Marcus on Belief and Belief in the Impossible [*]

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ABSTRACT: I review but don't endorse Marcus' arguments that impossible beliefs are impossible. I defend her claim that belief's objects are, in *some* important sense, not the bearers of truth and falsity, discuss her dispositionalism about belief, and argue it's a good fit with the idea that belief's objects are Russellian states of affairs.

Keywords: belief; truth; dispositionalism; Ruth Barcan Marcus; Kripke's puzzle about belief.

RESUMEN: Reviso, pero no suscribo, los argumentos de Marcus a favor de que las creencias imposibles son imposibles. Defiendo su tesis de que los objetos de las creencias no son, en *algún* sentido importante, los soportes de la verdad y la falsedad; discuto su disposicionalismo acerca de las creencias y argumento que encaja bien con la idea de que los objetos de las creencias son estados de cosas russellianos.

Palabras clave: creencia; verdad; disposicionalismo; Ruth Barcan Marcus; la paradoja de Kripke acerca de las creencias.

Ruth Marcus infamously defended the view that while it is possible to believe that London is pretty while also believing that London isn't pretty, it's not possible to believe that London is pretty though London isn't pretty.[1] Jointly impossible beliefs are possible; impossible beliefs are not.

As Marcus saw it, the contrary view—that one can believe that London is pretty but it is not, or believe that 3x17 is 61—is encouraged by a picture of belief as inherently linguistic, a matter of "inward assent" or of the tokening of a sentence on the blackboard of thought. As she noted, animals and pre-verbal children have beliefs and make choices; there is, Jerry Fodor and Donald Davidson notwithstanding, no reason to think that their beliefs are linguistically realized. On Marcus' alternative view belief is to be characterized as follows:

1. Beliefs are relations, not to things that are true or false, but to states of affairs, thought of as (actual, merely possible, or even impossible) configurations of objects, properties, and relations.

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[1] Marcus' thoughts on these topics were published in (Marcus 1981), (Marcus 1983), and (Marcus 1990). The latter two are republished in (Marcus 1993); all page references are to the republications and are indicated parenthetically.

2. Belief itself is a dispositional state. Roughly put, to believe a state of affairs s is to be disposed, given one's situation, wants and needs, to behave in a way that would be appropriate were s to obtain. Thus, belief is inherently—is, if you like, "by definition"—action guiding.

3. Rationality is not a matter of consistency of belief objects, but a matter of behavioral coherence—it is a matter of the manifestations of belief, desire, preference, and so on "fitting together" (Marcus 1993, 156-7, 243-5). Such coherence cannot be reduced to or ultimately explained in terms of logical or semantic relations: someone who says she loves her partner but treats her badly is irrational but needn't be making a logical mistake.

To tell the truth, Marcus was of two minds about whether one could believe something impossible. In two papers she flat out denied that one could have an impossible belief. In her last paper on the topic, she presented "the claim that we cannot believe impossibilities […] as a conceptual revision and extension rather than as an elucidation of the extant concept of belief […]" (Marcus 1993, 231).

I want to defend some but not all of what Marcus had to say about belief. I don't see much merit in the idea that impossible beliefs are impossible; eventually I will review Marcus' reasons for thinking otherwise, but I'm afraid I won't be able to endorse them. On the other hand, I think she is right in thinking that the objects of belief are, in *some* important sense, not the bearers of truth and falsity. And I think there is something to the idea that belief must be explained in terms of behavioral dispositions, though I think simply *defining* belief in terms of such—as Marcus once proposed to do—is a mistake.

I

Why did Marcus insist that the objects of belief are not bearers of truth? Well, she rejected views on which belief's objects are sentence-like entities, since she thought there are creatures that have beliefs but not because they token sentences. Frege's view of belief seemed to Marcus a sententialism *manqué.* She wrote that

> […] the mind-centered locus of the objects of belief is not [in Frege] wholly evaded. We "have them in mind" when we […] believe them […]. He did after all call them thoughts. (Marcus 1993, 238)

The underlying worry, I think, is that Fregean thoughts look to be projections of the sentences that express them, as evidenced by the fact that Frege gives no account of how one might come to believe a Thought beyond metaphorical remarks that suggest that the way to think a Thought is to token a sentence that expresses it. And thus we are led back to the picture of a blackboard of thoughts, depriving the poor dog of his.

Why can't the objects of belief be Russellian propositions? Actually, that is just what Marcus said they are:

> Believing is […] a relation between a subject […] and a state of affairs[…]. We may think of states of affairs as ordered structures of actual objects which include individuals as well as properties and relations. […] One recognizes here a certain Russellian thrust. On one of Russell's early accounts of epistemological attitudes, constituents of propositions are actual objects, including abstract objects such as properties and relations. [… But] Actual or non-actual states of affairs are not truth bearers. (Marcus 1993, 240-1)

Of course *Russell* thought that propositions were true or false. It is clear that Marcus thinks this a false step on Russell's part, but it is not altogether clear why.

One can, of course, imagine reasons for saying that states of affairs aren't truth bearers. The state of affairs of Desdemona loving Othello is most naturally thought of as something concrete—as Desdemona *loving* Othello. As such, it's two people standing in a relation and doesn't seem like the sort of thing that can be *true*; it just *is*, or obtains. The class of states of affairs that includes the merely possible, or the completely impossible ones, are obtained by one or another sort of abstraction: they are something like conditions on, or properties of, situations, where situations are (structured) ways that things might be. But properties seem no more apt as truth bearers than concrete states of affairs: A property—being red, being rosy, or even a maximal "way things could be"—one might complain, just isn't the sort of thing that is true or false.

I conjecture—but I'm certainly not certain—that something like this line of thought lay behind Marcus' claim that belief objects aren't truth bearers. Of course there is a rather large problem lying in wait. Beliefs, after all, *seem* to be properly said to be true or false. When the dog thinks its bone is in the yard, it has a false belief if the bone was thrown away. But what is it for the dog's—or any other—belief to be true or false? If we follow Marcus, we have discarded the idea that the objects of belief are truth bearers. If beliefs invariably involved representational states, one might answer with some sort of correspondence story: a true belief is one that represents a state of affairs that obtains. But such an answer seems to betray the motivations for Marcus' dispositionalism.

Best for Marcus, I think, to say that there is *a sense*—an attenuated, boring sense—in which the objects of belief can be true. How might she go about explaining this sense of 'true'?[2] The obvious strategy is to (i) say that a particular sense of the word 'true' is primary, and (ii) characterize a derivative sense in which states of affairs are true in terms of the primary one. The obvious candidates for what are true in the primary sense, if they are not anything like Frege's Thoughts or Russell's propositions, are representations like sentences and their utterances. Sentence truth is, presumably, something like correspondence. So Marcus might say that

1. Sentences bear a representational relation—let's use *expresses* for it—to states of affairs;
2. States affairs obtain or otherwise;
3. Sentential truth is a matter of expressing a state of affairs that obtains. More precisely: Necessarily, for any sentence and state of affairs: if the sentence is correctly understood as expressing the state of affairs, then, of necessity, the sentence so understood is true just in case the state obtains.

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[2] The answer that follows is a variation on one I suggest in (Richard, ms.).

One might go on to say

4. There is a secondary use of 'true', appearing in sentences of the form

(T) It is true that S

on which states of affairs themselves are said to be true. In an instance of (T), the phrase *that S* functions as a term naming the state of affairs expressed by *S*; (T) itself is (actually) true just in case a sentence expressing this state of affairs would be an (actually) true sentence. On this use of the word, 'true' coincides in intension with 'obtains'.

One now has an account of what it is for a belief to be true, given by

5. Beliefs have states of affairs as objects; a belief is true or false as its object is or is not true in the derivative sense just isolated.

Let us stipulate that 'proposition' is to name the range of potential referents of complements of the form *that S*. I foresee two sorts of objections to the account just given of propositional truth. The first is a general objection: propositions, the objector says, are the primary bearers of truth. A proposition's truth turns on whether the world is the way it represents it. Sentence truth is derivative, and is to be explained in terms of something representational that the sentence expresses. But on the account above, propositions are not representational and sentences are the primary bearers of truth: on this account, a proposition's truth is its being such that, were it represented by a sentence, that sentence would be true.

I find this line of argument mysterious. I can see the point of insisting that the field of propositions must have certain properties. There must be, for every potential (non defective) declarative sentence utterance a proposition that it would express; the truth of that proposition must correlate with the truth of the utterance. Likewise, for every belief we might ascribe or necessity we might note, there needs to be a proposition we could refer to in ascribing the belief or noting the necessity. So, there must be as many propositions as there are states of affairs, and the truth of a proposition must be of necessity correlated with the state of affairs obtaining. So a constraint on whatever story we tell about propositions is that things like

(B) For every molecule m there is proposition, p, that m is a molecule; of necessity, p is true iff m is a molecule.

come out true. But if there are such things as states of affairs, thought of as complexes of objects and properties à la Russell, then given the characterization of sentential and propositional truth above, (B) **is** true. What facts that need explaining must go unexplained if we adopt a story along the lines of (1) though (5)?[3]

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[3] One sometimes hears it said that the objects of belief and assertion must be not just representational but "intrinsically representational"—they must not only represent the way things are, but do so in virtue of their "intrinsic properties". So far as I can see, no one has ever given a good argument for this claim. It is, of course, true that things like (B) have to be true, given that propositions are what are named by complements of attitude verbs and 'it is true that', and are the range of variables that can occur in the positions of such complements. But all this requires is that propositions are representational in the rather weak sense that they have some property which, of necessity, tracks how things

A quite different objection might be made to the idea that a *dispositionalist* like Marcus is entitled to use something like (4) to explain how the objects of belief could be truth bearers. A sentence is true because it bears a particular kind of relation to a state of affairs. The sentence 'Desdemona loves Cassio' *represents* the state of affairs that Desdemona loves Cassio because of various referential and representational properties of its parts and its syntax. Nothing like this is true of beliefs in general on the dispositionalist view. Rover's believing that the bone is on the mat is his being disposed to act in certain ways; apparently, no representation need be involved. Othello's believing that Desi loves Cassi *may* involve his tokening 'Desdémona ama a Cassio', but it need not—all he needs is an apt set of behavioral dispositions.

Representation, the dispositionalist says, is neither here nor there as far as belief is concerned. But then why think that beliefs are true or false? The dog's disposition to avoid walking on thin ice helps constitute its belief that walking on thin ice is dangerous; but that disposition is not true or false. Neither is its disposition to bark at me if I start to do this. Why think that adding the two dispositions together, and others besides, yields something that is true or false?

Marcus should respond to *this* objection by observing that her view is not that the *psychological state* in virtue of which the dog has a belief is a truth bearer.[4] She should say that the only candidate for a truth bearer, when it comes to beliefs, are their objects. And she should avail herself of the idea that states of affairs have truth values in the derivative, deflated sense outlined above, saying that when we say that a belief is true, we mean that its object is true in this derivative, attenuated sense.

The situation here, Marcus should say, is rather like the situation with other natural, information bearing states. A tree trunk's rings bear a relation—indication, it's often called—to the claim that the tree is a certain age. What those rings indicate is true; the rings themselves, of course, are neither true nor false. Likewise, the dispositions that realize the dog's or Othello's belief are neither true nor false; they determine a relation to something that is true or false—though the sense in which this object is true or false is boring and deflated.

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are: All that is needed is that 'true' picks out a property of what the complement *that S* names which is such that any instance of

    (S) It is true that S iff S.

is necessary. And *this* doesn't require that what those complements name are "intrinsically representational". It suffices that 'true', as it occurs in (S), is understood in the way explained above.

The sophisticated reader will have noted that the counterfactual account of propositional truth on offer here apparently cannot make use of an account of the semantics of counterfactuals on which a counterfactual's truth is a matter of what happens at the "closest worlds" at which its antecedent is true. At the least, I would not want the proposal here held hostage to the assumption that for every proposition, there is some ('metaphysically possible') world in which some sentence expresses it. I don't see this is a defect. Possible worlds accounts of counterfactual semantics seem to me heuristically useful. That they are doesn't mean that they are literally correct.

[4] Marcus insists quite vehemently that any number of confusions arise as a result of a failure to distinguish the *psychological state* of having a belief from the (non-psychological) *object* of belief. See, for example, (Marcus 1993, 144-45).

II

Let us turn to impossible beliefs. Marcus gives three reasons for thinking we do not believe the impossible (or, more guardedly, that we should reform the notion of belief so that we do not speak of impossible beliefs).

1. The idea that belief in the impossible is itself possible is encouraged by a mistaken view of belief. We think of belief as a matter of assenting to or inwardly tokening a sentence. This picture results in our taking sincere, understanding assent to a sentence as a reliable or even infallible indicator of belief. Because we obviously do sincerely assent with understanding to sentences expressing the impossible, we think belief in the impossible possible. But once we reject the faulty picture of belief we have no easy argument to belief in the impossible.

2. Upon learning that she had ascribed to herself belief in an impossibility, Marcus reports that she would say that she had been mistaken in claiming that she had the belief. In so far as others share this thought—and as she points out, Berkeley and Wittgenstein had similar (or even stronger) views—our intuitions favor the idea that impossible beliefs are impossible.

3. The fact that belief is inherently action guiding rules out, or at least speaks strongly against, the idea that one could believe the impossible:

   > […] beliefs, whatever they are, are supposed to figure in our intentions: to guide choices, to guide action in the large, not just speech acts. They are supposed to guide us in achieving certain ends. But if a sentence that I assent to describes an impossible state of affairs, whether or not I know or believe that it is such a description, there is no way I will be served in achieving any ends [presumably: by allowing myself to be guided by a putative belief expressed by the sentence]. Such a sentence is not even a candidate for truth. Indeed, my total behavior in that context will be rendered incoherent, like that of a wholly irrational agent in the wider sense of rationality. (Marcus 1993, 160-1)

Taken alone, the first two considerations don't strike me as all that compelling. First of all, I just don't see that it's all that hard for a creature whose beliefs are not sententially realized to have a single belief that is contradictory. Recall the fable of the dog who, carrying a piece of meat, crosses a stream and sees a dog holding a piece of meat. The dog wants the extra meat, snaps at it and, of course, loses the meat it's carrying. And since what the dog saw was its own reflection, it lost substance for shadow.

In this case, the dog certainly knew, and thus believed, of itself and a piece M of meat, that it had M in its mouth. It also believed of itself and M, that it didn't have M in its mouth. It does not follow from this that the dog had a belief with an impossible object, since—as Marcus herself was wont to point out—belief is not closed under conjunction. But it is not hard to imagine modifications of the story on which we would be strongly inclined to say that the dog had conjoined its beliefs.

Suppose the dog routinely drops what is in its mouth when it sees something it wants to carry: if it has A in its mouth and wants to carry B too, it will drop A, fetch B, place B on top of A, chomp down on the pair, and continue on its way. It doesn't seem a stretch at all to say that when the dog does this, it plans, and thus believes, with respect to A and B, that it will leave A in one place, pick up B elsewhere, and

then put both A and B in its mouth. And now modify Aesop's tale so that the poor dog drops meat M onto the plank it's using to cross the river, so that it can grab the piece of meat—M—it sees below it. In this case, Rin Tin Wrong plans, and thus believes, of M and M, that it will leave M in one place while picking up M from another place, and then put M and M in its mouth. And this is belief in the impossible.

One can of course say that this is a misdescription of the dog's mental state; Marcus *would* say that. I will discuss her reasons presently. My current point is simply that we are not led to give this description of the case because we think the dog is forming beliefs by talking to itself. Rather, we are led to describe the dog this way because it seems obvious that the dog forms a complex plan—and thus has a complex belief—that results from its "putting together" various individually possible beliefs into a single (unfortunately impossible) plan.

Marcus' second reason for saying that there aren't impossible beliefs, recall, was this: many people have the inclination to say, on being told that a claim p they reported themselves as believing is impossible, that they were *mistaken* in saying that they believed p. Let us not worry whether this is a majority opinion. Even supposing it is, the fact that many people might say this seems less than probative. For surely pretty much everyone who would be inclined to say this would *also* be inclined to say that though they *thought* they'd believed p, they were mistaken. But it is hard to see how, if belief in the impossible is itself impossible, the claim that x believes that p could be possible when p itself is not. But then our intuitions on the matter appear to be inconsistent, and thus can't be trusted.

This leaves us with the third reason for rejecting impossible belief: a belief "is supposed to guide" behavior in a way that is conducive to achieving one's ends; but a belief whose object was impossible could not do this: "there is no way I will be served in achieving any ends" by letting my behavior be guided by a belief whose object is impossible. Now this *sounds* like an invalid argument: Bs are supposed to be Gs; a B that was an I couldn't be a G; so no B is a I. Sort of like arguing that Toyota accelerators don't stick to the floor because cars are supposed to be safe to drive, but a car whose accelerator stuck to the floor wouldn't be safe to drive.

But this way of interpreting Marcus misses her point. Her point, I think, is that we should expect someone who really believed something impossible to behave in a deeply irrational or incoherent way. Consider Pierre, who in London's East End says

(P)	London is so ugly, contrairement la belle Londres.

Pierre's overall behavior is not at all odd. Marcus' thought is that someone whose behavior is no odder than Pierre's is not someone who believes an impossibility. If this is her thought, she could have put it even more convincingly as follows: It is not (I here imagine Marcus saying) that I think it is *impossible* to believe (or do something quite like believe) an impossibility. Perhaps we should say that someone who suffers from Cotard's syndrome actually does believe something like the claim that

(C)	A person whose heart is beating and who is breathing is alive, and my heart is beating and I am breathing, but I am dead.

But impossible beliefs are going to lead to behavior *at least* as odd as the behavior of someone with Cotard's. In the case of Pierre, or of the poor student who says he's found a counter-example to the Chinese Remainder Theorem, we don't see such behavior. So surely it's best to say that Pierre and the student don't believe what they assent to.[5]

This, at any rate, is what I think Marcus should have said. The question we must pose to Marcus is 'But why should we say *that*?' Marcus' view here seems to be very close to the view that the behavioral effects of belief are determined simply by its object, so that, all else being equal, there can't be any behavioral difference between someone who thinks Paris beautiful and not beautiful because he tokens (P) and someone who has this thought because he tokens

(P') London is so ugly, unlike beautiful London (the very same London that's so ugly).

But why think *that*? Perhaps belief, although indeed a relation to a state of affairs, is a *mediated* relation, the mediation being one or another collection of "epistemic liasons" to the constituents of the state of affairs. The liaisons may be—in the case of adult humans perhaps often are—(parts of) sentences. But they need not be. Dogs and frogs, for instance, have perceptual states that track objects and trigger complexes of expectations and behavioral dispositions, thereby relating them to states of affairs in a belief making way; perceptual states are described as sentences only if we give a new meaning to 'sentence'.

Now the behavioral manifestations of a belief are arguably tied not (so much) to the state of affairs that is the belief's object, but to the "liaisons"—the epistemically operative relations—that make the state the belief's object. Behavior varies as a function of epistemic connections, not state of affairs. But if *this* is the proper picture of belief, we could concede to Marcus that

(a)   people like Pierre are rational;

(b)   rational belief's behavioral manifestations must be more or less coherent

without following her to the conclusion

(c)   belief in the impossible is (for a rational person, at least) impossible.

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[5] This line of argument—minus the unqualified acknowledgement that impossible belief is posible—is fairly explicit in Marcus. At the end of (Marcus 1983), for example, Marcus concedes that there are some similarities between Pierre's behavior towards London and the sort of behavior that would be exhibited by someone who seems to understand and sincerely assent to 'London is pretty and it [London] is not pretty'. But, she writes,

[…]for the belief relation to *hold*, it must have a proper object, a possible state of affairs, for how otherwise is one to distinguish Pierre's "other" behavior, such as his "choice" behavior, from that of a wholly irrational agent? A wholly irrational agent is…an agent for whom linguistic and non-lingusistic belief indicators are persistently incoherent. (Marcus 1993, 159)

The argument here seems to be that someone who believed an impossibility would exhibit 'persistently incoherent' behavior; thus we (relatively) normal people don't have such beliefs.

III

I say all this not to offer a quick refutation of Marcus, but to make the point that we need some reason—presumably a reason from the philosophy of mind—to prefer Marcus' position to the view I just gestured at. We are thus led back to Marcus' dispositionalism about belief. She summarized her dispositionalism with a schematic definition:

> (D) x believes that *S* just in case, under certain *agent-centered circumstances* including x's desires and needs as well as *external circumstances*, x is disposed to act as if *S*, that actual or nonfactual state of affairs, obtains. (Marcus 1993, 241, italics in original)

My reading of this definition and its surround is that Marcus held a more or less standard non-reductive dispositionalist account of belief. On such an account, for each belief b, there is a set of dispositions such that one has the belief just in case one has enough of the dispositions.[6] These dispositions can be characterized in terms of conditionals of the form

> (CD) If C obtains, then, all else being equal, if x has b, then x will…

I take it that (D)'s italicized clauses are gestures towards the antecedents of such an array of conditionals and the dispositions they would define. And I take it that the insistence that '*S*' be understood as characterizing a state of affairs means, among other things, that there can be no difference in the dispositions that determine (say) the belief that London is pretty from those that determine the belief expressed by 'Londres est jolie'.

Does this sort of dispositionalism give any support to the idea that impossible belief is impossible? You might think that it more or less entails it. The argument goes: there is no such thing as the way one would behave if something that could not occur did occur. So one could not have a disposition to behave as if the impossible obtained. So one could not, given (D), believe the impossible.

Whatever the merits of this argument, Marcus, at the end of the day, did not endorse it. In the last five pages she wrote on the topic, she allowed that if someone assented to a sentence of the form *a is P and b is not P*, with *a* and *b* co-referential names,

> (A) that would put her into a believing relation to an impossible state of affairs. In assenting to a sentence that, given still unknown reidentifications, might come […] to have on substitution the form of a surface contradiction, she is disposed to act as if an impossible state of affairs obtained. (Marcus 1993, 251)

Still, Marcus argued, we *ought* to revise our way of thinking about belief so that, on the revision, it is wrong to say that such a person has an impossible belief.

Why should we do this? The argument seems to be something of a normative variation on the argument which Marcus rejected. We recognize that belief is subject to

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[6] Some dispositions might be absent because, given one's circumstances, there is an excuse or explanation of a certain sort for why the disposition is absent. There is a nice discussion of this in (Schwitzgebel 2002).

certain norms; in particular, belief is supposed to be rational in a wide sense of 'rational' on which "a rational agent […] aims at making all the behavioral indicators of belief "coherent" with one another" (Marcus 1993, 244). This is because it is essential to belief that it be action guiding: to the degree that belief is not coherent in the relevant sense, it will not be able to guide action to satisfy goals. We can see a belief whose object is impossible would fail, and fail seriously, to satisfy this norm; indeed, we cannot even explain what it would be to have such a belief:

> If believing *S* is minimally a disposition to act as if a certain state of affairs obtained and if such a state of affairs could not possibly obtain, a rational language-using epistemological agent is in a position to ask what would count as acting as if it did obtain. Many actions would be rendered incoherent, many ends frustrated. If the speech act of assenting is one of those actions that mark our believing, then we would be acting as if '*S*' were true. But what sense can we make of "acting as if '*S*' were true" when [...] '*S*' has no truth value or '*S*' is necessarily false? (Marcus 1993, 254-5)

So, we ought to reform our way of speaking of belief, so that we do not ascribe belief in the impossible.[7]

The problem with this argument, of course, is that—as Marcus herself admits in the passage labeled (A) above—we can and do make sense of acting as if the impossible were true. We do this when we recognize that the dispositions that realize a belief are typically determined by cognitive contact (what I called above epistemic liaisons) with the constituents of a state of affairs, and that behaving as if a state of affairs obtains is a matter of having dispositions to behave that are in one or another way mediated by one's modes of cognitive contact with the constituents of the state affairs.

In order to draw Marcus' conclusion, we need an extra premise—something to the effect that the sorts of dispositions that Pierre manifests, when he talks about London and Londres, or Rin Tin Wrong manifests when he drops M in his vain attempt to pick up M, either should not be taken as manifestations of belief or should not be taken at face value, as straightforward manifestations of beliefs about the objects and properties Pierre and Rin seem to be thinking about. It is hard to see why we would want to endorse such a premise. Surely the behavior in question does manifest belief. And the idea that it does not manifest the belief it seems to manifest is just puzzling. After all, it is not as if we can't see or elegantly explain how Pierre's endorsement of 'London isn't Londres' is acting in a way appropriate to London's not being London: to deny the identity of x and y, using names of x and y, after all, *is* appropriate to x's not being y. Of course a complete explanation of what is going here must advert to Pierre's epistemic liaisons with London. But that fact does not show that Pierre is not behaving as if London were not London.

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[7] The argument is given in (Marcus 1993, 252-5) as an argument for rejecting a simple principle of disquotation (which would imply that understanding assent entails belief in what is expressed by what one assents to) and replacing it with a principle on which assent implies belief only if the agent's "actions, including her speech acts, are coherent and preserve a norm of rationality in the wide sense", which Marcus takes to require that her actions are not ones that can be described as acting as if something impossible were true.

Note that Marcus apparently assumes that it is not fixed in advance whether a person's (overall) behavior is correctly described as acting as if (an impossible state of affairs) s obtains. Rather, whether (say) Pierre's behavior can be so described depends (for example) on whether we adopt a permissive principle of disquotation.

IV

All this raises a question for the dispositionalist: what determines the collection of dispositions that define a belief? Marcus' schematic definition of *x believes that S* seems to presuppose that once we fix an agent's wants and needs (and whatever else determines her 'agent-centered circumstances') as well as the situation she finds herself in (her 'external circumstances'), we thereby fix a set (or family of sets) of behavioral dispositions which define how it would be rational to behave were one to believe that S. Put otherwise: Marcus seems to presuppose that, once we fix needs and wants and one's external situation, we have fixed what it is to behave as if S obtains.

I rather doubt this. At least I doubt it unless 'agent centered circumstances' are understood in such a way that specifying them involves specifying what I called above the agent's epistemic liaisons with the objects of her thoughts. The point of the last section is that (assuming the dispositionalist view is correct) the dispositions that determine whether one believes that S are *not* determined simply by one's wants and desires, the situation one finds one's self in, and the state of affairs that S. If the individuation of beliefs *did* proceed in this way, it would be hard to see how the belief that Hesperus is Phosphorus could differ from the belief that Hesperus is Hesperus.

Presumably our ascriptive practices make a significant contribution towards determining what dispositions define particular beliefs. We *could,* after all, individuate beliefs in such a way that, given that Hesperus is Phosphorus, the belief that …Hesperus… is the belief that …Phosphorus… . But of course we don't. Certainly *common sense* sees all the difference in the world between believing that Hesperus isn't Hesperus and believing that Hesperus isn't Phosphorus. Common sense thinks that the later is non-problematic but not the former; it presupposes that somewhat different behavioral dispositions will be associated with each belief. There is nothing irrational—confusion, after all, is not irrationality—about the dispositions associated with the second belief.

How the dispositions that underwrite an attitude ascription are determined will be a lengthy story. Syntax and logic surely play a role. Even though the state of affairs of Hesperus' not being Phosphorus just is the state of affairs of Hesperus's not being itself, we ascribe different behavioral dispositions to someone when we say he believes that Hesperus isn't Phosphorus than we do when we say he thinks that Hesperus isn't Hesperus. We do this, I think, because the use of a single name in ascriptions of the latter belief presupposes that the believer thinks Hesperus to not be identical with itself "using a single epistemic liaison"; this is not so for the other belief. Irrational behavior is expected of someone with the belief that Hesperus isn't Hesperus, but not the other one.

The dispositionalist, I think, needs to make use of a notion along the lines of *being disposed to (attempt to) bring it about that <x1, x2,…,xn> stand in R relative to epistemic liaisons <e1, e2, …., en> to <x1, x2,…, xn>* in characterizing her dispositionalism. Our friend Rin Tin Wrong is disposed to attempt to bring it about that <M, M> are both in his mouth relative to the pair of perceptual/sensory liaisons <his visual perception of M, his tactile/gustatory perception of it>; the dog does not have this disposition relative to the pair <his visual perception of M, his visual perception of M>. Do not say that

to introduce such notions into one's account of belief (or its semantics) is to succumb to sentientialism about belief. Surely we can all agree that our dispositions to act "run though" such things as perceptual and sensory relations to the objects those dispositions concern, and that the structure such relations introduce into our mentality is not the structure of a sentence. (Of course *some* of the epistemic liaisons that *language users* have to objects they are disposed to manipulate *do* run though sententially structured relations.)

It is not implausible to think that for each simple n-ary predicate *P(x1, x2,…, xn)*, our ascriptive practices associate with *believes that P(x1,. x2, …, xn)* something like a function from a potential believer, an n-tuple of objects (which, along with the predicate's semantic value in context determines a state of affairs) and an n-tuple of epistemic liaisons to a function that determines a collection of dispositions to behave in certain ways, given a specification of wants, needs, and external circumstances. To say this is to just to say in a very complicated way that (for example) our ascriptive practices associate with *believes that x is tasty* a rule that tells us that when John believes, while looking at it, that the steak is tasty, he will be disposed, if hungry and within grasping distance, to pick it up and eat it. He will not be so disposed, of course, if just hears about the steak on the telly. In so far as this sort of thing is plausible, it is plausible that our ascriptive practices associate with the simplest belief predicates something that can ground the beginnings of a dispositionalist account of belief ascription, one that answers the question: When I say that so and so believes that such and such, exactly what dispositions am I ascribing to so and so, and how does the truth of my ascription depend on them?

Of course, much more would need to be said. The dispositionalist will surely want to say that in different situations we focus on different dispositions when we ascribe attitudes; our words often enough are chosen so as to clue the audience in, as to what dispositions are among our focus. So what behavioral dispositions are being ascribed by a sentence of the form *X believes that S* may vary across contexts, even when *S* itself is not contextually sensitive. And even if we can say, for any atomic sentence *S*, what dispositions are relevant to the truth of a sentence of the form *x believes that S*, we will need an account of how the dispositions relevant to the truth of *x believes that T*, with *T* molecular, are to be determined. I do not think this project is hopeless; I commend it to the dispositionalist. [8]

Bringing the discussion back to Marcus: her suggestion that belief is to be understood in terms of dispositions has considerable merit. As she observes, it explains why that which seems unproblematic—the ascription of beliefs and other attitudes to those we think do not think in language—is indeed unproblematic. There is merit in the argument, implicit throughout Marcus' discussion of belief and its ascription, that:

> The complement *that London isn't London* picks out a state of affairs, not a truth bearer, in *it's impossible that London isn't London*;
>
> There is continuity in what that complement is doing there and what it is doing *in Pierre believes that London is not London*;

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[8] Some of the relevant issues are touched upon in the introduction to (Richard 2013).

So, what the latter does is relate Pierre to a state of affairs, not a truth bearer.

What I think needs to be added to what Marcus said is the observation that the dispositions that characterize the belief that S aren't determined *simply* by the state of affairs that S, along with what Marcus calls agent-centered and external circumstances. And because of this, when the state of affairs that S is the state of affairs that T, the belief that S needn't be the belief that T. Once we see that this is so, Marcus' arguments that belief in the impossible is itself impossible are undermined.

V

I'll close with an issue that I expect will be troubling some who agree with Marcus about the nature of belief. This is her election of "Russellian structures", complexes of object, properties, and relations[9], as the objects of belief. It will be said that this choice fits poorly with Marcus' dispositionalism. After all, if the truth conditions of belief ascriptions are given by anything at all like (D), what sense can be made of the idea that someone might believe that S but not that T, when of necessity S iff T? If S obtains of necessity just if T does, then a disposition to behave as if S is present (of necessity) iff a disposition to behave as if T is.

I think this is a bad argument. Someone or something who believes that I have thrown a particular ball doesn't simply have dispositions appropriate to the world's being one in which I threw the ball. They have dispositions to behave in certain ways that involve *me*, *the ball*, and the relation *throwing*. What, exactly, these dispositions will be depends on the case—on the 'agent centered' and 'external circumstances', of course. But the dispositions have to be ones that, in some fairly direct way, involve me and the ball. Likewise, someone who believes that 17x3 is 51 has dispositions to behave (in a suitably broad sense of 'behave') in certain ways that involve 15, 3, 51, multiplication, and equality (or representations thereof). The same thing is surely true of the belief that 17x3=51 iff S, for any sentence S: to believe this is to have dispositions involving the numbers and whatever objects are mentioned in *S*.

Of course one can have dispositions to do certain things with or to me without having any dispositions towards the number 51. Because of this there is no reason at all to think that a dispositionalist needs to say that believing that I threw the ball is believing that I threw the ball just in case 17x3=51, even though the states of affairs necessarily obtain together.

It is just not true that someone who is disposed to act as if I threw the ball is thereby disposed to act if I threw the ball iff 3x17 is 51. To think otherwise is to be confused about the nature of dispositions. While it doesn't follow from this sort of consideration that states of affairs *cum* Russellian propositions are the best candidates for the objects of attitudes like belief, it *does* I think follow that they are far better candidates than such things as sets of possible worlds. I like to think that Ruth would have endorsed this thought.

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[9] Including higher order relations corresponding to truth functions and quantifiers, as well as something along the lines of functions from objects to Russellian structures.

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