How substantial are Tractarian objects really?

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§1. Introduction

NE OF THE MOST PERSISTENT SOURCES of disagreement over how to understand the *Tractatus* has concerned the extent to which the book advocates realism. The book makes frequent reference to reality (*Wirklichkeit*), but what is the relationship supposed to be between this reality and the language we use to describe it? One debate concerns the direction of fit. Is language designed to fit an independent world or is the world to be understood as conforming to the shape that language allows for it? Central to this debate is the role played by Wittgenstein's explicit endorsement of Frege's context principle (3.3). Another debate —the one I shall focus on here—relates to the notion of substance. It has sometimes been supposed that a conception of the world as grounded in substance is a mark of realism. The question I want to address is whether there is a route from Wittgenstein's claim that objects form "the substance of the world" to anything worth calling "realism".

§2. The internalist premise

According to the picture theory, the essence of picturing —i.e. of representation— is a commonality of form between a picture and what it represents. It follows from this that if the picturing relation in question is to be unambiguous, the forms of the two relata must be unambiguous. And Wittgenstein thought that such a form is unambiguously present only in a fact, not in a complex: a complex need not, in the relevant sense, have a single unambiguous form. It follows, therefore, that both relata of the picturing relation must be facts, not complexes. This explains the inference from proposition 1 to

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Disputatio. Philosophical Research Bulletin Vol. 10, No. 18, Sept. 2021, pp. 93–107 ISSN: 2254–0601 | [EN] | ARTÍCULO proposition 1.1: given that the world consists of what is the case, i.e. what can be pictured, it must consist of facts, because only facts can be relata of the picturing relation.

This, though, invites us to scrutinize proposition 1 more carefully. Why believe it? Why suppose that the world consists only of what is the case, i.e. what can be pictured? Textbooks on the Tractatus largely ignore this question curiously so, given the central role the proposition plays in the book. This tendency originated with Russell, the book's earliest exegete, who in his introduction to the *Tractatus* observed (correctly) that the world is not described by merely naming all the objects in it, but did not go on to explain why one should think that the world is completely described by stating all the facts as to how the objects are configured. Nor did he note the sense in which defining the world as Wittgenstein did privileges what is in principle describable. To see why proposition 1 does give the book a contestable starting point, one has only to consider how different it might have been if it had begun: "The world is everything that occurs. The world is the totality of events, not of facts". Or: "The world is everything that is real. The world is the totality of things, not of facts". Neither of these beginnings is prima facie absurd, but Wittgenstein does not pause to explain what is wrong with them.

I have elsewhere (2020, p. 320) called proposition 1 the "internalist premise" of the *Tractatus*. I might also have called it a weakly idealist premise, but avoided the word "idealism" because I wanted to reserve it for the more specific idealism that Wittgenstein identified (in the 1916 notebook if not in the text of the *Tractatus* itself) with realism. Proposition 1 is weakly idealist because it holds that the world is at least of the right kind to be described propositionally, even if whether it actually can be so described is a question for further investigation.

If the whole *Tractatus* is premised on at least this weak idealism, that suffices to explain the discomfort Wittgenstein is known to have felt with Frege's swift dismissal of idealism in his 1919 article, "Thoughts". He believed that there were "deep grounds" for idealism which Frege had not grasped (Schmitt 2003), and he later said that Frege had "attacked idealism on its weak side, whereas a worthwhile criticism of idealism would attack it just where it was strongest" (Geach 1977, p. vii).

Nonetheless, even if the weak idealism of the book's opening is accepted, this does not settle the exegetical issues concerning realism that I mentioned at the outset. It does not settle the direction of fit between language and world, nor does it settle whether the world is grounded in an unsayable feature such as

substance is sometimes taken to be.

§3. Tractarian objects and Frege

Tractarian objects are simple, by which Wittgenstein meant that they have no complexity expressible in language. (Whether they have some other sort of complexity is a question we shall return to later.) In holding this Wittgenstein disagreed with both Frege and Russell, who held versions of realism that envisaged the world as explicitly complex.

Central to Frege's realism was his belief, which underpins the sense/reference distinction, that a single object may be thought about in different ways: we do not take the object into thought direct, but only by thinking about it in some way or other. The notion of sense is then required in order to explain how different ways of thinking may be ways of thinking about the same thing. Frege's classic expression of this view (1980, p. 80) occurs in a letter he drafted responding to Jourdain's question (very likely to have been prompted by his conversations with Wittgenstein) whether he now accepted that Russell's theory of descriptions shows the distinction between sense and reference to be unnecessary. Writing from Norway around the same time, Wittgenstein told Russell that his theory of descriptions was 'quite certainly correct' (McGuinness 2012, no. 30). This makes it seem as though Wittgenstein straightforwardly sided with Russell against Frege and held that our thought about the world is unmediated by any such notion as that of Fregean sense. In 1913–14 he may indeed have done so. Soon thereafter, however, he came to see that Frege's distinction is required even if we reject the notion of identity on which Frege's own argument for it relied. Wittgenstein realized, that is to say, that we still need two distinctions. We need first to distinguish between the components of a proposition and the components of the fact that makes it true: this is so that we can explain how it is possible to judge falsely. And we then need to distinguish further between the components of a proposition and the components of the sign used to express the proposition: this is so that we do not find ourselves committed to the extreme version of linguistic idealism which would hold that the structure of the world can be read off trivially from the structure of the sentences of ordinary language.

The first point for us to note in relation to the Tractarian semantics, then, is that by the time of the Tractatus Wittgenstein adhered, like Frege, to a twostage semantic theory, in contrast to Russell's one-step theory. For Frege, a proper name expresses a sense, which refers (or not) to an object. For Wittgenstein the simple sign that occurs in the propositional sign we write down or utter is to be understood as expressing a name—a symbol that occurs in a proposition and goes proxy for the object the proposition is about (see Potter 2019).

The distinction between simple sign and name, as I am drawing it here, is an instance of the more general distinction between sign and symbol. The latter is of course a distinction that Wittgenstein emphasizes at various points in the book, but the particular instance he rather oddly downplayed. Indeed he said that "the simple signs employed in propositions are called names" (3.202). In order that this remark should not simply remove the distinction, we are required to read it as saying that we turn a simple sign into a name by employing it in a proposition —by, as he put it elsewhere, "recogniz[ing] the symbol in the sign" (3.326).

§4. Tractarian objects and Russell

Let us now turn to a comparison of Wittgenstein's theory with Russell's. Russell, of course, called the entities in the external world for which he had names "sense data". By giving these entities names, logic treated them as simple. But in another sense they might very well be complex. I might, for instance, be acquainted with a triangular sense-datum made up of three sides, with each of which I am simultaneously acquainted. In such a case I can both name the triangle and name its sides. I can therefore express in my language the sense in which the triangle is spatially complex —made up of the three sides. The triangular sense-datum is thus, on Russell's account, explicitly representable as complex, even though it has a logically simple name.

Wittgenstein's picture theory outlawed this mismatch between language and world. On his view the fact that I can express the complexity of the triangle is enough to show that it is not a simple object. Anything I say about the triangle has to be re-expressed as being really about the three sides.

Notice, though, that Russell did not suggest that his realism required sensedata to be complex: he did not rule out the possibility of objects that are internally as well as logically simple. Nor, indeed, did Frege hold that objects have to be complex. This suggests that the simplicity of Tractarian objects does not in itself count either for or against a realist reading of the book.

§5. Tractarian naming

In the Tractatus Wittgenstein held that "the world is completely described by the specification of all elementary propositions plus the specification which of them are true and which false" (4.26). He was therefore committed to holding also that every object has a name and that every possible atomic fact is expressed by an elementary proposition. For if there were an atomic fact with no elementary proposition to express it, a list of which elementary propositions are true and which false would fail to say whether this atomic fact obtained.

Why, though, did Wittgenstein hold this *prima facie* implausible view? Why did he in effect hold not merely that the world is representable in thought but that it is represented in thought? The explanation for this seems to lie in his account of quantification. He in effect represented a quantified proposition $\forall x \varphi x$ as the application of an operator to a symbol expressing the class of propositions φa , φb , etc. (where a, b, etc. are all the names that can meaningfully be substituted for x). In order for this narrowly substitutional account of quantification to give the correct result, we need every object in the domain to have a name.

Contrast this with the Fregean account, which involves temporarily adding a dummy name α to the language and explaining the truth conditions of $\forall x \varphi x$ in terms of the truth conditions of $\varphi \alpha$ under all possible assignments of a reference to α . Frege's account requires only that each object in the domain should be capable of being the reference of the dummy name α under some interpretation, not that it actually has a name.

Wittgenstein claimed that his account, in contrast to Frege's, "separates the concept all from the truth–function" (5.521), but it should be conceded that this remark is far from transparent. After all, Frege had in section 9 of Begriffsschrift offered an account of the process of extracting a function from a proposition by removing a symbol from it, and had taken some care to present that account of function-extraction as not depending on his account of the quantifier. What more did Wittgenstein think was achieved by his own account?

It is plain, at any rate, that Tractarian naming does not work quite like Russellian naming. Since every object already has a name, there can be no question of giving an object a Tractarian name as a result of an act of acquaintance. On the other hand, that is not to say that I might not associate a particular sign with the name as a result of such an act. One way to make Wittgenstein's view that every object has a name more palatable would be to allude once more to the distinction between sign and symbol. One might hold

that every object has a name, but that some of these names do not correspond to any simple sign. This is no doubt true of ordinary language, but Wittgenstein does not make it entirely clear whether he also held this to be true of his formal language too. For he held that "the proposition is the propositional sign in its projective relation to the world" (3.12): this does not encourage us to think that there are some names not expressed by any simple sign, and hence some propositions expressed by no propositional sign. The alternative is that he supposed the formal language to have some system for constructing names of all objects. If, for instance, points in space are objects, we could represent every point by a triple of real numbers in the familiar way using Cartesian coordinates. Of course, most of these triples have not yet been used, but we might think of them as belonging to the formal language nonetheless.

§6. Independence

One of the central claims of the *Tractatus* is that the occurrence or nonoccurrence of each atomic fact is independent of the occurrence or nonoccurrence of every other atomic fact. Objects are the components of these independently occurring atomic facts, and they are independent in the sense that they ground the independence of the atomic facts in which they may occur. So the independence of objects in this sense can be taken as evidence of realism only to the extent that the independence of atomic facts can be so taken. We need, therefore, to ask what Wittgenstein's argument was for this independence. This is tricky, however, since the text of the *Tractatus* contains no explicit argument for independence at all. The best that might be offered would be to start from his notion of the sense of a proposition as consisting in the truth-possibilities of elementary propositions. Senses may thus be thought of as being like (possibly infinite) truth tables. An a priori dependence between atomic facts would amount to an a priori restriction on these senses, i.e. an a priori reason to delete a line of the infinite truth table.

What, though, would be wrong with that? A short and casual answer would be that Wittgenstein did not want to get involved in explaining how such a synthetic a priori could arise. A slightly longer and less casual answer might be as follows. First, logic cannot allow any a priori dependencies between elementary propositions, because to do so would threaten the generality of logic. But in that case there can be no a priori dependencies between atomic facts, because the picture theory requires a perfect match between the possibilities allowed by the atomic facts and the possibilities allowed by the pictures used to represent them.

The longer answer, though, can hardly be said to be a significant advance on the shorter. Both answers really amount to no more than an insistence that the picture theory is our only guide to possibility. "Outside logic all is accident" (6.3). What is important for our current purposes, though, is that Wittgenstein's route to the independence claim goes via the representation of the atomic facts in language and should therefore be rejected by the metaphysical realist, who wants to claim that the world is as it is, quite independently of our attempts to represent it.

§7. Controversy over identity

The term "substance" was used by many philosophers before Wittgenstein in varying senses, and he need not have had any one usage uniquely in mind in using the word. Nonetheless, as Proops (2004) has noted, there is a particular similarity with Kant's use of the word to refer to what persists: in Kant's case substance is what persists through time; in Wittgenstein's it is what persists across different possibilities as to how it is configured to form facts. Kant, however, also held (while discussing Leibniz) that "substances in general must have some inner (intrinsic) nature ... free from all external relations" (A274=B330). The Leibnizian account of space, according to which there is no more to a spatial position than the relations the position bears to other spatial positions, would thus be categorized as insubstantial. More recently, mathematical structuralists have held similarly that mathematical objects consist merely of positions in a structure and hence are not in this further sense substantial. The question which thus arises is whether Tractarian objects have an "internal nature" or not.

It is not always clear what those who talk of such internal natures mean by "internal". (This is especially problematic in the mathematical case.) On this point, though, the *Tractatus* is comparatively clear: a property of an object is internal (or formal) if the object has the property necessarily; the property is external (or material) if the object has it contingently. External properties are then just those that are expressible; internal properties are those that can only be shown.

Ishiguro (1969) suggested that names in the *Tractatus* function like dummy names in formal logic. If she were right in this claim, it would follow that the objects Tractarian names refer to are insubstantial in the sense just stated: they would have no internal nature, but would have a role solely as combining together to form atomic facts.

Now on this point of Tractarian interpretation Ishiguro was mistaken, as

various subsequent authors have noted (For a recent discussion, see Nakano 2020). The standard refutation of her claim quotes Wittgenstein on identity.

5.5302 Russell's definition of "=" won't do; because according to it one cannot say that two objects have all their properties in common. (Even if this proposition is never true, it is nevertheless *significant*.)

Wittgenstein thus explicitly allowed that there could be two objects that had all their expressible properties in common. Indeed, this was forced on him by his insistence that elementary propositions are independent of one another. For this entails that two objects may have all their elementary properties in common, in which case they would have all their expressible properties in common too, since every expressible property is a (perhaps infinite) truth–function of elementary properties. Wittgenstein's doctrine of the independence of elementary propositions therefore forced on him a conception of objects as substantial in the sense of having an internal nature that is not reducible to their expressible properties.

§8. Structuralist languages

If we believe 5.5302, then, Ishiguro was wrong to hold that Tractarian objects are insubstantial. There are, however, two puzzling remarks that seem to contradict this. The first of these is as follows:

5.526 One can describe the world completely by completely generalized propositions, i.e. without from the outset co-ordinating any name with a definite object.

In order then to arrive at the customary way of expression we need simply say after an expression "there is only and only one x, which ...": and this x is a.

Wittgenstein here explicitly countenances a purely structuralist description of the world. If such a description really does "describe the world completely", it is easy to see why Ishiguro would infer that Tractarian objects have no internal nature.

What did Wittgenstein have in mind? Quine has repeatedly suggested (e.g. 1957, p. 8) that it would be possible to remove each name "a" from a formal language and replace it with the definite description " $\imath xAx$ ", where "Ax" is a predicate uniquely satisfied by the object previously named "a". Proposition 5.526 has encouraged some readers to think that Wittgenstein was here proposing such

a Quinean language. Despite appearances, however, this cannot be right. Quine's proposal assumes as given a Fregean distinction among primitive expressions between names and predicates. The Tractatus, by contrast, makes no such assumption. An elementary proposition is a concatenation of names. If we remove all the names from it, all that is left is an empty form. A function is obtainable by removing names from a proposition, but without names there would be nothing to remove the names from. A Tractarian formal language does not contain any primitive predicative expressions in the sense that Quine envisaged. So there cannot be a Tractarian language without names. The language in which we couched our "completely generalized propositions" would have to contain a name for each object.

This point can be generalized. If we start with a Tractarian language with a full complement of names, we can existentially quantify into the name positions in all the true sentences of the language to obtain what is now called the "Ramsey sentence" of the theory; but if we wish to retain the narrow substitutional account of quantification mentioned earlier, we cannot formulate this Ramsey sentence in a language without names.

Notice, too, that there is a further difficulty, on Tractarian principles, in the second step of the two-step process Wittgenstein proposes —namely adding "and this x is a". This is because a Tractarian formal language does not contain a sign of identity.

Proposition 5.526 invites us to regard setting up a formal language as a two-stage process: in the first step we describe the world in a language containing only dummy (i.e. so far unattached) names; the second step hooks these names up with objects. This way of conceiving of the matter is of course familiar from any number of logic textbooks, which encourage us to study formal languages independent of their interpretation. It is worth noting, though, that elsewhere Wittgenstein showed himself resistant to exactly this way of proceeding. For instance, when Russell remarked that the theory of types is "a theory of correct symbolism" according to which "a simple symbol must not be used to express anything complex", Wittgenstein retorted, "You cannot prescribe to a symbol what it may be used to express. All that a symbol can express, it may express" (McGuinness 2012, no. 63). And he rejected what I have elsewhere (2020, pp. 376-377) called the "container" model according to which a grammatical category is viewed as a container that is formally specifiable in advance of the names that instantiate it (cf 4.12721). It follows that 5.526 is best regarded not as an invitation to countenance a language without names, but rather as an unfortunately phrased attempt to allude to the possibility of isolating, by means

of a Ramsey sentence, the purely structural part of a description of the world. The only sense in which the *Tractatus* should allow semantics to be a two–stage process is the one already alluded to, namely that in which at the first stage every object has a name; what is done at the second stage is only that *signs* are attached to (some of) these names.

§9. Distinguishing the actual world

A second exegetical puzzle concerns the apparent tension between Wittgenstein's acknowledgment that it makes sense to say of two objects that they have all their expressible properties in common and his observation that such objects cannot be distinguished:

2.0233 Two objects of same logical form are —apart from their external properties—only differentiated from one another in that they are different.

2.02331 Either a thing has properties which no other has, and then one can distinguish it straightaway from the others by a description and refer to it; or, on the other hand, there are several things which have the totality of their properties in common, and then it is quite impossible to point to any one of them.

For if a thing is not distinguished by anything, I cannot distinguish it —for otherwise it would be distinguished.

One might no doubt wish that Wittgenstein had expressed himself more clearly here. He says, reasonably enough, that if two things have all their properties in common, then it is "quite impossible to point to one of them". Does this entail, though, that they cannot have distinct names? Wittgenstein talks of whether things can be "distinguished", but does not clarify whether merely having distinct names suffices to distinguish them.

The most plausible way to resolve the tension, I think, is to invoke the distinction mentioned earlier between a name (i.e. a sort of symbol) and a simple sign (i.e. a sort of linguistic item). We can then allow that there may actually be two objects with distinct names having all their expressible properties in common, while insisting that I could not actually attach distinct signs to them in my language (because to do so I would have to be able to distinguish them). Which signs are used to refer to which things is an empirical matter of linguistic fact. So if two objects were referred to by different signs, that would amount to an empirical, and hence expressible, distinction between them. On this account, the possibility mentioned in proposition 5.5302 is not one that arises in relation

to the objects that I can actually refer to. The general moral, then, is that when Wittgenstein talks of possibilities, what he means is the range of what is available to thought in general, not what I, Michael Potter, can explicitly articulate given the empirical constraints that I happen to be subject to.

§10. But is this realism?

Ishiguro used her claim that Tractarian objects have no internal nature in support of an anti-realist reading of the book. Pears (1987, ch. 5) responded by pointing out the textual evidence that she was wrong on this point and arguing that this bolsters the realist reading of the book that he favoured. But why should it do that? Why should a conception of the world as grounded in substance favour realism? The thought behind the proposal seems to be roughly this. We have already seen that Frege's realism led him to hold that an object has a certain sort of complexity that outruns any particular way of thinking about it. But Frege, of course, was not an atomist. If we attempt to accommodate his realist conception within a Tractarian atomist framework which holds that a Tractarian object has no expressible complexity, we are compelled (the thought runs) to grant that the object has an *inexpressible* complexity. And that is just the internal nature that is here under discussion. According to the Fregean, then, an idealist is prevented from conceiving of the world as having an internal nature, because it is part of the transparency of an idea to its owner that its properties must in some sense lie in the open. One cannot possess an idea while being in the dark as to which idea it is.

So far as has been said, this is no doubt somewhat vague, and even if it were made precise, an idealist might well dispute it. For current purposes, though, I shall grant that there is a kind of realism that might be grounded in a conception of reality as possessing, and of the realm of ideas as lacking, an internal nature. Even if we grant the coherence of such a notion, however, Pears's objection to Ishiguro gives us no prospect of attaining it, because this internal nature is, on the account I have sketched, an outgrowth of our scheme of representation. Our recognition of it thus deploys resources that the realist should eschew.

Staunchly realist readers of the *Tractatus* will object at this point, however. It is true, they will grant, that the argument for the internal nature of Tractarian objects that I have offered here depends on the world's representability in thought, but that argument is nowhere stated explicitly in the text. Perhaps, they will say, Wittgenstein had in mind a quite different, non-internalist argument to the same conclusion. Indeed so, but in that case it is incumbent on them to supply the missing argument, and I for one doubt that they will find it. After all, the independence of atomic facts from one another —which is the key step— has *inter alia* the consequence that the number of possibilities open to the world is a power of two. It would be rather surprising if this followed on purely non-internalist premises.

The point is indeed somewhat more general. We need to recognize that (contrary to what some textbooks have claimed) the Tractatus provides little textual support for modal realism. The central notion in the Tractarian account of modality is that of the state of affairs (Sachlage, 'situation' in the Pears-McGuinness translation). Wittgenstein repeatedly (2.11, 2.202, 2.203, 3.02, 3.11, 3.144, 3.21, 4.021, 4.03, 4.031, 4.032, 4.04, 4.124, 4.125, 4.462, 5.156, 5.525) talks of these in terms of their being represented or described (by a picture, proposition or thought). One remark (5.135) mentions them in connection with inference, and hence indirectly with representation. That leaves only two early remarks (2.0122 and 2.014) which mention them without drawing an explicit connection with representation, and neither of these, it seems to me, compels a realist reading. The direction of fit which the *Tractatus* intends between thoughts and facts is, I think, disputable, with arguments on both sides. The direction of fit the book intends between thoughts and states of affairs (Sachlagen), on the other hand, seems to me to be unambiguously from thoughts to the states of affairs that they represent.¹

§11. Conclusion

We have seen that Tractarian objects do indeed count as substance in a sense that has a recognizable affinity to one of earlier philosophers' uses of the word, namely that they have an internal nature. I have argued, however, that this does not support a realist reading of the *Tractatus* in the way that Pears hoped, not because this notion of substance is in itself inimical to realism, but because the *argument* that Tractarian objects are substantial in this sense depends crucially on their role as the references of names. In other words, a Tractarian realism grounded in substance can be attained only via our attempts to represent the world. The *Tractatus* thus leaves us with a conception of the world that is, in this respect at least, neither determinately realist nor determinately idealist.

This somewhat peremptory denial of modal realism in the *Tractatus* deserves more explanation, but lack of space prevents me from supplying that here. I hope to rectify this omission in forthcoming work.

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How substantial are Tractarian objects really?

According to the Tractatus objects have an internal nature that is not exhausted by their possibilities of combination to form atomic facts. This internal nature cannot be used to bolster a case for a realist reading of the book, however, because the argument for this internal nature already assumes that the world is represented in thought.

Keywords: Wittgenstein · Tractatus · Realism · Idealism · Internalism · Structuralism · Sense.

¿Qué tan sustanciales son realmente los objetos tractarianos?

De acuerdo al *Tractatus*, los objetos tienen una naturaleza interna que no es agotada por sus posibilidades combinatorias para formar hechos atómicos. Esta naturaleza interna no se puede usar, sin embargo, para dar sustento a un caso de lectura realista del libro porque el argumento a favor de esta naturaleza interna ya presupone que el mundo es representado en el pensamiento.

Palabras Clave: Wittgenstein · Tractatus · Realismo · Idealismo · Internalismo · Estructuralism · Sentido.

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