

The Linguistic Optimism: On Metaphysical Roots of Logic in Wittgenstein's *Tractatus*

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Introduction

The philosophy exposed systematically in Wittgenstein's *Tractatus Logico-philosophicus* is an attempt to determine the semantic limits of every possible language. This is done by a logical investigation of the propositional symbolism *i.e.* by an analysis of our capacity for representation using statements or sentences (Sätze) which describes states of affairs (*Sachverhalte*). As Wittgenstein (1979¹) states just in the beginning of his preface: "this book intends to determine the limits of what can be expressed by our thoughts". As a result of this approach to language, the totality of philosophy as a domain of metaphysical thesis are taken by Wittgenstein as nonsense, because it intends to describe necessarily and meaningfully the essence of things and facts in the world. Wittgenstein aims to show that the traditional philosophy articulates nonsensically what the symbolism or logic of our language does not allow: necessity and sense. One of the famous claims in *Tractatus* is that no sentence that is meaningful is necessary, because only propositions that can also be false are meaningful. In this way, the formulation of the philosophical problems lays on the misunderstandings in the use of our language. The traditional metaphysical philosophers demand from our language what it cannot give. The essence of our language excludes meaningful necessary statements. Wittgenstein's task in *Tractatus* is to show this pictorial essence that makes the traditional philosophy nonsense.

Wittgenstein argues that the essence of language is descriptive. As a result, all other possible use of language should be analyzed in terms of descriptive use done by descriptive sentences. Every proposition is a logical picture from a fact, because the names in an all-analyzed proposition are symbols to the objects which compound the represented fact. The name and the named object must have the same logical form. Consequently, an essential harmony or isomorphism between world and language is assumed as the ground that supports the pictorial theory of propositional meaning. The possible articulation of names in proposition has to be necessarily suitable to the possible articulation of objects in facts. The syntax of language, *i.e.* all meaningful linguistic structures, has to match the "syntax" of world. In Wittgenstein's point of view in *Tractatus*, this fact is a demand to the fully significance of our most trivial daily sentences and also to the most sophisticated scientific statements. In order to convey meaning our sentences shows that the world and language has a unique net of possible articulation between their constituents (*der logische Raum*). As Baker says (1988) "The fundamental thought of the *Tractatus* is that the essential nature of symbolism must exactly match the essential nature of what is symbolized. Internal properties of symbols represent internal relations among what is symbolized. It is from this philosophical standpoint that there seems to be an identity

(of form) between linguistic expressions, the thoughts expressed and the states of affair described." (p.96)

Logic plays a relevant role in the tractatian philosophical structure because it is the sound way to grasp the claimed metaphysical harmony between world and language. Logic is the great linguistic mirror of world, it shows the world scaffolding. (*TLP* 5.6). Different from Frege's and Russell's realism that assumes logic as a theory of logical and real objects, Wittgenstein thinks that logic does not states a thing about any kind of logical domain, but instead of this logic shows through language and symbols the essence of world. To say and to show are essentially different to Wittgenstein (*TLP* 4.022). Trying to say something meaningful and necessary is wrong according to this account. To say is to say something contingent. However necessity can be shown silently through a correct approach of logic statements. As a matter of fact, there is here a clear possibility for a regenerated metaphysics, represented by logic, which shows the essential structure of world.

Nevertheless, the positivist interpretation of Wittgenstein's *Tractatus* tries to affirm through its arguments that all kind of metaphysics is nonsense, not only the traditional one. Moreover, positivist usually claims that, according to tractatian philosophy, only the natural science has the possibility to give us a sound and consistent account of world. This position is questionable because it overlooks the metaphysical importance of isomorphism, *i.e.*, the claim of a strong formal relationship between reality and language, in the interpretation of Wittgenstein's *Tractatus*. According to this view, the Vienna Circle philosophers, representatives of the positivist interpretation of Wittgenstein early philosophy, have been restricted to the surface of the status of language and logic problem. They shed light on the tractatian criticism to the traditional metaphysics, but neglect to consider the fact that Wittgenstein replaced the old-fashioned metaphysics by a silent one. This new account holds that the legitimated and regenerated metaphysics represented by logic *shows* the inner structure of world by the structure of language instead of trying to say it in the old fashioned way, *i.e.*, by necessary meaningful statements.

Methods

In order to give a correct account of the metaphysical status of logic in Wittgenstein's *Tractatus*, the current positivist investigation was analyzed and compared with the wittgensteinian text itself. The investigated texts belong to the traditional literature about this issue. Accordingly, we have read and summarized the main pieces of work of Wittgenstein's early philosophy and also the positivist account represented by the components of the Vienna Circle. The concepts and main arguments of both were contrasted and also organized in a way that the differences of approaches could be highlighted. Clearly, this strategy was sufficient to determine that the positivist interpretation is not suitable to the Wittgenstein's main statements.

¹ From now on, I use *TLP* followed by the respective passage number to quote *Tractatus Logico-philosophicus*. I use here the Suhrkamp standart edition. All translation to English is mine.

Results

Tractatus' account of philosophy of logic comes from his so-called theory of symbolism or representation. It means the preconditions that any system or complex has to follow in order to be hold as symbolic. The best way to grasp the meaning of logic as it is conceived in *Tractatus* is by contrasting it to the previous account from Frege and Russell. Both were determinant to the process of writing *Tractatus*, as can be seen in its preface "I just wish to mention that I owe Frege's great works and my friend Russell's work part of the encouragement for my ideas."

Frege and Russell establish their philosophy of logic by the assumption that logic is a normative science of logical and abstract objects realm. It is not different in form from any natural science. They do not share the same investigated objects. While natural sciences investigate concrete objects and facts, logic is a general science of abstract object. According to them, logic is a positive science which studies special functions like negation, material implication and generalization. Therefore, this interpretation of logic gives a strong metaphysical and realist connotation to logic since it holds that logic deals with real object independent from our minds and constructions. Wittgenstein does not agree with this scientific and realist point of view. It is worth to say that the emphasis here in the disagreement with *this* particular realist perspective and not with *all* realist points of view.

By contrast, the positivist account as Baker (1988) claims assumes that Wittgenstein make a decisive, but restricted contribution to logic. "Wittgenstein's purpose, on the conventionalist interpretation, was to free the philosophy of logic from Frege's (and Russell's) Platonism, or to replace a theory grounding the propositions of logic as a consequence of arbitrary stipulations of meaning. In doing this the positivists turned their backs on the metaphysical components of the *Tractatus'* theory of symbolism (on its alleged mysticism)" (pp. 70-1). By the positivist assumption, we lose the tractatian metaphysical roots. Thereby, it makes Wittgenstein totally vulnerable to a formal refutation by Church's Theorem. "While logicians credit Wittgenstein a major technical innovation in using truth-tables to exhibit some logical proposition as tautologies, they typically claim that the demonstrable impossibility of a decision procedure for logical truth in the predicate calculus vitiates Wittgenstein's basic claim that whether a proposition is a proposition of logic can be calculated from the symbol alone."(Baker, 1988, p. 3)

Wittgenstein holds that the logical propositions are extreme cases of symbolism. They share a common feature with the philosophical propositions: they do not convey meaning. However, different from philosophy, logical propositions are not nonsense. Logic does not violate the syntax or essence of our language, philosophy does. While descriptive propositions like our trivial sentences and the sophisticated sentences used in natural science can be either true or false. Logic is compounded by tautologies, syntactically legitimate propositions that are true and cannot be false. The impossibility of logical propositions to be false shows, as Wittgenstein claims, "essential features of symbolism" (cf. *TLP* 6.1-6.13). Moreover, if we assume the essential harmony between world and language claimed by Wittgenstein (cf. *TLP* 5.4711), which seems to justify a transitivity of results between language and world, we have therefore that logic also shows essential features of world. The point here is to highlight that against the positivist interpretation, logic does have a metaphysical and realist root. It *shows* the essential features of world. It mirrors logical space inner structure shared by language and

world. It does not say by a theory or by scientific propositions the features of world. The fact that logical propositions are always true shows, in a silent way, the essential articulation between the facts of world. Wittgenstein points out that when we understand logic we understand world without making a theory about it. As Baker (1988) holds, this is another point that shows Wittgenstein's criticism to the fregean and russelian realism.

"The corollary of this revised conception of the role of proofs in logic is a criticism of the philosophical significance attached to the axiomatization of logic by Frege. It was held that axioms are primitive propositions whose unconditional truth must be ascertained by apprehending the primitive logical concepts out of which they are built up. They were self-evident truths certified by our 'logical faculty'. The truth of all other propositions of logic is guaranteed by their following as theorems from the axioms and possession of a derivation from the axioms is the sole warrant for claiming knowledge of the truths of logic. The *Tractatus* attacked this whole conception. The truth of a proposition of logic can be ascertained by calculating the logical properties of this symbol alone. That isolates the delineation of the propositions of logic from the deliverances of intuition." (p.105)

In clear opposition to Frege, the complex logical forms are guaranteed by the names in proposition that have the same possible articulations of objects that constitute the facts in the world. And there is no possibility of lack of truth value or non-denotative names. All legitimate propositions have a truth value because all names have its own referenced object. (*TLP* 5.4733). J. Hintikka and M. Hintikka (1994) argue that logical forms, to Wittgenstein, are not given by complex propositions as Frege thought but by the existence of objects denoted by the names in a proposition (p.140). This account shows that Wittgenstein's point of view in logic, against the positivist interpretation, is realist because it deals with independent objects and not with conventions in language.

Conclusion

The status of logic in Wittgenstein's *Tractatus* is metaphysical and realist. The distinction between *to say* and *to show* something plays an important role in this account (*TLP* 4.022). As Wittgenstein holds, logical propositions are tautologies, hence they are always true. No fact in the world can negate or refute the truth of a tautology or logical proposition. They do not say facts of the world, because nothing can be described by proposition that cannot be false. However, logical proposition shows the essential articulation between the facts of world by showing the essential features of language. This conclusion is given by the assumption of isomorphism or essential harmony between world and language. As Wittgenstein (1979) states "the language in which facts are expressed can say everything that can be said" (p.109). Consequently, the essential feature of Wittgenstein account to logic is supported by the possibility of descriptive language in saying everything that can exist. This assumption can show a more general philosophical thesis in the roots of Wittgenstein's early philosophy: a linguistic optimism. Everything that exists can be said by propositions. Or even stronger, a precondition to existence is the possibility to be said. Rewriting berkeley's main claim in a tractatian spirit we could say that *to be is to be able to be said*.

By the propositions of logic the essence of world is revealed silently, but explicitly. Hence, in Wittgenstein's *Tractatus*, logic is a kind of regenerated and realistic metaphysics. It is different from the realism of Frege and Russell and it is also different from what the positivists from the Vienna Circle held. Assuming what Wittgenstein has written in his Notebooks 14-16, in 12.10.14, as paradigmatic – “The trivial fact that a completely analyzed proposition contains just as many names as there are things contained in its reference; this fact is an example of the all-embracing representation of the world through language” – I think it is suitable to hold that logic, in tractatian account, is another example from this linguistic optimism phenomenon.

Literature

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