Norms, Natures and God

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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 all[1]—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.

[1]The 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 ...??refs[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

[2]The 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. Motivating examples.

1.1.1. *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.???refs

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 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.

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, and to make clear how widespread the problem is.

1.1.2. *Risk and uncertainty.* Some people—perhaps you—would accept a 92% chance of winning a thousand dollars at the cost of an 8% chance of losing ten thousand. I wouldn't. I say that both I and they are reasonable. On the other hand, someone who (in ordinary circumstances) rejects a 99.9999% chance of winning a thousand dollars at the cost of a 0.0001% chance of losing ten thousand and someone someone who accepts a 10% chance

of winning a thousand dollars at the cost of a 90% chance of losing ten thousand are unreasonable. It is well known that attitudes to risk vary between people, and while there are unreasonable attitudes, it is very plausible that there is a broad range of reasonable attitudes.??refs So, as we vary the probabilities of wins and losses, we move between cases where accepting the risk is unreasonable, to cases where both accepting and rejecting are reasonable, to cases where rejecting is unreasonable.

This, once again, raises the Mersenne problem of why the transitions between the various evaluative categories lie where they do. And of course things are more complicated than described above. The rational evaluation function will depend not just on the probabilities involves but also on the values of the potential gains and losses.

While in the previous case, utilitarianism provided a neat but implausible solution, so too in this case, expected utility maximization provides a neat but implausible solution. On expected utility maximization, you are rationally required to accept a chance p of a good of degree α despite a chance q of a bad of degree β against a status quo of value zero just in case the expected utility $p\alpha + q\beta$ is strictly positive; when it is zero, you are permitted but not required; and when it is negative, you are not permitted. One problem with this solution is it requires all goods to be neatly quantifiable (cf. the next example for difficulties related to that). But the more serious problem is that it requires an implausibly negatively judgmental attitude towards ordinary people's attitudes to risk.

Indeed, here is a plausible trio of theses about risk that are incompatible with expected utility maximization:

(1) There is no upper bound on possible finite utilities.

(2) A decade of the worst tortures the KGB could think of has a finite negative utility.

(3) There is no possible good G of finite utility such that one would be rationally required in accepting a certainty of a decade of the worst tortures the KGB could thing of one for a one in billion chance of G.

For as long as $(1/1000000000)\alpha + \beta > 0$, where α is the value of G and β is the (highly negative) value of the tortures, one would rationally required to accept the deal on expected utility maximization, and by (1) and (2) there exists a possible G that makes $(1/1000000000)\alpha + \beta$ strictly positive. Hence, we should reject expected utility maximization, and and absent expected utility maximization, it is likely that the rationality evaluation function for risk will be messy and arbitrary-looking.

The most plausible thing for the apologist for expected utility maximization to reject is the no-upper-bound thesis (1). Here is one way an argument for such a rejection might go. First, there is a maximum intensity of goods that our brain can handle. Second, goods become significantly less valuable as they are repeated, decreasing in such a way that the sum of the values of any goods you could have over an arbitrarily long life has an upper bound.??refs

But the repetition thesis is only plausible when boredom and other memory-based phenomena are in play. Suppose you have lived for a very long time. Then you suffer from partial amnesia: you have lost all episodic memory of your past meals and of your past pinpricks. You are offered what you are reliably informed is the most delicious and wholesome dessert every prepared by the best chef on earth, a dessert which you are told you've eaten some large number n times in the past, and you may eat the dessert at the cost of a one in ten chance of a small pinprick. It's clearly worth it, regardless of what n is. So now suppose this happens to you every day of a very long life. The marginal value of each such dessert (i.e., the amount it contributes to total lifelong utility), absent memories of past desserts, must be at least one tenth of the marginal disvalue of the pinprick, at least given expected utility maximization. But the disvalue of the pinpricks clearly does not tend to zero with forgotten repetition. Hence, the value of the desserts does not tend to zero. And hence for any finite utility bound, enough such desserts will exceed the bound.

In addition to Mersenne questions about risk and prudential rationality, there will be Mersenne questions about risk and morality. For instance, what risks we may morally impose on others in exchange for a good to ourselves depends in a complex way on one's

relationship to these others, the probability of the risk, the degree to which these others accept the risk, the benefit to self, and so on. When I drive, I risk killing other drivers, their passengers, pedestrians by the side road, and so on. But the probability of these awful outcomes is very small, and typically other people on or by the road have accepted reasonable risks (or have had them accepted by proxies, in the case of children), so these dire but unlikely outcomes typically do not render it impermissible for me to go to the grocery store to pick up ice cream.[1] But when the risk is higher, say because I am tired and sleepy after a long day and hence less likely to be a safe driver, the matter becomes less clear. At some point, as the risk increases, it becomes impermissible to go to the grocery store for ice cream. And we have the Mersenne question of why the switchover happens where it does.

Expected utility utilitarians[2] will have a nice answer to this problem. But utilitarianism, as already noted??ref, has many highly counterintuitive implications.

1.1.3. *Orderings between goods.* Under ordinary circumstances, it would not be reasonable to choose to be a mediocre mathematician rather than a superb musician. But suppose one's choice is whether to be a superb musician or a superb mathematician? Here we are dealing with incommensurable goods and either choice is reasonable.

But now let's ask this general question: Is it is reasonable to choose to be a mathematician of quality α rather than a musician of quality β? Again, we have a function that takes a number of variables, including α and β and the circumstances, and tells us whether (a) it reasonable to opt to become a mathematician but not reasonable to opt for music, or (b) both are reasonable, or (c) opting for music is reasonable but opting for mathematics is not. And, just as before, it is very plausible that the function is extremely complex.

The problem obviously generalizes to all the many kinds of pairings of incommensurable goods there are. In each case, there will be some function of many variables encoding

[1] I leave open the question whether concerns about global warming render it impermissible.

[2] As opposed to actual-outcome utilitarians who evaluate actions morally based on the actual utilities that would result from an action.??refs

the correct rational evaluation of the situation, and we will have the Mersenne question of what grounds the fact that this function, rather than one of the infinitely many others, encodes the correct rational evaluation.

We also have Mersenne questions here that involve qualitative rather than quantitative comparisons. Other things being equal, social pleasures are better than solitary ones. This seems rather arbitrary. What makes it be so?

In the preferential treatment and moral risk examples, utilitarianism offered a nice solution. But the problem of incommensurable goods is also going to be a problem for any plausible utilitarianism. Utilitarianism comes in two varieties, depending on whether the good is pleasure or the good is satisfaction of desire. As Mill famously noted, it is essential to the plausibility of utilitarianism that one be able to make a distinction between lower and higher pleasures, so as to get the common-sense conclusion that it is better to be Socrates unsatisfied than to be a satisfied pig.

But once one makes the distinction between lower and higher pleasures, or lower and higher desires, incommensurability quickly shows up, since different kinds of pleasures and desires do not simply come in a linear ranking. Let's suppose that you get more enjoyment and satisfaction of the desire for truth out of mathematics and more enjoyment and satisfaction of the desire for music out of music, and let us suppose (contrary to typical situations) that your choice of life will not affect anyone else. Then it seems right to say that the mathematical and musical lives are incommensurable even on utilitarianism. But even if they are not incommensurable, but equal or one is better than the other, we still have a Mersenne problem as to what level of quality of mathematical life exceeds, equals or falls below what level of quality of musical life. And in fact it will be more complex than that, in that the quality of a mathematical or musical life is clearly multidimensional.

One might try to get out of this by hoping for some precise definition of the degree of pleasure or the strength of a desire. Perhaps there is a neural correlate of the degrees of pleasure or the strengths of desire that can be quantified in a single number. But such an

approach is likely to lead to the swinish utilitarianism that Mill wisely rejects. For presumably the neural correlate can be manipulated directly, and the pig could be given pleasures which, in terms of neural intensity, exceed the highest of Socrates' refined joys, and could be made to have a degree of intensity of desire for its swill far exceeding Socrates' desire for virtue.

Moreover, any neural approach is likely to fall prey to questions of cross-species comparison. While pig and human brains are similar, they are not the same, and states of pleasure and desire are likely to be merely analogical. It is clear that some comparisons between human and porcine goods are possible: a tiny human pleasure is worth less than a great porcine one. As one increases the human pleasure and/or decreases the porcine one, there will come cases where neither of the two is to be preferred, and then eventually cases where the human pleasure is to be preferred over the porcine one. But where exactly the cross-over points are is not something we can just read off the neural correlates. And things get even messier when we compare humans to possible beings that have no brains, such as intelligent robots (if these are possible) or aliens with very different biochemistry.

And even if one could give some such precise definitions, we would still have the Mersenne problem of why *this* definition corresponds with true value rather than some other.

1.1.4. *A miscellany of other cases.*

1.2. Standard normative systems.

1.3. Vagueness.

1.4. Necessity.

CHAPTER III

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[1]

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3.2. Family.

3.3. Restributive justice.

4. Explaining harmony theistically

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

[2]I 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??