## Participant roles and formal pragmatics

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Who does not remember jokes of the following kind:

(1) Whoever reads this is stupid.

The remarkable thing about this is that (1) is equivalent to (2) and yet does not contain the pronoun "you".

(2) You are stupid.

A similar phenomenon is the following message in a bottle.

(3) The author of this message is in great danger.

In the case a phrase in the 3rd person replaces the pronoun "I". In formal pragmatics represented by Montague and Kaplan it is commonplace to say that the 1st and 2nd person pronouns are special. If A says "I am tired." then this does not mean the same as if B says it. Now, it has been observed that the phrase "the author of this message" shows the same behaviour as "I" (see [2]). Innocent words ("reader", "author" and so on) must therefore be with at least one leg in pragmatics.

This poses fundamental questions for formal pragmatics. Montagovian style pragmatics (see for example [4]) identifies "context" with the collected values of certain variables, which denote the speaker, addressee and so on. A proposition is by definition context independent, it is only true or false. (Notice however that logicians did not object to the idea that a proposition is only true-in-a-world rather than true simpliciter.)

This view faces many problems. One is that it fails to eludicate the connection between pronouns, say "I", and expressions like "speaker". Another problem is that "I" actually serves several roles (see [3] and references therein). Formal pragmatics can answer to these requests as follows: it can eliminate the dependencies by introducing "meaning postulates"; and it will enlarge its territory by including expressions that denote utterance related roles. It wish to argue for the opposite move: integrate everything into semantics by eliminating the special nature of context variables. Finally, make utterances qua physical objects part of the model (thus allowing self-reference). It would then follow that (3) *semantically* the same as

(4) I am in great danger.

I

All variables can be defined from the utterance using the roles that the words "T" and "you" have. If we replace the pronouns in this way we are forced to spell out what exact role is behind the pronouns (whether an occurrence of "T" denotes the author, the impersonator, and so on). If instead we use several context variables, for example one for 1st person pronoun, we get no explanation for the fact that the uses of "T" are in fact ambiguous. If for example the vice president is reading a declaration by the president, then "T" refers to the president (as author), but it can in well-defined circumstances also denote the vice president (as impersonator), see [3] on this. Additionally the "sequence of person" described in [5] remains a mystery in such approaches. It is not clear why it occurs with verbs of saying and not, say, with verbs of motion. (The theory by Schlenker is also not able to elucidate this since it remains too close to the framework by Kaplan.)

There is a difference between sentences and utterances. Only utterances denote propositions. Some words are explicitly dependent on the utterance. For example, "I" denotes among other things the function f that takes an utterance to its speaker. Care needs to be exercised when doing this reduction:

- (5) If I am the author of this message...
- (6) If I am I...

(5) seems different from (6), but the difference is not easily brought out here. First, notice (5) contains "this message" as opposed to "this utterance". The message is a sentence token and could in different worlds have different authors. Let us therefore sharpen this to read "the speaker of this utterance" rather than "the author of this message". Even then there is a noticeable difference between (5) and (6). Namely, the speaker of a given utterance u may also depend on the possible world. Make the dependency explicit by writing f(u, s) for "the speaker of u in s". Let us be in the world s; let "this message" refer to u in s. Then the premiss in (5) reads in world s': f(u, s) = f(u, s'), while the premiss of (6) reads f(u, s') = f(u, s'). So, while I am the speaker of u in s I could fail to be that in s'.

However, an author of a message cannot deny *within the message* being the author of it. In that case he would have to use a contrafactual.

## (7) If I were not the author of this message...

This has other consequences, too. In (1) we find a free relative clause to denote the addressee. To use one for the speaker ("whoever wrote this") would be odd. There is a subtle distinction at work between a written sentence token and the "speech" acts that it can give rise to when being read. (I

<sup>&</sup>lt;sup>1</sup>I owe this to Hans-Martin Gärtner.

note here that messages do have something of an intended addressee, so that a promise contained in a letter is not issued to anyone who by chance reads it. See also the notion of "ratified recipient" in [3].) This difference explains why a text can address different people. This leads to further questions. For example, how about reference to time? Does (3) say that the author is in great danger at the time of writing or at the time of reading? Or both? And finally, not all written declarations have the property that they constitute an utterance every time they are read. An official document that is to be signed consists of an utterance at the point of signing it. After that it becomes a historical document. This shows that the reduction of pronouns to roles is successful only if it also takes into account the fact that the functions are partial.

What I am arguing for is not a reform of the previous theory as found in [5]. I think it is high time to formulate a framework that does not force us to view 1st and 2nd person pronouns as deictic. Recall that the motivation behind it was the vehicle change induced by context change: "I" become "you", or "he" or "she" depending on who is taking to whom. This type of reasoning has been applied by Quine in connection with modal logic. [1] has dismantled this methodology among other by pointing out that the substitution argument is linguistically naive. Without a prior syntactic and semantic analysis we would get absurd results. The same situation is found here. If we argue for a special status for pronouns because of the vehicle change will soon find ourselves replacing zillions of other words in such a way. Semantics would soon be reduced to a tiny fraction of "safe" words, all the rest being the domain of pragmatics. I recommend however that semantics should reclaim the territory and establish the criteria of use as the primary meanings of the pronouns. If this means rendering a simple words by a complex formula, so be it.

## REFERENCES

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