

True Belief Reports and Sharing of Beliefs

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In recent years Russell's view that there are singular propositions, namely propositions that contain the individuals they are about, has gained followers. As a response to a number of puzzles about attitude ascriptions several Russellians (as I will call those who accept the view that proper names and indexicals only contribute their referents to the propositions expressed by the sentences in which they occur), including David Kaplan and Nathan Salmon, have drawn a distinction between *what* proposition is believed and *how* it is believed.¹ While it is generally agreed upon among Russellians that this distinction needs to be drawn there is considerable disagreement as to what exactly the distinction amounts to and what role the *what* and the *how* should play. The most plausible option seems to be to not assign a semantic value to the cognitive role played by the name or indexical in the sentence assented to. But recently Mark Richard² has attempted to make the cognitive role affect truth values by building it into the truth conditions of belief reports.³ I will argue that Richard's attempt fails to satisfy our pretheoretical intuitions about the sharing of beliefs. Furthermore, and more surprisingly, I will argue that Richard's theory makes it virtually impossible for us to judge whether or not most belief reports are true or false, since doing so would involve what I call RAM probing, which would require viewing elements that are essentially private.

I

One of the most persistent attitude problems faced by Russellians is a close relative of the problem that lead Frege to his description theory of names. How can it be that one can seemingly have an attitude towards the proposition expressed by "Hesperus is Hesperus" and have a different attitude towards the

proposition expressed by “Hesperus is Phosphorus” when the two sentences express the same proposition? If someone is tempted to think that the problem is unique to identity statements it is quickly pointed out that Lois may have one attitude towards the proposition expressed by “Superman is magnificent” and a different attitude towards the proposition expressed by “Clark Kent is magnificent,” where the two sentences express the same proposition. Nor is the problem limited to instances where two names are used to refer to the same object, for, as shown by Saul Kripke, the same problem can be raised using a single unambiguous name.⁴ Furthermore, it can be raised in the absence of names via indexicals or demonstratives, as when I have one attitude towards the proposition expressed by “You look untidy” and a different attitude towards the proposition expressed by “I look untidy,” not realizing that I am looking at my own reflection in a mirror.

Any attempt to deal with attitude ascriptions of the type the Russellians are struggling with has to take into account our intuitions about the following:

1. Informativeness of propositions expressed by sentences containing names or indexicals,
2. Truth values of belief ascriptions,
3. Sharing of beliefs.

There is little or no disagreement about (1). In most cases it is fairly obvious whether or not a given proposition is informative. The problem lies in how to theoretically account for its informativeness; an issue that takes us well beyond our intuitions. The Russellian works on the assumption that the semantic value of a name or an indexical is its referent and, at first glance, that does not seem to leave room for modes of presentation which might explain the informativeness of propositions expressed by sentences containing those names or indexicals.⁵

There is considerable disagreement about (2). Consider the following assertions about the Babylonian astronomer Hammurabi;⁶

4. Hammurabi believes that Hesperus is a planet
5. Hammurabi believes that Phosphorus is a planet.

Hammurabi assents to the embedded sentence in (4) but dissents from the embedded sentence in (5) since he does not know that Hesperus is Phosphorus. What is the truth value of (5)? We can try to resort to the pretheoretical intuitions of the laymen. Gottlob Frege did just that and presented us with a theory according to which (5) is false. On the other hand, Russellians who claim that the embedded sentences in (4) and (5) express the same singular proposition have a hard time accounting for the pretheoretical intuition that (4) might be true while (5) is false.

There should not be much disagreement about the third item. It seems intuitively obvious that two or more persons not only can share a belief, or believe the same thing, but that we frequently share beliefs. We thus should make it a mandatory requirement for any theory of belief and belief ascriptions that it account for the relative ease with which we share beliefs. Traditionally, the sharing of beliefs is accounted for in terms of two or more persons believing the same proposition. Thus, a Russellian might claim that two persons believe the same thing or share a belief if they believe the same singular proposition, and a Fregean might make the same claim about general propositions. But Richard's theory makes it a virtual impossibility to share beliefs and the theory therefore cannot account for the relative ease with which we share beliefs.

II

Richard takes as a starting point of his theory of belief ascriptions our intuition which tells us that (4) is true and (5) is false. While he wants to acknowledge this intuition he also wants to maintain the Russellian idea that the referents of names are constituents of propositions. In an attempt to do so Richard introduces us to items of beliefs he calls RAMs (Russellian Annotated Matrixes). According to Richard Hammurabi does *not* believe the Russellian proposition

6. < being a planet, Venus >.

He believes a fusion of the Russellian interpretation of the that-clause and the sentence expressing it, giving us a fine grained distinction between belief ascriptions.⁷ He believes a proposition *under* the embedded sentence in (4), not under the embedded sentence in (5).

Richard obtains RAMs by first pairing linguistic items with their Russellian referents to get annotations. The following are examples of annotations:

<'is a planet', being a planet>

<'Venus', Venus>

where the first item of the ordered pair is a linguistic item and the second item their referent. And when the annotations are paired together we get RAMs. So, the RAM determined by the that-clause in (4) is

7. <<'is a planet', being a planet>, <'Hesperus', Hesperus>>.

If, on the other hand, (5) is the sentence in question, the RAM named by the that-clause is

8. <<'is a planet', being a planet>, <'Phosphorus', Hesperus>>.

So, if two persons believe a Russellian proposition under different sentences, then they have different RAMs in their representational systems.

But there is more to Richard's rather complex theory. One RAM can represent another RAM given appropriate *correlations*. A correlation is a function that maps annotations to annotations and preserves reference. A correlation could map <'Hesperus', Venus> to <'Phosphorus', Venus>, but we cannot have a correlation that maps <'Hesperus', Venus> to <'Phosphorus', Mercury>, for that does not preserve reference. And since annotations are functions the annotation <'Hesperus', Hesperus> cannot be taken to both <'Hesperus', Hesperus> and <'Phosphorus', Hesperus>. So, RAM₁ represents RAM₂ under correlation *f* iff *f* maps every annotation in RAM₁ to its image in RAM₂. RAM (7) would represent RAM (8) under correlation *a* iff *a* mapped <'is a planet', being a planet> to <'is a planet', being a planet>, and <'Hesperus', Hesperus> to <'Phosphorus', Hesperus>.

What we have so far is not sufficient to account for the pretheoretical intuition that (4) might be true while (5) is false, for we can surely find a correlation that maps the annotation in (7) to the annotations in (8). In order to obtain the wanted results Richard treats ‘believes’ as an indexical, so whether or not a belief ascription is true or false depends on the context in which it is uttered. Different contexts of utterance can carry with them different *restrictions* on correlations. A restriction on a correlation functions is a triple, $\langle P, A, S \rangle$, consisting of an owner of an attitude, P, an annotation, A, and a set of annotations S with the same Russellian content as A. For example, a context in which one would regard it as true that Lois believes that Superman can fly and false that Lois believes that Clark Kent can fly, a restriction would apply which precluded an annotation containing ‘Superman’ be mapped to an annotation containing ‘Clark Kent’. Similarly, one context might carry the restriction that an annotation containing ‘Hesperus’ can only be mapped onto annotations containing ‘Hesperus’. Other contexts might carry with them a restriction that allows an annotation containing ‘Hesperus’ to be mapped onto an annotation containing ‘Phosphorus’. We therefore get the following truth conditions for belief reports:

‘A believes that S’ is true in context C only if the RAM represented by ‘that S’ represents a RAM in A’s representational system on some correlation that is permitted by the restrictions in C.

In one context I might therefore be able to truly report that Hammurabi believes that Phosphorus is the heavenly body seen latest in the morning (this might include contexts involving a conversation with people who only use ‘Phosphorus’ as a name of Venus), while this would constitute a false report in other contexts. This allows Richard to claim that (4) can be true while (5) is false. Thus, our pretheoretical intuitions about the truth of belief reports are satisfied.

The restrictions that apply in a given context are typically the results of the shared intentions of those participating in a conversation. In some contexts speakers might be interested in quite a bit of

detail of the proposition the agent bears an attitude to, as when they want to account for Lois' love interest in Superman and lack of love interest in Clark Kent. In other contexts the speakers might only have an interest in which Russellian proposition the agent bears an attitude to without worrying about the details of the attitude, that is, without worrying about which sentence the agent would use to express the attitude. No restrictions on correlation functions apply in contexts when the speakers only have an interest in which Russellian proposition the agent bears an attitude to.⁸

It is important to notice that the agent bears an attitude to a proposition regardless of whether we do or do not have an interest in the attitude and, in case we have an interest in it, that the agents attitude does not change to reflect our varying degree of interest in the attitude. If Lois has an attitude towards a proposition containing Clark Kent then we can pay attention to more or less details of her attitude, thus producing various contextually determined restrictions. But Lois' attitude can and does remain the same in spite of that. Otherwise it would not be possible to account for Lois having *an* attitude towards a proposition when numerous conversations about her attitude take place simultaneously, each producing different contextually determined restrictions.⁹

III

Hammurabi's contemporary, the Danish astronomer Petersen, assented to what turned out to be a direct translation of the that-clause in (4), so the following is true:

9. Petersen tror Morgenstjernen er en planet.

Since belief ascriptions are partly tied up with the sentences that express them Petersen does not have a token of (7) on his mental blackboard. Instead he has the RAM

10. <<'er en planet', being a planet>, <'Morgenstjernen', Hesperus>>,

so Hammurabi and Petersen do not have the same RAM in their representational systems.

Let us go back to our pretheoretical intuitions. They tell us that (4) is true and (5) is false. They also tell us that (9) is true. They furthermore tell us that Hammurabi and Petersen have the same belief or share a belief. So, if we take our pretheoretical intuitions seriously, as Richard does, there should be *some sense* in which the two share a belief.

It is insufficient to say that they share a belief because they believe the same Russellian proposition, since it would undermine the intuition Richard is trying to respect. Richard developed his fine grained account of propositions partly to account for the intuition that (4) can be true while (5) is false. If he resorts to claiming that they share a belief because they believe the same Russellian proposition he is giving up that intuition, since if Hammurabi has the same belief in (4) and (5) we have no reason to claim one to be true and the other false.

An attempt to amend the account above by saying that they share a belief because the propositions believed contain the same Russellian core, namely <being a planet, Hesperus>, does not work since it, too, involves giving up the subjectivity Richard is after. If we accept this amendment we would have to say that Hammurabi has the same belief in (4) and (5).

Richard can try to account for the sharing of belief by saying that even though Petersen does not have RAM (7) in his representational system, RAM (7) can nevertheless *represent* one of Petersen's RAMs given the right correlations. Given the correlation that 'Hesperus' conventionally translates as 'Morgenstjernen' and 'is a planet' conventionally translates as 'er en planet', RAM (7) represents one of Petersen's RAMs.¹⁰ Since RAM (7) represents one of Hammurabi's RAMs *and* one of Petersen's RAMs, Hammurabi and Petersen can be said to have the same belief. The key to this account of sharing of belief is Richard's notion of correlation where we correlate *words* or *meanings*. This works if we treat RAMs as containing names (or, more formally, public language word types). But Richard has to abandon the view that RAMs contain names when he discusses Kripke's Paderewski puzzle.

IV

So far I have discussed Richard's linguistic account of RAMs and the one that is prevalent throughout most of his book. But Richard has to modify his linguistic account when he discusses Kripke's Paderewski puzzle, and the modification has serious and unwanted consequences.

Kripke's puzzle is of Peter who one day hears of a famous musician Paderewski and thinks to himself "Paderewski had musical talent." Another day Peter hears of a Polish statesman, Paderewski, and believing that all politicians are poor musicians he thinks to himself, "Paderewski did not have musical talents." Since the musician and the politician are the same person Peter assents to a proposition and its negation, so he seems to have contradictory beliefs. But Peter, being an expert logician, would never accept contradictory beliefs.

Kripke's puzzle presents a serious problem for Russellians. Russellians accept singular propositions as objects of beliefs and singular propositions do not contain modes of presentation or senses of any kind that might be of help when dealing with the puzzle. So, those who accept the view that names contribute their referents to the propositions expressed by the sentences in which they occur have two main options when attempting to solve the puzzle. The first one, championed by Nathan Salmon and Scott Soames, is to keep singular propositions and attempt to explain away the apparent contradiction in Peter's beliefs by introducing ways of believing, or ways of grasping singular propositions. The second main alternative, and the one Richard chose, is to build more into propositions, giving us much finer grained objects of belief than singular propositions.

In the Paderewski puzzle we are dealing with identical sentences in a single, unambiguous language, so correlations will not help us. Richard therefore gives up his view that RAMs contain names in favor of a view where RAMs contain *representations*. So, supposing we have a token of the form Fa on the mental blackboard, then there is a RAM of the form $\langle\langle d, e \rangle, \langle b, c \rangle\rangle$ in the representational system where d and b are the representations determined by a and F .¹¹ Given this revision Richard can

say that Peter has two representations of Paderewski and that he uses one when he thinks Paderewski thus and so, and another when he thinks him not thus and so.

This revision raises a problem for the account of sharing of belief. We were able to say that Hammurabi and Petersen had the same belief because we could correlate the annotations in RAMs (7) and (10). But now we see that names are not parts of RAMs; *representations* are parts of RAMs. While we were dealing with the linguistic account of RAMs we were dealing with public linguistic items. What was of importance when accounting for the truth of belief reports was, in essence, finding out whether any permitted correlations allowed us to map public language items in annotation onto other public language items. But with the representational account of RAMs the emphasis is on how the person who's belief is being reported *represents* or *thinks about* an object. We have gone from *public* objects to *private* objects.

Given this, how can we correlate the annotations in Hammurabi's and Petersen's RAMs? We cannot say as before that RAM (7) represents RAMs for both persons since RAM (7) consists partially of names while we now know that the names in RAMs have been replaced with representations. Instead of annotations containing linguistic items they contain representations, which we can indicate by following a linguistic item with a star, so the linguistic item 'is a planet' in an annotation is replaced with the representation 'is a planet*'. So, the that-clause in (4) now names the RAM

11. <<'is a planet*', being a planet>, <'Hesperus*', Hesperus>>

which indicates that we are dealing with representations instead of linguistic items. Correspondingly, the that-clause in (9) names the RAM

12. <<'er en planet*', being a planet>, <'Morgenstjernen*', Hesperus>>.

Richard does not say much about the nature of these representations, but he allows that they are, for example, something like images acquired through perception.¹² Given that, two things are clear; first, that whatever linguistic item we use to represent the representation does not tell us much at all about the

nature of the representation itself, i.e., whether the representation itself is linguistic in nature, an image, or perhaps something else. And second, even though two people have a representation of the same kind, for example an image, of the same object, the representations themselves need not be alike. I might know a woman as a loving mother and homemaker and represent her accordingly; someone else might know the same woman as an exotic dancer and represent her accordingly; and a third person might have known her only as a child and represent her accordingly.

Suppose we try to proceed as before and find a correlation that maps the appropriate annotations in RAM (11) onto the appropriate annotations in RAM (12). Remember that a correlation only has to preserve reference. It does not have to preserve representation. Given that, and given how unlike two representations of the same object can be, a correlation from the annotations in one RAM to the annotations in a second RAM tells us at most that the two RAMs contain representations of the same object. That there is a correlation between the annotations tells us nothing about how like or unlike the representations are. It does not even tell us whether the representations are of the same kind, or whether one is, for example, imagistic while another is linguistic. And since it is not a sufficient condition for two persons sharing belief that both have *a* representation of the same object, a correlation between Hammurabi's and Petersen's relevant RAMs is not sufficient for them sharing belief.¹³

Richard briefly discusses two sorts of conditions, "outside" and "inside" conditions, that together would be necessary and sufficient for two tokens to determine the same representation.¹⁴ The "outside" conditions include as a necessary condition for two tokens to determine the same representation that they be of the same thing, and that they be a part of the same causal chain of transmission. Thus, 'Aristotle' will not determine the same representation when it names the shipping magnate as it does when it names the philosopher, and 'Hesperus' and 'Phosphorus' do not determine the same representation because they are a part of different chains of transmission. The "inside" condition Richard discusses is a "recognition condition." The recognition condition has to do with how one files information. For example, if I take new information I hear of a man named Clinton to be about Clinton the U.S. president, then I file the new information with other information I have about that

person. If it was in fact Clinton the president who was being discussed, then the new token of ‘Clinton’ and the old presidential tokens I have of ‘Clinton’ will all determine the same representation. So, two name tokens are a part of the same representation for a person provided that (a) they are of the same word type, and (b) that the person groups them together as if they named the same thing.¹⁵

Unfortunately, Richard’s discussion of necessary and sufficient conditions for tokens to determine the same representation does not help us with Hammurabi and Petersen. The “inside” conditions he discusses do not apply when our concern is with representations of two people. They only apply when a person is determining whether to file incoming data as if they were of the same thing. And the “outside” condition that it is necessary for two tokens to be of the same word type in order for them to determine the same representation does not help either. The reason that it does not help has already been discussed, namely that representations of the same object can vary greatly, so it is clearly not a sufficient reason for two name tokens to determine the same representation that they name the same thing. Richard clearly agrees with this, for otherwise he would not impose “inside” conditions of sameness in addition to the “outside” conditions.

Perhaps Richard can account for how people can share a belief by claiming that if two persons share a belief their representations of the object in the RAM are identical, so Hammurabi and Petersen represent the Morning Star in exactly the same ways. This response would solve the problem at the cost that it would be almost impossible for any two people to share a belief. Mental representations of an object vary depending on what features of the object we attend to and even depending on from what exact angle we saw the object and in what surroundings we saw the object. Further discriminating details are introduced if we include tactile stimuli or the specific appearance of the object at the time we saw it. Given the great variety in which we can be acquainted with most objects, the chance of two people representing the same object in the exact same way becomes a virtual impossibility.

The fact of the matter is that agents can and do form different representations of the same object. It is therefore both possible and very likely that the representations of Hesperus in Hammurabi’s head and Morgenstjernen in Petersen’s head are, for all we know, as different as the representations of

Hesperus and Phosphorus in Hammurabi's head. And if the difference in representations of Hesperus in Hammurabi's head is sufficient for us to attribute two beliefs about Hesperus to Hammurabi, the difference in representations of Hesperus in Hammurabi's and Petersen's heads should also be sufficient to attribute to them different beliefs about Hesperus.

Richard is thus faced with the problem that if RAMs contain linguistic items, such as names, and sharing of beliefs is determined by whether there is a correlation between annotations, then he cannot account for the Paderewski puzzle. If RAMs contain representations, then the Paderewski puzzle can be accounted for, but Richard's account becomes too fine grained so we can no longer account for sharing of belief.

Someone might say that violating the pretheoretical intuitions about having the same belief is a small price to pay for an otherwise elegant theory. But more has to be done. While Richard respected our pretheoretical intuitions about the truth values of belief ascriptions, not only does he not respect them when it comes to our intuitions about sharing beliefs, he also is unable to give us *any* convincing account within his theoretic framework of people sharing beliefs.

Furthermore, now we see that on Richard's final account of belief ascriptions the truth/falsity of belief ascriptions depends partly upon the believer's representation of the object in the proposition; a representation that is hidden from everyone except the believer. Since the truth of belief ascriptions now depends partly upon a representation that is hidden from everyone except the believer, it becomes impossible to judge whether or not a belief report is true except in contexts where no restrictions apply, that is, except in contexts where we are only concerned with to which Russellian proposition the agent bears an attitude. Judgments in contexts involving restrictions would involve *RAM probing*, i.e., looking at the elements in a given RAM, and since RAMs now contain representations instead of linguistic items they are essentially private. The simple fact that Richard's theory prevents us from judging, with good conscience, the truth values of simple belief reports and belief ascriptions is enough to make his theory suspect.

V

I have pointed out that Richard presents two very different accounts of RAMs and that each account of RAM faces problems that cannot be overcome. The linguistic account of RAMs, as Richard acknowledged, cannot account for the Paderewski example. In order to account for the Paderewski example Richard introduced the representational account of RAMs, but once he does that we become unable to account for sharing of beliefs as well as unable to confidently attribute beliefs to persons. The reason the representational account fails is that representations are private objects.

There is a lesson to be learned from this failure and the lesson is that we better not include representations in propositions. If we are to successfully account for puzzles involving belief reports, such as the Paderewski puzzle or the Hammurabi puzzle, we need to resort to other means than enrich propositions with representations. The two options that come to mind as alternatives are to account for the puzzles in the Salmon/Soames way of introducing ways of believing propositions, or to introduce a third element into the belief relation and make the third element a psychological attachment/association speakers make with names. Both alternatives avoid representations that take us beyond singular propositions.¹⁶

¹ Nathan Salmon, *Frege's Puzzle* (Cambridge: The MIT Press, 1986). Kaplan's distinction between the content and the character of a name also leads to a distinction between the *what* and the *how* of propositional beliefs.

² Mark Richard, *Propositional Attitudes: An Essay on Thoughts and How We Ascribe Them* (Cambridge: Cambridge University Press, 1990).

³ Because of this departure from the "traditional" Russellian Richard doesn't label his view as being Russellian.

⁴ Kripke's Paderewski example will be discussed in section IV of the paper.

⁵ For an excellent discussion of some of the problems that arise see Saul Kripke, "A Puzzle About Belief," *Meaning and Use* (ed) A. Margalit (Dordrecht: Reidel Publishing Company, 1979).

⁶ I will pretend, for convenience sake, that Hammurabi spoke English.

⁷ Richard p. 137 and 182.

⁸ For discussions on problems that arise specifically in connection with restrictions, see Jennifer M. Saul's "Still an Attitude Problem," *Linguistics and Philosophy* 16, 1993: 423-435, Theodor Sider's "Three Problems for Richard's Theory of Belief Ascriptions," *Canadian Journal of Philosophy* 25, 1995: 487-514, and Scott Soames' "Beyond Singular Propositions," *Canadian Journal of Philosophy* 25, 1995: 515-550.

⁹ An interesting feature of Richard's theory is that he keeps objectual quantification while nevertheless assigning different truth values to the same belief report and, at first, that might seem to undermine the idea that there are any "belief puzzles" once we accept his account. But what determines the different truth values in those cases is the restrictions that arise in various contexts and not the features of the RAM itself.

¹⁰ See Richard pp. 138-141 and 154-162 for more on restrictions and correlations.

¹¹ Richard, pp. 181-2.

¹² Richard, pp. 186-7.

¹³ Richard shows that the introduction of representations works nicely with the Paderewski example, but note that there we are dealing with *one* person, namely Peter and his beliefs, trying to explain away the apparent inconsistency in his beliefs. The apparent inconsistency in Peter's beliefs shows that he has two *different* representations of Paderewski. Similarly, if Peter and Paul both have representations of Paderewski, a persistent disagreement regarding Paderewski might indicate that they have different representations of him. But the issue I am dealing with is not whether or how Richard can detect a difference in representations, but whether he can account for *sameness* of belief, and it is evident that mere lack of disagreement or inconsistency is not sufficient for sameness of belief.

¹⁴ Richard, pp. 183-186.

¹⁵ Richard, p. 185.

¹⁶ I thank a referee of the journal for helpful comments.