A Reply to “Mind the (is-ought) Gap”

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A.N. Prior’s (1960) famous counterexamples to ethical autonomy involve cases where non-normative premises entail a normative conclusion. Consider, for example, a normative claim $N$ and a non-normative claim $M$. If $N \lor M$ is non-normative, then the non-normative $\neg N \land (N \lor M)$ entails the normative $M$. If the disjunction is normative, then it is entailed by the non-normative $N$. The entailments are impeccable; in the ordinary sense of entailment, we really do have a case of the normative being entailed by the non-normative.

Daniel Singer, in (Singer forthcoming), fleshes out a familiar shortcoming with this approach: there is no way to argue from the premises of a Prior example to the conclusion without already being a position to assert the conclusion independently of any normative material. The thrust of Singer’s attack against Prior’s arguments is that even though they are great entailments, they are lousy ways of acquiring information about the normative. He argues we better capture the sense of Hume’s dictum by means of:

**IS-OUGHT-GAP**: There is no argument from non-normative premises to a relevantly normative conclusions.

Singer proceeds by showing that anytime we can reason from intuitively non-normative premises to an intuitively normative conclusion, this is due to the fact that the possibilities consistent with the premises already validate the conclusion; he then argues that if the premises of an argument are insensitive to the normative facts (are norm-invariant), then the conjunction of the premises and the conclusion is also insensitive to the normative facts. This means that we add no new normative information, understood in terms of sets of worlds, by so arguing. We think that Singer’s point here is absolutely apt—we can see why the Prior arguments don’t show that we can get an is from an ought by noticing that anytime we can make such an inference, we are already in a position to accept the conclusion and we gain no information, in a particular sense, about the normative by so doing. Put another way, ‘getting an ought from an is’ is more than getting an intuitively normative proposition from non-normative propositions. It, rather, is adding into our stock of beliefs a proposition that makes a normative difference.

All deductive argumentation is non-ampliative, so we never gain new information, in the sense of narrowing the set of possibilities consistent with our beliefs, by arguing deductively. But we might gain new information in the sense of making explicit and accepting a proposition which is a consequence of what we already believe. Singer’s claim is that if we start with a set of premises that don't make a normative difference, then we will
never shake loose a consequence that makes a normative difference. Unfortunately, we think that Singer’s particular interpretation of IS-UGHT-GAP does not capture this nice analysis of Prior’s problems.

At this point, it is crucial to remind ourselves about what Prior was up to in the first place. Prior gave a logical counterexample to is-ought; since logic makes no assumptions about the normative, a logical counterexample to is-ought is the strongest possible. Consequently, showing that we can overturn Prior’s examples or, rather, blunt them is to give the weakest possible defense of the barrier between is and ought.\(^1\) We need to also consider whether there are other notions of inference or argument where this defense does not work. We will shortly introduce a variety of such notions, involving metaphysical or analytic background propositions, and show that Singer’s defense does not help with these examples. First, though, we should look back at the source and see what Hume has in mind by the thought that we can’t get an ought from an is.

In every system of morality, which I have hitherto met with, I have always remark’d, that the author proceeds for some time in the ordinary way of reasoning, and establishes the being of a God, or makes observations concerning human affairs; when of a sudden I am surpriz’d to find, that instead of the usual copulations of propositions, is, and is not, I meet with no proposition that is not connected with an ought, or an ought not. This change is imperceptible; but is, however, of the last consequence. For as this ought, or ought not, expresses some new relation or affirmation,’tis necessary that it shou’d be observ’d and explain’d; and at the same time that a reason should be given, for what seems altogether inconceivable, how this new relation can be a deduction from others, which are entirely different from it … [I] am persuaded, that a small attention [to this point] wou’d subvert all the vulgar systems of morality, and let us see, that the distinction of vice and virtue is not founded merely on the relations of objects, nor is perceiv’d by reason. (Treatise, 3.1.1)

For Hume, a logical deduction involves reasoning with relations of ideas. But even the most cursory inspection of Humean relations of ideas shows that his notion of deduction involves relations which we would not ordinarily consider part of logic, including mathematical and geometrical claims like the interior angles of a triangle sum to 180 degrees. Plausibly, his account of deduction also includes facts based on knowledge of meaning (Noonan 2014). So, plausibly, there are some analytic statements built into what counts as a legitimate notion of deduction for Hume. Hume is not, therefore, objecting that we can’t logically derive ought facts merely from is facts, but the stronger claim that we can’t analytically derive ought facts merely from is facts.\(^2\) Given his repeated request for

\(^1\) We say ‘blunt’ here because Singer does not show that Prior’s examples aren’t instances of valid entailments. His point is rather that entailment doesn’t capture Hume’s dictum.

\(^2\) Admittedly, given a notion of analytic entailment, all normative facts are analytically entailed by non-normative facts, but that is because they are analytic truths. So this is irrelevant to our point, being analogous to the claim that any tautology follows from any set of sentences whatsoever.
exploration (italicized above), it is even possible that Hume is interested in the stronger claim that is-facts are not metaphysically sufficient for ought-facts. Does Singer’s account work on this broader conception of argument? To see whether or not this is true, we need to spell out some details of Singer’s account.

Singer works within Gibbard’s expressivist semantics. This semantics takes as its basic unit a world-norm pair consisting of a possible world and a set of norms. We will write such \(<w,n>\). The normative component figures essentially in the semantics for normative expressions like ‘ought’, ‘wrong’, etc. in the obvious way. Truth at a world-norm pair \(<w,n> \models \phi\) is defined with reference both to the worldly component and the normative component (see (Gibbard 1992) for details.) Given this set-up, we can define norm-invariance: \(\phi\) is norm-invariant just in case:

\[
\forall w \left[ \exists n <w,n> \models \phi \Rightarrow \forall n <w,n> \models \phi \right]
\]

This says that a sentence in norm-invariant if and only if it is satisfiable at a world with the choice of some norm only if it is satisfiable by the choice of any norm.

With the notion of norm-invariance defined, Singer turns to arguing that WORLD-NORM GAP, an formal specification of IS-OUGHT-GAP, captures the essence of Hume’s claim. WORLD-NORM GAP is a claim about the persistence of norm-invariance across valid argument:

**WORLD-NORM GAP:** If \(X \models \phi\) and all of \(X\) are norm-invariant and satisfiable, then \(X \& \phi\) (the conjunction of all the sentences in \(X\) and \(\phi\)) is norm-invariant.

Of course, it should immediately be noted that there is nothing special about norms here. In homage to Charles Pigden, let a world-hippopotamus pair be a pair of a possible world and a hippopotamus (letting the hippopotamus slot interact with some select expressions in some way). We can then formulate the obvious notion of hippopotamus invariance and prove WORLD-HIPPOPOTAMUS GAP:

**WORLD-HIPPOPOTAMUS GAP:** If \(X \models \phi\) and all of \(X\) are hippopotamus-invariant, and \(X\) is satisfiable, then \(X \& \phi\) is hippopotamus-invariant

as well as proving similar things about time-invariance, location-invariance, speaker-invariance, and so on. There is a general fact here about the persistence of index-invariant across deductive argument; the generality of this fact is important since it means that Singer’s claim that WORLD-NORM GAP captures Hume’s is-ought gap only if his definition of normative facts as those which have no impact on whether the worldly fact is correct.

In support of our claim that the crux is the account of normative facts, note that WORLD-NORM GAP holds even when is-ought clearly fails. Suppose, as Searle thought, that we can impact normative demands on ourselves by making promises (Searle 1964) and this is analytic of the notion of promising. If Searle is right, we can analytically infer from the existence of a piece of behavior — a sincere promise (perhaps with uptake, etc.) — to the existence of a normative demand on ourselves. Even though this doesn’t restrict the set of possibilities consistent with our beliefs, it adds in an explicit normative
proposition that was antecedently only implicit. But it is still true, even on a Searlean semantics, that if a set of sentences is normatively invariant and satisfiable, then the consequences of this set are likewise norm-invariant.

Or consider Russ Shafer-Landau and Terence Cuneo’s thesis that many substantive moral propositions are also analytic truths. They include examples such as that it is wrong to torture others just because they have inconvenienced you, that it is wrong to rape a child solely to indulge one’s lust, and that the interests of others are sometimes morally weightier than our own.3 If any one such proposition is analytic, then it will be included in any set of norms, and hence will be norm-invariant. But these are paradigmatically normative propositions. We get the same result if it is not analytically but metaphysically necessary that any system of norms will include some particular normative proposition – some fundamental substantive principle, or perhaps obey some abstract structural principle such as ought implies can.

If we reject views according to which certain propositions are norm-invariant because they are analytic or necessary, then norm-invariance does a reasonably good job at capturing the notion of a non-normative proposition. If the worldly facts do not interact with the non-worldly facts, then it shouldn’t matter for a non-normative statement which norms we pick. If it matters, then this shows that it is a claim about the findings of certain norms and hence it will not be norm-invariant. Is this adequate as a general characterization of the non-normative? Can we rule out such accounts of the meaning or metaphysics of the normative?

It’s not at all obvious. Part of what motivates Singer to give his account is the prospect of an account of is and ought which also permits an illuminating deontic logic, unlike the sort of account given in (Pigden 1986). Deontic logic, however, like tense logic or modal logic, is a logic-of, not a logic in the broadest sense. As such, the semantic base over which the logic is defined needs to accommodate the analytic features of the notion being theorized.4 When we do the logic of alethic modals, for example, we restrict the accessibility relation between worlds so that every world “sees” itself—i.e. we requires that the accessibility relation on possible worlds, $R$, be reflexive.5 We can then argue about whether $R$ should be transitive, euclidean, etc. Some of these arguments take place at the level of claims about the meaning of alethic modals, corresponding to claims about the meaning of ‘necessary’ itself; some take place at the level of fundamental metaphysics, corresponding to claims about the domain of application we want to apply ‘necessary’ over.6 Constraints

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3 They also offer “It is pro tanto wrong to impose severe burdens on others simply because of their physical appearance” but we’re confident it’s ok for you to pay someone to move your piano.

4 Arguably, this is true even for logical expressions, as in Woods (ms2), but the case for this would distract here. It’s clearly true for cases of like those we’re discussing.

5 If the T axioms doesn’t strike the reader as sufficiently general, consider instead the restriction to normal modal logics. The point is the same, even though the T-axiom is also plausibly part of the meaning of the alethic modal ‘necessarily’.

6 Compare, for example, the arguments against S4 in (Salmon 1989) to those in (Dummett 1993).
motivated by the first type of argument, such as the reflexive property, correspond to features of the meaning of ‘necessity’ itself.

When we turn to giving a semantics for normative notions, then, we need also ask what features of normativity should be built into the semantics since they correspond to the meaning of the normative expressions themselves. The answer to this is far from obvious. To take another example, suppose we, following Kaplan (1977), add into our index set a designated speaker. We can obtain, then, a logic of the first-person pronoun. But should we allow any object to serve as the speaker? This is by no means clear. If we do that, we have moved away from giving a logic of the first-person pronoun, in a sense, since our notion of the reference of a first person pronoun is always an agent capable of representing themselves. Similar problems plague Singer’s characterization of non-normative in terms of a wide-open version of Gibbard’s semantics since we can have different metasemantic views about the meaning of the normative expressions and, thus, different semantic constraints.

Consider, for example, the widely-held claim that normativity supervenes on the natural. Representing this in Gibbard’s semantics would involve banning pairs of world-norm pairs which agree in their worldly component but disagree in their normative component. Suppose we do this. Now, let W be the conjunction of all the worldly facts about a possible world w. W is then norm-invariant over the supervenient worlds, but surely this is the wrong result—W is paradigmatically non-normative. A similar point would hold on the assumption that the normative is metaphysically or conceptually necessary, which are not particularly uncommon metaethical stances.

From the other direction, consider a view on which there is no gap between is and ought—SIMPLE CONVENTIONALISM. Let the norms be related to the worlds in the following way: the norms figuring in n must cohere with the behaviors of the agents in w. Call such world-norm pairs proper. Consider the claim that people tend to avoid murdering and say things like “murdering is impermissible”. This sentence is not norm-invariant over the proper worlds since certain choices of norms would clash with them. So the notion of a normative sentence here overspills, marking clearly non-normative claims about behaviors as normative. One might worry that such claims are normative in such a context, but this would be a mistake. These are not normative claims, they are just claims that interact with normative claims. So, if the metasemantic view SIMPLE CONVENTIONALISM is correct, then our semantics only ought consider proper worlds, and over proper worlds, norm-invariance cuts the distinction between normative and non-normative sentences in the wrong place.

Of course, it might be thought that it is still progress enough to formulate a distinction between the normative and the non-normative on the assumption of an is-ought gap. This is also incorrect, which can be seen immediately from the example above where there is only a single possible set of normative facts. The necessity of non-mixed normative facts is actually unnecessary to make this point. Let’s add to the set of possible norms a null

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7 For discussion of how to formulate such a view correctly, see (Einheuser 2006) and Woods (ms). Note that when we interpret Gibbard’s view literally in terms of plans, some such restriction like that to proper worlds is already called for as not everything can be a complete plan of action.
set of norms which holds when there are no agents at all in the worldly component of a world-norm pair. We also hereby remove the restriction to proper world-norm pairs; all we require is that if there are non-null norms, then there are agents. But now notice that there is still a recognizable notion of an is-ought gap here. We cannot infer anything about the substantive nature of norms from a set of non-normative facts; the only conclusion we can make regarding the normative from the fact that there are no agents is that the null set of norms holds. But this seems entirely consistent with what Hume has in mind—we cannot infer anything about the character of normative facts or about what we ought to do from worldly facts. And, of course, there are intuitively non-normative facts here that are not norm-invariant such as the fact that there are no agents.

The upshot here is that glossing the non-normative in terms of normative invariance makes sense only if we allow, as a matter of meaning, norms to float free of the choice of worlds. To put it bluntly, Singer’s claim that we can treat norm-invariance as a non-controversial account of non-normativity, in the context of a metasemantic view translated into Gibbard’s framework, is false. The distinction between normative and non-normative propositions involves facts about the meaning of normative terms—since model theory is a model of an underlying intuitive account of the meaning of things like normative expressions, we cannot simply set up a formal semantics where anything goes. Since the analysis of the non-normative in terms of normative invariance only makes sense on the maximally permissive set of possible norms, it is not neutral with respect to various metaethical positions, many of which accept an is-ought gap.

Of course, Singer might argue that, since his gloss on the is-ought gap is meant be semantic, in the sense of deriving from the meaning of various expressions, it should not make presumptions about the underlying distribution of norms. Perhaps we really ought to assume a maximally permissive way in order to make sense of the meaning of normative expressions. Unfortunately, this still fails to do justice to the sense in which meaning can be beholden to background metasemantic issues. Suppose, for example, the simple conventionalist is correct about the relationships of the normative component of a world-norm pair to the worldly component. It is then presumably analytic of the various normative notions that they co-vary with underlying conventional behaviors of the agents

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8 Note also that it doesn’t follow from the existence of agents that there are non-null norms. Agents might, in this context, have no norms whatsoever.

9 Singer could object here that his definition can be modified to accommodate this problem, but it is an easy problem to generalize. Hume’s is-ought gap does not deny that there can be worldly consequences of facts about the existence or non-existence of norms in general or, even, worldly consequences of facts about the existence or non-existence of certain particular norms.

10 It might be objected here that Singer’s aim is to just characterize the is-ought gap on a Gibbardian picture. That his account works here is doubtful (see fn. 2, for example), but this is also clearly not his intention, as his closing remarks about the applicability of his solution to any reasonable semantics suggests. In particular, he is willing to extend his definition of norm-invariance to any reasonable semantics for moral terms (see the end of Singer section V).
making judgments involving them. The relevant notion of argument plausibly encompasses analytic entailments and thus there is no principled objection to restricting ourselves to proper worlds if the conventionalist is right about normative language. Likewise with the single norm restriction and the null-norm example.

So, Singer’s claim that WORLD-NORM GAP captures the sense in which Hume thought we can’t get an is from an ought fails since (a) WORLD-NORM GAP cannot be falsified even when we constrain the set of world-norm pairs in such a way that we can analytically infer an ought from an is, as in the Searleian view of promises described above (b) the formal notion of norm invariance which is persistent over deductive argument only captures non-normativity when we have no analytic or metaphysical constraints on possible sets of norms.

However, Singer’s original insight, captured in IS-OUGHT GAP, is important and worth preserving. Singer’s own account suffers from a dilemma: either we can view it as succeeding in its attempt to provide a purely formal characterisation of an autonomy thesis, but being as of little interest since the relevant notion of argument is broader or we can view it as failing in its attempt to provide an autonomy thesis of significance for the relevant notion of argumentation. An inductive argument from similar failures suggests that this dilemma will afflict any characterisation of the autonomy of ethics that appeals just to extensional ideology. We’ll now briefly sketch an alternative account to show how we might preserve Singer’s insight without running afoul of these problems. The key is to present a different account of the taxonomy of the normative and the non-normative which appeals to the hyperintensional ideology of grounding.

Consider a few paradigmatic examples of problematic is-ought transitions:

1. Jones uttered the words “I hereby promise to pay you, Smith, five dollars,” therefore Jones has an obligation to pay Smith five dollars.
2. Ronnie wants to dance, therefore Ronnie has a reason to dance

These are ampliative inferences. But some ampliative inferences are perfectly acceptable. The question is what exactly is wrong with these ones.

To explain this, we need to reach beyond these purely formal characterisations of the distinction between natural propositions and ethical propositions. Then we need some background principles that explain why inferences specifically from natural propositions to ethical propositions are problematic — at least when we assume that no ethical bridge principles are being assumed.

Our richer taxonomy starts with the following thought:

\[ \text{Note that this does not mean that it is analytic of such notions that they co-vary with the underlying conventional behaviors at a context where they are applied. To think this would be to confuse conventionalism with naive subjectivism.} \]

\[ \text{For suggestions about how such arguments might go against Gillian Russell’s (2011) view, see Maguire (forthcoming).} \]
**METAPHYSICAL AUTONOMY:** If some fact $E$ is ethical, and $E$ is fully grounded just by some fact or set of facts $\Gamma$, then $\Gamma$ contains at least one ethical fact.

This principle would be enough to diagnose the flaw in arguments 1 and 2. In many contexts when we infer $B$ from $A$ we mean that $A$ – together with any pragmatically implied background facts – is *metaphysically sufficient* for $B$, or, more strongly, that $A$ provides the grounds for $B$. But in 1 and 2, the premises are all plausibly natural, and the conclusions all plausibly ethical. If METAPHYSICAL AUTONOMY is true, the premises in these arguments fail to constitute full grounds for their conclusions. We should look around instead to see whether some ethical principles have been presupposed in the pragmatics. Perhaps it is so obvious that some version of humeanism is true, that you can simply assume the principle taking you from premise to conclusion in 2. Or perhaps the semantic/metasemantic thesis relating certain utterances in contexts with obligations is implicit, and can play the role of underwriting the transition from premise to conclusion in 1.

To this taxonomic principle, for completeness, we can add another principle such as the following:

**CONVERSE METAPHYSICAL AUTONOMY:** If some fact or set of facts $\Gamma$ contains at least one ethical fact, and $\Gamma$ grounds or partially grounds some fact $E$, then $E$ is ethical.\(^{13}\)

These two principles need some further taxonomic principles to play the role of the ‘base clause.’ We’ll assume some intuitive account of which propositions are uncontentiously ethical.

With this pair of theses, we can vindicate a version is-ought gap. Let us interpret it as follows: there is no argument from non-normative premises to a normative conclusion when the non-normative premises form the full set of grounds for the normative conclusion. If we interpret *relevance* in terms of being the full set of grounds, then we get a neat interpretation of Hume’s claim about is and ought which we can falsify, but which expresses a full-throated claim about the interaction of facts of these two domains.

This interpretation has other advantages as well. Singer has to rule out unsatisfiable premises by fiat. But it is easy to explain why arguments from inconsistent natural premises to ethical conclusions don’t trouble anything in the vicinity of Hume’s thesis; such premises *never* ground anything since grounding is factive. Inconsistent natural premises could thus not constitute the grounds of the ethical fact picked out by the conclusion. We can deal with Prior’s other arguments easily as well. Take the first argument Singer discusses:

\[
\text{Tea-drinking is common in England.} \\
\text{Therefore either tea-drinking is common in England or all New Zealanders ought to be shot.}
\]

\(^{13}\) This principle overgeneralises. The refinements are not crucial for our purposes here. For detail see Maguire 2015 and Woods (ms).
Take our world, in which it is not the case (presumably) that all New Zealanders ought to be shot. The conclusion here obtains just in virtue of the natural disjunct. Since this is not ethical and it’s the total grounds of the disjunction, the conclusion had better not be ethical. According to our taxonomy, it’s not since it’s grounded only by a natural fact. Change the world to one in which all New Zealanders ought to be shot. This might be because they were all so badly behaved, or because the true ethical principles in this world are very different from ours, or because some diabolical genius will destroy humanity otherwise. In this scenario, the conclusion is true partly in virtue of an ethical fact. Assume that tea-drinking is still common in England in this world. Here we also have no counterexample since the fact that tea-drinking is common in England does not constitute the full set of grounds for the disjunctive conclusion. Analogous things can be done for the other examples.

So, even though Singer’s way of interpreting IS-OUGHT GAP does not do the work we’d like, we can interpret it in a natural way which saves Singer’s insight, but in the context of a far more plausible taxonomy of propositions. As we had not yet used our account of normative autonomy to capture the sense in which we cannot argue from non-normative premises to a normative conclusion, Singer’s IS-OUGHT GAP, properly interpreted, is a welcome addition to the toolbox of us autonomy theorists.
References


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