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The Early Wittgenstein on Thought and World*

Abstract

The aim of this paper is to criticise several widely accepted interpretations of Wittgenstein's *Tractatus*. Against some of them author argues that, firstly, the idea of isomorphism between language structures and the world is questionable and, in a significant sense, impossible; secondly, he claims that early Wittgenstein's philosophy is focused not so much on the language-world relation but rather on the thought-world relation.

There exists an old wives' tale regarding the system of *Tractatus Logico-Philosophicus* that is now set to gain popular currency. Namely, the *Core Curriculum* for secondary schools announced by the Ministry of Education in 2008 sets the following requirement for students sitting final secondary school leaving exams in philosophy: 'The student [. . .] will explain the analytical method in philosophy (using examples of the concept of isomorphism of the structure of language and the world in the early philosophy of L. Wittgenstein...)' [III.1.4].

The text has been prepared by a team led by Jan Hartman building on earlier proposals by Adam Grobler and Jacek Wojtysiak. Students will now stare at sentences such as 'If Jan Hartman walked briskly down Grodzka Street in Kraków last Friday evening, the old Sociologist's Cottage atop the Otryt mountain range no longer exists' trying to figure out what the (alleged) isomorphism of the structures of this sentence and the situation it represents consists in.

In this article, I would firstly like to explain that isomorphism between the structures of language and the world is at least questionable and to some extent even impossible. Secondly, and more importantly, I will try to demonstrate that Wittgenstein's early philosophy did not concern the relationship between *language* and the world, but that between *thought* and the world.

1. The ontology of objects versus the ontology of states of affairs

The opening proposition of *Tractatus* is: "The world is all that is the case" [1].[1]
It is usually asserted that everything in the world constantly comes into existence,

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[1] L. Wittgenstein, *Tractatus Logico-Philosophicus* (London 1922); *Tractatus Logico-Philosophicus*, transl. D.F. Pears, B.F. McGuinness (New York 1971).

undergoes changes, and vanishes, and all these changes occur in accordance with an invariable order, the so-called laws of nature. Wittgenstein rejects this view: "The exploration of logic means the exploration of *everything that is subject to law*. And outside logic everything is accidental" [6.3]. "The whole modern conception of the world is founded on the illusion that the so-called laws of nature are the explanations of natural phenomena" [6.371]. The laws of nature are merely conventional forms by means of which we describe reality. Different sets of such laws "correspond to different systems for describing the world" [6.341], some of which may describe it for instance more simply than others, which does not entail that they are more true.

The central assumption of the *Tractatus* ontology – and a most bizarre one – is that the world divides into fragments called *states of affairs*, which are or are not the case independently of anything else being or not being the case. "Each item can be the case or not the case while everything else remains the same" [1.21]. This raises the question about credible examples. My broom may be in the corner or on the porch, while all other utensils may be where they are. But can *everything* remain the same? If my broom is in the corner, the garden parasol cannot, and the air movements must be different too. Moreover, the sequence of prior events must have been different in each case: if my broom is on the porch, something else must have happened than if it is in the corner. Common sense suggests that proposition 1.21 must be false – unless Wittgenstein wanted to say something different from what this sequence of words is ordinarily taken to mean. I am of the opinion that he wanted to say precisely what a 'normal' reader would understand his claim to mean, and he was led astray by a feature of propositional calculus.

"A state of affairs is a combination of objects" [2.01]. Wittgenstein is silent on what objects are: Democritus' atoms, Hume's elements of impressions, Leibniz's monads, Plato's ideas, Kant's (unknown) things-in-themselves, or something else. He only asserts that objects are *simple* (without explaining what that means) and *unalterable*, that they are the substance, or what makes up the world, and that each has a certain *form*, which determines how it can combine with other objects into states of affairs.

Thus, there are two levels of ontology in *Tractatus*: an ontology of objects dependent on one another and an ontology of mutually independent states of affairs, made up of objects.

2. Names, elementary propositions, and complex propositions

Popular accounts of Wittgenstein's early philosophy move from here directly to language. Here again there are two levels of analysis.

At the first, basic one, language is composed of names, each of which refers to some object. Names are combined into an elementary propositions, which shows that objects combine in the same way into a state of affairs. If the represented state of affairs is the case, the elementary proposition is true; if not, it is false. The postulate of the independence of states of affairs takes the form of the following assertion on the side of language: "One elementary proposition cannot be deduced from another" [5.134].

At the other level, propositions are truth functions of elementary propositions. In 'ordinary' logic, this is expressed by combining constituent propositions by means of logical constants into complex propositions. To avoid the claim that logical constants refer to something (for example that there are 'logical objects'), Wittgenstein adopts a notation that does without such constants. To this end he uses truth tables – their presence in logic is in large part his contribution – putting the last column of the relevant table in the first parentheses and all constituent propositions in the second. In this notation the example sentence from the first paragraph will take the form: '(TFTT) (Jan Hartman walked briskly down Grodzka Street in Kraków last Friday evening, the old Sociologist's Cottage atop the Otryt mountain range no longer exists)', whence it can be immediately seen that the sentence is true if Hartman walked down Grodzka Street and the old Sociologist's Cottage no longer exists, if he did not walk down the street and the cottage no longer exists, or if he did not walk and the cottage exists. Thus, our sentence would be made true by the occurrence of three different facts, so any isomorphism is out of the question.

Perhaps isomorphism occurs at the level of elementary propositions and the states of affairs they represent, then? This would seem to be suggested by the statement: "In a proposition there must be exactly as many distinguishable parts as in the situation that it represents. The two must possess the same (mathematical) multiplicity" [4.04]. It is preceded by the statement: "The fact that the elements of a picture are related to one another in a determinate way represents that things are related to one another in the same way. Let us call this connection of its elements the structure of the picture, and let us call the possibility of this structure the pictorial form of the picture" [2.15]. There are various kinds of pictures: spatial (e.g. figure, map), coloured (it is not quite clear what Wittgenstein means here), and finally – where the pictorial form is logical form – logical (*cf.* 2.171 and 2.181). A proposition is a logical picture.

This immediately suggests that the relationships among the constituents of a proposition are of a logical nature. Again, it is clear what is meant only at the level of complex propositions, the truth functions of elementary propositions. When we move to elementary propositions, however, Wittgenstein has us believe they have *some* structure but is silent about what it actually is. He only explains that – in contrast to the standard predicate calculus – they will contain neither truth-functional operators nor quantifiers. They are to consist only of names but it is not known what kind of names (general or singular, naming objects or their properties, or perhaps relations between them, referring to material things or to impressions, etc.) and whether there are to be only names of one kind or of many kinds. Neither is it clear how names are to be combined with one another.

Obviously none of the words making up the sentence 'Jan Hartman walked briskly down Grodzka Street in Kraków last Friday' is a name in the *Tractatus* sense, and while the structure of this sentence can be called *grammatical*, it cannot really be called *logical*. At the same time, Wittgenstein asserts: "In fact, all the propositions of our everyday language, just as they stand, are in perfect logical order" [5.5563]. One could ask: What do you mean by they are, seeing that they are?

The reply seems straightforward: "the apparent logical form of a proposition need not be its real one" [4.0031]. To uncover the 'real' one, it is necessary to carry out a logical analysis of 'ordinary' propositions. Wittgenstein asserts: "A proposition has one and only one complete analysis" [3.25] – and again he offers not a hint as to how such analysis could proceed. We can only observe that nobody has performed the complete analysis of a proposition that would meet the *Tractatus* criteria.

The situation appears paradoxical: the 'real' form of propositions is to decide whether they are pictures of (possible) facts, whereas such a form in language – in the ordinary sense of the word – does not exist.

This dilemma clearly troubled Wittgenstein as he worked on the text of the book:

> Let us assume that every spatial object consists of infinitely many points, then it is clear that I cannot mention all these by name when I speak of that object. Here then would be a case in which I *cannot* arrive at the complete analysis in the old sense at all; and perhaps just this is the usual case.
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> But this is surely clear: the propositions which are the only ones that humanity uses will have a sense just as they are and do not wait upon a future analysis in order to acquire a sense [17.6.15].

3. A thought as a proposition with a sense

The paradox will disappear – although numerous vague areas of a fundamental nature remain – if we look at *Tractatus* and note that Wittgenstein uses the words 'language' and 'proposition' in a manner that has little in common with their everyday usage. First of all, "A thought is a proposition with a sense" [4], where the word 'is' is clearly used in the sense of the *equality sign*. Add to this the statement that "The totality of propositions is language" [4.001], and by combining the two we get 'The totality of thoughts is language' (although one should add here certain 'empty' thoughts reflected in the laws of logic and mathematical theorems).

A little further down we find another important clarification. The grammatical, apparent, form of a proposition disguises the thought expressed by the proposition: "Language disguises thought. So much so, that from the outward form of the clothing it is impossible to infer the thought beneath it" [4.002].

Wittgenstein ushers in terminological confusion here by using the word 'language' in this last statement in the sense of *the totality of ordinary-language utterances*, which cannot be reconciled with the use of this word elsewhere. The ambiguity of the word 'proposition' is equally confusing. On the one hand, he makes the distinction between 'a proposition' and 'a propositional sign', the latter signifying precisely what the eye sees or the ear hears: "I call a sign with which we express a thought a propositional sign. And a proposition is a propositional sign in its projective relation to the world" [3.12]. On the other hand, just a little earlier he says: "In a proposition a thought finds an expression that can be perceived by

the senses" [3.1], although it should be "In a propositional sign..." (which is how the preserved earlier version of the text, published as *Prototractatus*,[2] reads). In the proper sense of the word 'proposition', as discussed in *Tractatus*, it is something the eye has not seen and the ear has not heard.

Let us take a closer look at the structure of the book. The ontological part, that is to say statements 1 to 2.063, is followed by a section devoted to thought. It opens with the statement: "We picture facts to ourselves" [2.1], and culminates in: "A logical picture of facts is a thought" [3]. (Both these statements are inaccurate: instead of 'facts' they should refer to 'possible facts'.) However, there is only half a page of enigmatic notes on thought, and then, in 3.1, Wittgenstein moves on to language, to which almost the entire remainder of the book is devoted. Small wonder that this short excerpt is missed by readers. Also, *Tractatus* omits some explanations of capital significance that are to be found in accidentally surviving notes from the time of World War I:

> Now it is becoming clear why I thought that thinking and language were the same. For thinking is a kind of language. For a thought *too* is, of course, a logical picture of the proposition, and therefore it just is a kind of proposition. [*Notebooks 1914–1916*, note dated 12.9.16][3]

And in a letter in English dated 19 August 1919, Wittgenstein replied to questions put to him by Bertrand Russell thus:

> (2) [...] But a Gedanke [thought] is a Tatsache [fact]: what are its constituents and components, and what is their relation to those of the pictured Tatsache?' I don't know *what* the constituents of a thought are but I know *that* it must have such constituents which correspond to the words of Language. Again the kind of relation of the constituents of the thought of the pictured fact is irrelevant. It would be the matter of psychology to find out. [...]
> (4) Does a Gedanke consist of words?' No! But of psychical constituents that have the same sort of relation to reality as words. What those constituents are I don't know.[4]

By putting it all together, we arrive at a solution to our dilemma: *Tractatus Logico-Philosophicus* is not a book about the relation of *language* – in the everyday sense of the term – to the world but about what *thinking* has to do with the world.

Again, it has to be kept in mind that Wittgenstein uses the word 'thought' in a different way than it is done in ordinary language or in psychology. No quandary one is in, no question one asks oneself, nothing that is an 'internal' expression of

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[2] L. Wittgenstein, *ProtoTractatus. An Early Version of Tractatus Logico-Philosophicus*, B.F. McGuinness, T. Nyberg, G.H. von Wright (eds.), transl. D. F. Pears, B.F. McGuinness (Ithaca 1971).

[3] L. Wittgenstein, *Notebooks 1914–1916*, G.H. von Wright, G.E.M. Anscombe (eds.) (Oxford 1961).

[4] L. Wittgenstein, *Letters to Russell, Keynes and Moore*, G.H. von Wright, B.F. McGuinness (eds.) (Oxford 1974).

desires or fears would be called a 'thought' by Wittgenstein. A thought is the internal picture of a possible fact, devoid of all emotion or aspiration. The picture is to consist of elements the configuration of which represents that this is the way in which objects making up the relevant fragment of the world are related to each other. We do not know what elements those are and what is the nature of the relations between them, so we picture the world without knowing what this picturing consists in.

> We express our thoughts by means of propositional signs, again without understanding the nature of this process. "Man possesses the ability to construct languages capable of expressing every sense, without having any idea how each word has meaning or what its meaning is" [4.002]. Sequences of sounds or marks on paper are of and by themselves dead, so to speak. A propositional sign is infused with life by the accompanying thought: "We use the perceptible sign of a proposition (spoken or written, etc.) as a projection of a possible situation. The method of projection is to think out the sense of the proposition" [3.11].

4. Logical analysis as investigation of thoughts expressed in propositions

If the principal subject matter of the investigations in *Tractatus* is the relationship between thought and the world, then why does almost all of the text concern language? Because, unable to examine thoughts, we can discover the nature of thinking by examining its linguistic expression. Although 'language disguises thought', Wittgenstein came to the conclusion that a powerful tool had emerged at the turn of the twentieth century that could reveal that thought: formal logic. His reference was the logical work of Gottlob Frege and Bertrand Russell. While he introduced truth tables, he made no contributions to logic himself. *Tractatus* is a work on the philosophy of logic.

The everyday word 'is' is used in at least three different ways, wrote Wittgenstein in a brief review published in 1913[5]: as a sign of existence (e.g. in 'somebody is in this room'), as a sign of identity (e.g. 'a human being is a thinking animal'), or as a sign of belonging to a class (e.g. 'Socrates is a human being'). Thus, the use of everyday language disguises thought – it suggests that, as the word is the same, it has the same sense – whereas the use of the symbolic notation of logic, which uses three different symbols in the cases above, reveals it. The sentence 'The king of France is bald' looks like a simple one, whereas Russell demonstrated that it is the conjunction of at least three propositions that – still expressed in ordinary language – are as follows: 'there exists an x that is king of France', 'there exists only one such x', 'this x is bald'. Thus, whereas the grammatical form suggests that the thought expressed in the sentence is simple, logic reveals that it is a complex thought. And so on.

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[5] L. Wittgenstein, 'On Logic and How Not to Do It', *The Cambridge Review*, 34 (1913), p. 351.

We uncover the thought expressed in a propositional sign, when we perform its logical analysis. If, as has been mentioned, a thought and a state of affairs are to have the same logical diversity, then each of our thoughts is extremely complex. We express it in a condensed form, but 'in reality':

> A proposition like 'this chair is brown' seems to say something enormously complicated, for if we wanted to express this proposition in such a way that nobody could rise objections to it on grounds of ambiguity, it would have to be infinitely long [19.9.14].

In the process of analysis, we begin to express with increasing accuracy what *we meant* when uttering a particular string of words. In the case of the author of an utterance, the analysis will be based on introspection: What did I consider true when formulating the propositional sign even if I did not make it explicit at the time?

And what is the situation in the case of the recipient of an utterance? If he understands the propositional sign, it means that mentally he has analysed it, supplying what the propositional sign left unsaid. In a word, the recipient has thought the sense of the propositional sign. Of course, since the recipient received an incomplete signal, he may – as is often the case in life – misunderstand it. What is he guided by in his subconscious analysis? Firstly, he is a member of a language community; since childhood he has been trained to understand words heard or read in a particular way:

> Man possesses the ability to construct languages capable of expressing every sense, without having any idea how each word has meaning or what its meaning is [. . .].
> The tacit conventions on which the understanding of everyday language depends are enormously complicated [4.002].

Secondly, an utterance usually occurs in some circumstances and is accompanied by other utterances: "What signs fail to express, their application shows. What signs slur over, their application says clearly" [3.262]. When I hear the sentence: 'My broom is in the corner,' I usually know who says it and I often also know what broom is meant and which corner it is usually in. Further, based on a tacit agreement in my language community, I know that when the speaker does not specify explicitly which corner he means, he means the one where he usually keeps the broom.

Thus, how much the recipient is able to add to the propositional sign and to what extent his analysis is correct depends both on his language competence, in the ordinary sense of the word, and on his prior knowledge. Never, however, will he be able to reconstruct everything the sender meant. Even if there was an isomorphism – an identity of structures – between the sender's thought and the possible fact depicted in his utterance, there would not be one in the recipient's mind. When hearing: 'Jan Hartman walked briskly down Grodzka Street in Kraków last Friday evening,' he will not know if the event took place at, say, six or ten, whether he

walked on the right or on the left side of the street, let alone whether or not it was windy at the time, what JH was wearing, what the expression on his face was, etc. Thus, when we understand something that someone else says, any isomorphism between our thought and the structure of the depicted fact is out of the question.

Let us sum up out what we have established so far: In our thoughts we create logical pictures of possible facts. This is done by combining certain mental elements – unknown to us – in certain ways, which represents that the objects – unknown to us – of which the world is made up are combined in the same way. We sometimes express our thoughts in a way that can be perceived through the senses, for example by means of propositional signs, relying on countless tacit agreements regarding the ways of encoding thoughts into signs. While an ordinary-language propositional sign disguises the thought as it often uses the same symbols where the thought represented different matters and, above all, it omits much of what is thought, the sender of the propositional sign knows what he means. By thinking the sense of the propositional sign, he projects it onto reality. The recipient, knowing – the knowledge is often called 'tacit' – the context of the utterance and the silent agreements regarding the understanding of propositions, reconstructs what the signs omitted and sorts out what the signs commingled. He is not able to reconstruct everything that ordinary language concealed, which is why there always exists the risk of misunderstanding, and understanding is never complete.

Even if somebody formulated a language sign, which upon a full analysis – performed by the sender – took the form of a giant conjunction of elementary propositions, the recipient could at best arrive – through his own analysis – at something that took the form of a giant alternative. The alternative would represent the set of possible facts, and if any one of those obtained, the recipient would consider the propositional sign true. Thus, even if there is an isomorphism between a possible fact and the sender's thought, there is none between the structures of possible facts and the thought that emerges in the mind of somebody else under the influence of a propositional sign he hears or sees.

Perhaps this is why Wittgenstein came to the brink of solipsism and announced: "The world is *my* world" [5.62], for "*The limits of my language* mean the limits of my world" [5.6]. While this question extends far beyond the subject matter of this article, there is another, brief explanation that is worth adding.

5. On the logical sources of the *Tractatus* ontology

Although Wittgenstein was unable to carry out a complete analysis of any proposition, he believed that a study of the logic of Frege and Russell, with some modifications, reveals what the world (my world) and thoughts (my thoughts) must be like in order for facts to be depictable by thoughts:

> My difficulty surely consists in this: In all the propositions that occur to me there occur names, which, however, must disappear on further analysis. I know that such a further analysis is possible, but am unable to carry it out completely. In spite of this I certainly seem to know that if the analysis were completely carried out, its results would have

> to be a proposition which once more contained names, relations etc. In brief it looks as if in this way I knew a form without being acquainted with any single example of it.
> I see that the analysis can be carried farther, and can, so to speak, not imagine its leading to anything different from the species of propositions that I am familiar with [16.6.15].

The entire construction, outlined in sections 1 and 2 of the text, came into existence as a result of the fact that formal logic in its canonical form is divided into the logic of propositions and the logic of terms (names).

As far as the logic of propositions is concerned, complex propositions are regarded as truth functions of simple propositions, and all possible combinations of the truth and falsity of the latter are considered possible. Thus, if in the course of our analysis we reach the level of elementary propositions, each could – by analogy – be either true or false regardless of the logical values of the others. This leads to the following ontological claim: A fragment of reality depicted by an elementary proposition, that is to say a state of affairs, can be the case regardless of whether any other state of affairs is the case. (Hence one of the most controversial claims in the book: The laws of nature do not hold in the world, as they would bind states of affairs in extralogical ways.)

As regards the conclusions drawn by Wittgenstein from studying the logic of names, they depend on a number of further assumptions. The most important of those, taken from Russell, was that there do not exist empty names. At the level of ordinary discourse, there are many such names, e.g. 'Pegasus' or 'the king of France'. The appearance of names that seem to be empty is a signal that logical analysis must be performed, for example by substituting 'winged horse' for 'Pegasus' or – in the Russellian analysis – by replacing the subject in the analysed proposition with a variable. In order for our thoughts to be pictures of the world, their elements must refer to something. Hence the claim that the names we would arrive at if we succeeded in carrying out a complete analysis of any propositional sign must denote something that is invariable.