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HOLISM AND ATOMISM
IN TRACTATUS LOGICO-PHILOSOPHICUS

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Introduction

The new Wittgenstein movement has introduced a range of topics into the centre of a philosophical debate on Ludwig Wittgenstein’s philosophy, such as the distinction between substantial and austere conception of nonsense,1

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1 For a discussion on these two conceptions of nonsense, see Diamond (1995, especially ch. 2 and 3), Conant (1998, 2002), Hacker (2000, 2003) and Glock (2004) present a scathing critique of the new approach to nonsense.
a strong and weak reading of the context principle,\(^2\) continuity or its lack thereof in Wittgenstein’s philosophical endeavor.\(^3\) Resolute reading also prompts questions about the significance of *Tractatus Logico-Philosophicus* for our present-day conception of philosophy and what the correct method of enquiry should be. My essay could be seen as a part of the discussion on the unity of Wittgenstein’s philosophy, what this unity amounts to and the relevance of Wittgenstein’s early thought for his later development.

The notion of holism is usually associated with Wittgenstein’s conception of language given in *Philosophical Investigation* (Wittgenstein, 2009) and *On Certainty* (Wittgenstein, 1969). According to this, the Wittgensteinian form of holism, a symbol or an expression has meaning only in the system of non-linguistic conventions, practices, and performances. It performs a role in our form of life. This role endows a sign with its meaning. To understand a word is to understand its use in the whole system of language games. Nonetheless, holistic elements are also present in *Tractatus Logico-Philosophicus*. This was indicated by Max Black as early as the 1950s at Gilbert Ryle’s seminars (Pears, 1990, p. 165). The topic of holism occurs in Black’s classic book *A companion to Wittgenstein’s “Tractatus”* (Black, 1966), Ryle’s scattered papers (2009c, 2009d), and David Pears’ short essay from 1990 (Pears, 1990). In recent years, James Conant (and others) started to contrast the holistic interpretation of the *Tractatus* with the traditional logical atomism of that early work.\(^4\) In my essay, I present the main strands in the holistic reading of *Tractatus Logico-Philosophicus* and try to adjudicate between different conceptions concerning the role of anti-atomism in this book. In effect, I pose questions such as: how much of Wittgenstein’s later semantic doctrine was present in his early writings, how deep the continuity between the *Tractatus* and *Philosophical Investigations* was, and where the main thread linking the early and late thought of Wittgenstein lies.

In the first part of my work, I identify the fragments of the *Tractatus* that pose a question concerning the relation between the standard attribution of logical atomism to the early Wittgenstein and holistic

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\(^2\) Apart from the works from the previous footnote, see Bronzo (2011, 2013), Dain (2006).

\(^3\) See especially Conant (2004), Diamond (2006).

\(^4\) I indicate all important works for this topic in the part “Forms of Holism in *Tractatus Logico-Philosophicus*”, but see in particular Conant (2002) and Diamond (2000).
ways of thinking of language. Then, I present three interpretations available in the literature of what Tractarian holism is. Next, I champion one of these readings and try to establish good reasons for this. In the conclusion, I indicate consequences of embracing this form of holism for an overall reading of Wittgenstein’s work.

David Pears on Holism

In the paper *Wittgenstein’s Holism*, David Pears distinguished two main groups of remarks from *Tractatus Logico-Philosophicus* that can be presented as intrinsically holistic in character. According to him, the first group can be summarized as containing the thesis that “names are not isolated tags, but words which already contain all their possibilities of combination with one another” (Pears, 1990, p. 165). In support of his thesis, Pears adduces remarks linking objects with the necessity of occurrence in some state of affairs or other:

If I know an object, then I also know all the possibilities of its occurrence in atomic facts. (Every such possibility must lie in the nature of the object.) A new possibility cannot subsequently be found (TLP, § 2.0123). Every thing is, as it were, in a space of possible atomic facts. I can think of this space as empty, but not of the thing without the space (TLP, § 2.013).

Only the proposition has sense; only in the context of a proposition has a name meaning (TLP, § 3.3).

The idea goes as follows: every object can occur in a specified set of states of affairs. Therefore, an object is related to a system of possibilities of combinations in the state of affairs. Every state of affairs is a combination of objects. The possibility of occurrence in atomic facts constitutes the form of the object which means that objects contain this possibility of all their combinations in the states of affairs as their forms (TLP,

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5 However, he ascribes the origination of this position to Max Black (Pears, 1990, p. 165).
6 As a standard, for references to Wittgenstein’s work, I use the abbreviation TLP for *Tractatus Logico-Philosophicus*, and then mention the number of the thesis. I use the bilingual German/English edition of TLP translated by C.K. Ogden.
§ 2.14–2.141). An object is something simple and indivisible, but it has an invisible nexus of connections to an abundance of the states of affairs. An atomic meaning of simple names generates holistic networks of its possible occurrences in elementary sentences. A name has content, its meaning, i.e., an object; and form, i.e., it is the common mark of a class of propositions (TLP, § 3.31–3.311).

The second group of remarks that is related to the topic of holism concerns the idea of the inseparability of a proposition from the logical space in which it is located (Pears, 1990, p. 165).

The proposition determines a place in logical space: the existence of this logical place is guaranteed by the existence of the constituent parts alone, by the existence of the significant proposition (TLP, § 3.4).

The propositional sign and the logical co-ordinates: that is the logical place (TLP, § 3.41).

The geometrical and the logical place agree in that each is the possibility of an existence (TLP, § 3.411).

Although a proposition may only determine one place in logical space, the whole logical space must already be given by it. (Otherwise, denial, the logical sum, the logical product, etc., would always introduce new elements—in co-ordination.) (The logical scaffolding round the picture determines the logical space. The proposition reaches through the whole logical space) (TLP, § 3.42).

Each proposition presents a possible situation. Every situation, however, is located in the whole space of realized and unrealized states of affairs. A proposition occupies a place in a set of propositions that are logically interconnected. If the sense of a proposition is to be determined, then a relation of this proposition to all other propositions in the logical space must be already established. Each proposition has a fixed set of inferential relations to other propositions. The truth conditions of all possible combinations of propositions are in this way determined. Therefore, there is an intrinsic connection between the sense of proposition p and its occurrences in propositions such as p ∧ q, ¬¬p, and p ∨ ¬q, etc. ⁷ Though each sentence of a natural language

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⁷ The reader may feel inclined to protest at this point. According to the Tractatus, elementary sentences must be logically independent (TLP, § 4.211). There are no
presents only one situation, it is related to a whole network of sentences in the space of possible combinations.

I want to add a third class of theses from the *Tractatus*, which are important for our assessment of the relation between logical atomism and semantic holism in Wittgenstein’s early thought. These remarks link the symbol/sign distinction with the idea of meaningful use and its role in logical syntax. Several commentators have already discerned an important role for the notion of *Gebrauch* in the logical syntax of language in *Tractatus Logico-Philosophicus* (Conant, 1998, 2002; Kremer, 1997; Livingston, 2004).

In order to recognize the symbol in the sign we must consider the significant use (TLP, § 3.326).

The sign determines a logical form only together with its logical syntactic application (TLP, § 3.327).

If a sign is not necessary, then it is meaningless.\(^8\) That is the meaning of Occam’s razor (If everything in the symbolism works as though a sign had meaning, then it has meaning) (TLP, § 3.328).

\(^8\) In the original German text, Wittgenstein uses an adjective *gebraucht* which allows the reader to recognize the connection between this thesis and the previous ones concerning the use—*Gebrauch*—of a sign: “Wird ein Zeichen nicht gebraucht, so ist es bedeutungslos”.

logical connections between Wittgenstein’s exemplary pictures of facts. If sentences “p is red” and “p is black” are contradictory, this means that they cannot be elementary propositions. The independence of elementary propositions implies the independence of states of affairs. Hence, the world is the mosaic of independent atomic facts; language is a set of independent elementary propositions. These are the main points of atomism. Holism characterizes non-elementary sentences and situations (i.e., functions of states of affairs). Therefore, holism and atomism are two independent elements of the Tractarian view. I agree with the main elements of this reasoning. However, this argumentation does not show that holism is an insignificant part of the early Wittgenstein’s view. If we consider the natural language, there are inferential relations between non-elementary propositions and elementary propositions. Each non-elementary proposition is correlated with a set of elementary propositions that constitutes its analysis. Moreover, elementary propositions are the bases of truth-functional operations that generate the set of all sentences of a natural language. Holism rather than atomism is already the main feature describing Wittgenstein’s view of natural language in the *Tractatus*. 

What signifies in the symbol is what is common to all those symbols by which it can be replaced according to the rules of logical syntax (TLP, § 3.344).

In the center of Wittgenstein’s later philosophy lies his slogan that meaning is use (Wittgenstein, 2009, p. 25). It is possible to argue that he put stress on the meaningful use of signs in a sentence much earlier, not only on representational capacities of expressions. From this point of view, a meaningful use is what transforms a sign into the symbol. The sign is the symbol (i.e., a meaningful expression) if it has a role in the logical syntax. The logical syntax presents possible relations of symbols in a language. If an expression has no application in the network of possible uses of sentences to states and denies the state of affairs, then it is meaningless. This is the significance of Occam’s razor. The application of a sign endows a sign with the meaning and a logical form. In this way, the themes characteristic for the late thought of Wittgenstein such as the notion of use, its connection to the idea of logical grammar (syntax) and of being a symbol turn out crucial to the reading of Wittgenstein’s early writings.

What is the relation between holistic elements of Wittgenstein’s work and logical atomism? How should we understand the notion of use that appears in §§ 3.326–3.328? Is there really no tension between the Tractarian atomistic conception of an elementary proposition and the all-encompassing logical space? In the next part, I present three different accounts that try to answer these questions and provide a coherent view of such notions as use, logical syntax, and the logical space.

Forms of Holism in *Tractatus Logico-Philosophicus*

In my view, it is possible to distinguish three alternative views concerning holistic elements in the *Tractatus* that can be found in the secondary literature. These positions are:

I. **Minimal Holism**, which is the view supported by Elisabeth Anscombe (1963), Max Black (1966) and David Pears (1990).

II. **Moderate Holism**, presented in James Conant (1998, 2002, 2004), Cora Diamond (1995, 2000) and Gilbert Ryle’s (2009c, 2009d) writings.
III. Radical Holism, which is proposed by Gilead Bar-Elli (2005), Michael Kremer (1997, 2001, 2002), and Paul Livingston (2004). Minimal Holism is the earliest and most modest view of these three. On the other hand, the newest and most controversial form is Radical Holism. I will describe Minimal Holism first, then Radical Holism, and finally, Moderate Holism.

Firstly, minimal holists acknowledge the existence of holistic elements in *Tractatus Logico-Philosophicus*, but they claim that there is, in fact, a tension between these parts of Wittgenstein’s doctrine and the “official atomism” (Pears, 1990, p. 167; Black, 1966, pp. 8, 10). There are two aspects to this pressure. Simple names have a very demanding role in the *Tractatus*. As to the atomistic requirement, names should not generate any connections between elementary propositions. The simplicity of names guarantees that the sense of an elementary proposition is determinate and independent from accidental features of the world (TLP, § 2.0211, §3.23). The truth of the proposition stating the existence of a simple object cannot imply truth or falsity of any other elementary proposition. On the other hand, names should so freely combine to form all elementary propositions. The form of objects must determine all their possible combinations in the state of affairs. The combinability of objects with one another depends on the implicitly holistic logic (Pears, 1990, p. 166). This aspect of atomism/holism dialectics exposes the second problem with the role of simple names in elementary sentences. It seems that there is a conflict between the logical independence of elementary propositions and their role in the description of the world. If the richness of our experience is to be described, then elementary propositions cannot be mutually independent. The simplicity of names should not generate logical relations between elementary propositions, but this implies that they would be unable to describe any interesting aspect of the world. Nearly every statement of facts in the world leads to an

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9 The boundaries between these three positions are sometimes fluid and the choice whether philosopher X belongs to position Y or Z is not completely determined. I prefer to treat each of these stances as a general way of thinking about Tractarian doctrine that can be rationally championed and defended. However, each position has an exemplary representative about whom we can say categorically that they instantiated it (minimal holism—Black, moderate holism—Diamond, radical holism—Livingston). See also footnote 15.
exclusion of some other facts. The *Tractarian* conception of simple names essentially contradicts this very conclusion.

Furthermore, minimal holists take the ontological parts of the *Tractatus* “seriously”.\(^\text{10}\) They promote realistic and representational reading of the work as a whole. The role of objects as the meaning of simple names is fundamental and inescapable. Therefore, minimal holists underplay the importance of Wittgenstein’s remarks concerning the notion of use in fixing the semantics of an expression. According to this traditional view of names in the *Tractatus*, each (real) proper name stands for a simple object. The meaning of a name is a co-ordinated object. This idea is fundamental to the early Wittgenstein’s whole philosophy of language (Black, 1966, pp. 93, 127). Moreover, this view of the *Bedeutung* of names lies at the heart of the *Tractarian* conception of analysis; it drew on Russell’s interpretation, but without the British empiricist epistemology that inspired Russell (Anscombe, 1963, p. 49).\(^\text{11}\) Wittgenstein sketches his view of names and objects as its meanings due to process of analysis in the following way:

In propositions thoughts can be so expressed that to the objects of the thoughts correspond the elements of the propositional sign (TLP, § 3.2).

These elements I call “simple signs” and the proposition “completely analyzed” (TLP, § 3.201).

The simple signs employed in propositions are called names (TLP, § 3.202).

The name means the object. The object is its meaning. (“A” is the same sign as “A”.)(TLP, § 3.203).

The object is simple (TLP, § 2.02).

The conception of simple names in the *Tractatus* is based on the idea that simple names just stand for objects which are their *Bedeutungen*. Contrary to Frege’s conception (Frege, 1892a), a name only represents an object, and it does not describe it in any way. However, Wittgenstein believes that

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\(^\text{10}\) The contrast here is meant with an “ironic” or just “resolute” reading of them (Diamond, 1988, p. 11; Kremer, 1997, p. 108).

\(^\text{11}\) For Russell’s conception of names, see Russell (1910–1911). The influence of the empiricist position on Russell’s view is easily discernible in Russell (1905, 1911, 1912).
ordinary proper names function as Russellian descriptions; therefore, they are not real names (TLP, § 5.02).

Lastly, according to proponents of Minimal Holism, “use” and “application” should be read as a “logico-syntactical application”, that is, a category based on the rules of logical syntax. This means that by “application”, Wittgenstein did not intend “role in life”, “use”, “practice of the use” in the sense of Philosophical Investigations. His employment of Gebrauch has a rather logical and syntactical flavour in Tractatus Logico-Philosophicus. Elisabeth Anscombe characterized logico-syntactical application as that kind of difference between the syntactical words which concerns a logician (Anscombe, 1963, p. 91). Then, her view was accepted by Black and commented in a straightforward way:

In the Tractatus, application does not mean “use” in the sense of the Investigations (cf. Anscombe, 1959, p. 91 – I agree with her that “application” means “that kind of difference between the syntactical roles of words which concerns a logician”).

(Black, 1966, p. 115)

Minimal holists accept the view that the fundamental change in Wittgenstein’s philosophy after the return to Cambridge was his new conception of what the use of an expression is. His employment of this term in the Tractatus was syntactical. Each expression has a logical role which is closely related to its meaning, but is not identical to it. For instance, in ordinary language, “Ludwig Wittgenstein” has a logical role of a proper name, it is used to talk about some person and its meaning is this person, i.e., an object called Ludwig Wittgenstein. In the two sentences, “Mr. Green is green” and “Mr. Green is Mr. Green”, the word “is” has different logical roles. It performs a role of the predicate in the former and it is an identity symbol in the latter.

Now I will describe Radical Holism to demonstrate how different this reading is from the standard one and to contrast it with Minimal Holism. The stark contrast between these two approaches in regard to the Tractatus should be of interest for its own sake for a historian of philosophy. It raises also the question as to whether the change in views between

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12 From one point of view, the difference between Minimal and Radical Holism goes deeper than the contrast between the resolute and standard reading of the Tractatus. Both
the early and late Wittgenstein has more a substantial or, rather, a predominantly methodological dimension.

First, radical holists claim that the function of use theory of meaning is more basic than the role of the representational account of the sense of propositions and meaning of simple names. Minimal holists emphasize that elementary propositions represent states of affairs in the world and names are representants of worldly objects in a proposition. According to radical holists, the representational dimension of the *Tractatus* is tempered by Wittgenstein’s view of logical syntax. The intra-linguistic principles governing the notion of meaning are rooted in use and reflect or express ways in which language is used.13 These intra-linguistic rules governing the use of expressions soften the realistic character of objects and prompts to see the talk of them as rather a transcendental framework for the possibility of language than as a full-blown metaphysical description of the world (Bar-Elli, 2005, pp. 2, 9–1214). Paul Livingston claims that “the metaphysically realist” view of the early Wittgenstein’s philosophy of language is incorrect and adds:

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13 “Meaning” here is a translation of *Bedeutung*. This is the standard procedure in translating the *Tractatus*. However, it has some obvious shortcomings. The meaning of a simple name is an object; therefore, “meaning” seems to mean here “denotation”, “reference”. For Frege, who has used *Bedeutung* in a similar sense, the *Bedeutung* of the name “Julius Caesar” is an object, something saturated, namely Julius Caesar (Frege, 1891, 1892a, 1892b). On the other hand, Wittgenstein speaks of the *Bedeutung* of expressions where it should be obvious that they do not refer according to the *Tractatus*, namely in the case of negation (TLP, § 5.451) and numerals (TLP, § 6.232). Hence, Peter Caruthers (1989, p. 28) and Brian McGuinness (2002) propose to use the notion of semantic content. The translation of *Bedeutung* as “meaning” is the most neutral and the least theoretically loaded.

14 Bar-Elli argues that Wittgenstein does not answer the question “what is a name and how is it individuated” in ontological terms (i.e., in terms of the relation to the object denoted by the name), but in terms of use. Ontological concepts do not serve as criteria by which to identify words and uses, since they are not assigned independently of them. In this perspective, the correlation of a name and an object is not a separate act and a genuine relation, but an aspect of logico-syntactic rules (Bar-Elli, 2005, p. 10).
The early Wittgenstein was actually more closely an adherent of the doctrine expressed by the slogan “meaning is use” than was the later Wittgenstein; and an understanding of the central role of this doctrine in the theory of the Tractatus is essential to understanding Wittgenstein’s philosophical method, early and late.

(Livingston, 2004, p. 34)

Livingston emphasizes that the possibilities of significant use define the essence of a symbol. We cannot understand what a symbol is without understanding the ways in which the signs that comprise it are significantly used in a proposition (Livingston, 2004, p. 39). He adduces in support of his view § 3.326: “In order to recognize a symbol by its sign we must observe how it is used with a sense”. However, in his very next remarks, Wittgenstein says that “a sign does not determine a logical form unless it is taken together with its logico-syntactical employment”. Therefore, a minimal holist would oppose, Livingston’s claim to the use theory of meaning is unwarranted, since the use of a sign that makes it the symbol is not the role in language games appearing in Wittgenstein’s later writings, but logico-syntactical use, application that concerns a logician. Here comes the second difference with the more traditional reading of the Tractatus.15

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15 I admit that it is not an uncontroversial matter whether Kremer should be counted as a radical or a minimal holist. His general way of thinking about the Tractatus is arguably quite close to both Diamond’s and Conant’s views. However, when it comes to details, there are readily apparent differences. Kremer acknowledges that himself (2001, p. 46). Some of these differences are decisive. Firstly, Kremer claims that Wittgenstein in the Tractatus proposed a broader than merely representational view of meaning. According to this view, “meaning, in general, is use or function in language, and the representing of objects is only one specific form of meaning” (Kremer, 2002, p. 284). Having a meaning is a matter of having a function in the language, a use; the function of representing objects is derivative and secondary (Kremer, 2002, p. 283; cf. Kremer, 1997, p. 87; 2001, p. 69). This shows that Kremer’s characterization of Tractarian doctrine fulfils the first distinguishing mark of radical holism. Secondly, Kremer claims at one go that the linguistic meaning in the Tractatus, as well as in Wittgenstein’s later works, can be equated roughly with use. This notion of use characterizes the use which we make of propositions “in life”, i.e., their use in the process of inference from significant propositions to significant propositions (Kremer, 2001, p. 56; Kremer, 2002, p. 300). This shows that Kremer does not want to restrict the use to its syntactic aspect. Thus, he agrees in this respect with Livingston and Bar-Elli.
The supporters of Radical Holism claim that “use” and “application” should not be treated as a logico-syntactical notion, but in a way close to the *Investigation*’s role in life. They explicitly reject the minimal holists’ view that use in the *Tractatus* means a logico-syntactical application. Use should not be treated as a syntactical notion isolated from the actual practice of ordinary speakers of language. This claim has a weaker and a stronger variant. According to the weaker version, the purely syntactical interpretation of what transforms a sign into a symbol is incorrect, and Wittgenstein opts for a “thicker” notion that includes the actual use of sentences in making true and false statements in actual situations. However, this “thicker” view of application is not identical with the notion of use well-known from *Philosophical Investigations*. The common point with the later view lies in its non-reductive and normative character (Bar-Elli, 2005, pp. 4, 6, 18). On the other hand, on the stronger view, *Tractarian* notion of use was as rich as that embodied in the slogan “meaning is use”. The scope of the rules of logical syntax must reflect the total range of possible meanings in ordinary language, and it is similar in this respect to Wittgenstein’s later conception of logical grammar (Livingston, 2004, pp. 45, 50).

Anscombe, for instance, interprets the phrase “logico-syntactic employment” as meaning “the kind of difference between the syntactical roles of words which concerns a logician” rather than gesturing toward “role in life”, “use”, [or] “practice of the use” in the sense of *Philosophical Investigations*. But actually there is no reason to think that Wittgenstein intended the scope of the rules of logical syntax shown by logical reflection on the use of symbolism in ordinary language to be any smaller than the total range of possible meanings in ordinary language.

(Livingston, 2004, p. 49)

In the process of clarification and elucidation of meaning, we can rely on all possible methods to explain the meaning of an expression. The practice of analysis exposes patterns of use implicit in ordinary language. The rules of logical syntax emerge from the explicitation of these ordinarily implicit patterns of use.

The third main claim of Radical Holism is even more surprising. According to the proponents of this stance, *Tractarian* theory of meaning is actually very close to the view that the meaning of a term must be determined holistically by the inferential place (the conceptual role) in the
network of propositions in which it can significantly figure. This view is instantiated in the following ways. Firstly, the doctrine of the Tractatus embodies an inferentialist program of analysis because it advises beginning with ordinary judgments of the meaning of propositions, and proceeds from identifying the semantic relations of propositions to identifying their logically distinct terms. In this respect, Wittgenstein’s early views anticipate Willard V.O. Quine’s and Wilfrid Sellars’ semantic holism (Livingston, 2004, p. 54). Secondly, the Tractatus involves the conception of the Bedeutung as a contribution to the inferential role; accordingly, a name is a name of a simple or a complex object in virtue of which logical relations hold between propositions involving it and propositions involving other names:

[...] “a” names a complex just in case proposition of the form “ϕ(a)” imply propositions of the form “Ψ(b)” for some b’s (the constituents of a); “a” names a simple just in case propositions of the form “ϕ(a)” do not imply propositions of the form “Ψ(b)” for any b’s. Thus mutual independence of elementary propositions is a consequence of Wittgenstein’s conception of a simple name.

(Kremer, 1997, p. 98)

The inferential position of an expression determines the meaning of a name. The character of the name does not depend on its representational relation to the world, but relies on a contribution to the inferential role of a proposition. Hence, the program of the Tractatus embodies what might today be called an inferentialist program of analysis (Livingston, 2004, p. 54; Kremer, 1997, p. 113).

How different from these two readings is Moderate Holism? In what does it see the main difference between logical grammar and logical syntax? What kind of view of the ontological parts of the Tractatus does it propose? I will try to address the main features of the moderate holists’ view now.

16 Hence, both Bar-Elli and Kremer emphasize that Wittgenstein uses the German verb kennen and not wissen when he speaks of knowing an object in a state of affairs (TLP, § 2.0123-1). This choice suggests an ability, a practical mastery of use. Bar-Elli (2005, p. 13) concludes: “[t]herefore, the only way of knowing an object is by understanding all sentences that contain its name, or in which he is in some way denoted”. Kremer (2002, p. 290) accompanies him: “[t]hus, to know the possibilities of an object’s occurrence in atomic facts is to know how to use the name of that object in propositions”.

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Moderate holists accept the logical and syntactical characteristic of such Tractarian notions as “use” and “application”. Hence, they agree in this respect with minimal holists and they tend to speak of logical roles and the syntactical application of symbols (Conant, 2002, p. 404; Diamond, 1981, p. 9). The notion of Gebrauch is understood by them in the traditional fashion. Use of signs transforms them into symbols which serve such logical roles as being an object, being a concept, being a relation, etc. The criterion of identity for such roles is that they can be interchanged in all cases salva veritate without the change of the truth-value of the propositions. On the other hand, moderate holists reject ontological and/or psychological criterions of objecthood.

If what we view as the leftover expression in one sentence can be taken to be an argument expression – if logic will allow such an identification—logic will insist that the expression now viewed as leftover, now viewed as argument, makes the same contribution to the truth or falsity of what is said. Logic will thus insist that it carry with it in the two cases the same rules for substitution salva veritate in sentences.

(Diamond, 1984, p. 361)

If we are to discern the symbol in a sign, we need to discover what contribution it makes to the sense of the proposition in which it figures. We need to know what logical role it performs in the context of a proposition. What we want to discover is thus not seen at all if we look at the mere isolated word. We have to look at the working parts of the proposition stating or denying some state of affairs (Conant, 2002, p. 385). The recognition of the use of an expression consists in examining its logical role in a proposition, and thus in discerning what symbol is embodied in a perceptible sign. The same perceptible sign “is” can perform different logical roles in the context of different propositions. To recognize the symbol, an examination of its logico-syntactical application is necessary, and not psychological ideas which speaker tends to associate with some signs.

An anti-metaphysical stance is characteristic for the moderate holists. They treat ontological categories as ultimately dispensable and

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17 See an example on p. 6 of the propositions: “Mr. Green is green” and “Mr. Green is Mr. Green”. See also Conant’s discussion of the distinction sign/symbol in Conant (2002, pp. 398–405).
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redundant. Because of this dispensable nature of the ontological discourse, speaking of objects as meanings of names has a transitory character. At the end of the *Tractatus*, the realist position has to be dropped (Diamond, 1984, p. 355). Furthermore, the reader has to recognize that the idea of ontological classifications of objects is self-undermining. There is simply no such thing. What an expression stands for is exposed in the logical role of an expression and this is an intrinsic matter of logic since logic must take care of itself (TLP, § 5.473). Metaphysics tries in vain to be the highest-order science that describes the world apart from our use of an expression. As we saw, this use of an expression consists in attending the logico-syntactical application of an expression and describing its role as a symbol. Metaphysics cannot replace examining the logical roles of symbols. A metaphysician is under the illusion that contemplating the nature of concepts can be a substitute for examining its use, i.e., logical role in a proposition describing the world in some way. This critical aspect of the Tractarian conception of the nature of philosophical enquiries was already discerned by Gilbert Ryle.\(^{18}\)

The conceptual enquiries that constitute philosophy are in an even worse plight than those that constitute Formal Logic. For the philosopher has apparently to try not just to deploy but to describe the concepts with which he is concerned. He has to try to say what Pleasure and Existence are. He has to try, necessarily in vain, to attach object-characterising predicates to non-object mentioning expressions. But by no prestidigitation can the live verb “enjoys” or the live verb “exists” (except in inverted commas), be made grammatical subjects to live verbs. The philosopher’s description of a concept is bound to terminate in a stammer.

(Ryle, 2009d, p. 195)

We have to take Wittgenstein’s appeal to throw away the ladder seriously (TLP, § 6.54). After throwing it away, we stay with the concept script and we are supposed to recognize that the idea of a logical classification of things is confused (Diamond, 1984, pp. 355, 365). Realism turns out to be incoherent since it presumes a view from the outside of logic and

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\(^{18}\) James Conant links Ryle’s description of Tractarian method of enquiries with his further examination of holistic strands of thought in the Tractatus (Conant, 2002, pp. 432–433 (fn. 35), pp. 446–447 (fn. 91)). For a discussion of Ryle’s view of logical atomism, see Gaskin (2013). See also Ryle (2009a, 2009b) for his own characterization of the nature of philosophical enquiries and logical syntax.
language. The objective of the *Tractatus* is therapeutic; it aims to show that a position in which we are outside logic is an illusory one (Diamond, 1988, pp. 8–9, 22–23).

Finally, according to moderate holists, there is no tension between representational and holistic elements in the early Wittgenstein’s thought. Tractarian holism is based on the logico-syntactical notion of use and is of limited character since it is controlled by logical and truth-functional relations in language. Though the meaning of an expression cannot be described as a conceptual role, every sentence has determinate logical relations to all other sentences. All sentences are within a common logical space in which relations between expressions are determined compositionally. The meaning of a sentence is abstractable, but not separable from its position within the common logical space. The metaphor of the logical space is meant to explicate truth-functional and logical relations between propositions (Diamond, 2000, pp. 269, 271). Firstly, each elementary sentence can occur as the basis of truth-functional operations. The elementary proposition is a possible argument for a truth-function. It must be already fixed in the logical syntax of language which the possible combinations of elementary propositions are in these truth-functions. Hence, the proposition reaches right through the logical space. Secondly, logical relations of the given proposition must also be determined completely. As I already explained, each sentence has a fixed set of inferential relations to other sentences.¹⁹ There is an intrinsic connection between the sense of sentence p and its occurrences in sentences such as p ∧ q, ¬ ¬ p, and p ∨ ¬ q, etc. Though each sentence of natural language presents only one situation, it is related to the whole network of sentences in the space of possible combinations.²⁰

What is the holistic position of *Tractatus Logico-Philosophicus*?

In the previous part, we have seen three different forms of holism that one can find in the literature devoted to Wittgenstein’s early work. These positions

¹⁹ See pp. 28–29.

²⁰ In TLP, §3.42, Wittgenstein states that “[a]lthough a proposition may only determine one place in logical space, the whole logical space must already be given by it. (Otherwise, denial, the logical sum, the logical product, etc., would always introduce new elements—in co-ordination.) (The logical scaffolding round the picture determines the logical space. The proposition reaches through the whole logical space)”.
Holism and Atomism in *Tractatus Logico-Philosophicus*

differ from one another as to the interpretation of the term “logical syntax”, the role of ontological parts of the *Tractatus* and the understanding of what conception of meaning Wittgenstein proposed. Now, I want to espouse moderate holism and indicate some points in favor of this position. My main intention is to point to what is interesting in this form of holism and to establish some fundamental insights which that view offers us.

The first fundamental belief which correctly forms a part of moderate holism doctrine is the view that Tractarian “use” clearly means the “logico-syntactical application”, and not a “role in life”. I think that in favor of this stance are reasons of both a textual as well as substantial nature. Firstly, Wittgenstein’s remarks both from the very *Tractatus Logico-Philosophicus* and *Notebooks 1914–1916* explicitly or indirectly speak of “syntactical use”. These are particularly clear examples:

Names signalize what is common to a single form and a single content. Only together with their syntactical use do they signalize one particular logical form (NB\(^{21}\), p. 53).

What signifies in the symbol is what is common to all those symbols by which it can be replaced according to the rules of logical syntax (TLP, § 3.344).

In fact, Wittgenstein introduces the topic of use in theses § 3.326/3.327 where he seems to apply the phrases “significant use” and “logical syntactic application” interchangeably. He smoothly passes from the first one to the second one without any additional explanation. Moreover, in a letter to Ogden, he explicates § 3.326 “significant use” as use “in accordance with the laws of logical syntax”\(^{22}\). The syntactical nature of this characterization is clear again here.\(^{23}\) Secondly, an attempt to treat notion of use as a role in life leads to a contradiction since there is no way of dispensing with the syntactical notion of use and with the notion of logical syntax in the *Tractatus*. Basically, every reading of this work must admit a role for logical syntax and correlated with it a logico-syntactical notion of application of a sign (TLP, § 3.33–3.334). The proponent of the richer notion of use (i.e., radical

\(^{21}\) I use the abbreviation NB for *Notebooks 1914–1916*.

\(^{22}\) This observation and the quoted text are due to Kremer (1997, p. 113).

\(^{23}\) For other fragments where the syntactical characterization of use can be discerned, see NB, pp. 59, 61, 64 (two times).
holist) must either claim that Wittgenstein applies the word “use” in two different senses in his work or acknowledge that the traditional approach towards the concept of use in the *Tractatus* is correct. The claim that there is a systematic ambiguity in the meaning of phrases “use” and “logical syntax” in Wittgenstein’s work does not appear very attractive. Therefore, there are both exegetical and textual reasons to state that the significant use means a logico-syntactical application in the early Wittgenstein’s thought.

For the sake of the second argument, let us adopt some stricter definitions. In a seminal book, Fodor & LePore define holism as the claim that generic semantic properties are holistic.\(^{24}\) One can provide as examples of generic semantic properties the property of having some content, reference or expressing some proposition or other. Then, we can distinguish between atomistic, molecular\(^ {25}\) and holistic properties. An atomistic property is one which might be instantiated by only one thing. On the other hand, a property is molecular only in the case that if anything has it, then at least one other thing does. Finally, holistic properties are properties such that if anything has them, then lots of other things must have them too (Fodor, LePore, 1992, pp. 1–2). Semantic holism is the doctrine that the property of having meaning is holistic in the sense that no expression in a language can have it unless many other (nonsynonymous) expressions in that language have it too. It is the view that there can be no atomistic languages. The conception of meaning from *Philosophical Investigations* is a clear (and famous) example of this kind of semantic holism (Fodor, LePore, 1992, p. 6). Is the Tractarian view of meaning another one?\(^ {26}\) There are compelling reasons for a negative answer. The first is connected with the analytic/synthetic distinction. Fodor and LePore present the argument that if someone accepts the analytic/synthetic distinction, then there is no implication from a property being molecular to a property of being holistic.\(^ {27}\) Roughly, if the property of having a belief is molecular, then having the belief p implies at least one other belief q. For instance, if Smith has the belief p, he must have other beliefs not identical to p. This is the first premise. The second premise goes as follows. There is no principled distinction between the propositions that

\(^{24}\) See Pagin (1997) for an alternative definition of semantic holism.

\(^{25}\) Fodor and LePore also call them “anatomic” properties.

\(^{26}\) Radical holists are obliged to give a positive answer.

\(^{27}\) One can find the details of this argument in Fodor, LePore (1992, pp. 22–32).
Smith has to believe to believe $p$ and the propositions that Smith does not have to believe to believe $p$. Therefore, the conclusion is: the property of having a belief is holistic, i.e., Smith must have many, many other beliefs apart from the belief $p$, if he has the belief $p$.\(^{28}\) Now, the problem for a radical holist with this argument is that Wittgenstein accepted the analytic/synthetic distinction; hence, there is a principled distinction between the propositions that Smith has to believe to believe $p$ and the propositions that Smith does not have to believe to believe $p$. The second premise is false, and the argument is incorrect. In short, Wittgenstein accepted the analytic/synthetic distinction in the *Tractatus*. If so, then there is no reasonable step from Tractarian semantics to semantic holism, because if I know the proposition $p$, then I have to know all propositions analytically connected with it, but I do not have to know the whole language or nearly the whole language. Therefore, Wittgenstein cannot be a holist in the strong sense, which we know from *Philosophical Investigations*.

The second reason against a holistic reading of the semantic properties in the *Tractatus* is more of a textual nature. The characteristics of names, complexes, and propositions indicate that they are molecular concepts. Firstly, being an object/being a name is a molecular property in Fodor and LePore’s sense, since if one object has it, then at least one other entity has it too. Wittgenstein claims that “every statement about complexes can be analyzed into a statement about their constituent parts, and into those propositions which completely describe the complexes” (TLP, § 2.0201). This assertion says that propositions concerning complexes should be further analyzed. We can present the contextual analysis of the complex “$aRb$” having a property $\phi$ as $\phi(aRb) = \phi(a) \land \phi(b) \land aRb$ (NB, 4; cf. Kremer, 1997, p. 97). The complex “$aRb$” is analyzed into an object $a$ that has the property $\phi$ and an object $b$ that has the property $\phi$ too. Hence if I know that there is a name for the complex object, then I know that there are at least two other objects $a$ and $b$ which have the property $\phi$ and stand in relation $R$ to each other. To know the meaning of the complex “$aRb$”, I do not have to know the meaning of the whole or nearly the whole language, but I have to know the meanings of “$a$” and “$b$”. Hence, the property of being a name

\(^{28}\) The set of sentences which we have to know to be a holist in Fodor and LePore’s sense is not specified. The clearest case is that when the knowledge of the whole language is required. However, it is not a necessary condition (Fodor, LePore, 1992, p. 2).
is a molecular property. Secondly, it is true at most that being a proposition is a molecular property in Fodor and LePore’s sense, but it is not a holistic one. According to the early Wittgenstein, it is true that if I understand the truth conditions of the sentence p, then I must understand the truth conditions of many other sentences; but it is not true that I must understand the whole language to understand the truth conditions of the sentence p. For instance, if I understand the sentence p, then I must understand the set of sentences such as \( \neg p, p \lor q \) and \( \neg \neg p \), but not the whole language. I have to know all the sentences that are logically (and analytically) connected with the sentence p, however this set is highly restricted.  

Two previous points speak against Radical Holism. What about the minimal holists? Is their position tenable? Is their view coherent? In my opinion, minimal holists wrongly see a tension between atomistic and holistic elements in the *Tractatus*. Their position comes from an overtly anachronistic view of names and its relation to facts. This view of names prompts minimal holists to be unable to acknowledge the centrality of the category of (logico-syntactical) use for the significance of the whole work. They accept an outdated vision of the ontological parts of the *Tractatus* which leads to an overtly atomistic view of language. According to this view, metaphysics has primacy over an examination of the logical roles of expressions. It overemphasizes the role of objects as the meaning of names in elementary propositions while ignoring what logical analysis really was for Wittgenstein, namely an examination of the inferential relations between propositions in the logical space.  

Minimal holists’ emphasis on atomism in the opening parts of the work obstructs an understanding of the rest of the *Tractatus*. It stops us from discerning that holistic elements are complementary to its initial atomism, for instance in Wittgenstein’s conception of quantification, logical space, and their relation to compositionality.  

Conclusion

To conclude, I would like to indicate the relevance of my discussion on the topic of holism for an overall reading of the early and late Wittgenstein. As we

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29 Here we can see the connection with the first reason for a non-holistic reading.  
30 For a discussion on this conception of logical analysis, see Diamond (2000, pp. 268–272) and Kremer (1997, pp. 96–99).  
31 For these three themes, see Diamond (2000, pp. 268–276, 2002, pp. 272–273).
have seen, my paper champions the necessity of discerning holistic elements in the doctrine of the *Tractatus*. However, the early Wittgenstein’s holism does not perform the role of theory of meaning based on the notion of an inferential role. Also, the early and the late Wittgenstein do not share an identical view of what the use of an expression is. This is meant to demonstrate that the unity of the early and the late Wittgenstein’s philosophy does not lie in a shared conception of meaning (e.g., a strongly holistic one) or any other conception. If we are to see the continuity in Wittgenstein’s thought, we have to look in a different direction. After all, the author of *Tractatus Logico-Philosophicus* and *Philosophical Investigations* claims that his activity is not that of proposing a theory, but it has a therapeutic character. Searching for the common ground of the early and late form of therapy should not consist in waiting for a rung of the ladder, which was there both when Wittgenstein was young and old. The aim of Wittgenstein’s work is to let us see the world from a different perspective and this perspective can be attained only by rejecting a body of doctrine, and not by embracing its particular part. What was constant for Wittgenstein was rather the aim of philosophizing and (partly) its method, but not this or that particular theoretical belief.

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**Abstract**

The aim of my paper is to describe and evaluate different conceptions of holism in Ludwig Wittgenstein’s *Tractatus Logico-Philosophicus*. I distinguish three readings of holistic elements in this work: i) Minimal Holism (E. Anscombe, M. Black, D. Pears); ii) Moderate Holism (J. Conant, C. Diamond, G. Ryle); and iii) Radical Holism (G. Bar-Elli, M. Kremer, P. Livingston). The conclusion is that the most viable option is Moderate Holism since it embraces the logico-syntactical notion of use, rejects an anachronistic interpretation of Tractatarian ontology and allows us to see that the holistic elements are complementary to the initial atomism of the work. Moreover, I point to the consequences of the topic for the overall reading of Wittgenstein’s early and late work.