

# Reply to Gabriele Contessa\*

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Gabriele Contessa concludes his fine paper by saying that although he rejects my strong form of realism about structure, he accepts a weak form:

*Strong structure realism* is what I take Sider to be advocating in *Writing the Book of the World*—it is the view that we do not just need to be realist about what the individual components of the world’s fundamental structure are (which might include, depending on one’s metaphysical views, universals or bare particulars or what-have-you) but also about the world’s structure itself. *Weak structure realism*, on the other hand, is simply the thesis that the world has one structure (as opposed to none or many), a thesis whose denial leads to various forms of metaphysical pluralism or metaphysical anti-realism. Weak structure realism takes ‘structure’ to be just a placeholder for whatever the world contains at the fundamental metaphysical level (as opposed to something one can be genuinely realist about).

But in fact, with one exception, Contessa and I disagree on very little. In this reply I’ll try to show this, taking the opportunity to clarify the relevant claims from my book.

For instance, Contessa’s definitions above of *both* weak and strong structure realism use the terms ‘structure’ and ‘fundamental’, apparently presupposing that such terms are in good standing. But establishing this was in effect the main point of my book. Further, the strong structure realism that Contessa attributes to me is distinguished by its realism “about structure itself”. I’m not sure what that means, but I certainly don’t think of “the world’s structure” as some sort of object or fact over and above facts about this or that concept carving at the joints—facts that Contessa apparently accepts (except, as we’ll see in a moment, in the case of logical expressions).

I argue that the concept of structure is useful in various ways, one of which is replying to certain forms of semantic skepticism—Lewis’s “reference magnetism” (section 3.2). But Contessa argues that reference magnetism’s value here is limited:

However, I doubt that reference magnetism is a cure-all for all forms of semantic underdetermination. In particular, I doubt that it can contribute

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\*Thanks to Gabriele Contessa.

to fixing the meanings of expressions such as ‘exist’ or ‘or’. Ultimately, this is because I cannot see what in the world could possibly act as a reference magnet for those words.

For example, take ‘either...or...’ and ‘it is not the case that’ in the sentence ‘Either every even number greater than two is the sum of two primes or it is not the case that every even number greater than two is the sum of two primes’. If their correct interpretation is classical, then that sentence expresses a tautology, for, on that interpretation, to assert that disjunction is to assert that at least one of its disjuncts is true and, since, on its classical interpretation, one of the disjuncts cannot be false unless the other one is true, the proposition expressed by that sentence must be true. If the correct interpretation of ‘either...or...’ and ‘it is not the case that’ is intuitionistic, however, to assert the above disjunction is to assert that there is a proof of at least one of the disjuncts and, since in this case (as well as other cases) this is not true, we are not in a position to assert that sentence. But what in the world could make one of these candidate meanings of ‘either...or...’ and ‘it is not the case that’ more eligible than the other (other than linguistic use, conventions, philosophical considerations, or some combination of these and other factors, that is)?

As far as I can see, the answer is ‘Nothing!’

Here we may have indeed a genuine disagreement. I argue in chapter 6 that talk of joint-carving is not limited to predicates, but rather may be extended to expressions of other grammatical categories, including logical words like ‘or’ and ‘not’. Contessa questions this, asking: “what in the world could make one of these candidate meanings” more eligible than the others—i.e. carve at the joints?<sup>1</sup> Now, most of chapter 6 is devoted to answering this question, and Contessa doesn’t say why he isn’t convinced. But in any case, this seems to be a genuine disagreement between us (and one in which Contessa will have many allies).<sup>2</sup>

However, nonpredicate structure doesn’t seem to be Contessa’s main concern, for he continues:

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<sup>1</sup>Relatedly, Contessa suggests in a couple of places that, contrary to what I claim, there isn’t a theoretical need for a concept of joint-carving that “goes beyond the predicate”.

<sup>2</sup>I should say that, even though I do uphold the metaphysical thesis that disjunction and negation carve at the joints (and in fact behave classically), I don’t mean to suggest that considerations from the metaphysics of joint-carving can resolve all the issues connected with intuitionism.

However, defending my answer against Sider's arguments would take me away from my main point, which is that even if I deny the existence of a reference magnet for 'either ...or ...' and 'it is not the case that', my denial does not necessarily make me a structure anti-realist. I might well be a structure realist who denies that any of the candidate interpretations of 'either ...or ...' and 'it is not the case that' compatible with the ordinary uses of those expressions carve nature at its joints better than any other. In fact, I might even be a structure realist who thinks that the very question of which interpretations of 'either ...or ...' and 'it is not the case that' carve nature at its joint is misguided, because such expressions are not meant to carve nature in the first place. In other words, I might believe that the world has a structure (as opposed to many structures or none) but deny that that structure contains anything that can act as a reference magnet for 'either ...or ...' or 'it is not the case that'.

Contessa's main claim here is certainly correct: one could buy realism about structure in general without accepting that disjunction and negation carve at the joints. But consider the two reasons he gives. The second is just the point mentioned above: one might resist speaking of structure in the case of connectives ("such expressions are not meant to carve nature in the first place"). But the first is different: one might accept such talk in general while holding that negation and disjunction do not in fact carve at the joints. But why is that a problem? My realism about structure is *supposed* to be neutral on what does or doesn't carve at the joints. It isn't meant to settle, on its own, particular questions about objectivity, substantivity, or semantic determinacy. Its point is rather to provide a background metaphysics in which theses about these matters may be articulated and defended. Whether there is objectivity (etc.) in any particular domain depends on the substantive question of whether the key concepts in that particular domain carve at the joints. (I myself answer such questions differently in different cases: I defend joints in nature, objectivity, and semantic determinacy in ontology (chapter 9) but not in modality (chapter 12).)

Consider next the passage that follows the one just quoted. In addition to reiterating the point just discussed, it goes on to say that structure is explanatorily idle:<sup>3</sup>

But why would this pose a problem for structure realists? I think it does because it goes to show that structure (qua structure) is ultimately idle.

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<sup>3</sup>Side point: I don't think reference magnetism answers Quine's gavagai problem (see p. 30, n. 17).

What does the job in virtually every supposed application of structure is not the world's structure as a whole but one or more of its components. The world's structure, for example, does not act as a reference magnet for 'green', 'gavagai', 'either ...or ...', or 'it is not the case that'. Rather, some of its components do, and structure realists can legitimately disagree with one another as to which specific components of the world's structure (if any!) act as reference magnets for each of those expressions. So, structure realism, in and of itself, does not provide its supporters with the tools to defuse all forms of semantic scepticism; only realism about the specific components of the world's structure that act as reference magnets for some term that can do so. Furthermore, structure realism seems to be completely silent as to what the components of the world's structure are, for all structure realists need to agree on to be structure realists is that the world has a structure, as opposed to none or many.

This new point may be summed up as follows: structure doesn't play any role in metaphysical explanations, only its components do.

It's true that structure-involving explanations normally cite facts about particular concepts carving at the joints rather than just citing "the world's structure"; in Contessa's words, "the world's structure as a whole does not seem to act as a reference magnet for anything". But why would this make structure explanatorily otiose? An explanation citing the fact that a certain particular concept *C* carves at the joints still essentially involves the concept of structure. The explanans is "concept *C* carves at the joints", not just "*C*".<sup>4</sup> Suppose *a* is negatively charged and *b* is positively charged. If you want to explain why *a* and *b* attracted each other, you couldn't, of course, just cite "positive and negative charge"; you'd need to cite the fact that *a* has negative charge and *b* has positive charge. But the appeal to charge in the explanation is still essential; you couldn't just cite *a* and *b*.

I'll close by mentioning one last concern of Contessa's:

...this talk of the world's structure is useful only insofar as 'structure' is taken to be a placeholder for whatever the world might turn out to

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<sup>4</sup>The issue comes to a head when Contessa speaks of the "components" of the world's structure doing all the work in explanations. Are the components facts of the form "*C* carves at the joints", or the individual concepts *C*? Only if they're the former do they do all the work, but then structure hasn't been shown to be explanatorily idle.

On pp. 94-96 I discuss (and reject) a view I call "ontologism", which presupposes a "sparse ontology" and tries to do (some of) the work I do with 'concept *C* carves at the joints' instead with 'concept *C* stands for some entity' (compare Armstrong (1978*a,b*) on universals). Contessa may have such a view in mind in this passage.

contain (at a fundamental level). If that's the case, then 'structure' is likely to turn out to be a term of convenience, a term that picks out a motley assortment of entities with little or nothing in common besides their being collectively referred to as 'structure'. The referent of 'structure' might turn out to be a metaphysical hodgepodge of radically heterogeneous entities, as opposed to something that one can be genuinely realist about (independently of one's being realist about its specific components, that is).

Now, I attempt to answer this sort of concern in chapter 7 by arguing that 'structure' is not a mere disjunction, but rather is itself structural—the concept of joint-carving carves at the joints. Contessa quotes a passage of mine defending this claim, but what he says about it indicates that we are talking at cross-purposes. He takes me to be arguing that metaphysics will have an “arbitrarily demarcated object” unless the joint-carving notions are all similar, and objects that it would be fine for metaphysics if, e.g., the right ontology turned out to be a multiple-category one. But this is not an objection to the passage. The passage says that the joint-carving notions *aren't* similar in any way *other than being joint-carving* (*first-order* heterogeneity), just as Contessa says they might well be. (If logical notions are among the joint-carving ones then a multi-category ontology isn't needed to establish this point.) The point of the passage is to say that because of this fact, explanations that cite 'joint-carving' are good only if joint-carving is joint-carving. The joint-carving notions don't share anything *else* in common, so being joint-carving had better be a genuine similarity. (Otherwise explanations that cite 'joint-carving' would be like saying that both a bereaved person and an Oscar winner cried because each of them was either happy or sad.)

Despite being at cross-purposes, though, there is indeed a genuine disagreement here. For Contessa goes on to say that my general notion of structure (which includes both predicate and nonpredicate structure) does not have the explanatory value I claim it has. If true this claim would undercut my argument that structure is structural. This goes to the heart of my book: nonpredicate joint-carving is one of the most distinctive features of my account, and is required for most of what I say about the metametaphysics of ontology, logic, time, and modality. I don't find Contessa's reasons for the claim compelling, however. I don't agree that only predicate structure is required in the case of inductive skepticism, for inductive skepticism could be based on “grue-ified” logical connectives rather than predicates; I don't think Contessa has shown that 'structure' is explanatorily otiose (as I explained above); and (as mentioned

earlier) I think that structure can indeed be applied to nonpredicates like logical connectives, in which case joint-carving can play a role in securing semantic determinacy for such expressions. Moreover, questions about objectivity and substantivity can be raised for nonpredicates like modal operators, quantifiers, and the connectives of propositional logic, and nonpredicate joint-carving has a role to play in understanding and answering such questions.

## References

- Armstrong, David M. (1978a). *Nominalism and Realism*, volume 1 of *Universals and Scientific Realism*. Cambridge: Cambridge University Press.
- (1978b). *A Theory of Universals*, volume 2 of *Universals and Scientific Realism*. Cambridge: Cambridge University Press.