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Moral Anti-Exceptionalism

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When the editors of this volume invited me to contribute a chapter, I hesitated. Although I have occasionally dabbled in metaethics and metanormativity, I have certainly never claimed to *be* a metaethicist. Not that I lack metaethical views or instincts: I have long had an outsider's impression that objections to moral realism are much weaker than they are usually taken to be. That impression comes not from any special attachment to morality, but from an attachment to rigour in logic and semantics.

Correspondingly, I have long had some methodological views about metanormativity: in particular, that the philosophy of normative language is best done as part of general philosophy of language, that the epistemology of normative knowledge is best done as part of general epistemology, and that the metaphysics of normativity is best done as part of general metaphysics. In each case, the application to normativity should be up to date with recent theoretical developments in the more general field, and meet similar standards of rigour, systematicity, and explicitness.

Naturally, an outsider to a sub-discipline who barges into one of its debates can expect to be accused by insiders of attacking a straw man. To avoid that danger, I asked the editors to nominate some self-standing pieces embodying objections to moral realism at their best, both substantively and methodologically, so that I could engage closely with them at less risk—though certainly not *no* risk—of being told that the *real* objection to moral realism is somewhere else. The editors kindly complied. They nominated Sharon Street's article 'A Darwinian dilemma for realist theories of value' (2006) and two chapters of Jonas Olson's book *Moral Error Theory* (2014). I respond to their arguments just as they stand.

Notoriously, the word 'realism' can mean many things; adding the qualification 'moral' does little to reduce the number. Just what I am defending will emerge more clearly below, but it includes at least this: in normative discourse, we often express mindindependent truths, many of which we know. However, I will not discuss epistemological issues in this chapter, since Olson and Street do not focus on them. Instead, I follow them in focusing on mind-independent truth.

Before I discuss Street and Olson, section 1 explains in more detail my starting-point and general framework. That is needed to explain why developments in philosophical logic may have quite devastating consequences for contemporary metanormative debates.

1. The null hypothesis and an intensional framework

I assume that we start with some capacity to distinguish normative from non-normative language when we see it. Typical normative terms are 'right' and 'wrong', 'good' and 'bad', 'better' and 'worse', 'kind' and 'cruel', 'permissible' and 'impermissible', 'polite' and

'rude', 'beautiful' and 'ugly', 'dainty' and 'dumpy'. Such terms are often used to praise or criticize. Some but not all of them concern morality; others concern aesthetics, etiquette, the law, I avoid the culturally specific assumption that moral norms are more 'serious' than non-moral norms. Nor do I assume that normative terms form a uniform kind in any deep way, though trivially they are all normative. The word 'normative' is vague; my purposes do not require it to be made precise. As I use the word, it applies to the usual paradigms; how much further it extends matters little, for reasons about to emerge.

The null hypothesis about the normative is that it is unexceptional. On the antiexceptionalist view, a general semantic theory which works for non-normative language will also work for normative language; a general epistemological theory which works for nonnormative knowledge and belief will also work for normative knowledge and belief; a general metaphysical theory which works for non-normatively expressed states of affairs, properties, and relations will also work for normatively expressed states of affairs, properties, and relations. This is not at all to assume that the non-normative is uniform in any of those respects, just that *if* such a non-gerrymandered generalization covers the non-normative, it will cover the normative too.

There is no suggestion that normative anti-exceptionalism is obviously correct. Rather, it is the null hypothesis in the modest methodological sense that it is the *default* view: the burden of proof is on its opponents. If a semantic, epistemological, or metaphysical hypothesis has withstood the worst the non-normative in all its variety could throw at it, we should not abandon it for the normative without good reason to do so. For now, the possibility remains open that such good reason will prove easy to find.

In the case of semantics, however, the null hypothesis receives significant confirmation from the *unity* of natural languages. To a first approximation, any two words of a given natural language can occur together in a well-formed sentence of that language; likewise for complex expressions of corresponding grammatical categories. For example, the mathematical term 'four', the normative term 'good', and the descriptive term 'nurse' are combined in the sentence 'Four good nurses helped'. Similarly, any two declarative sentences can be combined into a third declarative sentence by means of logical particles such as 'and', 'or', and 'if'. Thus, despite widespread preconceptions to the contrary, the expressions of a natural language cannot be partitioned naturally into disjoint classes dedicated to different types of 'discourse'. Any such restriction would compromise the functionality of language. The semantics of natural languages must reflect that unity. For well-known reasons, the semantics has to be broadly compositional, so the semantic value of a complex expression can be derived from the semantic values of its simpler constituents and how they are combined. Thus the semantic values of diverse expressions must mesh with each other, to permit such derivations. For example, simply giving a referentialist semantics for natural kind terms and an inferentialist semantics for logical particles is a non-starter, since the two kinds of semantics do not combine properly to permit the derivation of the semantics of a sentence containing both natural kind terms and logical particles. Similarly, a semantic account of normative expressions must be fully integrated with a semantic account of non-normative expressions in the overall framework of a semantic theory for the whole language. This, of course, is the big picture in the background of the rightly famous Frege-Geach objection to expressivist accounts of normative sentences which do not properly generalize to their occurrences embedded under negation or in the antecedent of a conditional. From the perspective of semantics, hand-waving responses to the Frege-Geach point which fail to

integrate their expressivist treatment of normative terms into a clearly specified compositional semantic framework for the whole language look hopelessly amateurish. Of expressivist accounts, only those with a worked-out response to the compositional challenge have intellectual credibility. Thus theoretical considerations tend to favour anti-exceptionalism about the semantics of normative language.

In practice, anti-exceptionalism about the semantics of normative words is confirmed by standard semantic accounts of modals such as 'ought', 'should', 'must', and 'may' on their deontic readings, which apply the same overall framework to them as to epistemic and alethic ('circumstantial', 'dynamic') modals (e.g. Portner 2009, Kratzer 2012). Similar comments apply to evaluative adjectives, such as 'good' and 'bad', which fit nicely into the standard semantic frameworks for non-evaluative adjectives (e.g. McNally and Kennedy 2008, Kamp 2013). Although semanticists do not completely ignore the distinction between the normative and the non-normative, its role in their taxonomies is secondary to deeper, more structural semantic distinctions.

Less directly, such theoretical considerations about semantics also give some support to anti-exceptionalism about both the epistemology of normative knowledge and belief and the metaphysics of normatively expressed states of affairs, properties, and relations. For had the normative differed deeply enough to need exceptional treatment in semantics, it would have been more likely to differ deeply enough to need exceptional treatment in epistemology and metaphysics too. The failure of exceptionalism in semantics rules out one salient route to exceptionalism in epistemology and metaphysics.

In itself, anti-exceptionalism is neutral between realism and anti-realism. To put the point at its crudest, one might be a realist about both the normative and the non-normative, but one might equally be an anti-realist about both. However, by far the best-developed frameworks for systematic compositional semantics come from the tradition of truthconditional semantics, especially intensional semantics, whatever further twists they add. On such a semantics, to a first approximation, the intension of an expression is a function taking each circumstance of evaluation to the extension of that expression at that circumstance, where a circumstance of evaluation is a possible world and perhaps a time (and even other parameters). The extension of an n-place predicate at a circumstance is the set of n-tuples of objects to which it applies at that circumstance; the extension of a declarative sentence at a circumstance is simply its truth-value at that circumstance. This central role for truth and falsity in the semantics encourages realism over anti-realism, by implying that any normative expression can occur in a true declarative sentence: if not the sentence you first thought of, then its negation. Of course, one must not read too much into the point. In particular, nothing in the semantic framework requires the truth-value to be mind-independent or to involve a metaphysically heavyweight correspondence theory of truth. Nevertheless, the semantics works more or less as realists hoped it would, whereas anti-realists might have hoped that it would avoid all talk of truth and falsity.

The intensional framework also models the metaphysics of states of affairs (or propositions), properties, and relations. For simplicity, we equate the circumstance of evaluation with a possible world, ignoring any time parameter (restoring it makes little difference for present purposes). Thus the intension of a declarative sentence is just a function from possible worlds to truth-values; it models the state of affairs obtaining in just those worlds the intension maps to the true. Similarly, the intension of a one-place predicate models the property an object has in just those worlds the intension maps to a set containing

the object, and the intension of a two-place predicate models the relation one object has to a second object in just those worlds the intension maps to a set containing the ordered pair of the first object and the second.

We can abstract away from the clunky set-theoretic apparatus and formalize the resultant theory of states of affairs, properties, and relations more elegantly by quantifying directly into sentence and predicate position in a second-order language, as below. For convenience and familiarity, we still use nouns such as 'state', 'property', and 'relation' when loosely paraphrasing formulas into English.³ The result is a very powerful and general theory of states of affairs, properties, and relations, arguably better adapted to the needs of semantics, mathematics, and other sciences than any available alternative. We note some of its most distinctive consequences.

First, the theory is *plenitudinous*. It does not require states of affairs, properties, and relations to be perfectly or at all natural or joint-carving, or causally efficacious, or non-disjunctive, or to have any other special metaphysical privilege. For the semantics applies to all declarative sentences, however complex, and assigns each of them an intension. More formally, the schema Comprehension₀ holds, where 'P' stands for a variable taking sentence position and 'A' for any declarative sentence, however complex; the (metaphysical) necessity operator \Box captures the generality over possible worlds in the semantics:⁴

Comprehension₀ $\Box \exists P \Box (P \leftrightarrow A)$

Rough paraphrase: necessarily, any sentence (A) modally corresponds to a state of affairs (P). In particular, we can substitute sentences containing normative terms for 'A', since the semantics works for them too. Thus any *normative* sentence modally corresponds to a state of affairs. For instance, some state of affairs is necessary and sufficient for eating meat to be wrong.

Similarly, the semantics applies to all predicates, however complex, and assigns each of them an intension. More formally, the schema Comprehension₁ holds, where 'Q' stands for a variable taking one-place predicate position, 'x' for a variable taking name position, and 'B(x)' for any declarative sentence, however complex:

Comprehension₁ $\Box \exists Q \Box \forall x (Qx \leftrightarrow B(x))$

Rough paraphrase: necessarily, any one-place predicate (abstracted from B(x)) modally corresponds to a property (Q). In particular, we can substitute open sentences containing normative terms for 'B(x)'. Thus any one-place *normative* predicate modally corresponds to a property. For instance, some property is necessary and sufficient for being in the wrong. The schema Comprehension₂ also holds, where 'R' stands for a variable taking two-place predicate position, and 'C(x,y)' for any declarative sentence, however complex:

Comprehension₂ $\Box \exists R \Box \forall x \forall y (Rxy \leftrightarrow C(x,y))$

Rough paraphrase: necessarily, any two-place predicate (abstracted from C(x,y)) modally corresponds to a relation (R). In particular, we can substitute open sentences containing normative terms for 'C(x,y)'. Thus any two-place *normative* predicate modally corresponds to a relation. For instance, some relation is necessary and sufficient for wronging.

The plenitudinous consequences of the theory have the abductive virtues of simplicity and strength, as well as fitting the needs of semantics. They also fit the needs of science, for mathematics in effect makes some of the most systematic applications of second-order logic in science. For example, arithmetic depends on the axiom of mathematical induction: if 0 has a property P, and n+1 has P whenever n has P, then every natural number has P. In set theory, the separation axiom says that every set has a subset containing those of its members with a given property; the more powerful replacement axiom in effect generalizes over relations. If the background theory of properties and relations imposed any special metaphysical requirement on them, it would trip up standard proofs in mathematics, which never dream of checking whether such requirements are satisfied.

Another aspect of the theory is that intensions are *coarse-grained*. Although distinct intensions may coincide extensionally, intensions which *necessarily* coincide extensionally are identical. This follows from the standard mathematical individuation of the functions serving as intensions in the semantics, but is also a simple, strong, and precise account in its own right of identity conditions for states of affairs, properties, and relations respectively, providing a satisfying answer to the charge of obscurity. It is explicit in these schemata:

Intensionality₀ $\Box \forall P \forall P^*(P = P^* \leftrightarrow \Box(P \leftrightarrow P^*))$ $\Box \forall Q \forall Q^*(Q = Q^* \leftrightarrow \Box \forall x (Qx \leftrightarrow Q^*x))$ $\Box \forall R \forall R^*(R = R^* \leftrightarrow \Box \forall x \forall y (Rxy \leftrightarrow R^*xy))$

The identity sign '=' here symbolizes the second-order analogues of identity: in effect, sharing all higher-order properties. Since they satisfy corresponding versions of the indiscernibility of identicals, the logical analogy is perfect.

The effects of Intensionality₀ may seem drastic. For example, the state of affairs of Fermat's Last Theorem holding just *is* the state of affairs of all cats being cats, since they are necessarily equivalent, both being necessary. Uncontroversially, the *sentences* 'Fermat's Last Theorem holds' and 'All cats are cats' are cognitively quite different. But that does not imply that they express distinct states of affairs. Analogously, although 'furze' and 'gorse' are synonymous terms for the same natural kind, a speaker can learn them at different times of year and understand both by normal standards without appreciating their co-reference. Thus the sentences 'Furze is furze' and 'Furze is gorse' can play distinct cognitive roles while still picking out the same state of affairs. On the intensional approach, such cognitive differences play no role in the individuation of states of affairs, which is purely metaphysical.

Similarly, by Intensionality₁, since necessarily all and only trilaterals are triangles, trilaterality just *is* triangularity, even though the sides themselves are not the angles. Thus the semantic constituent structure of the *expressions* 'three-sided' and 'three-angled' does not mirror any metaphysical constituent structure of the *properties* of three-sidedness and three-angledness, even though the former pick out the latter. One benefit of the intensional conception is that it blocks the naïve tendency to project the structure of our language onto the non-linguistic world. Of course, the *words* 'trilateral' and 'triangle' play different cognitive roles: for instance, substituting one for the other can make an explanation better or worse (more perspicuous or less). But that does not imply that they pick out different properties: after all, substituting 'furze' for 'gorse' can make an explanation better or worse

(more perspicuous or less). On the intensional approach, such cognitive differences play no role in the individuation of properties and relations, which is purely metaphysical.

Perhaps the terms 'states of affairs', 'properties', and 'relations' are sometimes used for items individuated along cognitive or linguistic lines, rather than purely metaphysically. If so, those are not the items under discussion in this chapter.

Like comprehension, intensionality has the abductive virtues of simplicity and strength, clarity and elegance. Intensionality also sharpens the effect of comprehension, for it adds uniqueness. Given Intensionality₀, Comprehension₀ entails that any sentence modally corresponds to a *unique* state of affairs. Thus, since just one state of affairs is necessary and sufficient for eating meat to be wrong, it is *the* state of affairs of eating meat being wrong (the proposition that eating meat is wrong). Similarly, given Intensionality₁, Comprehension₁ entails that any one-place predicate modally corresponds to a *unique* property. Thus, since just one property is necessary and sufficient for being in the wrong, it is *the* property of being in the wrong. Again, given Intensionality₂, Comprehension₂ entails that any two-place predicate modally corresponds to a *unique* relation. Thus, since just one relation is necessary and sufficient for wronging, it is *the* relation of wronging.

The intensional approach has significant consequences for the metaphysics of normativity. It is tempting to regard the state of affairs of eating meat being wrong, the property of being in the wrong, and the relation of wronging as themselves normative, since they were expressed with the normative word 'wrong'. But that is a trap. For intensionality allows that a state of affairs, property, or relation expressed in normative terms may equally be expressed in non-normative terms. This is most obvious for states of affairs. Suppose, for example, that torturing for fun is necessarily wrong. Then the necessary state of affairs of torturing for fun being wrong necessarily coincides with the equally necessary state of affairs of 7 being prime. Thus, by Intensionality₀, the supposedly normative state of affairs of torturing for fun being wrong just is the supposedly non-normative state of affairs of 7 being prime—strange, but true. Similarly, the property of wrongly torturing children for fun necessarily coincides with the property of torturing children for fun. Thus, by Intensionality₁, the supposedly normative property of wrongly torturing children for fun just is the supposedly non-normative property of torturing children for fun. Again, the relation of wrongly torturing for fun necessarily coincides with the relation of torturing for fun. Thus, by Intensionality₂, the supposedly normative relation of wrongly torturing for fun just is the supposedly non-normative relation of torturing for fun. Such examples show that we must beware of projecting features of linguistic expressions—here, normativity and nonnormativity—onto the states of affairs, properties, and relations they express. 6 The difference between the normative and the non-normative is cognitive rather than metaphysical.

Such identifications may sound like *reductions* of the normative to the non-normative, or of the non-natural to the natural. But to describe them so is to fall into the very trap just warned against, of confusing states of affairs, properties, and relations with their linguistic expressions. If a sentence or predicate involving a normative or non-naturalistic term picks out the same state of affairs, property, or relation as a sentence or predicate involving no normative or non-naturalistic term, that no more shows the worldly entity to be *really* non-normative or naturalistic than it shows it to be *really* normative or non-naturalistic. Nothing in the semantics suggests that one linguistic expression is somehow more perspicuous than the other. Rather, the proper conclusion to draw is that the distinction between the normative and the non-normative inextricably involves the use of language, not just the non-linguistic

reality spoken about. That in no way impugns the reality of what we speak about in using normative language: the property of wrongly torturing children for fun is just as real as the property of torturing children for fun, since they are identical.

On independent grounds, some philosophers may regard non-normative or naturalistic terms as somehow metaphysically more joint-carving than normative or non-naturalistic terms, but the intensional framework itself is simply neutral towards such naturalism. Accordingly, this chapter is simply neutral between naturalistic and non-naturalistic varieties of normative realism.

Of course, various alternatives are available to such an intensional account. In particular, there are also hyperintensional accounts of states of affairs, properties, and relations. For example, even though being Socrates is necessary and sufficient for belonging to {Socrates}, the properties may be held distinct on the grounds that the latter but not the former 'involves' the set {Socrates}. Similarly, even though torturing children for fun is necessary and sufficient for wrongly torturing children for fun, the properties may be held distinct on the grounds that the latter but not the former 'involves' wrongness. Such theories are currently fashionable, and quite compatible with realism about the normative.

So far, however, the hyperintensional approach remains far less well-developed than the intensional alternative. Extant hyperintensional theories postulate vastly more complicated structures for very meagre explanatory gains. Indeed, the 'data' they are designed to explain are themselves suspect: they feel like projections of discourse features such as *aboutness* and *relevance* onto non-linguistic reality. Moreover, it is far from clear that hyperintensional semantics can emulate anything like the wide range of successes already achieved by intensional semantics. Methodologically, a notorious pitfall in scientific modelling is to give oneself too many degrees of freedom, allowing one to model almost any phenomenon by setting the parameters to suit, but as a consequence adding scant explanatory value. That is an urgent danger for the hyperintensional approach.

In the present state of logic and semantics, the hyperintensional alternative is murkier and less controlled than the intensional approach. What cannot reasonably be demanded is an approach neutral between all 'substantive' metanormative views. It is not the job of logic to be neutral (Williamson 2013). If metanormative theorists make logical errors, that is their problem; it does not mean that logic should be loosened. I will use the simpler, more perspicuous, and more constrained intensional theory, with its much better track record of independent confirmation. In doing so, I will not merely treat the theory operationally, as somehow *useful*, irrespective of its truth-value. Rather, I will work on the (controversial) hypothesis that the intensional theory is *true*. However, even if the intensional theory turns out to be only a good *approximation* to the truth, the objections below to anti-realist arguments are still likely to work, since the gaps they reveal are so large.

The next section applies the intensional approach to Jonas Olson's argument against moral facts.

2. Olson's argument for moral error theory

Olson proposes a rational reconstruction of John Mackie's quaintly phrased 'argument from queerness'. He first considers three other interpretations of the argument, one targeting moral

supervenience, another moral knowledge, and the third moral motivation, but argues that all three fail (116).⁸ He then presents his preferred alternative.

In Olson's summary, his argument has two stages. The first moves from the premises (P12) and (P13) to the intermediate conclusion (C5) (123-4, his labels):

- (P12) Moral facts entail that there are facts that favour certain courses of behaviour, where the favouring relation is irreducibly normative.
- (P13) Irreducibly normative favouring relations are queer.
- (C5) Moral facts entail queer relations.

The second stage moves from the intermediate conclusion (C5) and the further premise (P4') to the conclusion (C2"):

- (P4') If moral facts entail queer relations, moral facts are queer.
- (C2") Moral facts are queer.

Of course, the intended destination is not that there are moral facts, which are queer. Rather, a disputable extra premise is implicit: no facts are queer. Combined with (C2"), it yields the final conclusion that there are no moral facts.

In light of section 1, the talk of 'moral facts' should already have rung alarm bells. For within the intensional framework, the obvious candidates for facts are obtaining states of affairs; thus moral facts are obtaining moral states of affairs. But moral realists should not expect the distinction between true moral sentences and true non-moral sentences to project onto any corresponding distinction between moral and non-moral facts, for a true moral sentence may express the same obtaining state of affairs as a true non-moral sentence. However, in charity to Olson, we can take a 'moral fact' to be a state of affairs expressed by a true moral sentence, irrespective of whether it is also expressed by a true non-moral sentence. Given the intensional framework, moral realists acknowledge moral facts in that sense, since they acknowledge true moral sentences. Contrapositively, if there are no moral facts, then there are no true moral sentences—presumably, because moral predicates somehow fail.

The intended semantic underpinnings of Olson's argument are unclear. Within the intensional framework, a predicate can 'fail' in two main ways. Either it has *no* intension, or it has an *empty* intension—extensionally empty (nothing has the property), and perhaps also intensionally empty (nothing *could* have the property). The difference emerges dramatically under negation. If a predicate has no intension, its negation also has no intension (semantically, there is nothing to negate). By contrast, if a predicate has an extensionally empty intension, its negation has an extensionally full intension (everything has that property). If a predicate has an intensionally empty intension, its negation has an intensionally full intension (necessarily everything has that property). Even predicates whose application to anything entails a wildly false theory have full negations: 'It is not haunted' is true of any house, and 'She is not bewitched' is true of any woman. For a predicate with no intension, one needs something more like pure gibberish: 'He is not fghkl' is not true of anyone.

Error theorists sometimes compare moral terms to empty proper names and mass nouns such as 'Vulcan' and 'phlogiston'. The comparison is inappropriate, because proper names and mass nouns lack natural negations. If moral adjectives such as 'good' and 'bad' or 'right' and 'wrong' are to be compared with terms complicit in a wildly false theory, a more appropriate comparison is with other terms of the same grammatical category, such as 'haunted' and 'bewitched'. On that analogy, moral predicates should have empty intensions, and their negations full intensions. But that result is problematic for moral error theories. Since the negation of a moral predicate is itself a moral predicate, not all moral predicates have empty intensions.

Error theorists might claim that although moral predicates have intensions, ascribing a moral predicate shares a false presupposition or implicature with ascribing its negation. Of course, they would need to meet the normal evidential standards in linguistics for postulating presuppositions or implicatures. But, in any case, such discourse effects sit on top of the intensional semantics, rather than working inside it. They leave untouched the dilemma in the previous paragraph. Analogously, even if ascribing the predicate 'haunted' and ascribing its negation 'not haunted' share a false presupposition, and 'haunted' has an empty extension, 'not haunted' still has a full extension.

The problem applies to Olson's conclusion (C2"). Assume (for reductio) that moral terms have intensions. Consider a sample moral claim, with 'impermissible' read in a fully moral sense:

(i) Torturing for fun is always impermissible.

Suppose that (i) is true. Then it states a moral fact (in the relevant broad sense). But by (C2") such a fact is queer, so by the implicit premise there is no such fact. Thus the supposition (i) is not true after all, so by the semantics its negation (ii) is true instead (moving the negation into the predicate makes no relevant logical difference):

(ii) Torturing for fun is not always impermissible.

Since (ii) is logically equivalent to (iii), (iii) is also true:

(iii) Torturing for fun is sometimes permissible.

But (iii) is just as much a moral sentence as (i) is. Since (iii) is true, it states a moral fact. But by (C2") such a fact is queer, so by the implicit premise there is no such fact. Thus (iii) is not true after all. That is a contradiction. Thus, within a standard semantic framework, Olson's error theory is committed to the implausible conclusion that moral terms lack intensions, and so are closer to 'fghkl' than to 'haunted' and 'bewitched'.

One might try denying that (iii) is a moral claim in the sense at issue, since permissibility is compatible with moral indifference, so the alleged truth of (iii) would not entail any irreducibly normative favouring. However, Olson says the opposite: 'Some moral facts are or entail facts that make actions permissible, where the "permissibility-making" relation is irreducibly normative' (118n12). Both permissibility and impermissibility here are moral matters.

Nor is the role of 'true' in the argument problematic, for it can easily be eliminated; it was used only for convenience. Instead of supposing that (i) is true, one supposes directly that torturing for fun is always impermissible, and proceeds accordingly. As for the role of 'fact', it would be pointless for an error theorist to invoke a metaphysically heavyweight sense of 'fact' on which (i) does not entail (iv):

(iv) It is a moral fact that torturing for fun is always impermissible.

For, within the intensional framework, moral realism requires moral facts only in the sense of the obtaining states of affairs expressed by true moral sentences, and in that sense the move from (i) to (iv) is unproblematic.

Thus, within the intensional framework, Olson faces a dilemma: either his error theory is inconsistent, or it collapses into a crass dismissal of moral discourse as mere gibberish.

One might instead object that Olson is not obliged to accept the intensional framework. That is true, but it misses the dialectical point. For the question is not whether *Olson* accepts the intensional framework but whether his opponent, the moral realist, does. If Olson wants to make trouble for a moral realist who accepts the intensional framework, he had better tailor his argument for the error theory to that opponent's background logic and semantics, unless he hopes to refute the intensional framework itself—a severe challenge for which nothing in his text offers resources or preparation.

How does Olson's argument for (C5) fare within the intensional framework? On his premise (P12), moral facts entail that there are irreducibly normative favouring relations. One might take an irreducibly normative favouring relation to be a relation which can be expressed in normative-favouring terms and cannot be expressed in other terms. But moral realism is not committed to irreducibly favouring relations in that sense. For example, consider a moral realist who accepts the intensional framework and holds that torturing for fun is necessarily wrong. Thus, on her view, there is a moral fact (in the broad sense), the obtaining state of affairs expressed by the true moral sentence 'Torturing for fun is necessarily wrong'. There is also a normative (dis)favouring relation (in a correspondingly loose sense), expressed by the normative predicate 'wrongly tortures for fun'. But the relation is not *irreducibly* normative in the proposed sense, since it can also be expressed by the necessarily equivalent non-normative predicate 'tortures for fun'. Similarly, the moral fact is not *irreducibly* moral in the analogous sense, since it can also be expressed by the necessarily equivalent non-moral sentence '7 is prime'. Reducibility in that sense does not compromise moral realism. Thus Olson is not entitled to premise (P12) in arguing against the moral realist, for whom moral facts need not entail irreducibly normative favouring relations.

In defence of (P12), Olson invokes what he calls 'the conceptual claim': 'that moral facts are or entail irreducibly normative reasons (and correspondingly that moral claims are or entail claims about irreducibly normative reasons)' (124). This suggests some sort of 'conceptual connection' between 'moral' and 'irreducibly normative reasons'. But, as just seen, there is no such connection.

Might Olson mean something else by 'irreducibly'? Perhaps he understands 'irreducibly normative' as something more like 'normative in a way not relativized to ends' (131). On this reading, within the intensional framework, an irreducibly normative relation is a relation which *can* be expressed by a normative predicate in a way not relativized to ends,

irrespective of whether it can also be expressed by a predicate of another kind. For brevity, we may substitute 'relative' and 'non-relative' for 'reducible' and 'irreducible' in this sense. How does his argument fare when read in this alternative way?

The problem is now with premise (P13) rather than (P12). When Olson tries to explain why non-relatively normative relations are objectionably 'queer' in a way relatively normative relations are not (his examples are rules of grammar and etiquette), what he emphasizes is that the former are 'metaphysically mysterious' while the latter are not (136). What is this appeal to metaphysics supposed to achieve? Presumably, if it means anything, it enjoins us to concentrate on the putative relation itself, and abstract from the words which express it. Thus, on the hypothesis that the predicates 'torturing for fun' and 'wrongly torturing for fun' are necessarily equivalent and so express the same relation, it should make no difference which predicate we start with, because by taking the metaphysical perspective we abstract away the difference. But that spells disaster for Olson, for if we start with the non-normative predicate we are not supposed to encounter metaphysical mystery. Within the intensional framework, what is non-relatively normative about the relation is just that it can be expressed by a non-relatively normative predicate; any mystery must involve the predicate, not just the relation. Thus, by moving the discussion into metaphysics, implicitly excluding semantics, Olson chooses to fight on ground where he is doomed to lose.

Stepping back from specific readings of 'irreducibly' and the intensional framework, we can state a more general problem for Olson's argument: if there is a distinctively metaphysical mystery about irreducibly normative relations, it should depend in some way on the metaphysics of relations. At the very least, getting more specific and precise about the metaphysics of relations should provide Olson with a welcome opportunity to get more specific and precise about what the mystery is supposed to be. But although he insists 'the issue here is at the bedrock metaphysical level' (136), he says nothing whatsoever at the bedrock metaphysical level about the nature of relations (or about the nature of reduction). Yet metaphysical theories of relations differ drastically from each other on several obviously relevant dimensions: they may be nominalist, conceptualist, Aristotelian-realist, or Platonistrealist; they may treat relations as sparse or plenitudinous, and as extensional, intensional, or hyperintensional. A metaphysical mystery about relations can hardly take the same form irrespective of those radical differences. But if the nature of all relations is left metaphysically mysterious, why be surprised that the nature of 'irreducibly normative' relations in particular remains metaphysically mysterious? When we got more specific and precise about the metaphysics of relations, by fixing on the well-known, well-developed and simple intensional framework, it did not make the metaphysical mystery more specific and precise. Instead, it suggested that the alleged mystery is a mere artefact of confusion between two levels: the level of relations themselves and the level of the predicates by which we express them. The invocation of metaphysics is a bluff. In brief, Olson's master argument provides the moral realist with no mystery to clear up, no case to answer.

3. Street's evolutionary argument against realist theories of value

Unlike Olson, Sharon Street argues that realism about value is utterly implausible in light of evolutionary theory. She defines her target thus (110):⁹

The defining claim of realism about value, as I will be understanding it, is that there are at least some evaluative facts or truths that hold independently of all our evaluative attitudes.

She adds in a footnote (156):

More broadly, realism about value may be understood as the view that there are *mind-independent* evaluative facts or truths. I focus on independence from our *evaluative attitudes* because it is independence from this type of mental state that is the main point of contention between realists and antirealists about the value.

Full-blooded moral realism entails realism about value in Street's sense.

Some initial clarification of the phrase 'mind-independent' will prove helpful. Consider a paradigm of a mind-independent truth, such as ' $E = mc^2$ '. Obviously, we could come to use the numeral '2' to mean what we now mean by '3' (and *vice versa*). If we did so, keeping the other elements of the equation fixed in meaning, the formula would express something false. What we mean by the numeral '2' is in some sense a mind-dependent matter. Humans could in principle collectively choose to make that change, and succeed in doing so, even if no single one of us has that power. This sort of mind-dependence is uncontroversial, almost trivial, and irrelevant to the issue of realism about value, just as it does not make laws of physics mind-dependent in any interesting sense. The question is not how a given sentence could have expressed a false proposition, but how the proposition it now expresses could have been false. Street's use of the phrase 'facts or truths' in effect acknowledges this point.

Propositions correspond to states of affairs in the intensional framework, and facts to obtaining states of affairs. Street's talk in the quoted passages of 'evaluative facts or truths' must be handled with care, for the same state may be expressed by both evaluative and non-evaluative sentences, as already seen. To make best sense of her text, we count a state of affairs as 'evaluative' if and only if it *can* be expressed by an evaluative sentence.

Suppose that some evaluative sentence expresses the necessary state of affairs. Then the necessary state of affairs counts as evaluative: in Street's phrase, it is an evaluative fact or truth. But the necessary state of affairs holds 'independently of all our evaluative attitudes', indeed independently of *all* our attitudes. After all, the necessary state of affairs is just the state of affairs of 7 being prime, and that state of affairs holds independently of all our attitudes. Thus an evaluative fact or truth holds independently of all our evaluative attitudes, which means that realism about value in Street's sense is true, contrary to her evolutionary argument.

But *does* any evaluative sentence express the necessary state of affairs? One candidate is an ordinary logical truth using evaluative terms, such as 'All good actions are good actions'. That seems a rather cheap way of establishing realism about value.

We could rule out such examples by stipulating that a sentence counts as evaluative if and only if it is logically equivalent to no sentence containing only non-evaluative terms, for 'All good actions are good actions' is logically equivalent to 'All whales are whales'. But that stipulation does not deal with sentences such as 'Either all whales are mammals or torture is wrong', which states a necessary truth because its first disjunct does; the disjunction counts

as evaluative because it is *logically* equivalent to no sentence containing only non-evaluative terms.

We could rule out such disjunctive examples by stipulating that a sentence counts as evaluative if and only if it is *necessarily* equivalent to no sentence containing only non-evaluative terms, for 'Either all whales are mammals or torture is wrong' is necessarily equivalent to 'All whales are mammal'. But that stipulation implies that if torturing for fun is necessarily wrong, then 'Torturing for fun is wrong' is not evaluative, because it is necessarily equivalent to 'All whales are whales' (since both are necessary). But that is cheating against realism about value. If it is a necessary fact that torturing for fun is wrong, that fact is a perfectly good verifier for realism about value.

The problem here is not with Street's understanding of 'realism' in terms of mind-independent truth, but with how she demarcates the 'evaluative' as the target of her anti-realism. She faces a tricky challenge within the intensional framework: to define which facts or truths are 'evaluative' without either giving realism about value an easy victory or cheating against it. Evolutionary theory provides no obvious help in meeting that challenge.

As with Olson, someone might object that Street is not obliged to accept the intensional framework. Again, that is true, but it misses the dialectical point. For the question is not whether *Street* accepts the intensional framework but whether her opponent, the realist about value, does. If Street wants to make trouble for a realist about value who accepts the intensional framework, she had better tailor her argument against such realism to that opponent's background logic and semantics, unless she hopes to refute the intensional framework itself—a severe challenge for which nothing in her text offers resources or preparation. We may therefore continue to test Street's argument within the intensional framework.

At one point in her paper, Street addresses a related challenge. She considers a 'rigidifying' move discussed by Stephen Darwall, Allan Gibbard, and Peter Railton (1992). The proposal is that the evaluative attitudes of a community determine which natural properties or relations its evaluative terms designate; they could have designated other properties or relations, had the community's evaluative attitudes been different. However, the evaluative terms are rigid designators, so as used in a given context they designate the natural properties or relations determined by the evaluative attitudes prevalent in that context even with respect to counterfactual circumstances of evaluation. For example, suppose that in our context C, evaluative attitudes E prevail and make the word 'good' designate the natural property N, whereas in another context C*, different evaluative attitudes E* prevail and make the word 'good' designate the different natural property N*. Since 'good' is a rigid designator, the sentence 'good = N' expresses a necessarily true proposition as uttered in our context C but a necessarily false proposition as uttered in C*, while the sentence 'good = N*'' expresses a necessarily false proposition as uttered in C but a necessarily true proposition as uttered in C* (let 'N', 'N*', 'E', and 'E*' all stand for context-insensitive rigid designators). Thus speakers in C can truly say 'Even if attitudes E* prevailed, N would still be the good', while speakers in C* can truly say 'Even if attitudes E prevailed, N* would still be the good'.

Here is Street's response to the rigidifying move (138, with 'N*' in place of her 'M'):

Such a view is not genuinely realist in my taxonomy, however, for on such a view, there is no robust sense in which other creatures (including other

possible versions of ourselves) would be making a *mistake* or *missing* anything if their evaluative attitudes tracked natural facts N*, say, instead of natural facts N. [...] when we say "The good is identical to N" and they say "The good is identical to N*," we will not be *disagreeing* with each other, with one of us correct and the other incorrect about which natural facts the good is identical to, but rather simply talking past each other

Again (138-9):

there is, on such a view, no standard independent of all of our and their evaluative attitudes determining whose sense of the word "good" is right or better; neither of us can properly accuse the other of having made a mistake.

Most of what Street says in these passages about the upshot of the rigidifying move is correct, though she goes somewhat beyond what it strictly commits its proponents to. For instance, it does not require N and N* to be *equally* natural or joint-carving; they only need to be natural or joint-carving *enough* to be picked out by the evaluative attitudes prevailing in the respective contexts. The two groups may still disagree over whose distinction is the more natural or joint-carving. However, Street is right that the rigidifying move is *consistent* with the more complete symmetry she imagines.

A more pressing question: how is the lack of disagreement in Street's scenario supposed to show that the two groups are not both expressing mind-independent evaluative truths? For Street defined realism about value at the beginning of her article; presumably, she does not mean to be moving the goalposts midway through. A more charitable interpretation is that she takes herself to be refining her explanation of the relevant sort of mind-independence, by setting a standard which the rigidifying move fails to meet.

The trouble is that the higher standard for mind-independence which Street seems to be setting involves going back on the distinction rehearsed at the start of this section between harmless mind-dependence in whether a sentence expresses a true proposition and harmful mind-dependence in whether the proposition it now expresses is true—a contrast which is really just an instance of the good old use-mention distinction. If we lose sight of that distinction, we risk classifying even ' $E = mc^2$ ' as a mind-dependent truth. For Street's complaint is that although 'good = N' expresses a necessarily true proposition in C, it expresses a (necessarily) false proposition in C*.

To reinforce the point, recall some of the cases in the literature for which the rigidifying move was first introduced, involving natural kind terms. Suppose that on Earth the word 'water' is used as a rigid designator for the transparent, colourless, tasteless liquid prevalent on Earth, which happens to be H_2O , while on Twin-Earth the word 'water' is used as a rigid designator for the transparent, colourless, tasteless liquid prevalent on Twin-Earth, which happens to be XYZ, with a completely different chemical structure from H_2O . Thus the sentence 'water = H_2O ' expresses a necessarily true proposition as uttered on Earth but a necessarily false proposition as uttered on Twin-Earth, while the sentence 'water = XYZ' expresses a necessarily false proposition as uttered on Earth but a necessarily true proposition as uttered on Twin-Earth. All of Street's complaints apply, with respect to variation in the environment rather than variation in evaluative attitudes:

On such a view, there is no robust sense in which other creatures (including other possible versions of ourselves) would be making a *mistake* or *missing anything* if they were on Twin-Earth instead of Earth. When we say "Water is identical to H₂O" and they say "Water is identical to XYZ," we will not be *disagreeing* with each other, with one of us correct and the other incorrect about which natural kind water is identical to, but rather simply talking past each other. There is, on such a view, no standard independent of our and their environments determining whose sense of the word "water" is right or better; neither of us can properly accuse the other of having made a mistake.

None of this undermines a fully realist view of 'water = H_2O ' as uttered on Earth or Twin-Earth. The fact which we use it to state on Earth is not itself environment-dependent in the relevant sense; its obtaining is not somehow limited to planets like Earth. The same goes for the fact which Twin-Earthers use 'water = XYZ' to state on Twin-Earth. Indeed, on the intensional view, it is the very same fact as the one stated in C, the necessary state of affairs.

For structurally parallel reasons, none of Street's points about the lack of disagreement and the rest undermines a fully realist view of 'good = N' as uttered in our context C. The fact which we use it to state in C is not itself mind-dependent in the relevant sense; its obtaining is not somehow limited to contexts like C. The same goes for the fact which others use 'good = N^* ' to state in C^* . Indeed, on the intensional view, it is the very same fact as the one stated in C, the necessary state of affairs.

One might still worry that there is something *parochial* about the envisaged use of 'good' in a fully-fledged version of Street's scenario. In our context C, we use 'good' to designate the property N; N plays a major role in our lives. But N is of no interest to creatures in C*; it plays no role in their lives. Conversely, in their context C*, they use 'good' to designate the property N*; N* plays a major role in their lives. But N* is of no interest to us; it plays no role in our lives. In both C and C*, 'good' designates something of merely local interest.

Equally, there is something parochial about the use of 'water' in a fully-fledged version of the Twin-Earth scenario. On Earth, we use 'water' to designate H₂O; H₂O plays a major role in our lives. But H₂O is of no interest to Twin-Earthers; it plays no role in their lives. Conversely, on Twin-Earth, they use 'water' to designate XYZ; XYZ plays a major role in their lives. But XYZ is of no interest to us; it plays no role in our lives. On both Earth and Twin-Earth, 'water' designates something of merely local interest.

Parochialism does not entail relativism. 'Water = H_2O ' is absolutely true as uttered by Earthers and absolutely false as uttered by Twin-Earthers; 'water = XYZ' is absolutely true as uttered by Twin-Earthers and absolutely false as uttered by Earthers. Similarly, 'good = N' is absolutely true as uttered in context C and absolutely false as uttered in C^* ; 'good = N^* ' is absolutely true as uttered in C^* and absolutely false as uttered in C. There is no room here for that will-o'-the-wisp, faultless disagreement. There is simply no disagreement between the two communities, at least on these points: just an illusion of disagreement for the unwary.

As officially defined by Street, realism about value imposes no ban on parochialism. It says simply that 'there are at least some evaluative facts or truths that hold independently of all our evaluative attitudes'. She explains the phrase 'evaluative facts or truths' thus (110):

Evaluative facts or truths I understand as facts or truths of the form that X is a normative reason to Y, that one should or ought to X, that X is good, valuable, or worthwhile, that X is morally right or wrong, and so on.

This liberal account says nothing to exclude parochial categories of evaluation. Thus, if we standardly use 'good' or any other evaluative term to designate a property of merely parochial interest, but some evaluative facts or truths about that property hold independently of all our evaluative attitudes in the relevant sense, then realism about value is still vindicated. Given how Street has set up the issues, she is wrong to dismiss the rigidifying account as not genuinely realist in her defined sense.

Of course, many metaethicists will deny that 'good' and 'bad', 'right' and 'wrong', and other central members of our evaluative lexicon are parochial. On their view, if such terms play the same general regulative role in the lives of other creatures as they play in ours, then the terms designate the same properties and relations in their mouths as they do in ours. Thus if we apply 'good' to X while the others deny 'good' of X, the disagreement is genuine. In that way, morality is supposed to be *universal*: supposedly, all responsible agents take an implicit interest in central moral properties and relations, however much they disagree about their extensions. Alternatively, some metaethicists may just take the aspiration to universality to be so deeply built into morality that, if it fails, moral terms simply fail to designate, rather than designating something parochial. On such grounds, some may deny that, on the Darwall-Gibbard-Railton scenario, 'good' functions as a strictly moral term in contexts C and C*, given the lack of universality. 11 But not all evaluative terms are moral terms; terms of aesthetic evaluation are not. The parochialism of 'good' in those contexts need not prevent it from functioning there as a non-morally evaluative term. Are Street's evolutionary considerations more relevant to specifically moral realism than they are to general evaluative realism?

The proto-evaluative attitudes which Street emphasizes in non-human animals are not all proto-moral. When a leopard is chasing down an impala, the leopard takes a positive evaluative attitude to the state of affairs of the leopard catching the impala, while the impala takes a negative attitude to the same state of affairs, but their evaluative attitudes do not seem proto-moral. There is no aspiration or claim to universality. Things may not be so different when a human hunter is chasing down a prey, for food. Of course, the human hunter *might* judge that the morally best outcome would be for him to catch the prey, but that seems like a rather pompous and pretentious rationalization of something more primitive—perhaps he moonlights as a moral philosopher.

Consider a hunting case in more detail. Let CATCH be the state of affairs of the predator catching the prey. The predator and prey take positive and negative evaluative attitudes respectively to CATCH. Without too much of a stretch, we can interpret the predator and prey as making evaluative *judgments* about CATCH, which may figure in their practical reasoning. To put their judgments into words, the predator judges 'CATCH is good' and the prey judges 'CATCH is bad'. But although the predator and prey have blatantly conflicting interests, they are not exactly *disagreeing*, faultlessly or otherwise. Neither is *mistaken*, or views the other as mistaken. Both judgments are clearly correct. CATCH has both the property the predator is attributing to it and the property the prey is attributing to it; the two properties are compatible. Thus, when we use 'good' and 'bad' to articulate their evaluative attitudes, we do not attribute universality, or even the aspiration to it. We are content to use

the words parochially: although 'good' and 'bad' designate mutually incompatible properties as both put into the predator's mouth, and mutually incompatible properties as both put into the prey's mouth, the property 'good' designates as put into the predator's mouth is compatible with the property 'bad' designates as put into the prey's mouth, and the property 'bad' designates as put into the predator's mouth is compatible with the property 'good' designates as put into the prey's mouth. These properties are all parochial, of merely local interest.

That a property is parochial does not mean that it is mind-dependent. More plausibly, those in CATCH concern the animal's needs and well-being. Which things will nourish an animal and which will poison it are mind-independent matters. Nor are the properties 'relative' in any useful sense. They are just ordinary properties which some things have and others lack. Evaluative realism in Street's sense holds for such parochial properties.

The case does not change radically when we consider a pack of predators hunting a herd of prey. Within each group, there are social relations and social attitudes, with some shared expectation that individual interests will be subordinated to those of the group, social rewards for conforming and sanctions for not doing so, and thus perhaps some sort of protomorality. Nevertheless, if CATCH+ is the state of affairs of the predators catching some of the prey, we have in effect the predators judging 'CATCH+ is good' and the prey judging 'CATCH+ is bad', where neither group is mistaken; both judgments are clearly correct. Thus both judgments are still parochial, although at the social rather than individual level. In these circumstances, what is good for the predators is bad for the prey, and what is bad for the predators is good for the prey. All these properties are parochial too: they are of merely local interest. Typically, they are also mind-independent.

Even when we consider conflict between two human groups, the case may still not be altogether different. Each group may be content to evaluate potential outcomes as 'good' or 'bad' in a parochial way. For example, in a battle, each side evaluates victory as 'good' and defeat as 'bad'. They are fully aware that what they judge 'good' is what the other side judges 'bad', and *vice versa*. But that need not make them see each other as *mistaken*. They may simply see the others as *other* and *the enemy*. Of course, there is also a human tendency to moralize conflict, to see the other side as evil and mistaken, in moral, religious, or legal error. Such an attitude may have motivational advantages. But it is not needed for conflict when there is competition for scarce resources. Each side may see the conflict as symmetrical: it's them or us.

All this is compatible with the propriety by universalist standards of universalist evaluation, in cases of human conflict and elsewhere: judgments in moral terms about properties or relations in which all responsible agents take an interest. The point is just that we should not assume that all evaluation is universalist, even when universalist evaluation seems quite natural.

If the universalist aspiration is essential to morality, then moral evaluation may play a smaller role in human life than many philosophers, especially moral philosophers and metaethicists, assume. We are often content to make our decisions on parochial grounds. The aspiration to complete universality may be a product of reflective proto-theorizing rather than a normal component of human decision-making. Such a process of reflection may be compared, doubtless more in aspiration than in achievement, to the process of trying to strip out the more parochial aspects from our picture of physical matters in order to get at something more scientific, most notably with universal laws of physics. Similarly, many

moral theorists try to strip out from our picture of normative matters the more parochial aspects, favouring oneself, or one's family and friends, or one's own race or nation, or one's own species. In both cases, the starting-point involves various forms of bias and limitation, but that does not mean that it is incapable of self-improvement. With science, that process has gone much further than we had any right to expect. How far it can go with morality is an open question, but generic evolutionary considerations impose no particular upper bound.

In brief, Street's evolutionary argument fails for broadly logical reasons against realist theories of parochial value. But, once a realist theory of parochial value is in place, her argument also fails to block the move from it to a realist theory of non-parochial value, through forms of reflective anti-parochial theorizing which have been successful in other cases.

4. Conclusion

Facts, truths, propositions, states of affairs, properties, relations: all are freely and frequently invoked in contemporary metaethics. But one is rarely told what theory of them, if any, is being assumed in the background. Perhaps the assumption is that the choice of background logico-semantic theory makes no relevant difference. That assumption is not obviously correct. Once the intensional theory is made systematically explicit, the problems with some of the most influential recent work in the area stand out clearly. Both Olson's argument for an error theory of irreducible normativity and Street's argument against realist theories of value turn out to fail. Thus, *if* the choice of background logico-semantic theory makes no relevant difference, those arguments fail under every such choice. Of course, Olson and Street may accept that the background logico-semantic theory is relevant, and prefer another. Then they should tell us which it is and how it makes a crucial difference to their arguments. But that would not take them very far, since proponents of moral and evaluative realism can still adopt intensionalism, leaving Olson and Street with the task of either finding arguments which work within that framework or refuting the framework itself.

One test of a philosophical idea is whether it looks better or worse once formulated in a precise, systematic logical and semantic framework. Moral, evaluative, and normative realism pass that test.¹³

Notes

- For previous dabbling see Williamson 2000: 238-259, 2001, 2018, 2019, 2020b, 2021.
- The terminology follows Kaplan 1989. For simplicity, we omit mention of the context of utterance, needed to handle context-sensitive expressions. The considerations in the text generalize to a wide variety of intensional frameworks.
- For a detailed defence of such a form of higher-order modal logic as a metaphysical theory see Williamson 2013.
- 4 P must not occur free in A; \leftrightarrow is the material biconditional. Similar glosses are to be understood for the other formulas. See Williamson 2013 for more discussion of logical and semantic issues about such schemata.
- 5 Shapiro 1991 explains why the first-order schemata derived from the second-order axioms are inadequate substitutes for characterizing the intended mathematical structures. For the extension to second-order modal logic see Williamson 2013.
- Note that the identities are not derived from any general thesis of the supervenience of the normative on the non-normative or of the non-natural on the natural; no such thesis is implicit in the intensional framework. Instead, they are derived from specific necessitated normative theses.
- Some authors simulate hyperintensionality within a superficially intensional framework by permitting impossible worlds where laws of classical logic break down. This approach violates semantic compositionality and loses much of the explanatory value of the classical intensional approach, for reasons explained in Williamson 2020. It is not helpful for issues about normative realism.
- 8 All page references in this section are to Olson 2014.
- 9 All page references in this section are to Street 2006.
- 10 For these purposes, linguistic expressions are assumed to be individuated nonsemantically.
- See Horgan and Timmons 1991 and the ensuing debate. The putative failure of universality cannot be understood as a failure of supervenience because (i) the contexts C and C* differ as supervenience bases (just as Earth and Twin-Earth do) and (ii) 'good' in C and 'good' in C* may each satisfy reasonable supervenience constraints on evaluative terms. The complaint that the difference between C and C* does not justify the difference in evaluative attention is downstream from the demand for universality.

- Taking a propositional attitude does not imply the ability to articulate it in words. Good explanations of the behaviour of non-human animals often attribute to them propositional knowledge of the present state of their environment and preferences as to its future state. The coarse-grained nature of the intensional framework facilitates such ascriptions.
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