Russell on acquaintance and the limits of thought

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1. Two ways of thinking about things

So far, we have examined Russell's theory of descriptions as a view about a particular class of expressions in English. We now turn our attention to the importance of that theory for the philosophy of mind and epistemology.

Russell distinguishes between two ways of thinking about things. One occurs in cases in which "we know propositions about 'the so-and-so' without knowing who or what the so-and-so is." (209) To think about an object as the so-and-so is to think about that object 'under a description'; knowledge about an object, when expressible in this way, is knowledge by description.

When we know that

The F is G.

what we know, according to Russell's theory of descriptions, is that

There is exactly one thing which is F, and that thing is G.

i.e.,

 $\exists x(Fx \And \forall y(Fy \rightarrow x = y) \And Gx)$

Suppose that some object o is in fact uniquely F. In this case, our thought is *indirectly* about o, even though o is not itself a part of the content of our thought. By contrast, the property F is directly part of the content of our thought. So there is some sense in which,

if Russell's theory of descriptions is correct, we have thoughts which are indirectly about about o by having thoughts which are directly, or immediately, about F.

This suggests a general distinction between those things we think about directly — by making judgements involving them — and those things we think about indirectly. This is Russell's contrast between knowledge by acquaintance and knowledge by description. Russell gives the following list of things that we can think about directly:

Sense data. (We'll return to what these are later.)

Universals. "...we have also ...what may be called awareness of universals. . . . Not only are we aware of particular yellows, but if we have seen a sufficient number of yellows and have sufficient intelligence, we are aware of the universal yellow." (212)

Relations. Sentences like 'if one thing is before another, and that is before a third, then the first thing is before the third' as showing that awareness of relations cannot be analyzed as awareness of relata.

Oneself.

This means that whenever we think about anything else — for example, a material thing, or another person, or another person's mental states — we must be thinking about that thing indirectly, by description.

What we want to understand is: why did Russell have this very restrictive view of the possible objects of thought? There are two reasons. One is based in the philosophy of perception, and the other is based in the philosophy of language.

2. The case for a restrictive view of the possible contents of thought

2.1. Acquaintance and the argument from illusion

One prominent question in the philosophy of mind, which has been around at least since Locke, is: How are certain kinds of thoughts possible?

One plausible kind of answer to this question might be called *empiricism about content*. This holds that, for every constituent of thought, an agent is able to have thoughts involving that thing just in case it was presented to him in experience. (This should be distinguished from empiricism in epistemology, thought of as a view about justification of knowledge.)

Russell holds a version of this view. He begins by explaining the key notion in his philosophy of mind, acquaintance:

"I say that I am acquainted with an object when I have a direct cognitive relation to that object, i.e. when I am directly aware of the object itself." (209)

We explain our capacity for having thoughts involving a certain object or property in terms of this sort of direct awareness of that object or property. As Russell puts it,

"The fundamental epistemological principle in the analysis of propositions containing descriptions is this: Every proposition which we can understand must be composed wholly of constituents with which we are acquainted.

...The chief reason for supposing the principle true is that it seems scarcely possible to believe that we can make a judgement or entertain a supposition without knowing what it is that we are judging or supposing about." (219)

Given this principle, our question — What things can we think about directly? — comes down to the question — What things can we be directly aware of?

Russell's answer to this question was guided by the argument from illusion, which is an argument for the conclusion that the immediate objects of sensory awareness are sense data, rather than ordinary external objects. Here is what Russell says about perception in *The Problems of Philosophy*:

"It is evident from what we have found, that there is no colour which preeminently appears to be the colour of the table, or even of any one particular part of the table – it appears to be of different colours from different points of view, and there is no reason for regarding some of these as more really its colour than others. And we know that even from a given point of view the colour will seem different by artificial light, or to a colour-blind man, or to a man wearing blue spectacles . . . This colour is not something which is inherent in the table, but something depending upon the table and the spectator and the way the light falls on the table. When, in ordinary life, we speak of the colour of the table, we only mean the sort of colour which it will seem to have to a normal spectator from an ordinary point of view under usual conditions of light. But the other colours which appear under other conditions have just as good a right to be considered real; and therefore, to avoid favouritism, we are compelled to deny that, in itself, the table has any one particular colour. ... The shape of the table is no better. We are all in the habit of judging as to the 'real' shapes of things, and we do this so unreflectingly that we come to think we actually see the real shapes. But, in fact, as we all have to learn if we try to draw, a given thing looks different in shape from every different point of view. If our table is 'really' rectangular, it will look, from almost all points of view, as if it had two acute angles and two obtuse angles. If opposite sides are parallel, they will look as if they converged to a point away from the spectator; if they are of equal length, they will look as if the nearer side were longer. All these things are not commonly noticed in looking at a table, because experience has taught us to construct the 'real' shape from the apparent shape, and the 'real' shape is what interests us as practical men. But the 'real' shape is not what we see; it is something inferred from what we see. And what we see is constantly changing in shape as we, move about the room; so that here again the senses seem not to give us the truth about the table itself, but only about the appearance of the table."

Initially, one might think that when I look at the table, I am aware of the shape of the table — a property of a certain object which is independent of my sensory experience. But, Russell points out, the shape we are aware of changes based on our perspective. But the 'real' shapes of external objects do not change with our perspective. So, whatever shapes we are aware of in experience, they must not be the shapes of external objects, which exist independently of us. Instead, Russell thought, we are aware of things he called *sense data*.

If the objects of perceptual awareness are always sense data and their properties, rather than independent physical things and their properties, then it follows from the above principle about acquaintance that our thoughts can only directly be about sense data, universals, and relations, and only indirectly about physical things.

2.2. Restrictions on what can be named

In his theory of descriptions, Russell distinguished between names, which directly designate objects in the world, and definite descriptions, which do so indirectly. This gives us two ways in which the thought expressed by a sentence may concern an object: the object may itself be a part of the thought (as would happen if the sentence contained a Russellian name), or the object may be singled out indirectly by properties which are themselves a part of the thought (as would happen if the sentence contained a description satisfied uniquely by the object in question).

This distinction corresponds to an intuitive distinction between two ways of referring to, or thinking about an object. (Consider, on the one hand, demonstratives, and on the other hand, descriptions like 'the point midway between my left foot and the surface of the sun'.)

This gives rise to the same question discussed above: what kinds of objects can we think about directly, as opposed to merely indirectly, via some properties which they happen to have?

Given Russell's view of names, we can raise this question in a linguistic form by asking, 'What sorts of objects can we name?' The interesting thing is that, using Russell's distinction between descriptions and names and some plausible theses from the philosophy of language, we can reach the same result as in the previous section: that the constituents of our thoughts include only sense data, universals, relations, and possible oneself, but never other external objects. Furthermore, the present argument seems to show this without relying on any empiricist theses or on the sense datum theory of perception; so it seems to provide a kind of independent confirmation of the restrictive view of the contents of thoughts outlined above.

The first principle is about our access to our own thoughts:

[1] We can never be mistaken about whether or not we are thinking a thought.

This is closely linked to another principle:

[2] One can never be mistaken about whether a sentence of one's own language expresses a thought.

These principles are linked because, you might think, if [2] were false then [1] would be as well. For if one could be mistaken about whether a sentence of one's own language was meaningful, then one might say that sentence to oneself, thereby taking oneself to be thinking a thought. But if the sentence was meaningless, one would not be thinking a thought, and so one would, contra [1], be mistaken about whether one was thinking a thought. This is some reason to think that [1] entails [2].

Consider now the following plausible principle about the meaningfulness of words and sentences of which they are a part:

[3] If one expression in a sentence is meaningless, the sentence as a whole fails to express a thought.

Consider, e.g., 'They're serving flibbertyflam in the cafeteria today.' It's plausible that this sentence fails to express a thought because 'flibbertyflam' lacks a meaning.

[4] The meaning of a genuine name is its reference.

From [4], it is natural to infer the following principle:

[5] If a name lacks a reference, it also lacks a meaning.

But it follows from [3] and [5] together that

[6] Any sentence involving a name which lacks a reference fails to express a thought.

But from [2] and [6] together it follows that

[7] One can never be mistaken about whether a name of one's own language has a reference.

From which it is natural to infer

[8] We can only understand names for objects about whose existence we cannot be mistaken.

So what things can we understand names for? Plausibly, properties and relations — which exist necessarily — and sense data, since (one might think) we can never be confused about whether or not we are having a certain sort of perceptual experience. Perhaps also we can understand names for ourselves, since plausibly we cannot be mistaken about our own existence.

And this seems to show that we can only think directly about these things. For consider anything about which we can think directly. Surely we can understand a name for that thing; we could, after all, think the thought expressed by sentences involving the name. So there is a link between thought and what can be named, which suggests the following parallel between thought, acquaintance, and language:

 $\forall x$ (one can think directly about x iff one is acquainted with x iff one can understand a name for x)

If this is right, this means that we can derive from thesis [8] a claim about the sorts of objects with which we can be acquainted, or think directly about: those objects about whose existence we cannot be mistaken.

And from this it seems to follow that we cannot name, or be acquainted with, physical objects, since we can always be mistaken about their existence. And, from Russell's 'fundamental epistemological principle', it then follows that physical objects can never be constituents of our thoughts.

These two arguments both purport to show that the contents of our thoughts are limited to sense data and universals and relations. But this gives rise to an obvious problem. There are many sentences which we seem to understand, but which appear to contain names for material objects. Russell's theory of descriptions provides the solution to this problem: "Common words, even proper names, are usually really descriptions." (216) This means that the meaning of an ordinary proper name of, for example, a person must be given by some description 'the F' where we fill in 'F' in some way which makes reference only to sense data, properties, relations, and ourselves.

3. CONSEQUENCES FOR EPISTEMOLOGY

Few problems in philosophy are older than the problem of explaining how it is possible for us to have knowledge of the physical world. For Russell, this problem took a particularly difficult form.

3.1. Sense data and knowledge of the external world

Russell's philosophy of perception committed him to thinking that sensory experiences are acts of awareness of sense data, which seem to be items distinct from ordinary material things. In sensation, we never are directly aware of, for example, tables and chairs, and other medium sizes objects. So how can we know anything about those items on the basis of sensation?

Russell put the problem like this:

"What can we learn by observation and experiment?

Nothing, so far as physics is concerned, except immediate data of sense: certain patches of colour, sounds, . . .

The supposed contents of the physical world are prima facie different from these: molecules have no colour, atoms make no noise, electrons have no taste ...

If such objects are to be verified, it must be solely through their relation to sense-data: they must have some kind of correlation with sense-data, and must be verifiable through their correlation alone.

But how is this correlation itself ascertained? A correlation can only be ascertained empirically b the correlated objects being constantly found together.

But in our case, only one term of the correlation, namely, the sensible term, is ever found . . . Therefore [physics] is itself utterly and for ever unverifiable.

There are two ways of avoiding this result.

(1) We may say that we know some principle a priori . . . that our sense data have causes other than themselves, and that something may be known about these causes by inference from their effects. . . .

(2) We may succeed in actually defining the objects of physics as functions of sense data. ..." (from "The relation of sense data to physics")

Russell finds the first unsatisfactory, since it makes all of our empirical knowledge of the world rest on a suspicious sort of philosophical principle. Further, his restrictive views about the contents of thoughts would imply that we couldn't even have thoughts — except by description — about the entities whose existence was inferred.

He thinks, then, that the possibility of knowledge of the material world rests on (2): analyzing ordinary material objects in terms of sense data. If we can do this, then there is no real gap between sense data and material things, and hence no gap for a principle of the sort invoked in (1) to bridge.

3.2. The idea of a logical construction

Russell states his core idea as follows:

"The supreme maxim in scientific philosophising is this: Wherever possible, logical constructions are to be substituted for inferred entities." (155)

This idea is related to what's sometimes called 'Ockham's razor': the idea that we should not multiply entities without necessity. The idea here is that if we know of the existence of some class of entities, and are incline to infer on that basis of the existence of another class of entities, we should prefer the hypothesis (if possible) that talk about the second class of entities really is just disguised talk about the known class.

This motivation for Russell's view comes out clearly when he writes,

"Since the 'thing' cannot ...be identified with any single one of its appearances, it came to be thought of as something distinct from all of them and underlying them. But by the principle of Occam's razor, if the class of appearances will fulfill the purposes for the sake of which the thing was invented by the prehistoric metaphysicians to whom common sense is due, economy demands that we should identify the thing with the class of its appearances. It is not necessary to deny a substance or substratum underlying these appearances; it is merely expedient to abstain from asserting this unnecessary entity. Our procedure here is precisely analogous to that which has swept away from the philosophy of mathematics the useless menagerie of metaphysical monsters with which it used to be infested." (155) But it remains to be seen how we can do without these sorts of metaphysical monsters. He explains his method of logical constructions as follows:

"The method by which the construction proceeds is the same in these and in all similar cases. Given a set of propositions nominally dealing with the supposed inferred entities, we observe the properties which are required of the supposed entities in order to make these propositions true. By dint of a little logical ingenuity, we then construct some logical function of less hypothetical entities which has the requisite properties. . . . This method, so fruitful in the philosophy of mathematics, will be found equally applicable in the philosophy of physics, where, I do not doubt, it would have been applied long ago but for the fact that all who have studied this subject hitherto have been completely ignorant of mathematical logic." (156-7)

The key bit of logic required is the apparatus of quantification and, in particular, Russell's own theory of descriptions. That theory enables us to substitute, when we encounter a name n for some entity in which we are disinclined to believe, a description which can, in turn, be analyzed wholly in terms of properties in which we do believe. This strategy enables us to explain how sentences involving n can be true without assigning some mysterious entity as the reference of n.

3.3. Material objects as logical constructions

As Russell mentions, one application of this method is in the philosophy of mathematics, when we analyze talk about mysterious entities — numbers — in terms of propositions which are wholly about sets. (See "The definition of number" for more on this.)

Just so, we analyze material objects as logical constructions out of sense data — and analyze names for material objects using descriptions which make reference only to sense data. Suppose, for example, that I name my car "Bessie." When I say

Bessie is in the faculty lot.

Russell thinks that "Bessie" is not really functioning as a name for a material object, which exists behind and independently of our sense data. Instead, it is a complex description of the form

The F is in the faculty lot.

where the "the F" stands for some very long list of facts about sense data, like: "the set of the grey sense datum I experienced this morning when walking out the door & the loud sense datum when I turned the key & ...".

This view — that material objects are logical constructions out of sense data — is sometimes called *phenomenalism*. It was thought to both solve otherwise intractable problems about our knowledge of the external world, and solve otherwise intractable metaphysical problems about the relationship between mind and matter.

However, the idea that we can analyze our talk about material objects in this way faces some serious objections:

- In the above analysis, reference to other material objects the door, the key occurs in the analysis. This is, for obvious reasons, unacceptable but it is not obvious that we could avoid this sort of circularity.
- If we really want to capture the intuitive truth conditions of our talk about material objects, then we have to capture the distinction between veridical experience and hallucination and, in particular, "There are spiders all over the walls" had better come out false when I am merely hallucinating that there are spiders on the walls. But this means that the analysis of "spiders on the walls" can't just be given in terms of my current sense data because, while having the hallucination, I might really be experiencing sense data characteristic spiders on the walls. A natural thought here is to appeal not just to my current sense data, but to certain sense data I could have experienced; for example, facts about which sense data I *would have* experienced had I not just taken a powerful hallucinogen. But then to know the truth of an ordinary material object statement I have to know facts about which sense data I would have experienced in certain non-actual scenarios and this threatens to re-introduce at least some of the epistemological problems which phenomenalism was introduced, in part, to solve.
- A similar problem arises from the fact that if I say "There are spiders on that wall" and you say "There are no spiders on that wall", then our statements contradict each other. But this shows that my sentence can't just be analyzed in terms of facts about my sense data while yours is analyzed in terms of facts about your sense data — since, if they were, our statements would not contradict each other after all. So my statement must be partly analyzed in terms of the sense data of other people which seems to imply that in order to know that my statement is true, I must know something about the sense data of other people. But this reinstates all of the standard problems about knowledge of the external world. (And makes them worse since, on Russell's view, knowledge of the existence of other minds seems especially problematic. This is because the standard "argument from analogy" for the existence of other minds does not get off the ground in Russell's system, since we have no observation of a correlation between facts about our own body and facts

about our own mental states — since the former are all just facts about our own sense data.)

In response to these problems, Russell could, of course, simply deny that there is a distinction between hallucination and veridical experience, and deny that material object statements made by different people can ever contradict each other. But then the view seems more like a form of skepticism than an analysis of our ordinary thought about material objects.