and contingent, and could just as well have enjoined on us the anti-utilitarian rule that we should always prefer the lesser benefit. Then whatever these rules are, they do not constitute morality, but at best happen to agree with morality in content.

Thus, even if there is some bruteness in the rules of preferential treatment, the rules in our world must be generated in a way that makes rules such as the anti-utilitarian rules not be among the possible outcomes. But this makes it very unlikely that the rules would be brute. For what force would limit the brute rules to avoid unacceptable options? Such a view of limited bruteness would be akin to a view on which banana peels can come into existence *ex nihilo*, but not where we might trip over them.

1.2. Other examples. But before I continue the discussion of the possible explanation for the above ethical Mersenne question, let me follow Mersenne's lead and multiply the examples, in order to defend against potential answers that only work in some cases. ??

1.3. Standard normative systems.

1.4. Vagueness.

1.5. Necessity.

2. Metaethics

3. Flourishing

4. Supererogation

5. The great chain of being

CHAPTER III

Applied ethics

- 1. Double Effect**
- 2. Medical ethics**
- 3. Environmental ethics**
- 4. Marriage and other natural relationships**

CHAPTER IV

Epistemology

1. Priors

2. Infinity, self-indication and other limitations of Bayesianism

CHAPTER V

Mind

CHAPTER VI

Semantics

CHAPTER VII

Metaphysics

CHAPTER VIII

Laws of nature and causal powers

CHAPTER IX

Harmony, Evolution and God

1. Harmony

2. Explaining harmony by natures and evolution

¹

2.1. Number of natures.

2.2. Nomic coordination.

2.3. Fit to DNA.

2.4. Fit to niche.

2.5. Nature zombies.

3. Explanations of moral norms

3.1. Global aesthetic-like features. ²

3.2. Family.

3.3. Restitutive justice.

4. Explaining harmony theistically

¹This section owes much to discussion in my mid-sized objects seminar, and especially to Christopher Tomaszewski's suggestions on the explanatory powers of forms.

²I am grateful to Nicholas Breiner for drawing my attention, in the context of justice, to this form of explanation of moral features.

CHAPTER X

Eternal Life and Fulfillment

CHAPTER XI

Aristotelian Metaphysical Details

1. Introduction

2. Individual forms

Recall the debate whether forms are individual—numerically different ones for different members of the same kind—or shared by all members of the same kind.

In ??backref, we saw that there is some advantage to an individual form account of ethics: individual forms intuitively do a little more justice to the personal nature of ethical obligation.??[but conjoint twins] ??add But are there any other arguments for taking forms to be individual?

I believe so. An initial attempt might be to argue that then the numerically same entity—the form—is present in multiple places at once. I do not find this argument compelling, however, as I do not think multilocation is absurd.??ref But if you do, that is one argument. Let us consider some others.

2.1. Distant conspecifics. Suppose a shared form theory is true. Now, imagine that in our galaxy there is only one human being, Adam, and imagine that in a galaxy far, far away, God creates a humanoid comes into existence, with no genetic connection to Adam, but with a form that is just like Adam's: this form unifies matter in the same way as Adam's form does, it imposes exactly the same norms on the form's owner as the human form does on Adam, and it causes the same structure and behavior as the human form does for Adam.

At this point we have a dilemma: either the form of this humanoid must be numerically the same as Adam's or not. Suppose it must be numerically the same as ours. Then

somehow simply by creating something in a galaxy far, far away, God causes an entity in *our* galaxy—Adam’s form—to become multilocated. This seems counterintuitive.

Suppose that the form does not need to be numerically the same as Adam’s. In that case, we have admitted that there can be numerically different forms with the same broadly functional features (including the normative functions). This means that the question of whether you and I have the numerically same form is not settled by noting that the forms have the same functional features. Indeed, now the question whether your and my form is numerically different or the same becomes a metaphysical question that no empirical data is relevant to the settling of. There is nothing absurd about there being such metaphysical questions. But it is some advantage to a theory if raises fewer such questions, having fewer degrees of freedom. And if one does accept a theory where it is possible but not logically necessary that different individual substances have numerically different forms, then one really shouldn’t be accepting that in practice you and I share a form. At best one should be agnostic on this question.

2.2. Ethical counting. ...forms are the most important, so why not count by forms rather than individuals, especially in cross-species contextst??