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Normative Appeals to the Natural

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Abstract

Surprisingly, many ethical realists and anti-realists, naturalists and not, all accept some version of the following normative appeal to the natural (NAN): evaluative and normative facts hold solely in virtue of natural facts, where their naturalness is part of what fits them for the job. This paper argues not that NAN is false but that NAN has no adequate non-parochial justification (one that relies only on premises which can be accepted by more or less everyone who accepts NAN) to back up this consensus. I show that we cannot establish versions of NAN which are interesting in their own right (not merely as instances of a general naturalistic ontology) by appealing to the nature of natural properties or the kind of in-virtue-of relation to which NAN refers, plus other plausible non-parochial assumptions. On the way, I distinguish different types of 'in virtue of' claims. I conclude by arguing that the way in which assessment of meta-ethical hypotheses is theory-dependent predicts the failure of non-parochial justifications of NAN.

1 Introduction

It seems very plausible that nothing is brutely right or wrong, good or bad, admirable or reprehensible, or just or unjust. Rather, if something has a particular normative or evaluative property, it has that property in virtue of some of its other properties.[1] But if evaluative facts hold in virtue of other facts, then what kind of facts are eligible to play this kind of normative role?

[1] I'll use the terms 'evaluative' and 'normative' interchangeably. This is a harmless simplification here.

There are at least four different views we could take if we deny that (0) evaluative facts can hold brutely, in virtue of no other facts. (1) Evaluative facts hold in virtue of other facts, but there is no particular restriction on what kind of facts these must be. (2) Evaluative facts hold solely in virtue of non-evaluative facts. This view would allow that evaluative facts can hold, even in the actual world, at least partly in virtue of supernatural facts. (3) Evaluative facts hold solely in virtue of natural facts. If evaluative facts fell into the category of natural facts, then this view would allow that some evaluative facts can hold solely in virtue of other evaluative facts. (4) Evaluative facts hold solely in virtue of natural facts which are specifically non-evaluative.

None of these views is obviously incorrect, and each merits attention. My focus will be on (3) and, since it entails (3), (4). In some respects, ordinary evaluative practice accords with these views. The facts we take to make things good and bad often plausibly count as natural and non-evaluative. I might say that the feeling in my shoulders is bad because it is painful. Insofar as facts about painfulness are natural, my judgment appeals to a fact that is natural.[2] We think that we have the right to vote in virtue of being adult citizens, certain individuals have the authority to ban patrons from certain bars in virtue of being their proprietors, and so on. Insofar as societal roles count as relevantly natural, this sort of ordinary talk about rights appeals to natural facts.

But typically our ordinary judgments take no explicit stand on the naturalness of the facts we identify as those in virtue of which evaluative facts hold. When we make such judgments as 'What you did was bad because it hurt little children,' we seem to be committed to no more than that what fits the facts in virtue of which evaluative facts for this job is their being the particular facts they are – facts about painfulness, harm, deceitfulness, consent, and so on. Many of us would still be willing to make the judgments we make even if the facts in question didn't fall into the category of natural facts. In this respect, then, ordinary evaluative practice seems not to support (3) or (4).

[2]Until section 3, any claims about which properties are natural will be merely provisional or illustrative.

Many philosophers today, however, want to make such stronger claims as that evaluative facts hold solely in virtue of natural facts, that it is natural facts which ground or explain evaluative facts, and the like. One frequently finds such claims even in contexts which claim to be neutral on such issues as whether evaluative properties themselves fall into the category of natural properties. Such is the context of all of these claims:

> [I]f something is "good" . . . then that must be so "in virtue of" its being a "certain way", that is, its having certain "factual [naturalistic] properties." (Kim 1993: 235.)
>
> [E]ven if moral properties are not themselves natural, their possession presupposes that of certain natural properties as their basis. (Audi 1997: 117.)
>
> [E]valuative claims cannot be barely true, but have to be made true by facts about naturalistic features. (Smith 2000: 229; cf. 1994: 58.)

Even many who think that evaluative properties are non-natural want to say that evaluative facts hold solely in virtue of natural (and, presumably, non-evaluative) facts. Here are some examples:

> [A] moral property cannot exist on its own, but must result from some other (probably natural) properties. (Dancy 1993: 79.)
>
> [I]t seems that [the reasons we have to choose, prefer, recommend, and admire things that are good or valuable] are provided by the natural properties that make a thing good or valuable. (Scanlon 1998: 97.)
>
> When classifying an action as cruel or just, we certainly regard the moral status as obtaining 'in virtue' of certain of its nonmoral features: those natural features are what make the action cruel, are the reason it is kind. (Little 2000: 280.)
>
> Something exemplifies a moral property entirely in virtue of its possessing certain natural features. (Shafer-Landau 2003: 75.)

Even some of those expressivist anti-realists who don't mind talking about evaluative facts privilege natural properties in evaluative judgment. Simon Blackburn writes that "the whole purpose for which we moralize . . . is to choose, commend, rank, approve, or forbid things on the basis of their natural properties" (1985: 137).[3] This seems to fall not very far from a quasi-realist reading of the above sorts of claims, which would take their primary function to be that of expressing a commitment to approve or disapprove of things solely in the light of their natural properties.

Although it is hard to be sure, not all of the above claims seem equivalent, and some seem importantly different from others. As I'll explain, parts of my discussion will apply only to certain versions of these claims. At this point I wish simply to note that, despite their many disagreements, all of these authors assign to natural properties some or other kind of exclusive role in grounding evaluative facts or judgments. Simplifying a bit, we can say that versions of the following sort of "normative appeal to the natural" are endorsed widely across meta-ethical party lines:

(NAN) For any evaluative property E and any object x, if x is E, then there are some natural properties N which x has such that x is E solely in virtue of N.[4]

NAN gives a bit more precise statement of (3). So the corresponding statement of (4) entails NAN, too. In brief, NAN says that any evaluative fact holds solely in virtue of natural facts.

It seems surprising that many realists and anti-realists, naturalists and not, all agree to some version of NAN. What seems particularly surprising is why a non-naturalist about evaluative facts would believe NAN. This paper queries whether these odd bedfellows can also be united behind an adequate "non-parochial" justification for NAN, one that relies only on premises that can be accepted by more or less everyone who accepts NAN.[5] Section 2 clarifies NAN and rejects one

[3]See also the discussion of the role of recognitional concepts in planning in Gibbard (2003).

[4]In the context of expressivist anti-realism about evaluative facts and properties we could restate NAN to concern the role of natural properties in evaluative thought and judgment.

[5]I borrow the term 'non-parochial' from Sturgeon (forthcoming), who argues that there is no substantive non-

argument for it as either parochial or insufficient. Section 3 argues that one non-parochial strategy for establishing NAN fails. Section 4 distinguishes more precise versions of NAN and explains why there is good reason to be particularly interested in versions according to which a relation that is not purely metaphysical but also explanatory holds between natural and evaluative facts. Section 5 argues that another non-parochial strategy fails to establish at least these explanatory versions of NAN. Section 6 concludes by arguing that the way in which assessment of meta-ethical hypotheses is theory-dependent predicts the failure of non-parochial justifications of NAN.

2 What Kind of Normative Appeal to the Natural?

If it is surprising that so many anti-realists and realists, naturalist and not, all agree to some version of NAN, it is no less surprising that the kinds of normative appeals to natural facts which were quoted above are more often merely asserted than explicitly defended. This might reflect an implicit supposition that NAN is something that more or less everyone can accept. But in fact it is far from clear what kind of an argument people who accept NAN have in mind for it or whether they think NAN can be given a non-parochial justification. But before we can assess what an adequate non-parochial argument for NAN might look like, we must first clarify NAN itself.

What is the domain of the quantifiers in NAN? NAN won't capture a widely held view if the quantifier 'any evaluative fact' ranges over facts about all possible worlds. Most of those who think that evaluative facts hold solely in virtue of natural facts consider this to be a contingent truth. They typically grant that there are some possible worlds which contain supernatural facts that can make a difference to evaluative facts. But if there could be two situations which are exactly alike in their natural properties but in one but not the other there is a God with certain wishes for us, then the evaluative facts about these situations could be different but not solely in virtue of natural

parochial doctrine about the supervenience of the ethical on which more or less everyone agrees.

facts. NAN will capture a widely held view only if we commit 'any evaluative fact' to no more than ranging over facts about the actual world or, perhaps, facts about the actual world and nearby possible worlds. In what follows, these are the facts to which I take 'evaluative facts' to refer.[6]

Does NAN concern all types of evaluative facts which hold in the relevant worlds, or only some types, such as perhaps moral facts? I'll take NAN to concern any type of evaluative facts, but my discussion will largely ignore what W. D. Ross called "attributive goodness" or the property of being a good specimen of a given kind (Ross 1930: 65-67). Perhaps we have good reason to think that good turntables, good dancers, and good blow dryers are good solely in virtue of their natural properties. But that wouldn't suffice to show that NAN is true of other types of evaluative fact.

What, according to NAN, is supposed to fit the facts in virtue of which evaluative facts hold for this normative job? Is it simply their being the particular facts that they are about painfulness, pleasantness, and so on? Or, more strongly, is their naturalness supposed to be part of what fits them for the job? Many of the above quotes say only that evaluative facts hold in virtue of "certain" natural facts. However, if hitting someone, for instance, were bad in virtue of its painfulness even if the latter weren't a natural fact, then its naturalness would be accidental to its performing this job and unnecessary to mention. But the naturalness of the facts in virtue of which evaluative facts hold is specifically mentioned. Thus I'll read NAN as implying the stronger claim that part of what fits the facts in virtue of which evaluative facts hold for this job is their naturalness.

One might worry that NAN has obvious counterexamples. For instance, many people think that facts about what is right hold in virtue of certain facts about goodness.[7] But although a view like this might rule out some attempts at a non-parochial justification of NAN, it needn't pose a serious problem for NAN itself. It isn't a counterexample to NAN if, for instance, evaluative naturalism

[6]Thanks to Elizabeth Harman for pressing me to clarify this point.

[7]Thanks to Cody Gilmore for raising the question of why this view isn't a counterexample to NAN.

is true, since in that case facts about goodness are natural facts.[8] Even if facts about goodness aren't natural facts, a view like this isn't a counterexample to NAN if the best interpretation of the view is that facts about what is right hold in virtue of facts about *the* good, that is, facts about what things have the property of being good. For if these are facts about such things as well-being, knowledge, and so on, they might well be natural. It is also worth noting that many people think that facts about goodness hold in virtue of non-evaluative facts which are natural, as (4) has it. There should be some sense – although a sense which is difficult to pin down – in which they can accept NAN even if they think that facts about what is right hold in virtue of facts about goodness. It isn't as if they think that facts about what is right are overdetermined by facts about goodness and by non-evaluative facts in virtue of which facts about goodness hold. They may rather think that if evaluative facts are to be appropriately anchored in the world, they must bottom out at non-evaluative natural facts. One way to respect this idea is to say that facts about what is right hold proximately in virtue of facts about goodness but hold ultimately in virtue of non-evaluative natural facts. This distinction generates one natural reading of NAN on which facts about what is right can hold in virtue of certain facts about goodness. (See section 4 for related discussion.)

[8] An interesting issue arises for anyone who accepts NAN and holds the reductive naturalist view that any evaluative property is identical with some natural property that can also be ascribed using purely non-evaluative terms. Imagine that goodness is identical with pleasure, and suppose pleasure is a natural property. Since goodness is an evaluative property, pleasure is an evaluative property (and goodness a natural property) if they are the very same property. Would facts about what is good hold in virtue of natural facts on this view? The view needs to explain why good things (that is, pleasant things) should be good in virtue of natural properties other than pleasure or else how something can be good in virtue of its being pleasant even though goodness is the very same property as pleasure. One worry about the former option is that perhaps two experiences could be exactly alike in all respects other than their pleasantness. One worry about the latter is that identity is symmetric but 'in virtue of' is asymmetric (see section 4). McNaughton and Rawling (2003: 32-33) argue that reductive naturalism cannot accommodate these latter kind of 'in virtue of' claims. I believe that their argument fails, but I have no space to argue the point here.

What, then, would count as an adequate justification of NAN? Suppose we argued as follows:

(P1) If there are evaluative facts, then they hold in virtue of other facts.

(P2) These other facts are either natural, non-natural, or supernatural.

(P3) They aren't non-natural.

(P4) Nor are they supernatural.

(P5) Therefore, if there are evaluative facts, they hold solely in virtue of natural facts.

(P6) There are evaluative facts.

(P7) Therefore, evaluative facts hold solely in virtue of natural facts.[9]

Call this the "elimination argument" for NAN. One way to support (P3) and (P4) is to appeal to some form of naturalistic ontology or worldview. If one's worldview weren't naturalistic in some sense, why would one believe NAN or have any reason specifically to mention the naturalness of the facts in virtue of which evaluative facts hold? One would only need to say that they are facts about pleasure, pain, and whatnot. What exactly counts as a broadly naturalistic ontology is a philosophical question. But one candidate is parochial and another is too weak to support NAN.

One sort of naturalistic ontology holds that every fact (about the actual world) is a natural fact. This view entails (P4) and so (P3).[10] Moreover, since it entails that all evaluative facts are natural, this view makes it hard to see how evaluative facts could hold in virtue of any other than natural facts. Evaluative naturalists and anti-realist expressivists both can accept this kind of ontology.[11] But non-naturalists about evaluative facts cannot do so. Thus an argument for NAN which conjoins this kind of naturalistic ontology with the elimination argument would be parochial.

[9]Thanks to Tyler Doggett for putting a closely related argument crisply. Cf. Shafer-Landau (2003: 76-77).

[10]The second worry raised below also suggests that this might fall short of supporting NAN as we are reading it.

[11]Expressivism, as its proponents tend to state the view, should be equally plausible whether or not there is a God or a supernatural realm, and certain arguments for it (such as the so-called supervenience argument against moral realism in Blackburn 1985) don't require a naturalistic ontology. Expressivism may only require that evaluative

Many realists and anti-realists, naturalists and not, can all share a weaker ontology according to which every fact (about the actual world) either is a natural fact or stands in some naturalistically acceptable or respectable relation to natural facts.[12] Such an ontology can perhaps count as broadly naturalistic even if it doesn't entail that every fact is natural. For perhaps facts which aren't themselves natural could still be naturalistically acceptable if they stood to natural facts in some relation which doesn't make them mysterious or queer.[13] Non-naturalists who accept NAN surely must think something like this about evaluative facts. Thus an argument for NAN which conjoins this weaker form of naturalistic of ontology with the elimination argument might be non-parochial. But I have two worries about its adequacy.

The first worry is that the weaker form of naturalistic ontology is too weak to yield (P3). If that ontology is compatible with evaluative facts being non-natural, then there seems to be no reason why it should be incompatible with mental facts being non-natural. But it is plausible that some evaluative facts hold at least partly in virtue of mental facts, such as facts about pain and pleasure. Thus the possibility that some evaluative facts hold partly in virtue of non-natural facts seems to be compatible with this ontology although it is incompatible with (P3). This possibility is particularly salient for non-naturalists about value. If one thinks that there are non-natural facts, why shouldn't one allow that some of them can hold partly in virtue of other non-natural facts?[14]

The second worry is that one can accept all of the premises of the elimination argument without

judgments be based on non-evaluative facts, natural or not. It nevertheless seems fair to say that many expressivists hold the view because it promises to reconcile evaluative thought with a naturalistic ontology.

[12]Scanlon (1998: 96-97) and Shafer-Landau (2003: 75-77) seem to be non-naturalists who accept such an ontology.

[13]An error theorist such as Mackie (1980) would presumably argue that in the case of evaluative facts this possibility is in tension with a naturalistic ontology, and so is, for this very reason, (P6).

[14]Thanks to Tyler Doggett for emphasizing this point. As far as I know, every non-naturalist who believes NAN also believes that mental facts are natural in the same sense in which evaluative facts supposedly aren't. But they should tell us why they think mental facts are natural and why this reason doesn't generalize to evaluative facts.

thinking that there is anything special about natural facts *qua* natural to make them the only type of facts in virtue of which evaluative facts hold. That argument implies only that no type of facts other than natural facts exist to make evaluative facts hold. So, for instance, one can think that a naturalistic ontology supports (P3) and (P4), but only because it eliminates other contenders, not because of any special feature of naturalness. (These points apply also to the first, stronger form of naturalistic ontology discussed above.) But above we saw reasons to read NAN as implying, more strongly, that the naturalness of the facts in virtue of which evaluative facts hold is part of what fits them for the job.

To summarize, we have good reasons to read NAN as saying that every evaluative fact about the actual world holds solely in virtue of natural facts, where part of what fits them for the job is their naturalness. Even when we conjoin the elimination argument for NAN with a naturalistic ontology, at best this gives an argument that evaluative facts hold in virtue of natural facts because no other facts exist to do the job. It doesn't yet give an adequate non-parochial argument for the claim that their naturalness is part of what fits them for the job. Even if it did, we might still want to know whether any adequate non-parochial argument can be given for NAN independently of a general argument for a naturalistic ontology. The natural place to look for one would seem to be in the content of NAN itself. That NAN appeals to (a) natural facts as (b) those in virtue of which evaluative facts hold suggests two potentially non-parochial strategies: try to show that NAN is true by appealing either to (a) some account of natural properties or (b) some account of the in-virtue-of relation to which NAN refers, plus other plausible non-parochial assumptions. In either case, the hypothesis would be that the account in question can explain why evaluative facts should hold solely in virtue of natural facts.

3 NAN and Accounts of Natural Properties

One non-parochial strategy for justifying NAN is to appeal to some account of what makes a fact natural. I know of no account which is introduced with this aim. But NAN requires the correct account of naturalness to classify as natural the facts in virtue of which evaluative facts hold. Thus we might wonder if any account of naturalness canhelp explain why naturalness should be part of what fits some facts for the job of making evaluative facts hold. I'll argue that none of three prominent sorts of account, plus plausible non-parochial assumptions, establish NAN.

Many philosophers who mention natural facts or properties in passing appeal to a "disciplinary" account. A disciplinary account typically classifies some list of disciplines (such as the natural sciences plus psychology and sociology) as sciences and then defines a property as natural just in case it is studied by these sciences or its instantiations can be explained in terms of properties studied by these sciences. But, firstly, this at least comes close to requiring scientism, whereas NAN seems to carry no commitment to scientism. And, secondly, no disciplinary account can seemingly be basic. Such an account requires a criterion for counting a discipline as a science. Presumably the criterion should both explain why disciplines that meets it count among the sciences which define what counts as a natural property and rule out literary criticism, theology, and home economics from counting as such sciences. But if we had such a criterion, then we should be able to wield it directly to determine whether a given property counts as natural, thereby rendering the reference to disciplines unnecessary.[15] It is also far from clear that we can characterize the requisite kind of criterion without relying on some antecedent understanding of what naturalness is.

Since the category of natural facts sounds metaphysical, one obvious move is to try defining it in metaphysical terms. According to one metaphysical account, the natural world is the universe

[15]This objection is due to Copp (2003: 182) and Sturgeon (2003: 555). A disciplinary account is endorsed by Moore (1903/1993: 13, 92), Smith (1994: 17, 203), and Shafer-Landau (2003: 55).

of events and states of affairs in the causal order. Natural properties might then be those which could be exemplified by things (or by properties of things) in the spatiotemporal causal order. This account is problematic. Some interpretations of quantum mechanics say that there is no causation at the quantum level. Thus we cannot assume that the natural order is causal. Moreover, many people – such as those who hold it to be a literal truth that God caused the world to exist – hold a supernatural view of the causal order (Copp 2003: 184). Finally, it would seem that the property of being intrinsically valuable can be exemplified by things in the spatiotemporal causal order irrespective of whether it is a natural or non-natural property. But the present account would immediately classify it as a natural property on this ground. So it cannot be a good account to rely on when discussing ethical naturalism and non-naturalism.

According to another metaphysical account, due to David Lewis, natural properties are that small elite minority among abundant properties (by which Lewis means any arbitrary set of possibilia, actual or not) which carve out objective (that is, entirely mind-independent) qualitative joints in the world. So understood, natural properties are more or less "(im)perfectly" natural to varying degrees.[16] But properties which capture high degrees of objective qualitative similarity often fail to capture evaluative similarity. Two killings can share physical properties which make for a great degree of objective similarity between them and their consequences, and yet one of them may be wrongful and the other not. A handsome face can be just like an ugly mug in every objective respect other than that one has a scar or mole which the other lacks. Lewis's view also treats facts which presuppose the existence of conventions as very imperfectly natural at best. But

[16]See Lewis (1983: 13-14) and (1986a: 59-68). Lewis claims that other than the perfectly natural properties "are at least somewhat natural in a derivative way, to the extent that they can be reached by not-too-complicated chains of definability from the natural properties" (1986a: 61). But it seems excessively optimistic to think that we can reach even crudely adequate definitions of the sorts of properties in virtue of which evaluative facts hold by "not-too-complicated chains of definability" from such perfectly natural properties as mass or charge.

most who accept NAN would say that a property like taking something owned by a person without his permission is a natural property which can make something bad. Lewis's view would therefore count many facts in virtue of which evaluative facts hold as ever so imperfectly natural at best.

Even though the category of natural properties sounds metaphysical, we might try defining natural properties in terms of the nature of our epistemic access to them. Specifically, we might define them as empirical properties. Here are two accounts of this kind:

> A property is natural if and only if any synthetic proposition about its instantiation that can be known, could only be known empirically. (Copp 2003: 185.)
>
> A natural property [is] any property that could figure in an empirical regularity . . . any property that is *such as to* figure in an empirical regularity. (Smith 2000: 212.)[17]

These accounts capture the idea that, insofar as we take the sciences to study the natural world and provide our most reliable source of empirical knowledge, we should count any reliable non-scientific means of acquiring empirical knowledge also as a source of knowledge of natural facts.[18]

Epistemological accounts appear to avoid ruling out intuitively plausible candidates for facts in virtue of which evaluative facts hold. Smith illustrates his account with just such examples: "The painfulness of the feeling I have in my neck, the telling of an embarrassing joke about someone behind his back, the writing of certain words, and so on, . . . are all natural properties because they are properties that figure in empirical regularities" (Smith 2000: 211). Since those who accept NAN typically count as natural just the sort of properties that epistemological accounts classify as natural, it seems that treating natural properties as empirical properties would help NAN.

[17]Smith adapts this proposal from Griffin (1996: 44-45), adding the modal element "such as to." To explicate what counts as an empirical regularity, Smith gestures at causal explanation, claiming that sentences like 'The pain causally explains my going to the doctor' state empirical regularities (Smith 2000: 211).

[18]See Copp (2003: 185). Also Moore at one point suggests that natural properties are ones (whose instantiations) we can know about "by means of empirical observation and induction" (1903/1993: 91).

It nonetheless doesn't follow from an epistemological account of natural properties, plus plausible non-parochial assumptions, that NAN is true.[19] Consider, for instance, the seemingly non-parochial idea that knowledge of evaluative facts and adequate guidance of evaluative judgment depend on knowing things to have certain other properties. Facts in virtue of which evaluative facts hold can presumably provide knowledge of evaluative facts and guide evaluative judgment – but only if they are epistemically accessible to us.[20] General skepticism aside, empirical properties are epistemically accessible to us. But it doesn't follow that evaluative facts hold solely in virtue of empirical facts or that their being empirical uniquely fits them for the job. Many logical and mathematical facts are epistemically accessible to us as well, but not empirical by Copp's and Smith's accounts. Moreover, evaluative judgment may be adequately guided by the empirical properties of things so long as there are reliable correlations between empirical facts and the facts in virtue of which evaluative facts hold; the latter needn't themselves be empirical facts. Nor can we infer that evaluative facts hold solely in virtue of empirical facts from the idea that such properties as being approved of by God don't count as empirical. The proposition that if something is approved of by God, then it is good in virtue of that fact is a synthetic proposition concerning the circumstances in which an evaluative property would be instantiated. Epistemological accounts of natural properties are silent about the truth or falsity of such non-empirical propositions. So conjoining such an account with other plausible non-parochial assumptions won't establish NAN.

To conclude, the above accounts of natural properties either make NAN implausible or, even when they otherwise help NAN, cannot be invoked to show either that evaluative facts hold solely in virtue of natural facts or that their naturalness is part of what fits them for the job. Although my survey is hardly exhaustive, it supports skepticism about whether any account of natural properties

[19]This implies no criticism of Copp's or Smith's accounts themselves. Whether some account of natural properties justifies any claim like NAN is tangential to their aims and not considered by them.

[20]See e.g. Audi (1997: 117-18), as well as Gibbard (2003) on the role of recognitional properties in planning.

can be invoked to establish either of these claims. So I doubt that we can use any account of natural properties to give an adequate non-parochial justification of NAN.

4 NAN and Different Kinds of 'In Virtue of' Claims

Another potentially non-parochial strategy for justifying NAN is to give an account of the kind of in-virtue-of relation to which NAN refers and argue that, given the nature of that relation, only natural facts qualify to stand in that relation to evaluative facts.

An obvious *prima facie* obstacle to this strategy is that although the use of such locutions as 'in virtue of' and 'because of' pervades philosophy and ordinary talk, we have no adequate analysis or theory about the relation or relations which they can be used to express. We might nonetheless grasp such relations well enough to be able to evaluate a wide variety of claims that use these locutions.[21] But as I'll now explain, these locutions can be used to express a variety of different kinds of relations. Often those who use them don't clarify just what kind of relation they mean to be talking about or argue that it has the features which their claims require it to have.

I'll characterize different kinds of claims that can be made using 'in virtue of' and related locutions and argue that the versions of NAN which are interesting in their own right are explanatory claims. I'll argue that they refer to a kind of in-virtue-of relation which has formal features that are incompatible with those of a number of other relations (such as supervenience and purely metaphysical determination) which could be claimed to relate the evaluative solely to the natural. Thus we cannot appeal to the latter relations to establish NAN. I'll argue, further, that the features of explanatory 'in virtue of' claims give us no reason to think that evaluative facts hold solely in virtue of natural facts. Thus we cannot establish explanatory versions of NAN on the basis of the features of the in-virtue-of relation to which they refer plus plausible non-parochial assumptions.

[21] For a discussion of this point, see Witmer, Butchard, and Trogdon (2005: 335-37).

To begin, we can draw two distinctions to distinguish four different kinds of 'in virtue of' claims. The first distinction concerns metaphysics and explanation. One way to understand the claim that one thing holds in virtue of another is that it is a purely metaphysical claim which implies nothing about the epistemic relations between the two. (In many cases the connection in question is causal, but many other cases, such as ontological dependence, truth-making, and reduction, involve no causation.) But often locutions like 'in virtue of' express explanatory concepts or relations. So another way to understand the claim that one thing holds in virtue of another is that the latter not only bears some metaphysical relation to the former but also in some non-trivial sense explains why it holds.[22] For instance, when we say that the country has a certain birth rate in virtue of reproductive facts about the various Smiths, Joneses, Browns, and Fawltys, we may mean not only that these reproductive facts ontologically ground the country's birth rate (for instance, by being what it consists in) but also that they explain its having the birth rate it does.

Either sort of 'in virtue of' claims have two features which indicate that 'in virtue of' expresses ontological priority. Firstly, they express a relation that involves some kind of metaphysical dependence and/or determination which isn't purely modal.[23] It seems that two people could agree on all of the relevant modal facts and yet disagree on the relationships of dependence. To borrow an example from Kit Fine, they might agree that persons and minds are distinct, that one could only

[22]Philosophers who explicitly associate 'in virtue of' and related expressions with explanation include Swoyer (1996: 247-48), Little (2000: 285), and Fine (2001: 16).

[23]The terms 'dependence' and 'determination' are sometimes used in a way that implies nothing about the order of things. In one such sense, the dependence of one fact on another fact and its determination by another are purely modal relations, in that the holding of one merely implies the holding of another. For instance, assuming an appropriately coarse division of the space of temperature conditions, being neither hot nor cold determines being warm, and being warm depends on being neither hot nor cold, in this weak sense. (The example, though not my use of it, is due to Oddie 2005: 153.) But nothing is warm in virtue of being neither hot nor cold. The 'in virtue of' talk involves dependence and/or determination in a metaphysically more robust sense that isn't purely modal.

exist with the other, and so on, and yet one of them might think that persons are embodied minds and so ontologically depend on minds while the other might think that minds are abstractions from persons and so ontologically depend on persons (Fine 1995: 272). Secondly, these claims pick out an asymmetric relation. If A holds in virtue of B, it cannot also be that B holds in virtue of A.

The second distinction concerns a different dimension of the strength of 'in virtue of' claims. One way to understand the claim that A holds in virtue of B is that B in some sense necessitates A and does so because A "is nothing over and above" B, or "consists in nothing more" than B, or "depends entirely on" B, or "is determined wholly by" B, or the like.[24] (I assume we would often want to specify B so that it "minimally necessitates" A, that is, necessitates A and has no proper part that necessitates A.) For instance, when we say that there are at least two electrons in a world in virtue of electrons e_1 and e_2 existing, we may mean, depending on what kind of world we have mind, not only that the latter (minimally) necessitates the former but also that the former consists in nothing more than the latter (etc.). Say then that A holds "wholly in virtue of" B.

Another way to understand the claim that A holds in virtue of B is that B is some significant or crucial element of a condition that minimally ncessitates A. Say then that A holds "crucially in virtue of" B.[25] For instance, when we say that someone's life is an accomplished life in virtue of the particular inventions or discoveries that they make, we may mean not that having made them by itself is sufficient to necessitate having an accomplished life but that having made them is one kind of particularly central factor in having a life which is, specifically, an accomplished one.

These 'crucially in virtue of' claims have an interesting logical feature. Suppose something has

[24]The second conjunct is crucial. Since necessitation is a purely modal relation that isn't, as such, asymmetric, it doesn't suffice to explain the asymmetricity or metaphysical strength of the relevant 'in virtue of' claims. Parallel points will apply below to the counterfactual dependence of evaluative facts on various sorts of factors.

[25]I owe the expression 'crucially in virtue of' to Elizabeth Harman. It would be reasonable to take a 'crucially in virtue of' reading of NAN to require that the further conditions for the holding of evaluative facts all be natural, too.

natural properties N which minimally necessitate having an evaluative property E. And suppose it has E crucially in virtue of a combination of natural properties N^* which is only a proper part of N and so doesn't itself necessitate E. It doesn't follow that the thing has E (crucially) in virtue of N. When we say things like 'You did wrong because you broke a promise' to normatively account for the wrongness of what you did, we typically grant that its wrongness consists in something more than your having broken the promise and depends counterfactually on various conditions about how things would have been if any element of a minimally necessitating condition for it hadn't held. We could still be saying that, as things were, your having broken your promise "made" your action wrong or was "responsible" for your having done something wrong – that is was wrong crucially in virtue of this fact.[26] In general, one might think that some elements of a minimally necessitating condition for the instantiation of an evaluative property matter to its instantiation in some more robust way than various merely counterfactual conditions do. It is unclear that 'wholly in virtue of' claims can discriminate between such conditions, but 'crucially in virtue of' claims can. They might also help express the idea that not just any fact can give moral reasons, even if more or less any fact can be relevant to the distribution of moral properties in some weaker sense.[27]

Sentences saying that something has a given evaluative property in virtue of having certain natural properties can coherently be used to make any of the four kinds of 'in virtue of' claims distinguished above. This raises the following complication: NAN, as well as the claims quoted in section 1, can be interpreted in various different ways. Each interpretation picks out some in-virtue-of relation, but since these have different features, there is no unique relation which can claim to

[26]For this kind of view, see Dancy (1993: 75-79) and (2004: 41, 79-80). W. D. Ross uses the term 'responsibility' to describe his notion of *prima facie* duty in his (1939).

[27]Foot (1958) argues that the moral landscape isn't "flat" in this way by arguing that views which forbid us to look at hedgehogs in the light of the moon or run round trees left handed don't count as moral theories. See also McKeever and Ridge (2006: ch. 3) on the general issue.

be *the* in-virtue-of relation. It is a distinct question about each relation whether its nature, plus plausible non-parochial assumptions, can be used to justify the corresponding version of NAN.

The claim that some of the writers quoted in section 1 intend to make is probably that a certain kind of purely metaphysical relation holds between natural and evaluative facts. I don't deny that some purely metaphysical version of NAN can perhaps be given a non-parochial justification. For instance, if the universe has some basic constituents, if all other facts about it are wholly determined by the configuration of these basic constituents, and if these basic constituents are natural, then some purely metaphysical version of NAN would seem to follow. But this argument neither turns on any particular feature of the relationship between the evaluative and the natural nor reveals anything about natural facts which would uniquely fit them for the normative role which NAN assigns to them. The interest of purely metaphysical versions of NAN reduces to the interest of whether some general naturalistic ontology is true. Hence I'll set such versions of NAN aside.

Instead I'll focus on versions of NAN according to which natural facts also explain evaluative facts. There are good reasons to do so. Firstly, when we say such things as that this feeling in my shoulders is bad in virtue of its being painful, we are naturally taken to suggest that painfulness not merely ontologically grounds this feeling's badness but also can explain it. Moral theories and theories of other kinds of value and norms aim to explain why certain things are valuable in certain ways, why certain actions are right and wrong, and so on. Most meta-ethical accounts of what kinds of claims these theories are in the business of making are guided by their underlying ontology. But one would dissociate this explanatory aim of normative theories from one's ontology if one accepted a naturalistic ontology but denied that natural facts can in some non-trivial sense help explain evaluative facts. By analogy, it would seem odd to hold that mental facts hold in virtue of physical facts but not care whether physical facts also help explain mental facts. Secondly, one popular view about reduction requires that we can use the reduction base to explain the phenomena

which are being reduced (see Horgan 1993). It seems that if this is a reasonable requirement on reduction, then it should be a reasonable requirement on 'in virtue of' claims as well. Thirdly, the lesson of the Euthyphro problem has often been taken to be that the features because of which good and bad things are good and bad should be rationally intelligible.

All that I need to assume about the notion of explanation at issue in explanatory versions of NAN can be extracted from a few general features of explanation. Explanation has to do with conveying certain kind of information. While it is controversial what counts as explanatory information in the context of different types of explanations, it should be uncontroversial (if perhaps not very illuminating) that they all aim to convey information which produces understanding about what is being explained. So, while it is controversial what the epistemic conditions for explanation are, it should be uncontroversial that there are such conditions. I assume that to count as explanatory a chunk of information needs to satisfy the relevant epistemic conditions only under some idealizations in the conditions under which those who use the explanation exercise their cognitive capacities. Then it should also be uncontroversial that the features which make something an explanation must be such that its audience could grasp or know those features if they satisfied the relevant idealizing conditions. Thus I assume that claims such as that the feeling in my shoulders is bad in virtue of being painful makes a claim about what information would be explanatory of the feeling's badness if that information satisfied the relevant epistemic conditions on explanation.

To get more concrete, let me describe two different explanatory versions of NAN. Suppose that, in a purely metaphysical sense, an object O is good wholly in virtue of a combination of natural properties N. One view is that to explain why O is good is to provide some information about N, where the explanatory import of such information depends not only on its truth and strength but also on such contextual factors as the beliefs and interests of the audience. Citing the whole N would be an "ideal" explanation, that is, an error-free and maximally strong chunk of explanatory

information.[28] But citing N in full might never satisfy the epistemic conditions on explanation, because it might be a property so complex that we cannot state or even grasp it in full. Which parts of N a good explanation presents as those in virtue of which O is good in an explanatory sense depends primarily on the pragmatics of explanation. So this view explicates explanatory 'in virtue of' claims in terms of contextual restrictions on a metaphysical wholly-in-virtue-of relation.[29]

When those who understand NAN as an explanatory 'wholly in virtue of' claim say that something is good, typically they can claim to have located only some parts of *N*. But, given the above account of explanation and a suitable context, they could still claim to have located natural facts that are *pragmatically* crucial to explaining why the thing is good. Each part of N is a necessary part of a condition wholly in virtue of which something is good. The boundaries of what we pick out as making something good and what we pick out as a condition for its having that kind of normative significance to distribution of value may vary with such contextual factors as what we already presume to know about the local conditions. If we pick out certain parts of N as explaining why something is good, this is because those parts and not others provide information regarding the distribution of value which is salient to us given our beliefs and interests.

According to this pragmatic view, the crucialness of certain parts of N to why something is good tracks no deeper normative or metaphysical difference between the various parts of *N*. Suppose, for instance, that Ann hurts Ben's feelings by taunting his height. What she did was bad. The

[28] It may be that in some sense an "ideal" or "full" explanation of why something is good will feature not only the facts in virtue of which it is good but also some story about why those facts have the kind of normative significance that they do, such as general principles which connect natural properties to evaluative ones.

[29] I extrapolate this proposal from the view that causally to explain an event is to provide some information about its causal history (Lewis 1986b). A related claim is that the explanations we actually give are "non-ideal," and only partially explanatory by virtue of conveying information about some limited aspect of "ideal" explanations which include all of the information relevant to the phenomenon of interest. See e.g. Hempel (1965) and Railton (1981). For a recent critical survey, see Woodward (2003: ch. 4).

pragmatic view can agree that, given a suitable context, a sufficient explanation of its badness is that she knowingly hurt his feelings. It might be, for example, that this fact gives us a context of which it is true that the action would still have been bad even if certain other contextual features had been different. Perhaps what Ann did would still have been bad even if it hadn't been the taunting of Ben's height, or even if it didn't make Ben cry, so long as it hurt his feelings. If the badness of Ann's hurting Ben's feeling is in this way invariant with respect to a range of hypothetical changes in other features of the situation, the pragmatic view can accommodate this.

The pragmatic view contrasts with the view that only some parts of N are *normatively* crucial to the thing's being good while the rest are only some weaker sort of conditions for its being good.[30] According to this alternative view, if the badness of Ann's hurting Ben's feeling is invariant in the above way, this is because the relevant counterfactuals that help explain why what Ann did was bad are underwritten by normative rather than just pragmatic differences among the parts of N.[31] Suppose, for instance, that what Ann did wouldn't have been bad if Ben had been more than five feet tall. (Imagine that in that case Ann's taunting wouldn't have hurt his feelings.) One might deny that this counterfactual is part of that in virtue of which what Ann did was bad, and instead regard it merely as a condition under which what Ann did was bad (crucially) in virtue of the fact that by taunting Ben's height Ann knowingly hurt his feelings. That fact can still support the relevant counterfactuals, of which another is that taunting Ben's height wouldn't have hurt his feelings if he had been more than five feet tall. (Suppose Ben's feelings aren't hurt in the nearest world where Ann taunts his height but he is taller than five feet.) Thus one could explain why what Ann did was bad by invoking a 'crucially in virtue of' claim. Such a claim would answer

[30] The line may not be sharp in many cases, but that doesn't show that there is no distinction to be made.

[31] An analogy would be that explanations of events which cite their causes make a real distinction between causes and background conditions. This is one way to construe claims such as that crops grew because they had enough light, water, and nutrients, although their growth also depended on the absence of drought, frosts, and pests.

a range of counterfactual questions about the conditions under which facts about the badness of Ann's behavior would have been different and thereby indicate how its badness was to expected in the light of the fact that what she did hurt Ben's feelings.

What I wish to have achieved is a reasonably clear sense of two views about what sort of content one could plausibly attribute to explanatory versions of NAN.[32] These views can agree on what the idealized epistemic conditions on explanation are. They can also agree that one thing explains another only under some suitable description or mode of presentation (compare citing 'the cause of the car crash' and saying 'the driver was drunk') and that explaining some fact involves showing that it is invariant with respect to a range of counterfactual variation in the circumstances.[33] We can capture these assumptions by interpreting explanatory versions of NAN in terms of (E):

> (E) *A* holds in virtue of *B* only if: one would be able to see that *A* was to be expected in the light of *B* if one were given a description of *B* under an appropriate mode of presentation and the appropriate idealizing conditions held.

Explanatory versions of NAN can further agree that a chunk of information is explanatory only if it somehow exhibits certain kinds of determination and/or dependence relations which make explanation possible.[34] I won't here take a stand between different particular explanatory versions of NAN.[35] I wish the discussion to come to apply to any version of NAN that accepts (E).

[32]Of course, I haven't explored all of the relevant issues about explanation. For instance, for all that I say here, the explanatory claims made by these versions of NAN might be irreducibly contrastive. Readers interested in contrastive explanation can easily confirm that this would further support my argument in section 5.

[33]On the explanatory import of exhibiting patterns of counterfactual dependence, see Woodward (2003: ch. 5).

[34]For discussion of this kind of view of explanation, see Ruben (1990) and Kim (1994). As Ruben puts is, "explanations work only because things make things happen or make things have some feature" (1990: 232).

[35]To decide between these views, one would in any case have to explore various other live issues in meta-ethics which I cannot address here. Debates about the so-called "holism of reasons" in the literature on moral particularism are one example. See e.g. Dancy (2004), McKeever and Ridge (2006), and Väyrynen (2006).

5 NAN, Transitivity, and Exclusiveness

Let's now examine whether some explanatory version of NAN has an adequate non-parochial justification. This can be done by determining what features an in-virtue of relation must have in order to satisfy an explanatory version of NAN and whether those features, plus plausible non-parochial assumptions, suffice to establish some explanatory version of NAN. My strategy will be to consider various relations which have been claimed to hold between the evaluative and the natural and determine whether they possess the features of the requisite kind of in-virtue-of relation.

Many people think that the evaluative supervenes on the natural. One might then wonder whether supervenience is a relevant kind of in-virtue-of relation. The core notion of supervenience is that of necessary covariance. Supervenience holds when and only when there could be no difference of one sort without a difference of another sort. For instance, evaluative properties supervene on natural properties just in case there could be no difference with respect to evaluative properties without some difference with respect to natural properties; exact similarity in every natural respect excludes the possibility of difference in any evaluative respect.[36]

But the supervenience of the evaluative on the natural cannot establish NAN. Supervenience is a form of necessitation that is non-symmetric, but 'in virtue of' is asymmetric. Being a world that contains singleton {Pinky} supervenes on being a world that contains Pinky, and conversely (cf. Fine 1995: 271). But surely the world contains {Pinky} in virtue of containing Pinky and *not* conversely. Supervenience claims likewise imply nothing about the order of explanation: the mere fact that there could be no difference in how things are with As without a difference in how things are with Bs says nothing about whether how it is with Bs explains how it is with As. So

[36]The core notion can be refined in various ways. One may claim the evaluative to stand in different particular types of supervenience (such as weak, strong, or global) to the natural. One may also vary the interpretation of the necessity operators in supervenience claims. These complications make no substantive difference here.

the supervenience of the evaluative on the natural cannot establish versions of NAN which refer to an explanatory relation of asymmetric metaphysical determination and/or dependence.[37] Nor will it help to appeal to some restricted supervenience claim. It is well known that in many instances of supervenience the supervenience base has superfluous elements. Accordingly, a combination of natural properties N on which some evaluative property E supervenes is often one which can be restricted to a minimal supervenience base N^* which minimally necessitates E. But the supervenience *relation* will still be a form of non-symmetric and non-explanatory necessitation.[38] It will at most be entailed by, and so accompany, any in-virtue-of relation between E and N^*.

A natural move is to look beyond supervenience to some deeper and richer form of determination and/or dependence which can ground and explain the supervenience of the evaluative on the natural.[39] This is how Michael Smith, for instance, explains why the evaluative supervenes on the natural. He argues that evaluative properties are supervenient because evaluative claims couldn't be brutely true (not made true by other claims) and that they supervene specifically on natural properties because claims about the evaluative properties of things must ultimately be made true solely by claims about their natural properties (Smith 2000: 225-29). The evaluative properties of acts, for example, must supervene on natural properties because "all acts are, at bottom, bodily movements with certain characteristic causes – desires, beliefs, thoughts – bodily movements that in turn cause effects in a naturalistic world" (Smith 2000: 229).

[37]These points about supervenience are by no means original. See e.g. McLaughlin and Bennett (2005).

[38]See also Kim (1993: 145-47), who argues that it is neither necessary nor sufficient for the dependence of A-properties on B-properties that As supervene on Bs and Bs don't supervene on As.

[39]Explaining supervenience relations in terms of some more robust relation (possibly a different one in different domains) is a common strategy. For instance, when As supervene on Bs, this might be because As are identical with Bs, or because instances of A are composed of instances of B, or because B is a determinate of a determinable A, and so on. See McLaughlin (1995: 18-23), Heil (1998: 150-51), and Kim (1993: 147-48) and (1998: ch. 1). For discussion of why supervenience relations should in general be explained and not left brute, see Horgan (1993).

Smith considers a Socratic sort of person whose life is one of philosophical reflection. He says that (i) if a Socratic sort's life is good, that is because it is a life of accomplishment, and (ii) what makes it a life of accomplishment is that it displays understanding. But, as our Socratic sort is one to publish, not perish, (iii) "what makes it true that the Socratic sort lives a life in which she writes articles that display her understanding is evidently the fact that she writes the particular words that she writes in those articles" (2000: 228). Smith concludes that the evaluative claim that the Socratic sort's life is good is made true by a claim about certain natural features of her life:

> (S) What makes (it true that) the Socratic sort's life (is) good is the fact that she lives a life in which she does things like writing the particular words with a particular meaning that she writes in her articles.[40]

One might wonder whether that an argument like Smith's could also be used to show that evaluative facts hold solely in virtue of natural facts. It claims that evaluative claims are ultimately made true by naturalistic claims, and a truth-maker for a certain proposition is often described precisely as something in virtue of which the proposition is true.[41] Thus one might wonder whether the "making" relation doing the work in Smith's argument could also be used to show that the Socratic sort's life is good solely in virtue of natural facts. There seems to be nothing peculiar about this kind of evaluative fact which would prevent the argument from generalizing to show that all evaluative facts hold solely in virtue of natural facts.

Extrapolating an argument for NAN from Smith's requires caution, however. We must ask what kind of relation Smith's argument for (S) requires such expressions as 'makes true' to stand for. And we must ask whether the features of that relation, plus plausible non-parochial assumptions,

[40]See Smith (2000: 228). I'll ignore the complications involved in shifting between expressions of the forms 'makes it true that x is F' and 'makes x be F.' We cannot substitute the latter for the former in (i)-(iii) unless we change the value of 'F' from 'good' to 'a life of accomplishment,' from that to 'a life that displays understanding,' and so on.

[41]See e.g. Armstrong (2004: 5) and Rodriquez-Pereyra (2005: 17).

can be used to establish some explanatory version of NAN. I'll argue that we have no reason to think so. (Of course, this constitutes no criticism of Smith's own argument, which concerns just supervenience.) Smith's argument for (S) is sound only if the making relation it employs is either transitive or non-exclusive. But I'll argue that explanatory versions of NAN refer to an in-virtue-of relation which is plausibly neither, because otherwise they would violate (E).

We are entitled to infer (S) from (i)-(iii) if the making relation to which these claims refer is transitive.[42] Smith pretty clearly thinks it is. (Whether he thinks it is explanatory is less clear.) But in fact this isn't obvious. Many people take the truth-making relation to simply be, or at least imply, necessitation: if p is true and there is at least one entity α that makes p true, then α couldn't exist without p being true.[43] Necessitation typically is transitive. We must, however, be cautious about whether the necessitation involved in truth-making is transitive. Few examples are uncontroversial here. But suppose that what I am necessitates my having propositional attitudes and that such attitudes take propositions as their objects, so that my having them necessitates that there are propositions. I gather that we wouldn't want to say that what I am makes it true that there are propositions. Yet that seems to be what we would have to say if the truth-making relation were, or implied, a transitive form of necessitation.[44] But let's grant that there is some suitably restricted transitive truth-making relation which licenses the inference to (S).

My question of interest is whether a making relation which would license the inference from (i)-(iii) to (S) on the strength of its transitivity could also serve as the kind of in-virtue-of relation to which explanatory versions of NAN refer. Such a relation must be some metaphysically more robust sort of transitive relation than mere necessitation. Otherwise α could make p true without doing anything to explain why p is true. But one strong intuition is that truth-making involves

[42]Relation R is transitive if and only if for any x, y, and z, if Rxy and Ryz, then Rxz.

[43]See e.g. Fox (1987: 189), Armstrong (2004: 5-7), and Rodriquez-Pereyra (2005: 18).

[44]Thanks to Ross Cameron for discussion here.

explanation.[45] (It is unclear to me why a truth-maker for p should have to be something that couldn't exist without p being true, so long as it explains why p is true.) To assess this strategy for establishing NAN, let's break (i)-(iii) to the relata of the making relationships they assert:

(5) The Socratic sort writes particular words with a particular meaning.

(6) The Socratic sort's life displays understanding.

(7) The Socratic sort's life is a life of accomplishment.

(8) The Socratic sort's life is a good life.

The 'in virtue of' claim corresponding to (S) would be that (8) holds in virtue of (5). So let's rejoin (5)-(8) by substituting 'in virtue of' for 'makes true' and grant that (8) holds in virtue of (7), (7) in virtue of (6), and (6) in virtue of (5).[46] Does it follow that (8) holds in virtue of (5)?

I claim that if (8) holds in virtue of (5) in a sense that satisfies (E), that isn't because this in-virtue-of relation is transitive. If (6) holds in virtue of (5), (5) should hold in virtue of (9):

(9) The Socratic sort's life is F_1, ..., F_n (where 'F_1, ..., F_n' is some lower-level description of the Socratic sort's writing activities).

If the in-virtue-of relation to which explanatory versions of NAN refer were transitive, it would then follow that (8) holds in virtue of (9). To be clear, (8) may well hold in virtue of (9) in some purely metaphysical sense in which evaluative facts are determined by and "bottom out at" some

[45] See e.g. McFetridge (1977) and Horwich (1998).

[46] These claims are plausible only if they are read as 'crucially in virtue of' claims or as 'wholly in virtue of' claims with a suitable pragmatic restriction in place. But let's grant that we could expand (5)-(7) so that the corresponding 'wholly in virtue of' claims between them would come out as true even without pragmatic restrictions. There is also the question, which I have no space to pursue here, whether a univocal reading of 'in virtue of' can render all these claims simultaneously plausible. The issue is parallel to doubts about whether various arguments about what constitutes what invoke a univocal concept of material constitution that is transitive in Wilson (forthcoming).

such lower-level properties as chemical or even microphysical ones.[47] But even assuming that (7) explains (8), (6) explains (7), (5) explains (6), and (9) explains (5), why think that (8) holds in virtue of (9) in a sense that satisfies (E)? Reasons to deny that it does would be reasons to deny that explanatory versions of NAN refer to a transitive relation.[48] I can think of three such reasons.

Firstly, the kind of constellation of facts for which 'F_1, ..., F_n' stands is often too large and complex for us to understand even under the appropriate idealizing conditions. Say it stands for some constellation of chemical or microphysical facts which would determine the badness of polygamy or that of taking someone's property without her consent or some strong reason. Can we really wrap our minds around even such a constellation of chemical facts? If not, then even if (9) in some sense ontologically grounds (8), the claim that (9) explains (8) would violate (E). We cannot see that (8) is expectable in the light of (9) if we cannot understand (9) to begin with.

Secondly, even if we can wrap our minds around such claims as (9) under the appropriate idealizing conditions, they will contain all manner of information that is irrelevant to evaluative facts in ways which can destroy explanatory import. (8) would have held under a range of variation in the facts F_1, ..., F_n. But when the evaluative facts would have remained what they are under a range of variation in the lower-level facts, in one clear sense it doesn't matter what the lower-level facts are. The chemical or microphysical way that things are is irrelevant to the goodness of the Socratic sort's life, so long as they are in some way such that her life is good. But if (8) makes no distinction between (9) and close alternative lower-level descriptions of (5), so that (8) would have held even if (9) hadn't, then nothing about (9) in particular is needed to explain (8) even if (9)

[47] It is, however, far from clear that 'bottoms out at' is transitive. Can (8) bottom out at (5) and bottom out at (9) as well? The phrase 'bottom out at' is naturally read as implying uniqueness. It is also far from clear whether the 'holds proximately in virtue of' and 'holds ultimately in virtue of' express transitive relations.

[48] Many explanatory relations, such as the relations of the best explanation and probabilistic explanation, are clearly not transitive for wholly independent reasons. But these relations may not be relevant here.

determines (8). If so, then the claim that (9) explains (8) would seem to violate (E). This might also suggest that 'F_1, ..., F_n' moves at a level of description which may lack explanatory import regarding why things have the evaluative properties they do. Assume (5) explains (8). Adding (9) to (5) wouldn't seem to introduce anything that would enhance whatever understanding (5) offers of why (8) holds. If so, why think it true that (9) explains (8)?

Even if (9) can explain (8) despite the fact that (8) makes no distinction between (9) and its close alternatives, all these descriptions would still contain lower-level descriptions of things like the Socratic sort's slumped posture and two-finger typing style. The problem about this isn't that such irrelevant detail makes (9) explain also much more than (8) or makes (9) misleading as an explanation of (8). It could still be that (9) explains (8). Rather, understanding 'F_1, ..., F_n' plus conceptual competence with the relevant evaluative terms isn't enough for seeing which of its parts make (8) expectable. If anything is expectable about the Socratic sort's life in the light of lower-level descriptions of her slumped posture and two-finger typing, it would seem to be shoulder pains and slow output. Sifting the relevant from irrelevant information, or restricting 'F_1, ..., F_n' into a description which minimally determines (8), would seem to require understanding more than 'F_1, ..., F_n' and conceptual competence with the relevant evaluative terms. But if that is right, then the claim that (9) explains (8) would seem to violate (E).[49]

Evaluative facts may differ in this respect from such cases as that there is coffee in my cup in virtue of chemical facts. If I know that there is liquid with a certain chemical composition in my cup and liquid with such chemical composition is black, tastes acidy and slightly bitter, has

[49]I cannot here explore the interesting issue of how analogous this argument is to arguments for an "explanatory gap" between physical and mental facts. I also lack space to discuss whether further irrelevance problems arise akin to those that beset the deductive-nomological account of explanation. Here is a classic example from Salmon (1971: 34). The propositions that all males who take birth control pills regularly fail to get pregnant and that Jones is such a male entail that Jones fails to get pregnant. But they provide no explanation of why Jones fails to get pregnant.

a subtle floral aroma and certain psychoactive effects, and so on, and if my concept *coffee* has it that coffee is whatever has such features, then it is expectable that there is coffee in my cup. But (8) would seem to be expectable in the light of 'F_1, ..., F_n' only under some further substantive assumptions about what kinds of factors can constitute a good life and what is supposed to give this kind of normative significance to such lower-level facts as 'F_1, ..., F_n' stands for.

Thirdly, if one claims that (9) explains (8) in spite of the above, one may not be entitled to commitments this incurs. If lower-level facts like (9) can explain evaluative facts like (8) only under further substantive assumptions which (let's suppose) take the form of principles connecting the two, then (9) can explain (8) only if there is a substantive principle which explains the goodness of a life in terms of its being in the lower-level way F_1, ..., F_n and which we can grasp at least in the appropriate idealizing conditions. But what entitles us to confidence that there are such principles? Supervenience functions and many other more robust but purely metaphysical determination and/or dependence functions between lower-level facts and evaluative facts wouldn't qualify as explanatory principles. If we aren't entitled to confidence that there are such principles, then understanding the relevant lower-level facts in the idealizing conditions wouldn't guarantee understanding how evaluative facts hold in virtue of them. Objecting that we can know that evaluative facts hold in virtue of lower-level facts without knowing how they do would be beside the point. By (E), knowing that (8) holds in virtue of (9) requires seeing that (8) was expectable in the light of (9). But that seems tantamount to knowing how (9) gives rise to (8).

In sum, it seems that (8) could well fail to be expectable in the light of (9) even if one understood (9) in the appropriate idealizing conditions. But then it follows from (E) that (8) doesn't hold in virtue of (9) in the sense involved in explanatory versions of NAN. This argument against the transitivity of 'in virtue of' applies most naturally to versions of NAN which refer to a wholly-in-virtue-of relation with contextual restrictions. But if transitivity fails there, then it should fail also

with versions of NAN which refer to a crucially-in-virtue-of relation. (5) can be crucial to (6), (6) to (7), and (7) to (8) without (5), let alone (9), being crucial to (8). (6) would have been no less crucial to (8) had it been realized differently than by (5) and yet, as things were, (5) is crucial to (6). The conclusion this suggests is that the in-virtue-of relation to which explanatory versions of NAN refer isn't transitive. If we wish to argue that (8) holds in virtue of some such natural fact as (5), we must do so on some grounds other than that this relation is transitive.[50]

I have discussed a complex example partly because it may be unclear whether certain more straightforward cases would be genuine counterexamples to the transitivity of 'in virtue of.' Suppose a football hooligan vows to detonate a bomb in a stadium if one of the teams play in blue jerseys. Wearing blue jerseys would be instrumentally bad in virtue of its making the hooligan detonate the bomb. It would make him detonate the bomb in virtue of the vow he made plus perhaps certain other facts about his psychology. (Suppose he made the vow in virtue of his desire to disrupt Chelsea's game by preventing them from playing in their primary kit. Respectable aim, despicable means.) But it seems false that wearing blue jerseys would be instrumentally bad *in virtue of* these facts about the hooligan's psychology. What seems to matter to its badness are the effects of the detonation, not the hooligan's psychology. (Also at least a significant chance that wearing blue jerseys will start off a certain kind of causal chain would in any case be required for explaining its instrumental badness.) But whether this is a genuine counterexample to transitivity may be unclear, since the explanatory role of causal and constitutive connections with respect to facts about instrumental value may not be sufficiently well understood.

Transitivity aside, we are entitled to infer (S) from (i)-(iii) if the making relation to which these claims refer is "non-exclusive" with respect to truth-makers. It is non-exclusive if (8) can be made

[50]I don't claim that the schema 'If A holds in virtue of B and B holds in virtue of C, then A holds in virtue of C' has no true instances in a sense of 'in virtue of' that satisfies (E). I only claim that their truth must be defended on some grounds other than that such 'in virtue of' claims express a transitive relation.

true simultaneously by each of the facts in the kind of chain of metaphysical determination in which (5)-(7) stand to (8). Michael DePaul notes that supervenience is non-exclusive. If being morally right supervenes on maximizing utility and being commanded by God supervenes on maximizing utility (say because God is a utilitarian), then being morally right supervenes on being commanded by God as well. But he argues that the metaphysical dependence of moral properties on the non-moral is exclusive: it isn't the case that the rightness of right actions depends on their maximizing utility and also on their being commanded by God.[51] (DePaul 1987: 436-38.) If the same is right about the 'in virtue of' claims made by explanatory versions of NAN, then we cannot use the kind of making relation which validates the argument for (S) to capture these 'in virtue of' claims.

Consider Theo, who believes that right actions are right in virtue of their maximizing utility and that God commands actions in virtue of their maximizing utility. If explanatory versions of NAN refer to an exclusive relation, then (cases of overdetermination aside) Theo's beliefs don't imply that right actions, besides being right in virtue of their maximizing utility, are also right in virtue of their being commanded by God. And in fact Theo can consistently maintain his beliefs and deny (indeed, plausibly deny) that right actions are right in virtue of their being commanded by God. (One explanation is that 'in virtue of' is hyper-intensional: even if 'maximizes utility' and 'is commanded by God' are co-intensional, the substitution of the latter for the former in 'is right in virtue of ...' may fail to preserve truth-value.) So this in-virtue-of relation is exclusive.

Another argument for exclusiveness parallels the argument about transitivity in the Socratic sort's case. If explanatory versions of NAN referred to a non-exclusive relation, then NAN would have implications that violate (E). In particular, if this in-virtue-of relation is non-exclusive and if (5) holds in virtue of (9), then it won't discriminate amongst facts which stand in the kind of chain

[51] The so-called exclusion arguments against non-reductive physicalist accounts of mental causation seem to assume that the relevant causal relation is exclusive in roughly this sense. See e.g. Kim (1998).

of metaphysical determination that runs from (9) to (8). But again it doesn't seem plausible that (8) holds in virtue of (9) in a sense that satisfies (E). As before, the lower-level facts reported in (9) may merely tell us more about the chemical or microphysical realization or constitution of facts which *do* explain why things have the evaluative properties they do, instead of supplanting the latter, higher-level facts in explanations of evaluative facts. Level of description seems to matter in explanation in that explanation generally discriminates amongst facts which stand in the kind of chain of metaphysical determination that runs from (9) to (8).[52] This can be explained by treating the relevant explanatory relations as exclusive. Moreover, if (8) holds in virtue of (6), then the explanation that (6) provides of (8) would be no more defective if (6) were realized or constituted by something other than (5) or (5) by something other than (9). The precise details at the level of (9) wouldn't matter when explaining why (8) holds.[53]

I conclude that the in-virtue-of relation to which explanatory versions of NAN refer is plausibly exclusive. If we wish to argue that (8) holds in virtue of some such natural fact as (5), we must do so on some grounds other than that this relation is non-exclusive. Note that these arguments require exclusive in-virtue-of relations to imply only that for any fact which holds in virtue of others, some facts in a chain of metaphysical determination of that fact may not be ones in virtue of which that fact holds. (So, the arguments don't require there to be a unique fact in virtue of which it holds.) This is enough to show that the exclusiveness of the in-virtue-of relation to which explanatory

[52]It is independently plausible that many explanations are exclusive in this way. Consider, for instance, Putnam's (1975) example of the square peg and round hole. Also consider a bull that sees a cape of a specific shade of crimson and charges. Even though the cape's particular shade was involved in making the bull charge, intuitively the bull didn't charge *because* it saw this particular shade of crimson. It charged because it saw *red*. Even though the cape is red in virtue of being this specific shade of crimson, what matters to the bull's charging isn't the precise shade it saw but its seeing a shade of red. I owe this example to Brendan Jackson. It is similar to examples in Yablo (1992).

[53]Johnston (1997) and Parfit (1995) debate the interesting analogous issue whether, if personal identity just consists in certain other facts, it is these other facts or facts about personal identity itself which matter normatively.

versions of NAN refer would leave unsettled just which facts are those in virtue of which (8) holds, and so cannot be used to show that (8) holds in virtue of some such natural facts as (5).

I have argued that it is plausible that explanatory versions of NAN refer to an in-virtue-of relation which is exclusive but not transitive. But now notice that, at least so far as these features go, this relation is compatible with the possibility that (8) holds in virtue of (7) but not in virtue of (5) or (6) and that (5) and (6) merely specify what realizes or constitutes (7) in this case. What non-parochial assumptions would, in conjunction with these features, imply that if (7) held solely in virtue of natural facts in a sense that satisfies (E), then (8) would do so as well? Talk of accomplishment is evaluative, so the claim that (7) is a natural fact would be parochial. I conclude that the claim that evaluative facts stand in a non-transitive and exclusive relation to other facts, plus plausible non-parochial assumptions, doesn't establish any explanatory version of NAN.[54]

6 NAN and Methodology in Meta-Ethics

I have argued that we cannot establish any version of NAN by appealing to an account of natural properties plus plausible non-parochial assumptions and that we cannot establish any explanatory

[54]One might complain, with some justification, that I haven't discussed in-virtue-of relations which I should discuss to be entitled to this conclusion. Consider, for example, the relation of A consisting in nothing more than B (or A being nothing over and above B) such that A and B may be numerically distinct (see e.g. Fine 2001: 15-16; cf. Shafer-Landau 2003: 77). It doesn't seem implausible that such a relation is transitive and non-exclusive. Nor does it seem implausible that (8) consists in nothing more than (5) and (5) consist in nothing more than (9). (8) might then plausibly consist in nothing more than (9) even if the two are numerically distinct. Yet, one might say, this relation is also explanatory. After all, if (8) consists in nothing more than (9), won't (9) explain why (8) holds? It gives a complete account of (8)! My worry about this is essentially the same: if the consists-in-nothing-more-than relation is transitive or non-exclusive, it violates (E). One might reply that there is a kind of metaphysical explanation that doesn't satisfy (E) but is no less a kind of explanation for that. Here I can only register my inclination to think that the notion of metaphysical explanation has yet to be given a satisfactory explication (cf. Daly 2005).

version of NAN by appealing to the nature of the in-virtue-relation to which it refers plus plausible non-parochial assumptions. In closing, I'll argue that the way in which assessment of meta-ethical hypotheses is theory-dependent predicts the failure of non-parochial justifications of NAN.

It is widely thought that assessment of theoretical hypotheses is in general theory-dependent. In deciding what to think about some hypothesis H, we typically find ourselves having to rely not just on our understanding of H and our evidence for it, but also on a body of auxiliary assumptions which include theoretical assumptions concerning the subject matter of H. For example, in assessing a claim about the future in the light of facts about the past and the present, we typically find ourselves having to rely also on some assumptions concerning the future, such as that it won't be wildly unlike the past. If assessment of meta-ethical hypotheses is theory-dependent in a similar way, then we should expect that our assessment of NAN (in its different versions) may be different under different auxiliary assumptions even if we hold all plausible non-parochial assumptions constant.

We can use the elimination argument for NAN from section 2 to illustrate this thesis. One might think that philosophers with different meta-ethical views who agree that NAN is true and that the elimination argument is sound also believe its premises on the basis of reasons that they all can accept. But it seems a lot more likely that even if they agree on some things, at least some of their reasons for believing the premises will differ depending on their other views. Evaluative naturalists could reasonably say that since evaluative facts are themselves natural facts, it is hard to see how they could hold even partly in virtue of any other than natural facts. Since non-naturalists deny that evaluative facts are natural, they must offer some other reasons for thinking that the facts in virtue of which evaluative facts hold are natural, which are also likely to be parochial.

Our assessment of NAN will also depend on what is true of facts in virtue of which evaluative facts hold. For instance, one would expect that the normative role which NAN assigns to natural facts has a link to normative reasons: if something is good in virtue of some facts F, then F should,

at least in the right conditions, give someone a reason to respond to it in some favorable way. One sort facts which are often held to give reasons are facts stated using "thick" evaluative terms, such as 'generous,' 'amusing,' 'deceiving,' or 'brutal,' which are typically taken to have both evaluative and non-evaluative content (see Williams 1985: 129, 140-41). This follows from the above principle about reasons plus the claim that things can have properties expressed in such "thin" evaluative terms as 'good' or 'ought' in virtue of having properties expressed in thick evaluative terms. For brevity, I'll call these properties thin and thick evaluative properties, respectively.

Whether things really can be good or bad in virtue of thick evaluative properties depends on whether such properties decompose into distinct non-evaluative and thin evaluative components. If the property of being generous, for example, decomposes in this way, then it will be something like the property of being good on account of having the non-evaluative and (let's suppose) natural property of assisting a needy cause out of one's own resources without seeking esteem or compensation. If that were right, then we couldn't say that anything is good in virtue of being generous any more than we can say that anything is red in virtue of being red on account of being crimson.

Unless there is independent reason to think that thick evaluative properties are natural, NAN requires that they decompose in this way. Otherwise it is left open as a possibility that something is good in virtue of being generous but not in virtue of benefiting a needy cause in the said way. For if NAN refers to an in-virtue-of relation that is exclusive but not transitive, then it leaves open the possibility that something is good in virtue of being generous and generous in virtue of assisting a needy cause in the said way without being good in virtue of so assisting it.[55] Thus our assessment

[55]This possibility is left open by any view according to which thick evaluative properties neither are natural nor in general decompose but do provide reasons for action, such as Scanlon (1998: 96, 2002: 513) and Wallace (2002: 447-49). I don't know whether these philosophers embrace it. One could embrace it if one thought that something is good in virtue of being generous and benefiting a needy cause in the said way merely realizes its generosity, or that this is just a reason to believe that the action has some other property, such as being generous, which makes it good.

of NAN depends on what we think about the nature of thick evaluative properties.[56] This is the sort of thing to expect if assessment of meta-ethical hypotheses is theory-dependent.

One might object that if my arguments are sound, then parallel arguments would show that we cannot establish that evaluative facts hold solely in virtue of non-evaluative facts on non-parochial grounds. The worry is that this would show too much: unlike the claim that evaluative facts hold solely in virtue of natural facts, the claim that they hold solely in virtue of non-evaluative facts is a genuine truism whose denial seems just incredible.[57] But this worry is off the target. Firstly, the issue that would parallel my concerns is *why* evaluative facts should hold solely in virtue of non-evaluative facts (or indeed why they should hold in virtue of other facts of whatever kind instead of being brute). Secondly, so long as I am careful to make only non-parochial assumptions about the nature of non-evaluative facts, evaluative facts, and the relation which explanatory 'in virtue of' claims express, I don't find it obvious that evaluative facts hold solely in virtue of non-evaluative facts. My argument predicts that if one finds it (obviously) true that evaluative facts hold solely in virtue of non-evaluative facts, then that is likely because one accepts some auxiliary assumptions which make this claim seem (obviously) true. It also predicts that if one finds it more plausible that evaluative facts hold solely in virtue of non-evaluative facts than that they hold solely in virtue of natural facts, then that is likely because one finds the auxiliary assumptions required by the former claim more plausible than those required by the latter claim. If these predictions are as good as they seem to be, then they are further grist to my argument's mill.

If assessment of meta-ethical hypotheses is theory-dependent, this will not only explain the relevance of certain other meta-ethical issues to our assessment of NAN, but also predict the failure of non-parochial justifications for NAN. Some may perhaps take the failure of such justifications to

[56]The converse is less straightforward. The two views about the nature of thick evaluative properties both remain open to us if we assume that NAN is true. Deciding between them requires further auxiliary assumptions.

[57]Thanks to Michael Ridge for pressing an objection along these lines.

suggest that evaluative distinctions might have no natural basis. This is an extremely intriguing thought which I cannot explore here. But of course this result is equally compatible with the possibility that NAN has some adequate justification which is yet to be given. If I am right, however, that such a justification will have to be parochial, then it will require auxiliary assumptions which not everyone who accepts NAN can accept. This, I think, is an instructive result. It shows that important features of methodology in meta-ethics make the justification of NAN a more complicated business than the widespread but often casual acceptance of NAN might initially suggest. It shows how thinking about NAN can give a new perspective on other important issues in meta-ethics. To mention one other example, assuming that the facts in virtue of which evaluative facts hold thereby give normative reasons, whether NAN is true depends on what kind of content facts must have in order to count as normative reasons for something. Systematic discussion of this fundamental question about normativity is a rare find, but a discussion informed by its relationship to NAN is an even rarer find. Finally, the result I have reached reminds us again how surprising it is that so many realists and anti-realists, naturalists and especially non-naturalists, all agree to NAN. Even those who harbor doubts about my arguments can hopefully share my surprise and take up my challenge to articulate their preferred version of NAN and their reasons for accepting it.[58]

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