Saying and Showing in Wittgenstein

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Abstract

Wittgenstein's TLP shifts logic toward the analysis of language, breaking with Frege's and Russell's views. Its main claim is that the business of logic consists of representing or (a) picturing reality (TLP 4.01). Nevertheless, (b) saying something about the world implies that a sentential picture must share with reality a logical form (Maury 1983, Morris 2008, Frascolla 2007). On the contrary, (c) logical propositions per se say nothing. Instead, they show the logical scaffolding of the world, which relies on (d) analytic propositions or tautologies (Baker-Hacker 1984, Dreben-Floyd 1991, Glock 2008). However, Wittgenstein also bestows (c) a metaphysical connotation since logical sentences disclose how the world could be. Scholars (Anscombe 1965, Juhl-Loomis 2010) usually overlook the implications of this possibility and adopt Wittgenstein's dismissive attitude toward analytic claims. Differently, I argue that, in TLP, (a) relies on (c). If correct, it follows that (d) is prescriptive and bears a normative connotation supporting (b).

In *TLP*, Wittgenstein identifies logic with the fundamental forms of any symbolic representations. His view breaks with tradition significantly. Instead of timeless and language-independent relations between abstract entities (Frege 1884), logic deals with the most general conditions for the possibility of representing. "The abstract logical structure of a correct conceptual notation would reveal," clarify Baker and Hacker, "the essential nature of any possible sign-system which can represent reality" (1984: 39). Unlike Frege and Russell, Wittgenstein's "logic is not an investigation into the nature of language-independent judgements, concepts and laws of thought, but an elucidation of the essential properties of symbols alone (*TLP* 6.113, 6.126)." (Hacker 2009: 41) Consistently, he reduces philosophy to the analysis of a natural language where that logical structure is at work. Therefore, ordinary language is in good logical order since to represent or depict at all; it must already have the essential structure making representation possible, namely a logical structure. So, logic doesn't improve (as Frege and Russell held) but clarifies a natural language by revealing what is hidden in the symbolism of a language itself.

This clarification consists in analyzing linguistic propositions that, for Wittgenstein, rely on a semantic structure. This latter per se says nothing but supposedly shows the logical essence of the world. In what follows, I argue that analytic propositions (dubbed as 'tautologies' by Wittgenstein) support such an essence. My claim relies on Baker-Hacker's conclusion that "All the

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propositions of logic follow from operations generating tautologies out of tautologies" (1984: 44) and furthers related arguments by Anscombe (1965), Dreben-Floyd (1991), Frascolla (2007), Glock (2006), Mácha (2015), McGinn (2006), and Morris (2008), among others. Despite the differences, Wittgenstein builds on Frege's and Russell's claims, from which his notion of analyticity (see Williamson 2007: 54-7) ultimately derives.

> [In TLP 6.1 and 6.11] Wittgenstein asserts that the propositions of logic are tautologies, say nothing, and are the analytical propositions, he is continuing the Idealist and Moore-Russell traditions of identifying the class of analytic propositions with tautologies [...] and is directly attacking Frege's conception of logic. (Dreben-Floyd 1991: 28)

I – THE PICTURE THEORY

For Wittgenstein, the essence of representation lies in the description; namely the depiction of a state of affairs employing a proposition. So, he focuses on elementary propositions, reducible to "a sensible sentence which is logically independent of every other such sentence" (Baker-Hacker 1984: 39-40). An elementary proposition has no (non-trivial) entailments but describes the existence of an elementary state of affairs. Let's recall that, for example, a formula *P* is trivial for a background formula set Γ if Γ |= *P* or Γ |= ¬*P* (read: Γ semantically entails (i.e., is true of) *P* or non-*P*). Otherwise, *P* is nontrivial for Γ (see Clark 1967). So arises *the picture theory of the proposition*, which contains the essence of all descriptions that, in turn, capture the essence of the world. Its main claim is that "A proposition is a picture of reality" (*TLP* 4.01).

> For what is essential for a description is whatever makes possible the representation of states of affairs in reality, and whatever structural features states of affairs possess in virtue of which they can be described at all are themselves the essence (the essential form) of reality. (Baker-Hacker 1984: 40)

According to the picture theory (hereafter PT), analytic sentences are reducible to tautologies (see Glock 2010). Tautological (and contradictory) claims don't describe anything but prescribe the rules for any descriptions. In Wittgenstein's *TLP*, logical truths cannot be reduced to universal laws applying

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to every statement. Indeed, they don't *say* anything about the world. They instead represent *tautologies* whose business is to *show* the logical "scaffolding of the world" (*TLP* 6.124). E.g., see the law of non-contradiction. So, Wittgenstein sharply separates *saying* and *showing* in any sentence. However, what does it entail? These notions need clarification.

Let's start with *saying*. Unlike Frege, Wittgenstein denies referentiality to sentences and sense to names: names have reference but not sense, and claims have sense but no reference. An elementary proposition comprises simple indefinable names denoting sempiternal objects in reality (such as spatiotemporal points or simple, unanalyzable qualities), conceived as the world's metaphysical substance. We combine names to form elementary propositions using conventional logico-syntactical rules that specify combinatorial possibilities.

> To assign a given object to an arbitrary name as its referent, the logical syntax of the name must mirror the combinatorial possibilities of the object in reality, viz. its ability to combine with other such objects to constitute a state of affairs (e.g., a given spatio-temporal point's having such-and-such a quality). (Baker-Hacker 1984: 40-1)

So, the notion of *saying* presupposes that of *showing*. An object's nominal referent entails the object's combinations in reality. The logical form of that name implies specific semantics and relies on a particular syntax, although conventionally established. So, this logical syntax becomes prescriptive for (representing) those combinations. The possibility of such actual combinations depends on the syntactic normativity that underpins their mirroring semantics.

> A particular mode of signifying may be unimportant but it is always important that it is a *possible* mode of signifying. And that is generally so in philosophy: again and again the individual case turns out to be unimportant, but the possibility of each individual case discloses something about the essence of the world. (*TLP* 3.3421)

Notoriously, the proposition shares its essence with the world. Wittgenstein calls this common feature between proposition and world 'the logical form' (see Maury 1983). As Morris says, "sentences have the same form as the reality they depict" (2008: 152). Indeed, "*the proposition is a picture of the*

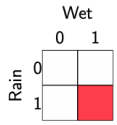
situation," explains Frascolla, "and is, in this sense, 'essentially connected' (T 4.03) with it" (2007: 12).

> To give the essence of a proposition means to give the essence of all description, and thus the essence of the world. (*TLP* 5.4711)

Implicitly, determining the logical forms of names (required by the essence of a proposition) entails a standard tripartition of linguistic analysis.

(a) Syntax defines a set of valid formulas, e.g., 'Wet · Rain.'

(b) Semantics specifies a set of models (configurations of the world) for each formula, e.g., as follows.



(c) Inference rules establish, given *f*, what new formulas *g* can be added that follow (*f/g*). E.g., from 'Wet · Rain' follows 'Rain.'

PT's central tenet is the isomorphic relation of proposition and reality despite the names of objects being arbitrary and their logical syntax conventional. Once conventions are fixed, "the relation between an elementary proposition and the state of affairs it depicts is essential and internal" (see Mácha 2015), namely "the proposition must be isomorphic with the state of affairs it depicts, it must have the same logical multiplicity and identical logical form" (Baker-Hacker 1984: 41). So, the combination of names adopting logical-syntactical rules represents a logical picture of a state of affairs (see McGinn 2006: 81). Such a strict isomorphism between sentence and reality shows the logical form shared by the sentence and what it depicts. So, PT supports an obtainment theory – a sentence is true iff the state of affairs it depicts obtains. Therefore, PT differs from deflationary theories in that it involves an ontology of states of affairs/facts; and it "can be transformed into a type of correspondence theory: a sentence is true iff it corresponds to, i.e., depicts an obtaining state of affairs (fact)" (Glock 2006: 345).

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These theses enshrined a form of the Augustinian picture at the heart of the *Tractatus*, as a picture, not of the surface forms of language but of its underlying structure (see Bearsley 1983, Burnyeat 1987).

II – TAUTOLOGIES

PT (*TLP* 2.1-3.84) treats a genuine proposition as a picture depicting how things are, if it's true, or how they are not but could be if it's false (*TLP* 4.6). A picture (i.e., proposition) is true if it corresponds with how things are, while it's false if it doesn't. Still, "whether true or false, a picture/proposition must depict the way things might *possibly be* or *possibly not be*" (Juhl-Loomis 2010: 19). Indeed, it must depict a possible state of affairs (see *TLP* 4.01-4.05), meaning neither impossible nor necessary. If anything cannot possibly be the case, nothing is there to be depicted. Similarly, a pictorial proposition cannot portray anything that *must* be the case, i.e., that cannot possibly *not* be (see *TLP* 4.063). Picturing such a state of affairs would not possibly be false (5.61), but it tells us nothing about how the world *actually* is. "Since it could not fail to be true, it would be compatible with every possible circumstance, and so would not tell us how the world in fact is" (Juhl-Loomis 2010: 20).

Hence, "the sense of a molecular proposition is thus given by its truth-conditions, which reality may or may not satisfy" (Baker-Hacker 1984: 42). Accordingly, '*p* & *q*' requires the conjoint realization of the states of affairs *p* and *q* obtains, whereas '*p* v *q*' allows the realization of *p* alone, *q* alone or both. So, Wittgenstein analyzes significant sentences into truth-functional combinations of atomic ones, whose conjunctions or disjunctions generate quantified sentences. Baker and Hacker suggest considering necessarily true propositions in the *Tractatus* as *non-extensional contexts*, analyzable into pseudo-propositions or, in fact, extensional ones. Let's recall that extensional contexts prioritize reference over sense, e.g., 'the morning star and the evening star' or '21/3 and 7' have the same extension but different intension. In similar syntactic contexts, a sub-sentential expression (e.g., 'Satan') can be replaced by an expression (e.g., 'Lucifer') retaining equal extension and truth-value of the whole sentence (e.g., 'the fallen angel who seduces humans into sin or falsehood').

A molecular proposition's truth value depends on the distribution of truth values among its constituents. But Wittgenstein identifies two exceptions, *(a)* tautology and *(b)* contradiction, respectively, true or false however we assign truth values to the propositional constituents. E.g., $\sim(p \,\&\, \sim p)$, $((p \supset q) \,\&\, p) \supset q$. These propositions of logic are limiting cases since they aren't bipolar. Indeed, "tautologies leave open," say Baker and Hacker, "the whole of logical space, since they are true however things are in the world, and contradictions close off the whole of logical space, since they are false no matter what." (1984: 43). Being unconditionally true or false, tautologies and contradictions have no sense since they have no truth-conditions.

> The propositions of logic are tautologies. (*TLP* 6.1)
>
> Therefore the propositions of logic say nothing. (They are the analytic propositions.) (TLP 6.11)

So, tautologies have no content. "They are simply (senseless) consequences of our conventional symbolism for combining propositions" (Baker-Hacker 1984: 43). Therefore, expressing necessary truth or necessary falsity obtains no genuine proposition. Such statements merely stand for tautologies (if true) or contradictions (if false) by means of their form alone.

> It is the peculiar mark of logical propositions that one can recognize that they are true from the symbol alone, and this fact contains in itself the whole philosophy of logic. And so too it is a very important fact that the truth or falsity of non-logical propositions *cannot* be recognized from the propositions alone. (TLP 6.113)

Notably, Wittgenstein employs these semantic classes to describe the nature of arithmetic propositions, which he deems as pseudo-propositions expressing no thoughts (see *TLP* 6.2-6.21).

However, "All the propositions of logic follow from operations generating tautologies out of tautologies" (Baker-Hacker 1984: 44). So, logic isn't a science resting on self-evident axioms, but the manipulation of signs determined by rules of logical syntax. Knowing the logical syntax of any sign-language suffices for obtaining all the propositions of logic. Consistently, analytic propositions show logical necessity brought to light by analyzing the

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underlying structure of language. Therefore, philosophical pronouncements appear now to be ill-formed sentences violating the rules of logical syntax. More precisely, their illegitimate categorical concepts (e.g., substance, property) are merely variables, not names. These metaphysical pseudo-propositions pretend to say necessary truths about reality but lack bipolarity (see McGinn 2006: 98). Quite the opposite, "only bi-polar propositions picture reality; and only tautologies are necessary truths, and they say nothing about the world." (Ibid)

Nevertheless, let's briefly remind that the late Wittgenstein abandoned PT for its supposed incapacity to account for falsity; specifically, "it fails to provide a satisfactory account of the distinction between true and false propositions" (Shieh 2019: 11). But this development isn't my current purpose.

III – CONVENTION AND NOTATION

As stated above, Wittgenstein distances himself from Frege, who conceives logical laws as stating general truths about the world. However, he retains a non-trivial purpose of tautology and contradiction, to which he reduces the laws of logic. Indeed, such laws show "the formal - logical - properties of language, of the world" (*TLP* 6.12). Roughly put, the language has certain formal features that show the formal properties of the world, although they say nothing about it.

Notwithstanding, Wittgenstein's *TLP* mainly relies on three achievements of Frege, later developed by Russell.

(1) The similarity between semantics and mathematical logic. Frege compares a predicate and the expression of an arithmetical function, e.g., '$(x)^2$'. The notion of propositional function, such as '*x* is bald', lies in this comparison. Accordingly, we obtain a sentence if we replace the latter '*x*' with a (real) proper name, "just as from '$(x)^2$' we get an expression of definite value by replacing the '*x*' by a definite number" (Anscombe 1965: 14).

(2) The modern conception of quantification. In modern (post-Fregean) logic, quantification reformulates sentences such as 'Everything is heavy' and 'Something is heavy' as: 'For all *x*, *x* is heavy' and 'For some *x*, *x* is heavy' (or

'There is an *x* such that *x* is heavy'), respectively. It does so by adopting a symbolic notation.

(3) The replacement of subject-predicate logic with function-theoretic logic. A proposition is a function of its constituent expressions, decomposable into function and argument.

As Anscombe notices, Frege's notation has some non-technical relevance. Indeed, it can disambiguate puzzling arguments. Consider, for example, Descartes's version of Anselm's ontological argument stating that the notion of God involves that of existence, as that of a triangle implies its various properties. After Frege's notation, the argument sounds like "*if* anything is a triangle, it has those properties, so *if* anything is God, it must possess eternal existence" (Anscombe 1965: 15). From the argument's premise, now correctly stated, doesn't follow Descartes's intended conclusion that God exists. Since "from: 'For all *x*, if *φx*, then *ψx*', we cannot infer: 'There is an *x* such that *φx* '" (Ibid). Suppose '*φx*' stands for '*x* is God' and '*ψx*' for '*x* has eternal existence;' we cannot infer '*There is* a God' from 'For all *x*, if *x* is God, *x* has eternal existence'.

Importantly, Wittgenstein maintains that logical constants, such as connectives, quantifiers, identity signs, and others, don't represent anything. On the contrary, although syncategorematic, for Frege, these expressions denote actual concepts and relations (such as unary and binary functions), mapping truth-values on truth-values. But, in PT, these expressions signify *operations* for generating compound statements from elementary ones, and not *logical objects*. Despite that, for Wittgenstein, necessity is a consequence of arbitrary conventions of logical syntax for the compounding of propositions.

However, such a metaphysical flavor of PT (and the related notion of analyticity) dissatisfied all empiricists, especially the Vienna Circle's members (Schlick and Carnap *in primis*) concerned with avoiding any metaphysical implication. So, they proposed treating the truths of logic as expressions of *conventions* governing a given language (see Glock 2008). Besides the conventional connotation (see Schlick 1974: 69-79), Circle's members maintain

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the Wittgensteinian properties of the logical laws, namely their incapacity to say anything about the way things are and their capacity of spelling out the relations and/or implication among statements.

Conclusion

The separation between *(a) saying* and *showing* presupposes the *(b) pictorial theory of meaning*, Wittgenstein's signature thesis in the *Tractatus*. Although of conventional origin, the logical form of showing becomes necessary once established. It shares certainty with *(c) tautologies* (i.e., analytic propositions) and *contradictions*, whose truth values' distribution disregards all relations with reality. *(d)* Such *logical propositions* show the linguistic scaffolding of the world but nothing else within it. However, Wittgenstein also bestows them a metaphysical connotation since they disclose how the world could be. Scholars usually overlook the implications of this possibility and adopt Wittgenstein's dismissive attitude toward analytic claims (see Anscombe 1965, Baker-Hacker 1984). Differently, I argued that *(b)* relies on *(d)*. If correct, it follows that *(c)* is prescriptive and bears a normative connotation supporting *(a)*.

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