Index-Proliferation and Semantic Competence: On Glanzberg's Argument against Semantic Value Relativism

In "Context, Content, and Relativism", Michael Glanzberg offers a contextualist treatment of predicates of personal taste, modeled on Chris Kennedy's view about gradable adjectives. This view is put forward as an alternative to Peter Lasersohn's relativism about predicates of personal taste. Glanzberg also discusses a more comprehensive relativist position, which extends the analysis to the whole category of gradable adjectives, and cites Mark Richard as a proponent of such a view. Starting from some observations found in Richard's work, Glanzberg makes a distinction between direct and indirect metasemantics, and addresses some issues pertaining to this distinction.

In this paper I'm not going to consider the details of Glanzberg's version of contextualism. What I'm interested in is rather the broader context in which the whole discussion takes place, one in which two views about the semantic values of sentences are contrasted. One is the doctrine of

> **Semantic Value Relativism** (SVR): The semantic values of sentences are sets of tuples of worlds and other parameters, relative to which the truth of a sentence in a context is determined,

whereas the other is the doctrine of

> **Semantic Value Absolutism** (SVA): The semantic values of sentences are sets of worlds.

My aim is to have a close look on Glanzberg's main objection to SVR and to show that it fails.

The objection

Glanzberg's objection to SVR is similar to one raised by M. J. Cresswell against the Index Theory during the seventies. In order to better understand what Glanzberg has to say against SVR, it will be better first to go through Cresswell's original objection.

The Index Theory was an influential intensional semantic theory according to which in order to fully capture the context-dependence of natural language sentences we must evaluate them with respect to all the features of the context that might influence their truth-value. Thus, from this perspective, one of semantics' tasks is to build a list of all those features. Each such feature is called a "parameter" or "coordinate", while the whole list is called an "index". Given that there are many expressions that are context-dependent, the list of parameters will turn out to be quite long. David Lewis, one of the defenders of the Index Theory, had thought of the index as "any octuple containing a possible world, a moment of time, a place, a person, a set of persons, a set of things capable of being pointed at, a segment of discourse, an infinite sequence of things" (Lewis: 1983: ...).

Cresswell's objection to the Index Theory is simply that, once we open the route for more and more parameters in the index, we won't be able to stop at a reasonable number of parameters. Cresswell has given some examples to highlight the slippery slope one is on when doing semantics in the way the Index Theory recommended. Thus, in order to account for the context-dependence of sentences like

(1) They're playing the <u>national</u> anthem.
(2) What a <u>cold</u> winter we had.
(3) <u>The gods</u> are angry.
(4) Just fetch your Jim <u>another</u> pint.[1]

we would need to introduce a parameter for country, climate, religion and "previous drinks", respectively. Call this phenomenon "index-proliferation". Because of index-proliferation, Cresswell is skeptical that a list with all the relevant contextual factors could ever be provided and concludes that the very project of giving such a list is misguided.

Glanzberg's raises the same point against SVR. He takes Cresswell's objection to show that index-proliferation is an undesirable consequence even for views that depart from the old Index Theory, such as modern versions of relativism. As widely acknowledged, all those versions of relativism militate for the introduction of

[1] All these examples are mentioned in Cresswell (1973), p.111, especially footnote 143; (4) is discussed a bit lengthier in Cresswell (1979).

“unorthodox” parameters in the index – standards of taste or judges, moral and aesthetic standards, epistemic standards, epistemic bases, perspectives, and so on – and thus depart from SVA. Glanzberg thinks that arguments for introducing more parameters than possible worlds “lead us back to the bad old days of the index theory” (Glanzberg, forthcoming: 7).

Here is what he says about how Cresswell’s point bears on the falsity of SVR:

> This is a worry for two reasons. First, our credulity for relativism should be further strained, especially when we consider the sorts of things that will have to be added to indices. ‘True for a quantifier domain’ and ‘true for a modal base’ and ‘true for an alternative set’ just sound crazy. But more importantly, (…) the components that go into building semantic values are part of the semantics of a language. (…) [H]aving the semantic value of any sentence be built from such a long, or worse, open-ended indices raises serious problems about semantic competence. This shows that such indices are not appropriate for the job of giving the semantic value of sentences. As that is exactly what such indices are for, we may conclude that any form of semantic value relativism that is committed to them is untenable. (Glanzberg, forthcoming: 34)

Leaving aside the first worry (after all, “simultaneous with respect to a frame of reference” might have sounded totally crazy in the first days of the relativity theory), there might be two ways in which the second problem might arise. There are two ways in which “open-ended indices” (what I call index-proliferation) might raise problems for semantic competence. Firstly, the length of an index might have upper limit that is settled by the nature of human languages. In this case, the fact that we are not able to provide the complete list of parameters that influence the truth-value of sentence containing context-dependent expressions is a limitation pertaining to us, human beings (absent a full semantic theory). But if we are not able to write down the list of those parameters, semantic competence (and language acquisition in general) becomes odd. Secondly, the length of an index might not have an upper limit settled by human languages – being thus genuinely open-ended. In this case, things are worse than in the previous case, since it will be impossible *in principle* to say what semantic competence consists in.

Now, is this something the semantic value relativist should be afraid of? In what follows I will try two lines of defense against Glanzberg's objection. The first will be to argue that Glanzberg is overstating the extent to which SVR leads to index-proliferation. I will do this by pointing to some limitations (both empirical and theoretical) index-proliferation might be subjected to. The upshot will be that since index-proliferation is not that severe as Cresswell and Glanzberg think, the danger of making semantic competence mysterious does not arise. The second line will be to show that, even granting that SVR leads to (severe) index-proliferation, explaining semantic competence is not a problem *only* for SVR. Thus, if explaining semantic competence poses a problem for SVR, I will try to show that it does pose a somewhat similar problem to SVA as well.

First line of response

The point of my first line of response is that there are several limitations that would keep index-proliferation at a reasonable level. One such limitation is of an empirical sort, and it is vividly brought to the fore by considering one traditional argument that has been offered in favor of introducing specific parameters in the index. The argument is formulated in Kaplan's "Demonstratives" and plays a significant role in Lewis' classic paper "Index, Context and Content". Here is how Kaplan puts it, with focus on the specific case of time:

> If we built the time of evaluation into the contents (thus removing time from the circumstances leaving only, say, a possible world history, and making contents specific as to time), it would make no sense to have temporal operators. To put the point another way, if what is said is thought of as incorporating reference to a specific time, or state of the world, or whatever, it is otiose to ask whether what is said would have been true at another time, in another state of the world, or whatever. Temporal operators applied to eternal sentences (those whose contents incorporate a specific time of evaluation) are redundant. (Kaplan, 1989: 503.)

Kaplan's argument seems to be very simple: if we weren't to put some specific parameters in the index, the corresponding operators would be redundant. But since those are not redundant (since they play a crucial role in yielding the semantic values of

complex sentences out of more basic ones), we need to introduce the corresponding parameters in the index – parameters that are to be shifted by the operators. The limitation to index-proliferation thus comes from the fact that we cannot simply put any parameter in the index, but just those for which we have operators in the language (or could construct such operators that reflect the workings of the language).

Of course, Kaplan's argument presupposes that temporal expressions (including tense) and other expressions are best interpreted as sentential operators. This presupposition, however, is far from being unproblematic. In fact, several authors, like King (2003) or Stanley (2005), following some current threads in linguistics, have argued that temporal expressions are best seen as quantifying over times, and not as sentential operators. King, for example, writes that "(…) treating tenses as involving quantification over times (…) rather than index shifting sentence operators (i) allows for a simpler more elegant less ad-hoc treatment of tenses and temporal expressions than does an operator treatment and (ii) allows for a more plausible account of the relation between the surface structures of English sentences and the syntactic representations of those sentences at the level of syntax that is the input to semantics" (King, 2003: 48). However, things are not entirely settled here. In response to King's allegations, Recanati (2007) has argued that we are not *forced* to take temporal expressions (including tense) as quantifying over times instead of treating them as operators. The same kind of response might probably be available with respect to other expressions for which the issue of interpreting them as operators or as quantifiers arises.

The outcome of this discussion is the following: the argument from the existence of operators, if correct, puts some limitations on the kinds of expressions for which introducing corresponding parameters in the index is suitable – namely, parameters for which there are operators in the language. It is debatable whether we have operators in the language to shift all the parameters that Cresswell was pointing to. Given this, index-proliferation might turn out not to be that severe. Modern relativism, allowing parameters in the index such as standards of taste, epistemic standards, epistemic bases and so on, might not fuel the fear of proliferation after all, contrary to what Cresswell and Glanzberg think.[2]

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[2] Max Kölbel has pointed out to me that Kaplan's view has not the strong consequence that I claim it has. In fact, on Kaplan's view, the possibility to put parameters in the index for which there are no corresponding operators in the language is left open. That is, Kaplan's view is that *if* there are operators in the language, then we need to put the corresponding parameters in the index, whereas what I claim is that *if and only if* there are operators in the language, etc. Thus, the limitation I speak about in the paragraph is

Secondly, there is another limitation to index-proliferation that is of a more theoretical sort. Relativists are usually keen on extending their theory to several areas, especially if those areas exhibit the same patterns of data (disagreement, retraction, etc.) for which the relativist claims to have a better explanation that her rivals. However, there is no pressure to have an across-the-board relativist view. Here the point is simply that one might be a semantic value relativist in some domains (about some kinds of expressions), but not in others. To be sure, there is (at least) one pattern of data that is exhibited by all the expressions that are said to be context-dependent: namely, the fact that one and the same sentence could be true in one context and false in another. But considerations having to do with the specificity of a given domain might overcome this similarity in patterns of data – having thus the straightforward consequence of refraining from applying the theory to other domains. In other words, one might not find two domains similar enough for supporting relativistic treatment: although the two domains might exhibit some similarity in data patterns, this would not license a relativistic treatment unless some *specific* data is present in both domains. This sort of considerations might have a say in limiting the domains for which one might propose relativism – and, hence, in limiting the parameters that one is willing to allow in the index.

Let me make this last point clear with an example. One of the patterns of data that MacFarlane thinks favors the relativistic approach to knowledge attributions over its rivals is the phenomenon called retraction: the fact that, once we move from a context in which low epistemic standards are in play to one governed by higher standards, we retract earlier claims to knowledge. About a claim made in a context in which the standards are low "I won't just *say* that it was false: I will *treat* it as false. If challenged, I will *retract* my earlier claim, rather than reformulating it in a way that shows it to be consistent with my current claim (…)" (MacFarlane, 2005: 202). However, the phenomenon of retraction is not present in our use of other expressions. Consider, for example, "here". Imagine that we are both in a cab that carries us from the city to the airport. When the cab passes by the beautiful medieval city center, I utter "It is very nice around here". Twenty minutes later, when we are approaching the airport,

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not a limitation after all. I acknowledge the point. However, I think the following remark is in place: the fact that Kaplan admitted *only* worlds, times and locations in the index, together with the fact that he argued that this is so *because* there are modal, temporal and locational operators in the language shows that he at least intended to hold the stronger view.

you say “It is not very nice around here”; your claim doesn’t make me retract my earlier remark. Thus, the fact that our use of “here” does not give rise to the phenomenon of retraction (as uses of “knows” do), would be enough reason for the relativist to refrain to apply the theory to discourse involving our use of “here”.[3]

The above considerations have to do with index-proliferation across domains. But Glanzberg also considers the case in which index-proliferation is arrived at within one and the same domain. He thus writes: “[e]ven in the case of the standard for a gradable adjective, it seems we will need not only a judge coordinate, but a separate coordinate for the function s itself” (function s is the function that, for every context, takes as input the literal meaning of every gradable adjective and returns as value a degree on a scale determined by an experiencer class in that context).

In order to answer to this challenge, we need to make a detour. First thing to look at is the distinction Glanzberg draws between direct and indirect metasemantics. The distinction has to do, in cases in which we deal with context-dependent expressions, with the complexity of the process by which we extract the required value of the relevant parameter from the context. Demonstratives are paradigmatic for *direct* metasemantics: although not without problems, the process by which we arrive at the semantic value of a demonstrative is simple: we have only to identify the object pointed at (on some theories), or the intentions of the speaker (on other theories). In contrast, for the contextualist story Glanzberg has for predicates of personal taste, that process is much more complex. What we are after are what Glanzberg calls “standards” (degrees on a scale determined by an experience-class). “What fixes their values will be complicated combinations of such factors as what is salient in the environment, speakers’ intentions, hearers’ intentions, coordinating intentions, linguistic meaning, general principles governing context, discourse, structure, etc.” (Glanzberg, forthcoming: 35). All this complexity is a mark of *indirect* metasemantics.

In his paper, Glanzberg considers a more extended relativist view, which will encompass gradable adjectives as well, and cites Richard as a proponent of such a view. The reason Glanzberg thinks Richard finds it appropriate to extend relativism to gradable adjectives is that Richard rejects indirect metasemantics. By allowing only

[3] As Wright (forthcoming) notes, it is indeed sensible to ask whether the relativist has a better explanation of retraction than the invariantist. Here, however, I’m not claiming that she does. The purpose of the cab-story is only to illustrate the kind of patterns of data relativists claim a discourse must exhibit in order to be amenable to a relativistic treatment.

direct metasemantics (such that in play for demonstratives), Richard is free to hold that for all the cases in which the metasemantics seems to be indirect, we need to treat them relativistically. The domain that falls outside direct metasemantics is one in which we find phenomena like negotiation and accommodation, and these become now the marks of a relativistically-treatable domain. So the argument seems to be that since indirect metasemantics is too messy, we should treat all these domains in a relativistic fashion.

Now, Glanzberg's point is to deny that indirect metasemantics is such an awful thing to have. He claims that gradable adjectives in general have an indirect metasemantics. Since his view on predicates of personal taste is modeled on a view about gradable adjectives with indirect metasemantics, it's not a surprise that he ends up with having an indirect metasemantics as well.

Coming back to the objection, my point here is that, like in the case of Richard and indirect metasemantics, Glanzberg thinks that the relativist must hold that the process by which the required value of the relevant parameter is computed must be simple. This is why, I gather, he thinks that in cases like gradable adjectives we need to introduce more than one parameter in order to have a relativistic treatment of a single domain (of a kind of expression). But I don't see why this must be so. The way in which we arrive to the relevant parameter that is then used to give the semantic value of an expression might be a complex process, maybe having to do with the speakers' or hearers' intentions, linguistic meaning, discourse structure, and so on. That is, the relativist might avail herself of something equivalent, at the theoretical level, to what Glanzberg thinks indirect metasemantics does for the contextualist. Call this, in the absence of a better term, and to differentiate it from what Glanzberg calls "metasemantics", *circumstance-metasemantics*. Circumstance-metasemantics, as metasemantics *simpliciter*, is concerned with the process by which we extract the required value of the relevant parameter from the context – with the difference that the value arrived at is used for purposes of evaluation, and not to establish the content of an expression in a given context. This is in direct connection with what the difference between relativism and contextualism comes down to: although both positions make appeal to parameters provided by the context, it is *what is done* with those parameters that makes the difference. But so far, it seems, Glanzberg has not provided any reason why the relativist could not accompany her semantics with an indirect circumstance-metasemantics. Of course, the relativist needs to say something more about the process of arriving at the required value of the relevant parameter (as Glanzberg does at the end

of his paper about indirect metasemantics), but the point remains. The relativist is therefore not confined to a direct circumstance-metasemantics, as Glanzberg seems to suggest. Thus, for one and the same discourse, the relativist is not forced to posit more than one parameter, even if there is more than a simple element from the context that enters in the computation of the required value of the relevant parameter. Intra-discourse index-proliferation is thus blocked.

Second line of response

My second line of response is that, insofar as index-proliferation threatens semantic competence, the absolutist faces a similar problem with that raised by Glanzberg to the relativist. I'm not sure what exactly is Glanzberg's view on semantic competence (and I myself have no definition to offer), so the discussion here will be on a less firm ground. But here is how I think a relativist rejoinder might sound:

So let us grant that SVR leads to (severe) index-proliferation and that, in turn, index-proliferation raises a problem for the SVR in explaining semantic competence. The problem arises, remember, because the list of parameters that give the semantic value of an (arbitrary) sentence would be impossible to be provided. And under the assumption that possessing semantic competence is to know (or to be aware of, in one sense or another) all the parameters that make up the semantic values, this will make semantic competence impossible. But note that if the assumption is right, it seems that there is at least the suspicion that the same point (although less dramatically) would apply to SVA as well. If being semantically competent requires the computation of all the parameters that comprise the semantic value of a sentence, then according to the absolutist, in order to get the semantic value of a sentence, some kind of awareness of possible worlds is required. I take this to be a quite implausible requirement. We don't usually think that ordinary speakers are aware of the fact that their sentences have sets of worlds as semantic values. So the move that I think the relativist should make at this point is to reject the assumption above.

Note that the point is not that SVA has problems because there are in(de)finitely many possible worlds that the semantically competent person must somehow be aware of. The point that awareness of possible worlds is required for semantic competence does not trade on the in(de)finiteness of possible worlds. Suppose there are just two possible worlds. The point of my earlier remarks will equally apply: it is doubtful that,

to be semantically competent, a person need to be aware of the existence of the two possible worlds.

However, it seems that the absolutist has a ready answer to this reply, an answer associated with a deeper worry that the relativist might have to face. The worry is that, regardless of how many parameters the index might end up being composed of, simply having more that the world is enough to generate trouble for the relativist. This worry, if sound, will be immune to both lines of reply that I offered above.

Here is the worry in detail. Take a three-year old child who is learning his way into using all kinds of expressions of English. The language she is in the process of learning will consist in sentence comprising many context-dependent expressions, like "here", "I", "now", etc. But, undoubtedly, the language will also comprise sentences that are not in any way context-dependent. "The socks are blue." is one example.[4] Now, supposedly, the child has a "built-in" ability to distinguish between worlds in which the socks are blue, and worlds in which the socks are not blue. On some views about what understanding is, having this ability makes the child fully understand sentences like those. Now, if the relativist is right and every sentence of the language must have a semantic value composed by a (however small) number of parameters besides worlds, we would have to say that the child doesn't fully understand sentences like "The socks are blue", even if they comprise no context-dependent expressions. As Glanzberg puts it, "the semantic value of even the most simple sentence would build in something like the complexity of a whole human language" (Glanzberg, forthcoming: 6). But this seems to be totally unintuitive. Therefore, something must be wrong with SVR.

How is the relativist to answer this worry? I think there are a number of strategies available. One will be to deny that the three-year old child doesn't understand the sentences in question. It might be the case that, in the same way as she has, in her use of language, the "built-in" ability to distinguish between worlds, she also has the ability to distinguish between what is the case and not according to a different parameter. In the case of time, for example, what such ability would come down to is being able to tell what is the case at some time, but not at another. The same holds, arguably, with other parameters that the relativist appeals to. Here the absolutist might reply that there still an intuitive difference between being able to tell what is the case at

[4] I'm ignoring for the moment issues pertaining to the use of the present tense. I also take it that "blue" is not context-dependent in the usual way.

some time but not at another and to tell what is the case with respect to, say, a standard of taste, but not with respect to another. But, I think, more than intuitions are needed here. If the absolutist is to make a case against the relativist, it needs to rest on empirical research about language learning, and not on armchair reflections. So, unless such case is provided, the relativist should not be bothered by the absolutist's reply. (She should be bothered, however, with providing the empirical evidence needed for *her* thesis, but this a different matter.)

The second, more concessive strategy for the relativist would be to bite the bullet and agree that the three-year old child doesn't understand sentences like "The socks are blue." This sounds quite radical, but the notion the relativist might retort to here is that of *partial* understanding. How bad is that? Given what the relativist claims, she must deny full understanding of any sentence whatsoever. But note that the contextualist herself might need to make room for something less than full understanding. After all, how plausible is it that a three-year old child has all the means to compute the standard for predicates of personal taste, if, as Glanzberg argues, computing such a standard is a highly complex process? The contextualist has either to deny that a three-year old child understands sentences involving predicates of personal taste, or to admit that she has the ability to carry the complex computations required for getting the standard. If the former, she admits there is something less than full understanding (although of a less drastic kind than the relativist is forced to accept – since it is limited only to *some* sentences, while in the relativist's case all language use is "infected" by partial understanding.) If the latter, why is this more palatable than accepting that the child has the "built-in" ability to tell what is the case and what is not the case with respect to other parameters than the world?

What is important to note here is that what is going on is a trade-off, not of the degree of complexity each view involves, but on the place this complexity is to be situated. The issue is not one of degree of complexity, because the same complexity is to be found in both views. The issue is rather where this complexity should be situated: in the contextualist's metasemantics or in the relativist's circumstance-metasemantics? Nothing Glanzberg says, it seems to me, should favor one choice over the other. So the relativist is untouched, even when she comes to the point of conceding many of the absolutist's claims. Ultimately, I think she is not forced to do that, but it is certainly reassuring to see that, even if she does, her view is not in danger.

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