

Why formal objections to the error theory are sound

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Abstract Recent debate about the error theory has taken a ‘formal turn’. On the one hand, there are those who argue that the error theory should be rejected because of its difficulties in providing a convincing formal account of the logic and semantics of moral claims. On the other hand, there are those who claim that such formal objections fail, maintaining that arguments against the error theory must be of a substantive rather than a formal kind. In this paper, we argue that formal objections to the error theory cannot be eschewed but must be met head-on.

Keywords Error Theory • Semantics • Meaning • Semantic Individuation • Consistency

1. Rejecting the error theory on formal grounds

In a recent paper, Bart Streumer and Daniel Wodak (2021) have argued that formal objections to the error theory fail. In this paper, we will argue that formal objections to the error theory succeed.

Formal objections to the error theory are straightforward. Take the moral error theory as an example and assume that this theory holds all moral claims to be false.¹ Then formal objections challenge moral error theorists to provide a plausible semantics of moral claims which is compatible with the error-theoretic denial of moral truths. If moral error theorists succeed in rising to this challenge, their theory remains on the table. If moral error theorists fail to meet this challenge, the error theory should be rejected.

This seems to be a good challenge. Since any metaethical theory must be able to provide a convincing semantics of moral claims, demanding that error theorists be able to do so as well is fair. Since error theorists themselves generally hold moral claims to be meaningful but false, asking them to provide an account of the meaning of deontic moral claims that is compatible with their denial of moral truths is also indispensable for assessing the tenability of their position.

One way to respond to formal objections would be to tackle them directly by presenting a moral semantics which is compatible with the error theory. Another, indirect way would be to explain why no such formal objections can succeed. It is this second, indirect route which Streumer and Wodak pursue. In this paper, we set out in deliberately programmatic fashion why indirect replies to formal objections to the error theory fail.

¹ We follow Streumer & Wodak (2021: 1) in employing the standard definition of the error theory. We briefly address its non-standard formulation in the conclusion.

2. Why indirect replies to formal objections fail

To show why indirect replies are insufficient to counter formal objections to the error theory, we will disentangle four such replies and explain why each of them fails. Let us start by clearing a first reply out of the way which, despite not being presented by Streumer & Wodak, has been put to us on numerous occasions:

Formal objections to the error theory team with all kinds of technical considerations, including formal semantics, logic, the dual schema, intensionality, hyperintensionality, etc. Yet, once we brush these technical considerations aside, we arrive at the one, decisive observation that the error theory is conceivable. Hence, given its conceivability, formal objections to the error theory must fail. There must be a logic and semantics that is compatible with the error theory.

We take it to be uncontroversial that the fact that a position seems conceivable and consistent does not make it so. For instance, Frege conceived the principle of unrestricted comprehension and believed that it was consistent until Russell showed him otherwise. We also take it as uncontroversial that it would have been inappropriate for Frege to ignore Russell's paradox and instead insist on intuitions about the conceivability of unrestricted comprehension. Of course, pointing out as much does not entail that paradoxes cannot be worked around. It does show, though, that formal objections cannot be refuted on grounds of intuitions about conceivability. Instead, substantive counterarguments are required to discharge this task.

The second indirect reply, based on considerations presented by Streumer & Wodak (2021: 5), seeks to present such a substantive counterargument:

Formal objections to the error theory are based on standard deontic semantics that employ the dual schema, according to which $\neg P \neg \varphi$ ($\neg O \neg \varphi$) entails $O\varphi$ ($P\varphi$) and vice versa.² Since this schema implies that negating some deontic moral claim always entails the truth of another, it is true that error theories are incompatible with standard deontic semantics. However, rather than being an innocuous, formal assumption, the dual schema must be categorised as a substantive moral claim since it implies that actions have moral statuses. On the one hand, this moral categorisation entails that the error theory will evaluate the dual schema as false. On the other, it also entails that this substantive, moral schema should not be built into a formal deontic semantics. Hence, since formal objections to the error theory presuppose the dual schema, and since the dual schema should not be incorporated in a formal semantics, formal objections to the error theory fail.

One way to respond to this reply would be to try questioning the moral categorisation of the dual schema. However, this is not what we seek to do here. Instead, let us point out that error theorists' semantic troubles are far more extensive than this narrow focus on

² Streumer & Wodak (2021: 1) focus on the claim that every action is either permissible or impermissible, which is stronger than the dual schema as it requires imposing additional frame conditions on the accessibility relation.

the dual schema and standard deontic semantics suggests. Two considerations explain why.

First, the dual schema is a symptom of error theorists' troubles, not the root cause. To elaborate, in order to get off the ground, any deontic semantics must be able to individuate the notions of *obligation* and *permissibility* by identifying some semantic difference that tells them apart. Call this 'the problem of semantic individuation'. The simplest yet most fundamental formal objection to the error theory challenges error theorists to present a solution to this problem which is compatible with their denial of moral truths. The dual schema provides one putative solution to the semantic individuation problem which, as pointed out above, fails to be compatible with error-theoretic commitments. Yet, other proposals that semantically distinguish *obligation* and *permissibility* without invoking the dual schema fare no better for the error theory. To give but one example, take a deontic semantics which does not define O and P as duals, but instead analyses $O\varphi$ as expressing the conditional $\Box(G \rightarrow \varphi)$ and $P\varphi$ as expressing the conditional $\Box(\varphi \rightarrow G)$ (van Ben- them 1979). Then for this semantics to evaluate both $O\varphi$ and $P\varphi$ as false, it would have to be the case that $((G \wedge \neg\varphi) \wedge (\neg G \wedge \varphi))$. Since this is a contradiction, this semantics cannot simultaneously assign falsity to both $O\varphi$ and $P\varphi$.³ Hence, although this individuation scheme neither presupposes that *obligation* and *permissibility* are duals nor invokes standard deontic semantics, it nevertheless is incompatible with the error theory.

Put in more principled terms, semantics ordinarily individuate concepts by specifying the conditions under which one notion is true whilst others are false. The error theory, by definition, cannot avail itself of such ordinary means. Consequently, we face the urgent question of how the problem of semantic individuation can be solved in a way that *is* compatible with the error theory. *Dismissing* standard deontic semantics and all other individuation schemes that are incompatible with the error theory—while failing to give at least *some* positive outline of how any semantic individuation of moral concepts can be maintained given error-theoretic commitments—does not answer this question.

Second, debate about formal objections to the error theory has so far concentrated predominantly on the question of whether there is a semantics that can secure compatibility with the error theory by being able to evaluate all moral claims as false. However, while this question addresses one component of formal objections, it does not exhaust them. Rather, for formal challenges to be met successfully, error theorists must be able to offer a semantics that is not only compatible with their position, but also semantically plausible. Semantic plausibility, in turn, demands that a semantics not only individuate deontic concepts, but also account for the different fine-grained meanings of moral claims. Since error theorists take all moral claims to be necessarily false, this means that the semantics they endorse must be able to differentiate between the different meanings

³ Indeed, this semantics' incompatibility can be established even when focusing exclusively on its analysis of $O\varphi$. Since error theorists will want to evaluate $O\varphi$ as false, they need to evaluate $\Box(G \rightarrow \varphi)$ as false. Yet, this conditional will be false at a state w only if there is some state which is morally good (G) but in which φ is not satisfied—which is exactly what error theorists cannot declare, given that they deny the existence of morally good states.

of moral claims while evaluating all of them as false in all circumstances of evaluation.⁴ However, as we have recently argued, the feat of construing a semantics that can simultaneously assign falsity to all moral claims and account for fine-grained meaning is extremely hard to pull off (Tiefensee & Wheeler 2021). That this feat is hard to pull off, though, has nothing to do with the dual schema. It has to do with negation. For, while negation arguably needs to be precluded in order to evaluate all moral claims as false, it is nonetheless required to generalise a semantics to a hyperintensional semantics in order to account for fine-grained differences in meaning. But if so, what helps a semantics secure compatibility with the error theory might very well stand in the way of accounting for fine-grained meaning and *vice versa*. Again, it is exactly the fundamental nature of these observations about the connections between negation, fine-grained meaning and semantic individuation that lends urgency to the question of how a plausible error-theoretic semantics can be constructed.

Consequently, formal objections to the error theory are more extensive and far-reaching than the second indirect reply suggests. As such, dropping the duality between *obligation* and *permissibility* from a formal deontic semantics and rejecting all other individuation schemes that are incompatible with the error theory neither solves the problem of semantic individuation nor answers the challenge of accounting for fine-grained meaning. The second indirect reply, then, also fails to refute formal objections to the error theory.

A third indirect reply, which approaches the dual schema not from a moral but a semantic perspective, is next (Streumer & Wodak 2021: 6):

Since formal objections to the error theory are based on the dual schema, they treat a claim such as ‘Action A is not permissible’ as synonymous to the claim ‘Action A is impermissible’. If true, this assumption would entail that endorsing the claim ‘Action A is not permissible’ commits error theorists to endorsing the claim ‘Action A is impermissible’, which is incompatible with their denial of moral truths. However, ‘not permissible’ (‘not F’) does not mean the same as ‘impermissible’ (‘im-F’). Hence, the dual schema must be rejected on semantic grounds. As such, formal objections to the error theory fail.

We have already explained that formal objections to the error theory do not, in fact, presuppose the dual schema. Still, let us look at this third reply more closely.

To bolster their denial of the meaning-equivalence between ‘not F’ and ‘im-F’, Streumer & Wodak (2021: 6) quote two examples of affixal negations, arguing that ‘immortal’ clearly does not mean ‘not mortal’, just as ‘immoral’ does not mean ‘non-moral’. They are absolutely right: ‘immortal’ and ‘immoral’ do not mean the same as ‘not mortal’ and ‘non-moral’, respectively. Yet, although these examples show that ‘im-F’ does not always mean ‘not F’, they do not entail that ‘im-F’ *never* means ‘not F’. Rather, just as

⁴ Non-error-theorists, such as moral realists, do not face an identical challenge. Since moral realists differentiate between necessarily true and necessarily false moral claims, moral realists, but not error theorists, possess the resources that afford an intensional semantics the possibility to extend to a hyperintensional semantics in order to account for fine-grained meaning (Tiefensee & Wheeler 2021).

‘implausible’ means ‘not plausible’, ‘intransitive’ (as applied to verbs) means ‘not transitive’, to mention just two examples. Given as much, listing examples for or against the synonymy of ‘im-F’ and ‘not F’ will not get us very far in answering whether or not ‘impermissible’ means the same as ‘not permissible’. Instead, what we need at this point is a principled argument as to why ‘impermissible’ does—or does not—mean the same as ‘not permissible’.

To this effect, Streumer & Wodak (2021: 6) provide a second argument in support of their claim that ‘not F’ and ‘im-F’ do not mean the same. This considers category mistakes such as

(~1) It is not permissible for iron to be attracted to magnets,⁵

which does not semantically entail that

(2) It is impermissible for iron to be attracted to magnets.

Since according to Streumer & Wodak, (~1) is true whereas (2) is false, they conclude that ‘not permissible’ and ‘impermissible’ cannot mean the same. If they are right, error theorists can freely endorse negations featuring ‘not permissible’ without thereby getting entangled in any moral impermissibility commitments that would conflict with their error-theoretic position.

This line of argument commits error theorists to holding category mistakes to be both meaningful and truth-evaluable, which is itself a controversial position. Still, let us grant that this is so. As a further concession to error theorists, let us also stipulate that our semantics is not restricted to the domain to which the terms in question can ‘properly’ apply, but that it leaves room for their misapplications in contexts of category mistakes. Yet, even if that much is granted, it is not clear how appealing to category mistakes is supposed to help error theorists. For instance, assume that we were to follow Aristotle in arguing that ‘X is permissible’ and ‘X is impermissible’ are both false whenever X is something to which ‘permissible’ and ‘impermissible’ cannot be properly applied (Horn 2020). Then it does not follow that ‘X is permissible’ and ‘X is impermissible’ can also be both false when X is something to which ‘permissible’ and ‘impermissible’ *can* be properly applied. To use a less contentious case, return to the adjectives ‘transitive’ and ‘intransitive’ as applied to verbs, and assume that ‘Iron is transitive’ and ‘Iron is intransitive’ are both false. Then it does not follow that ‘The verb *sneeze* is transitive’ and ‘The verb *sneeze* is intransitive’ can also be both false.

Consequently, appealing to examples in which ‘not F’ and ‘im-F’ do not mean the same or invoking category mistakes in which ‘not F’ does not entail ‘im-F’ does not guarantee that there is a semantics which enables error theorists to evaluate all moral claims as false, as would be required to dismiss formal objections to the error theory. Consequently, the third indirect reply also fails.

⁵ Streumer & Wodak (2021: 6) use the claim ‘The number 157 is not permissible’. As this sentence might be ungrammatical and not syntactically well-formed, we choose a different example here.

Let us turn to the fourth and last indirect defence of the error theory (Streumer & Wodak 2021: 5,7):

If formal objections to the error theory were successful, they would overgeneralise. Consider a 'spiritual modalities theory', which treats spiritual obligation and spiritual permissibility as duals. Assume further that there is also a spiritual error theory, according to which all claims featuring spiritual modalities are false. Then the spiritual error theory has the same form as the deontic moral error theory. Accordingly, if formal objections succeeded in ruling out the deontic moral error theory, they would also rule out the spiritual error theory. However, the spiritual error theory is very plausibly true. But if the spiritual error theory is very plausible true, it cannot be false in virtue of its form. This means that the deontic moral error theory cannot be false in virtue of its form, either. Formal objections to the error theory thus fail.

This overgeneralisation argument takes the form of a *reductio* that pits formal objections to the moral error theory against the claim that at least one error theory, such as the spiritual error theory, is very plausibly true. For the argument to succeed, two conditions must be satisfied. First, formal objections to the moral error theory must indeed generalise to other error theories. Second, at least one error theory in this class must be more plausible than any formal objection to it.

To assess each condition, we first distinguish between deontic error theories, which concern modal operators, and what we call predicative error theories, which concern predicates rather than modal operators. For a deontic modal error theory, let us stick to the example of a spiritual error theory about spiritual *obligation* and *permission*. For a predicative error theory, suppose there is also a spiritual purity theory, according to which every object is either spiritually pure or spiritually impure, where 'pure' and 'impure' are predicates. Then the predicative purity error theory will declare that all claims about purity properties are false (Streumer & Wodak 2021: 4).

Start with the first condition, overgeneralisation. Since all modal error theories share the same form no matter which kind of modality they concern, formal objections to a deontic moral error theory also generalise to the deontic spiritual error theory. However, things are less obvious with regard to predicative error theories. To begin with, note that in contrast to the stipulated spiritual purity theory, the predicate pairs in which we are generally interested, such as 'good' and 'bad', 'desirable' and 'undesirable', 'kind' and 'unkind', 'generous' and 'ungenerous', are normally not contradictories but gradable contraries. As such, telling the truth, say, will not be either desirable or undesirable, but may be desirable, highly desirable, extremely undesirable, or *neither desirable nor undesirable*. At the same time, semantics for predicates are generally far less constrained than those for deontic operators. Hence, given these differences between deontic semantics and the semantics of gradable contraries, it is an open question whether formal objections to the deontic error theory generalise to a predicative error theory.⁶ Moreover, this question

⁶ For instance, it is an open question whether any observations about a semantics for gradable modals can be adapted to gradable predicates, since a Kratzer-style semantics for gradable modals

cannot be answered unless error theorists address formal objections directly by specifying a semantics for predicates that is compatible with error-theoretic commitments, as the specific nature of the challenges a predicative error theory will face depends on the semantic choices that are made. Consequently, although the first condition of Streumer & Wodak's *reductio* is met with regard to modal error theories, the jury is still out on whether it is also satisfied with regard to predicative error theories.

Still, let us suppose that formal objections to the moral error theory did generalise both to the deontic spiritual error theory and the predicative purity error theory. Then turning to the second condition, Streumer & Wodak's *reductio* would succeed only if at least one candidate error theory were more plausible than any formal objection to it. Here, note the resemblance that this *reductio* bears to the first indirect reply discussed above. Whereas the first indirect reply maintains that formal objections fail because of the error theory's seeming conceivability, the *reductio* rests on the supposition that some or another error theory is plausibly true. Given as much, our response to the first indirect reply also applies to the *reductio*: objections that question the very conceivability and truth of a theory by mounting challenges to its internal consistency cannot be refuted by declaring that this theory nevertheless seems conceivable, consistent and plausibly true. Additional arguments are necessary.

Second, note also that holding the *reductio* to invalidate formal challenges to the error theory amounts to committing oneself to there being *constructive* solutions to these challenges that *succeed*. At this point, though, recall the fundamental nature of these challenges, which concern very basic connections between negation, semantic individuation and fine-grained meaning. Let us also stress once more that no positive solution has been offered as yet that would address these fundamental concerns, while charitable attempts to find a semantics that can individuate fine-grained meanings and simultaneously assign falsity to all moral claims have failed (Tiefensee & Wheeler 2021). In short, stating that some error-theoretic semantics *must* work does not answer the question of *how* it is to work.

Finally, given the scope and depth of the problems that formal objections raise for the error theory, and given the fundamental logical and semantic relations they concern, it is natural to ask why one should think that at least one error theory is more plausible than any formal objection to it. This question becomes even more pressing when bearing in mind that the plausible truth of this error theory depends, of course, on whether or not this theory is consistent to begin with. Consequently, before we can assess and appeal to the plausibility of this theory, we need to have at least an inkling of how an error theory can be shown to be consistent by explaining, at least in principle, how an error-theoretic semantics works. This is precisely what formal objections to the error theory call for.

We thus conclude that appealing to the alleged truth of the spiritual and purity error theories is insufficient to avoid tackling formal objections directly. As such, this fourth and final indirect reply also fails.

is not compositional, whereas predicates are not interpretable as such but are constituents of semantically interpretable formulas.

3. Conclusion

We conclude that error theorists cannot evade formal objections to the error theory, but must engage with them directly. Which result such a direct engagement will yield remains open. Error theorists might succeed in refuting formal objections by presenting a plausible semantics that is compatible with the standard version of the error theory. They might fail to rebut formal objections and choose to give up their position altogether. Or they might choose to modify their position in response to these objections, either by moving from a standard to a non-standard version of the error theory⁷ or by altering the nature of their position. Yet, engage they must, for the formal objections to the error theory are sound.⁸

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⁷ For a non-standard, presuppositional construal of error theories, see Kalf (2018), Perl & Schroeder (2019), Salinger (2021) and Perl (forthcoming). Streumer & Wodak (2021), Streumer (2017) and Olson (2014) reject this presuppositional account. See also Tiefensee (2020).

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