Two Problems of Overgeneration for the Reflexive-Referential Theory

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-- extended abstract // paper draft --

abstract

One of the most promising aspects of Perry (2001)'s *Reflexive-Referential Theory* (henceforth RRT) is its capacity to generate a variety of contents that may be associated with a single utterance, contents that may be used for various explanatory purposes. My concern in this paper is that, as it stands, RRT generates *too many* contents. The problem is not just that most of those contents will be explanatorily idle, but rather, that nothing in the actual RRT explains why those contents cannot play the roles that their minimally different "neighbors" can play.

In Section 1, I discuss two kinds of example that motivate RRT and its multiplicity of contents; the first comes close enough to some of Perry's own examples, but the second is original, and may be therefore viewed as an application of RRT to a problem that has not been discussed by Perry himself. In Section 2, I will show how these examples give rise, in turn, to problems of overgeneration. In other words, just as RRT is able to derive contents that may be used to account for the cases that need explanation, it ought to be able to derive analogous contents that, in turn, give counterintuitive, if not outright wrong predictions. In Section 3, I will tentatively outline a line of response that Perry could take. The overall direction of the paper is thus optimistic, since the problems raised may be viewed as pointing to ways of improving RRT, rather than undermining it.

Section 1.

Motivations for Multiple Contents

1.1. Kaplanian Heritage: Lexical and "Official" Content

It is important to keep in mind that RRT builds upon the two-tiered approach from Kaplan (1977) and early Perry (1977, 1979), a crucial tenet of which is the distinction between, on the one hand, the level of *lexically encoded* content or (in Kaplan's terminology) *character,* or (in Perry's old terminology) *role*, or *linguistic meaning*, and, on the other, a level of content that includes the reference of indexicals and other referential expressions, which Kaplan simply calls *content*, and which Perry now calls "the *official* content."

This distinction is preserved in RRT, although it is cast within a multi-layered theory of reflexive and referential contents. To illustrate it, suppose that Marsha says on Monday November 5, 2007:

(1) I was insulted yesterday.

There is a content associated with Marsha's utterance of (1) that any competent English speaker may grasp, independently of any information on the context of utterance, namely the right-hand side of the following bi-conditional:

P(1).1 *(1) is true iff the speaker in (1) was insulted on the day before the day on which (1) is uttered.*

P(1).1 is actually only one among the reflexive contents of (1); for the sake of clarity, I will call it its *lexical* content.

In Kaplan's theory, the move from lexical to referential content is a one go-move, in the sense that character is a function that takes a context as input and returns a content as output. But in RRT, the move from lexical to referential content involves as many steps as there are items whose reference needs to be resolved, as illustrated in the following analysis of (1):

P(1).2 *Given that the speaker in (1) is Marsha, (1) is true iff Marsha was insulted on the day before the day on which (1) is uttered.*

P(1).3 *Given that the speaker in (1) is Marsha, and given that (1) is uttered on Nov 5, 2007, (1) is true iff Marsha was insulted on Sunday November 6, 2007.*

The right-hand sides of both P(1).2 and P(1).3 are "incremental" contents: they are obtained by incrementing P(1).1 with information on the context of utterance of (1). Note that P(1).2 is still a reflexive content, since the utterance itself is still part of it (the indexical 'yesterday' hasn't been resolved). It is P(1).3 that corresponds to the official referential content.

1.2. Pre-Lexical Contents

Having stressed that "the binary distinction (...) is too simple," Perry writes: "An utterance has as wide a variety of contents as we may find useful to isolate, for particular purposes of description and explanation" (1997: 17). We could already see with the previous example that the passage from lexical to referential content generates new contents; I will soon turn back to such *intermediary* contents. However, in (1997) and (2001), Perry's focus was primarily on contents that, so to speak, *come before* the lexical level (or the level of character), applying RRT to puzzles involving proper names. Those being somewhat controversial, let me give a different kind of example, which, I believe, still captures the gist of RRT. Suppose that the following conversation takes place in a shop where Marsha is buying socks:

(2) *Marsha:* Would you happen to have these socks in red?
Sales-person: I'm afraid we've run out of red, but would you like to see them in crimson?
Marsha: Yes, please, I'd like to.

Now imagine that Marsha had never encountered the word 'crimson' before, and has no idea what it means. Yet, Marsha is not clueless as to what question she is being was asked, and, in her answer, she even ends up saying that she would like to see those socks in crimson. Marsha's utterance thus has a truth value, as well as truth conditions; but here comes a puzzle. Given that Marsha has access neither to the lexical nor, for that matter, to the referential content, *which* truth conditions of her utterance does Marsha have access to? A Kaplanian would need to say: none. That, however, is unconvincing, since a speaker who is entirely ignorant of the conditions under which her utterance is true would not venture to make such an utterance at all. On the other hand, RRT is able to provide a truth condition perfectly available to Marsha, namely:

P(2).1 *Marsha's utterance is true iff Marsha would like to see the socks that have the property denoted by the word 'crimson' (as used in her utterance).*

Note that the right-hand side of P(2).1 is both a reflexive and an incremental content. It is reflexive since, again, the utterance itself is part of it,[1] and incremental (or referential) since it takes into account information on the context of utterance, viz. that Marsha is the speaker (this information is used to "discharge" the indexical 'I'). The label 'pre-lexical' is thus to be taken with care, since the content in P(2).1 reaches beyond lexical content, except for one item – the word 'crimson' – whose contribution fails to reach to the level of lexical content.

While P(2).1 involves a mixture of pre-lexical and referential content, there may be extreme cases in which the only content to which the hearer has access is fully pre-lexical. Recall one of Perry's own examples. He writes:

> "Consider this utterance:
>
> (*) Ich! (said by several teenagers at camp in response to the question, 'Who would like some sauerkraut').
>
> Knowing that this happened in Berlin rather than San Francisco might help us determine that it was German teenagers expressing enthusiasm and not American teenagers expressing disgust." (2001: 40)

Now what, in this example, would be grasped by a hearer who lacked this knowledge? Well, he or she, too, will have access to a certain truth condition, namely something like:

P(*).1 *Utterance (*) is true <u>iff</u> the proposition denoted by the phrase 'Ich' in the language in which (*) is made, is true.*[2]

And, of course, it is possible to generate such a pre-lexical content for any sort of utterance.

1.3. Intermediate Contents

Recall that in Perry (1977), (1979), one of the main motivations for *roles* (which, in the realm of the mental, have a similar function that *characters* have in the realm of the linguistic), was to account for the fact that two people who both believe what they would express by saying "I am about to be attacked by a bear" (hence believe different *referential* contents), will, *ceteris paribus*, behave in the same way (e.g. climb a tree as fast as they

1 P(2).1 is reflexive since it involves the use of the word 'crimson' in *Marsha's* utterance, but the latter is elliptical, hence her utterance is true <u>iff</u> she'd like to see the gloves that have the property denoted by 'crimson' *as used in the sales-person's utterance.*

2 A subtlety with this example is that expressions of disgust presumably do not have *truth* conditions. But this will hopefully not blur the central point.

can).

What I would like to do now is present a similar case – viz. different referential contents, yet (relevantly) same behavior – and yet, a case that cannot be accounted for merely in terms of roles or characters. What I will show, though, is that it is possible to account for this sort of case in the multi-layered RRT. (I am thus offering a novel motivation for RRT, one that has not been discussed by Perry.) Consider:

(3) *Marsha, on Monday Nov 5, 07:*
I need to finish my paper by Wednesday.

(4) *Josh, on Tuesday Nov 6, 07:*
I need to finish my paper by tomorrow.

Suppose that both Marsha and Josh are in rush to finish a paper in order to meet the same submission deadline of Wednesday November 7. They will, then, exhibit a similar sameness of behavior as the two people who think that they are about to be attacked by a bear. Nevertheless, in the case of (3)-(4), not only are the referential contents different (one being about Marsha, the other about Josh), but the lexical contents (*alias* roles, or characters) are different, too. Thus if Marsha were to entertain her belief under the same role as Josh, she would be striving to finish her paper within 24 hours, rather than 48.

The level of content that Marsha's and Josh's beliefs have in common lies, in fact, somewhere in between. It is, roughly, the proposition that the person who occupies the role of 'I' should finish his or her paper by a certain specific date, namely November 7. A promising feature of RRT is that it generates this level content, so to speak, for free. For, recall the way in which RRT generates the official content from lexical content:

P(3).1 *(3) is true iff The speaker in (3) (='I') needs to finish the paper of the speaker in (3) (='my') by the first Wednesday that comes after the day on which (3) is uttered.*

P(3).2 *Given that the first Wednesday that comes after the day on which (3) is uttered is November 7, 2007, (3) is true iff The speaker in (3) needs to finish the paper of the speaker in (3) by November 7, 2007.*

P(3).3 *Given that the first Wednesday that comes after the day on which (3) is uttered is November 7, 2007, and given that the speaker of (3) is Marsha, (3) is true iff Marsha needs to finish the paper of the speaker in (3) by November 7, 2007.*

P(3).4 *Given that the first Wednesday that comes after the day on which (3) is uttered is November 7, 2007, and given that the speaker of (3) is Marsha, (3) is true iff Marsha needs to finish Marsha's paper by*

November 7, 2007.

Similarly for (4):

P(4).1 *(4) is true <u>iff</u> The speaker in (4) (='I') needs to finish the paper of the speaker in (4) (='my') by the the day after the day on which (4) is uttered.*

P(4).2 *Given that the day after the day on which (4) is uttered is Nov 7, 2007, (4) is true <u>iff</u> The speaker in (4) needs to finish the paper of the speaker in (4) by November 7, 2007.*

P(4).3 *Given that the day after the day on which (4) is uttered is Nov 7, 2007, and given that the speaker of (4) is Josh, (4) is true <u>iff</u> Josh needs to finish the paper of the speaker in (4) by Nov 7, 2007.*

P(4).4 *Given that the day after the day on which (4) is uttered is Nov 7, 2007, and given that the speaker of (4) is Josh, (4) is true <u>iff</u> Josh needs to finish Josh's paper by Nov 7, 2007.*

Now look at P(3).2 and P(4).2. Although their right-hand sides, are, strictly speaking, different, the one being about Marsha's utterance of (3), and the other, about Josh's utterance of (4), it is enough to abstract upon the utterance itself, in order to obtain one and the same content-schema. In turn, the latter may be used to account for what (3) and (4) have in common – and, hence, for the similarity in Marsha's and Josh's resulting behaviors.[3]

Section 2.

Problems of Overgeneration

2.1. Can Anything Bear a Truth Value?

Recall that a motivation for a level of pre-lexical content (or, if you wish, a whole array of such levels) was to explain how a hearer who does not know whether a given utterance of "Ich!" was made in English or German, could still associate with it a certain truth condition, namely, that it is true iff

[3] Here, I have offered a motivation for intermediate contents in terms of the similarities in belief and behavior. In previous work (cf. my (2006), (2007)), I used the same sort of examples in discussing the similarities in *what is said*, and the possibilities of truly reporting, for instance, that Marsha and Josh *have said the same thing* – namely, that they both need to finish their papers by a certain date, namely by November 7, 2007.

the proposition denoted by the expression(s) used in this utterance is true. But the problem is, then, that any string of sounds (or symbols) can, in principle, be associated with a truth condition of the same sort. E.g.:

(5) Mxe hiad gsadag.

For (5), RRT provides the following reflexive content:

P(5).1 *An utterance of (5) is true iff there is a language associated with (5) such that the string of sounds uttered in (5) denotes a proposition that is true in the circumstances in which (5) is uttered.*

But once we accept this, a legitimate concern is that we will end up with a very unorthodox conception of semantics (to put it mildly). The standard approach to semantics, endorsed by Kaplan and by pretty much all contemporary semanticists, is one according to which semantics deals with functions that map sentences to other functions, viz. to mappings from sequences of parameters (context, index, etc.) to truth values. According to the standard view, the primary bearers of truth values (and of truth conditions) are *sentences*, even if they bear their truth values only *with respect to* this or that parameter.

Taken at face value, RRT may seem like an approach to semantics according to which it is *utterances of sentences* that bear truth values, rather than sentences bearing them with respect to contexts (and maybe other things). One might, then, be tempted to consider this a distinction without a difference, the idea being that it is always possible to go back and forth between an utterance of a sentence, and a sentence-context pair. However, RRT is much more radical. For it is not only utterances *of sentences* that are associated with truth conditions, but, as we have just seen, even utterances of entirely meaningless sounds can be associated with truth conditions. In fact, one can argue that RRT is even more radical. Utterance are *events*, and nothing prevents RRT from associating truth conditions with all sorts of events, rather than just events of people uttering words (or writing down symbols). The worry is, then, that if all sort events, and maybe all sorts of objects, end up having truth conditions, then we arrive at a rather strange conception of semantics, since its object of study extends from the sentences of a language to pretty much everything. A related worry is that if it is *events* that are now thought of as the primary bearers of truth and of truth conditions, then many among our pre-theoretical conceptions are in need of revision; for instance, how are we to think of an event being false? In sum, RRT appears to unveil a background of ideas that look like bullets quite difficult to bite.

2.2. Back to Intermediate Contents

We have seen that in the process of generating referential content from lexical content, when the sentence at stake contains more than one indexical, RRT generates intermediary contents that, in addition, prove to be useful for explanatory purposes. The problem to which I now turn is that among those intermediary contents, some appear to be on a par with those that do the explanatory work, yet they fail to give rise to the same sort of phenomena. And if this is so, then the worry is that the contents that we had used in the first instance actually fall short of explaining the phenomena that they were meant to explain. Consider the following pair:

(6) *Marsha, on Monday Nov 5, 07:*
I need to finish my paper by Wednesday.

(7) *Josh, on Tuesday Nov 6, 07:*
Marsha needs to finish my paper by tomorrow.

Unlike the pair (3)-(4), where one was tempted to say that Josh and Marsha had (relevantly) same beliefs, namely that they needed to finish their papers by a certain date, viz. Nov 7, it is very difficult to try to think of Marsha and Josh expressing, in (6) and (7), beliefs that are *same* in any relevant way. Marsha believes that she needs to finish her paper by Nov 7, Josh believes that she needs to finish *his* paper by that date. The only thing that appears to be common to their beliefs is that Marsha needs to finish *some* paper by that date – but this common factor is of no or little bearing on their behavior, and we are certainly not inclined to view Josh and Marsha as entertaining beliefs that are "the same" in any interesting sense. Also, there seems to be no context in which we could truly report them as having said the same thing. This contrasts with the case of (3)-(4), where one could easily report them as believing, or as having said, the same thing – namely that they needed to finish their papers by a certain date, namely, Wednesday, November 7, 2007.

The problem for RRT is that (3)-(4) and (6)-(7) end up being very much on a par. Recall P(3).3, which was among the contents associated with (3). We get the same truth condition for (6):

P(6).1 *Given that the first Wednesday that comes after the day on which (6) is uttered is November 7, 2007, and given that the speaker of (6) is Marsha,* ***(6) is true <u>iff</u> Marsha needs to finish the paper of the speaker in (6) by November 7, 2007.***

If we were to spell out the steps that allow us to move from the lexical content to the official referential content of (7), we will similarly bump upon the following truth condition:

P(7).1 *Given that the day after the day on which (7) is uttered is November 7, 2007, (and given that the name 'Marsha' as used in (7) denotes Marsha,* ***(7) is true iff Marsha needs to finish the paper of the speaker in (7) by November 7, 2007.***

In other words, (6) and (7) appear to share as much of their content as (3) and (4) did. But, while (3)-(4) exhibit the phenomenon of same-saying and of the relevant sameness of belief, (6)-(7) exhibit neither. This shows, in turn, that the mere fact that (3) and (4) have a certain intermediate content in common is not enough to explain why they can be perceived as expressing the same belief (or as saying the same thing).

Now, one might think that there is an easy solution to the problem raised with the case of (6)-(7), the idea being that rather than having an intermediate step such as P(3).3 that comes after P(3).2 and before P(3).4, there is just a single step from P(3).2 to P(3).4. In other words, the idea is that once we include the information on the speaker of the utterance in the 'given that'-clause, all occurrences of the indexical 'I' should be “discharged” at once. However, this does not seem to be the right solution: we ought to be able to discharge occurrences of 'I' once at a time. The reason is, roughly, that if Marsha says, e.g., “I admire the work of my adviser”, and if Josh says “I admire the work of Marsha's adviser”, they have said the same thing and have expressed the same beliefs to the same extent as they did e.g. in (3)-(4), and to the same extent as that happened with the original case of two people who both believed that they were about to be attacked by a bear. But in order to account for this, the 'I' and 'my' in Marsha's utterance need to be resolved once at a time.

Section 3.

Expanding the Agenda of RRT

[This last part of the paper will consist, once written, of some tentative suggestions as to how Perry might deal with the problems pointed out in Section 2. **]**

Barwise J. and J. Perry (1999). *Situations and Attitudes*. Stanford: CSLI Publications.

Kaplan, D. (1977). "Demonstratives. An Essay on the Semantics, Logic, Metaphysics, and Epistemology of Demonstratives and Other Indexicals". Eds. J. Almog, J. Perry, and H. Wettstein. *Themes from Kaplan*. Oxford: Oxford UP (1989): 481–563.

Korta, K. and J. Perry (2006). "Three Demonstrations and a Funeral." *Mind and Language* 21: 166-186.

Perry, J. (1977). "Frege on Demonstratives." reprinted in Perry (1993)

—— (1979). "The Problem of the Essential Indexical." reprinted in Perry (1993)

—— (1990). "Individuals in Informational and Intentional Content." reprinted in Perry (1993)

—— (1993). *The Problem of the Essential Indexical and Other Essays*. Oxford UP

—— (1997). "Reflexivity, Indexicality and Names." *Direct Reference, Indexicality and Proposition Attitudes.* Eds. W. Kunne et al. Stanford: CSLI & Cambridge University Press.

—— (2001). *Reference and Reflexivity*. Stanford: CSLI Publications.

Predelli, S. "The Problem with Token-Reflexivity". *Synthese* 148: 5-29.

Stojanovic, I. (2006). "What Is Said, Linguistic Meaning, and Directly Referential Expressions." *Philosophy Compass* 1: 10.111/j. 1747-9991.2006.00029.

—— (2007). *What Is Said. An Inquiry Into Meaning, Reference, and Content*. PhD dissertation, Stanford University