

Idegen nyelvű

Platonic Realism and the Early Analytics

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Introduction:

In the present paper I set out on an examination of some key authors and their theories in the philosophy of language and XXth century, early analytic philosophy. I start with looking at the works of Frege and Russell, teachers and direct colleagues of Wittgenstein during his formative years, and arguably great influences on the *Tractatus*. After this, I turn to the main object of our analysis, the main work of the young Wittgenstein, the *Tractatus Logico-Philosophicus*. First, I consider a more orthodox reading of its content, after which – noting the dissensus in the surrounding literature – I turn to my proposed interpretation, that is, that there are theoretical elements, namely the logical space, which act as abstract entities in Wittgenstein's work. I support this theory by a few arguments, the main one drawn from the characterization of tautologies and contradictions as part of the logical space as done by Wittgenstein.

Along with the two auxiliary authors listed, I line up some secondary literature that supplements my train of thought and helps elucidate some points I make along the way. The most important of these is the work of David Weissmann, who has made much the same observations of Wittgenstein's early work, however, from a slightly different starting point of examination. This text, in its current form, then, serves as a foundation for a future, more extensive research into the project of the logical positivists and the Vienna Circle more specifically, and the entirety of Wittgenstein's life's work, along the same lines of analysis considered in this paper.

1: The Forebears

1.1 : Frege

The first step in this brief historical overview and perhaps the most important step in the founding of philosophy of language as an individual discipline is the work of mathematician, logician and philosopher Gottlob Frege. It is due to his work – along with its rediscovery by Bertrand Russell decades later – that today we can use and understand the system of first-

order predicate calculus and all the advances in logic since then. Here I will go over some of the most important concepts that we can thank Frege for discovering and examine his stance regarding formalism and psychologism in the fields of logic and mathematics.

In his works “Sense and Reference” (Frege, 1948) and “The Thought” (Frege, 1956), Frege examines several central notions of linguistics and takes strong positions regarding a few of them. Firstly, in “Sense and Reference” he examines the semantic contents of linguistic expressions through a series of logical puzzles. He concludes that to solve these problems one must differentiate the possible semantic contents of utterances¹ as either extensional or intensional. The first is reference, or the extension of a given sentence. This acts as a connection between the utterance and reality, connecting it to an object in said reality, acting as a function between linguistic utterances and the objects of reality. This connects the given utterance–token to an appropriate object (a particular, universal, some state of affairs) in the outside world. The second is sense, which is the linguistic meaning connected to the utterance. This does not give the extensional reference of the given name, that is, it does not connect linguistic entities to entities of the world. What it does is connect linguistic entities to other linguistic entities, or in Frege’s term, contain the mode of presentation (Frege, 1948, p. 2) through it, one is able to see one and the same extension connecting different linguistic terms. One important example where we see intension in action is when we wish to talk about propositional attitudes.

Propositional attitudes are a phenomenon which arises when we wish to formulate the mental states of thinking agents as propositions. It can be the case that an agent assigns truth or falsity to a proposition differently in propositions which are extensionally identical, but intensionally different. E.g. P thinks:

“The Mount Everest is 8,848 meters tall.”

but, unknowing to the fact that Mount Everest and Qomolangma are one and the same object, also thinks that:

“The Qomolangma is not 8,848 meters tall.”

¹ Frege himself mostly only talks about the semantics of sentences, I made the choice to talk about utterances, as they are a broader, more general term, covering not only sentences, but predicates as well, be they saturated or unsaturated.

Here the difference between extension and intension as possible semantic contents is clearly seen. The extension of both ‘Mount Everest’ and ‘Qomolangma’ is a mountain located in the Himalayas, however, the intensional content in the two names can create situations in which propositions containing them receive different truth–valuations by agents. Thus, we can conclude that these semantic contents are not identical either in tokens or types. It is important that it is possible for more than one sense to be connected to a reference, also through the application of functions, but not *vice versa*. Frege then goes on to explain what kinds of references are allowed for what kinds of linguistic utterances:

In the case of names, definite and indefinite descriptions, the reference is an object, a particular entity in the world.

In the case of verbs, adjectives the references are universals, which in Frege’s conception resides in a so–called “Third Realm”, populated by all kinds of abstract entities, propositions – as thoughts – being an important one (Frege, 1956)².

And lastly, for propositions, Frege posits two abstract entities, ‘The True’ and ‘The False’, the two truth–values, which also reside in this realm of abstract entities.

One can then easily see Frege’s position regarding psychologism and formalism, which were in vogue at the time amongst mathematicians and logicians. Frege of course backs these claims up by arguments; if logic is to be a fundamental science, on par with mathematics – as will be shortly demonstrated by Russell and Whitehead – the laws of truth have to be all encompassing, not just directed at the mental content of humans. Logic must describe the laws of truth, not the laws of thought and, seeing as “Laws of nature are the generalization of natural occurrences with which the occurrences are always in accordance.” (Frege, 1956). We can say that the laws of truth or of logic are a unique kind of natural law, and it is from these natural laws that our “rules for asserting, thinking, judging, inferring follow from”. Here, one can see a differentiation between the psychological and scientific aspects of logic, the latter of which Frege was an adamant supporter of.

Seeing as the laws of logic are on a level of generalization that they do not contain

² These universals are characterized as being classes of individuals, which all have a characteristic function, assigning a truth-value to the particular instantiating the property or not; this is marginal to our current examinations. For further reading, see: (Frege, 1917, 1951, 1960)

anything pertaining to the particularities of reality, they must be in some way removed from them, such that they are not influenced by them in any way. They deal with propositions and not the contents of human thought; and propositions, with their individuum–constants and –variables, along with predicates, working as functions that map to ‘The True’ or ‘The False’. These must, by the laws of logic, be constant in such mappings, just as a Platonic idealist language-conception reflects the realm of the Forms, true, constant and unchanging. This gives a clear explanation and a motivation for the line of thought contained within Frege’s work.³ The laws of logic are something prior, more fundamental than either human cognition or natural sciences – which are both dependent on them –, equivalent to mathematics in its capacities; this, however, requires us to grasp at an ontology allowing the reality for abstract entities in their own right.

I would also like to show here the different types of objects that Frege thought of as having abstract, or platonic reality, these are (Frege, 1948):

- The logical connectives or constants, which characterize how we connect given propositions, such as conjunction, disjunction, negation, conditional, biconditional, among possibly others.
- The Sinn–s, that is the senses or intensional contents of linguistic terms, e.g. the senses of ‘Mount Everest’ and ‘Qomolangma’ in our above example.
- The True and the False, or the truth–values that we refer to when making valuations of given sentences and propositions.
- And most importantly, the Gedanken (Frege, 1956), or the propositional contents of given sentences, e.g. the one in “The Mount Everest is 8,848 meters tall.”, and all extensionally identical sentences.

1.2: Russell

The next step in our historical investigations leading up to Wittgenstein’s work, arguably the

³ It is, however, unknown how familiar Frege was with Plato’s philosophy and works, however, as he is one of, if not the most influential figure of the evolution of western thought, these theses could have been transmitted, even if only implicitly to Frege.

most influential thinker in relation to him, is Bertrand Russell. Russell, a British mathematician and philosopher, with an indubitably massive effect on philosophy not just in the 20th century but in all of its history. Together with Alfred North Whitehead he authored *Principia Mathematica* (Whitehead and Russell, quoted in Carnap 1931)⁴, a seminal book for logic and mathematics, in which they worked out the deficiencies in Frege's own system of mathematics and completed a type-theoretic description of the notion of set, which could avert the problem of Russell's paradox and give a complete proof of the reduction of the notions and propositions of mathematics to logic.

I do not wish to go through the entirety of Russell's body of work, which is fairly large, but rather focus on a small segment of it, leading up to his acquaintance with Wittgenstein and the publishing of the latter's *Tractatus*, after which Russell himself turned in part to matters outside the philosophy of language. For the wish of a quick summary, I will forego a detailed overview of the texts in question and highlight the main arguments, in addition to showing the nature of Russell's own stance regarding the metaphysics of universals and abstract entities in general.

Firstly, I will discuss "On Denoting" (Russell, 1905) an essay on the nature of propositions⁵ and a reply, a new solution to Frege's puzzles presented in "Sense and Reference". Here Russell denies the need for a separate extension and intension in the semantic content of propositions and posits that reference – what he calls denotation – is enough for describing all manners of connection between linguistic utterances and the objects of the world. He also goes on to talk about proper names working as hidden descriptions, stating that the grammatical subject– predicate form of sentences is deceiving, and we should instead analyze proper names as another predicate, that is, functions, the values of which are decided the same way as any other universal or property. Going forward he describes a

⁴ It should be noted that the famous Russell's paradox was first presented in Principles of Mathematics, where he argued for the equivalence - or reduction - of mathematics to logic, but it was later, in Principia Mathematica that he and Whitehead presented and proved a formal system based on these assumptions. (Russell, 2020)

⁵ After Russell rejects the realist proposition-conception, it is not perfectly clear what he thought of the ontological status of propositions. He substituted propositions with propositional functions, in which binding the variables creates closed sentences, but how these sentences behave otherwise is not clearly stated.

manner of analysis for the sentences of natural language – this being English, of course – which can avert the logical puzzles as well as fit into his later theory of logical atomism.

The fundamental object of this analysis is the variable x , to which we can connect predicates, properties. Instead of a proper name behaving as an identifier for an object, they behave the same way as any other predicate would, in addition to this, Russell says that for a clear and unambiguous mode of denoting – in the case of definite descriptions –, we must also restrict the minimal and maximal number of objects allowed to take on the given predicate. From a sentence's naive analysis which looks the following:

$$F(a)$$

We get to one such as this:

$$\exists x(F(x) \wedge G(x) \wedge \forall y(F(y) \rightarrow y=x))$$

or, in simpler notation:

$$\exists!x(F(x) \wedge G(x))$$

The intentions of Russell are clear here, we wish to remove reference to any objects with which we have no clear acquaintance so as to remove any metaphysically dubious statements about the nature of our world and the objects contained within.

The next part of my examination of Russell's work leads us to analyze some concepts and arguments of Russell's *The Philosophy of Logical Atomism* (Russell, 2009) and part of his *Introduction to Mathematical Philosophy* (Russell, 1919, pp. 52-63).⁶ Both of these works, written in the 1910's aim at giving a systematic description of the connection between language and reality, such that they allow humans to make true assertions of the world—in itself in human language, however artificial one might need to be able to do so. These works are thus in line with "On Denoting" and Russell later stated that he learned and explained, expanded upon many ideas which he learned from Wittgenstein. Many of these ideas are generally taken to be ideas which were part of Wittgenstein's *Notes on Logic*⁷ (Potter, 2009) I

⁶ There is a bit of a problem with the sudden changes in Russell's view during this period. In this volume his views are not logical atomism yet, but structural representationism, however I think the underlying mechanism of similarity between relations of the outside world and the contents of one's mind are there in both theories. It is thus not amiss to examine both of them here, as aligning towards the same goal.

⁷ https://wittgensteinproject.org/w/index.php/Notes_on_Logic

take this to be a cautious statement on Russell's part that he thinks his and Wittgenstein's views are congruent, at least in some parts. Firstly, an outline of the system of logical atomism:

Russell treats logical atoms – facts – the fundamental constituents of reality, different from object and different still from names. These facts are complexes made up of objects and properties, the combination of which creates a function which projects to one of the two truth-functions. Facts are needed – against Russell's own conception of the principle of Occam's razor – because objects are what things are in the world, they however cannot make things true by themselves. Objects need to be connected to or subsumed under properties for us to be able to assign a truth-value to them.

If one is to be able to create a system which is perfectly aligned with the reality it describes, we must have what Russell calls "logically proper names". The meaning of a logically proper name is the object it stands for; the meaning is nothing but the object, thus, if the object does not exist, the logically proper name has no meaning. A fact containing a logically proper name and a property is called an atomic fact. From such atomic facts, through combination with other atomic facts one can create complex facts, which, when connected, create groups. The sum of all such facts is the world itself. Russell however does not posit existence for these kinds of non-atomic facts, these are just abbreviations for atomic facts standing in groups.

Similarly, Russell does not take conjunctions and disjunctions as real objects in the world, as they too can be easily explained by the atomic facts themselves. One thing to note, however – and this will be a point of derivation for Wittgenstein – is that Russell claims existence for negative and general facts. The existence of negative facts is argued for, from the fact that Russell thought, that the totality of positive facts does not determine the totality of negative facts as well. In his view what is does not determine what is possible, as we will see later in Wittgenstein's stance, rather, we also have to have negative facts, which correspond to the given facts that are not actually true in our world. In my opinion, the existence of negative facts is also needed to avoid the kind of argumentation which was used by e.g. Meinong⁸ for the subsistence of nonexistent entities and the existence of objects which

⁸ Marek, Johann, "Alexius Meinong", The Stanford Encyclopedia of Philosophy (Spring 2024 Edition), Edward N. Zalta & Uri Nodelman (eds.), URL = <<https://plato.stanford.edu/archives/spr2024/entries/meinong/>>. See: 5.:

would be in contradiction to themselves. In my view one does not need to claim the existence of such negative facts, as it would be more parsimonious to just deal with negation the same way as with conjunction and disjunction and take only the atomic facts to be real, as one can make an argument – along the lines of Wittgenstein –, that the positive facts give us the totality of the possible facts in a given world, as the structure itself cannot contain contradictory statements, it would be a logical impossibility.⁹

General facts, on the other hand, have more of a reason to exist in a system such as this. Russell motivated their existence by the fact that simple listing of all the particulars and the propositions containing them would not be able to give a fully closed description of any world; one also has to state that there are no other particulars than the ones previously listed. Another motivation can take the following form: we can see that all elements of a set which is of a cardinality larger than \aleph_0 cannot be counted, which means listing them is not possible either. Thus, one needs a different way of accounting for properties belonging to sets of these cardinalities, and thus general facts are admitted to the system.¹⁰ Another formulation of this can be seen in the problem of induction, listing however many sentences of a type, does not make the generalized version of the sentence true.

Lastly, we have to see that all atomic facts must contain objects, that is particulars – which Russell takes to be sense data – and ‘ideas’ or universals, in the same sense that we have seen our previous authors take a favorable position towards the existence of abstract entities. The former is needed to be such as we can only have acquaintance with our sense datum and thus, only these can give a stable enough foundation for our atomic facts. The latter, i.e. universals, however, are posited by the apparent obviousness of their existence and because properties – taken to be monadic or polyadic relations – seem to be instantiated multiply in the physical and mental reality, so the existence of these leads one to accept the existence of abstract entities altogether.

Ontology beyond Being and Non-Being, especially 5.4.: Beingless Objects — Russell versus Meinong.

⁹ However, one must also see that including one of the existential or general types of facts is enough, as logically each can express all quantified statements without a need for the other.

¹⁰ One remark is that it would be possible to create such a system in which only the existential quantifier - \exists - is present and there is no need for either negative or general facts, in a narrow scope at least.

It should be also noted that there is a tendency in Russell's work, not just in *The Philosophy of Logical Atomism* but in the *Introduction to Mathematical Philosophy* to state that while the contents of polyadic – *n*-ary relations, where $n > 1$ – can be known. Meaning, the structural properties of reality are discoverable to us, the contents of monadic relations – *n*-ary relations, where $n = 1$ – or properties in the ordinary sense cannot be discovered. From this follows that one is unable to find out if a given property truly is connected to a given object in reality. This notion will be later expanded upon and refined in Wittgenstein, in his conception of internal and external properties. Here also, one can see that the general tendencies largely remained the same in Russell's work – e.g. in his structural realism, his logical atomism, etc. – only the tools and considerations, approaches changed between them.

Let us see what kinds of entities Russell described as being abstractly real.¹¹

- *Platonist Realism, 1901–1904*

- o Russell, in the years between 1901 and 1904, was a platonic realist. During this time, he stated that any object which can be thought of, that is, any term, has existence. He takes this stance in the *Principles of Mathematics* (p. 43).

- o Along with this, if terms are to be entities with reality of their own right, the objects containing them must also have the same kind of reality. Thus, propositions are also platonic entities.

- o Doing a philosophical–logical analysis of these types of entities, mostly propositions, Russell derives another, third entity–type, concepts or classes. These can be taken to be platonic universals in the sense we have talked about in the first chapter, however Russell soon came to several problems with these entities, which led to him abandoning this stance altogether.

- *Logical Realism, 1905–1912*

- o Between 1905 and 1912 Russell developed his analytical techniques, as

¹¹ There have been many stages in Russell's philosophical development, he was at one point a platonic realist much like Frege, while later he turned to logical realism, structural realism and logical atomism, I wish to list here the kinds of entities he did think of as having abstract reality leading up to, and having influence on the young Wittgenstein working on the *Tractatus*. This summary was taken from: "Bertrand Russell: Metaphysics," by Rosalind Carey, *The Internet Encyclopedia of Philosophy*, ISSN 2161-0002, <https://iep.utm.edu/>, 2024. 11. 19..

well as adopting an eliminative stance to any entities that refer to classes and concepts. He does this by formulating the logical structures of the analyzed sentences not in terms of classes, but properties, which are related to individual entities which themselves can and do have reality.

- o In 1910, he reaches a point where he finally gives up on assigning reality to propositional entities, instead characterizing the meaning of sentences as a person's belief of different objects being unified in a fact.

- o Connecting to the first point, as the sentences contain particular entities – individuals – and properties and relations – universals – Russell at this point presents a doctrine of universals, stating that properties such as redness are real entities of their own right, also relational properties between objects are also part of this class.

- *Logical Atomism 1913–1918*

- o During this period, from 1911 to 1913, Ludwig Wittgenstein came to study under Russell in Cambridge. His ideas influenced Russell's thought greatly, so much so in fact, that Russell abandoned his earlier views almost entirely. This does not mean that Russell didn't have any influence on the young Wittgenstein, only that theirs was a very fruitful working relationship, for both parties.

- o In 1913, in the *Theory of Knowledge* (p. 98) Russell states that logical propositions are consistent of nothing but form, they do not have forms but are forms, that is, abstract entities. In 1914, he revises his theory, taking into account beliefs, as a unique kind of proposition, which have different forms than any he has examined up to that point.

- o At this point Russell also differentiates between mathematical and philosophical logic. The former only deals with *a priori*, general definitions, axioms and theories, alongside different kinds of techniques, like his theory of descriptions. The other, philosophical logic, or sometimes simply just logic studies the forms of propositions and the facts corresponding to them; this also implies a metaphysical and ontological examination of what is, rather than just a mere study of grammar or meta-language.

- o Finally, in 1918, he publishes his paper titled *The Philosophy of Logical*

Atomism, which is the transcription of a series of lectures he gave on the topic in the winter of 1917–18. This is the point in Russell’s development, which we have seen above. Reality is attributed to sense datum and universals, along with the logical connectives or constants and also to facts, atomic, negative, general and existential and also a unique kind of fact accounting for propositional attitudes, belief facts.^{12,13}”

These ideas, when taken into the larger context and sentiment of the early XXth century – the soon to come logical positivism – do not seem too extravagant. It is the duty of science to serve mankind by laying down the laws of reality, which are consistent and unchanging. It would be, of course, absurd to think that humans use language strictly in a descriptive manner to capture the nature and states-of-affairs of the world, as will be soon demonstrated by Wittgenstein and others in the middle of the 20th century. However, language partly still does this and as such, one must give account for the nature of reality which is described and the mode of describing used. Additionally, with the use of logic, and by extension, mathematics, we as humans have direct access to and understanding of the elements, structure and inner workings of all sciences. This is why logical positivism is of the utmost importance in the era, to lay down an unshakeable foundation for mankind’s discovery and understanding of the world around us. Even if there seems to be a problem arising from a few pesky metaphysical notions, conflicting with the ideal of parsimony is to be of no matter. Though one can have some objections against positing theories and theoretical entities which aren’t empirically verifiable, if they help us to reach some ‘final science’, which gives perfect predictions of the objects and processes which are empirically verifiable, so be it. And, of course, one cannot do much else as a philosopher, but talk and theorize about non–empirical topics, so even in the case of the philosophy of science or language, which was mostly analogous to the philosophy of logic at the time, one must make unverifiable claims about

¹² I should also point to the fact, that at this point Russell started moving away from his earlier dualistic-pluralistic views of metaphysics and started adopting what would later come to be known neutral monism.

¹³ I would like to also note at this point, that this conception of logical atomism, contra Wittgenstein, still thought of universals as real abstract entities. Wittgenstein will overcome the problem of how one can create a complete theory without them, and thus surpassed Russell on that front, but we will see that some elements of his theory are still realist in their conception.

abstract entities in some form or other.

To claim existence of objects of reality with no empirical value was, at the time still a matter of zeitgeist, which would radically change in the coming years,¹⁴ but still permeate science as well as analytical philosophy – even to this day. The idea of the unchanging laws of nature and reality is still with us, be they correct or not. Though there seems to be hope in Wittgenstein’s work against the realism seen thus far in the previous authors; mainstream reading would suggest this, at least. Let us see if we can find any traces of such sentiments in his work.

2: Wittgenstein

2.1 : Introduction

Ludwig Wittgenstein’s *Tractatus* is one of the most well-known pieces of philosophy written in the 20th century. It is read and taught at major institutions of higher education throughout Europe and the U.S., and it has demonstrated an immense influence on the course of western philosophy as a whole. Its concise, cryptic and sometimes seemingly self-contradictory style of writing has left many philosophers stumped and searching for answers to the questions one is left with after finishing the book – among them the author of this paper. I will first give a short explanation of Wittgenstein’s Tractarian theory of logical atomism,¹⁵ after which we’ll examine a few places of the text where the ontology-neutrality or metaphysics-denial of Wittgenstein comes under question; did the forebears’ influence leave traces of a kind of platonic realism in the theory of Wittgenstein or is his theory as against metaphysics as the traditional reading states it to be? I wish to state clearly two things, firstly that I deviate from the mainstream readings and that I may be faulty in misinterpreting elements of that interpretation as well, secondly, interpreting the *Tractatus* in this – or any – way was motivated by pure academic curiosity and a general interest in the *Tractatus*’ influence on the

¹⁴ This is what the Vienna Circle and logical positivism would bring about, although, one can raise objections – as many have done – to the efficacy and value of the movement.

¹⁵ “In the *Tractatus*, Wittgenstein adopts a version of logical atomism (although he does not use the term “logical atomism”).” (Cheung, 2016b, p. 127)

members and works of the Vienna Circle. If this interpretation could gather any credit, it could result in some interesting consequences for those later theories which it had influenced.

In order to complete the task outlined above, it is first necessary to present an orthodox¹⁶ reading of Wittgenstein, which we will do on the basis of Hans–Johann Glock's *A Wittgenstein Dictionary* (Glock, 2005). The question requires first of all a knowledge of the so-called logical form; the logical form being that property of statements or states-of-affairs which is capable of expressing the connection of objects they are related to in the appropriate manner and the way in which they are connected by a reduction to some relational basis, or in other words, taking out the constituents until only the form of the state-of-affairs remains. To illustrate a simple example, the logical form of the sentence 'Peter admires Michael' can be expressed as ' $x\Phi y$ ', so it can be seen that the two objects, denoted by individual-variables, are subject to a binary relation expressing the relationship between them. However, we can also see that by 'extracting' the logical form, we have lost almost all of the properties that uniquely define our original statement, we have stripped it down, so to speak, to a skeleton of objects and the relation between them. "The logical forms are completely general facts – in our case 'Something is somehow related to something' or 'There are dual complexes'." (Glock, 2005, pp. 212–216). In this way, however, the extracted logical form will be applicable not only to the above statement, but to a potentially infinite set of statements of this form and the facts they describe, correctly.

Frege and Russell, in relation to the nature of logical form, at a time when they were extending influence on the work of the young Wittgenstein, postulated some kinds of abstract realism, particularly in relation to logical form, as it was seen above. Logical form, as a logical object, was posited not as an entity that could be named, but as part of a kind of logical experience, or as some kind of abstract, non-physical and non-experiential object, but nevertheless as an object with an independent reality. Wittgenstein accepted this theory as a

¹⁶ Unfortunately, it is not possible at present to go into detail of the interpretative literature surrounding the *Tractatus*. Most of the interpretative debates center around the status of non-sense in thesis 6.54, which has birthed the "resolute" and "irresolute readings" as well as the "traditional" and "ineffability" interpretations. There are also the "therapeutic" and "post-modernist" interpretations. Here I give some starting literature on the interpretations of the *Tractatus*: (Biletski, 2003; Kahane, Kanterian and Kuusela, 2007; Cheung, 2016a; Conant and Bronzo, 2016)

thesis for a correct grasp of logical form up to a point, but later, citing contradictions¹⁷ in the Russellian conception, he distanced himself from it and then began to deny the correctness of the theory outright. In the *Tractatus*, this later theory of logical form, which is usually called the pictorial theory of the logical form, appears stated outright. This theory insists on the non-reality of logical form, but only as a kind of property or structure present in, projected from, individual statements and statements of fact, but without reality independent of them and of physical or experimental reality. The pictorial theory is most easily grasped by the possibility of representation of the logical form and by the metaphor of imagery, which Wittgenstein himself derives from examples of the images. Statements and the states of affairs they describe, or two states of affairs in the world (e.g. a real car accident and a model of it represented by toy cars) are images of each other, by virtue of their correspondence in logical form. For two facts to be images of each other, they must be able to be arranged in identical ways, but they must not be perfect replicas of each other, which is a necessary fact of their representation in different media.

2.2 The Tractatus

Having seen the orthodox view of Wittgenstein's conception of the logical form, I now turn to analyzing the content of his work. This analysis will be done based on Glock's Wittgenstein Dictionary (Glock, 2005), as well as J. C. Nyíri's book on Ludwig Wittgenstein (Nyíri, 1983) *The Tractatus* (Wittgenstein, 2003),¹⁸ a book reminiscent more of a system of deductions than a traditional philosophical inquiry, is consistent of seven main theses with sub- and sub-sub-theses subordinated below to a depth of five layers of explanatory sub-theses at some points. Following Nyíri's examination of the *Prototractatus* (Wittgenstein, 1971). Here I will list the theses with the assigned numbers in the *Prototractatus* in the form they were published later,

¹⁷ „Wittgenstein claimed that Russell had imposed inconsistent demands on these logical forms: they had to be both facts expressed by propositions, that is, capable of being negated ('There are dual relations'), and objects designated by names ('the dual relation'). As Wittgenstein trenchantly remarked, they were to combine 'the useful property of being compounded', the hallmark of propositions and FACTS, with the 'agreeable property' of being simple, which for logical atomism is the privilege of OBJECTS (...)." (Glock, 2005, p. 213)

¹⁸ Citations from now on with the thesis number at the beginning refer to this text.

in the finalized edition of the *Tractatus*. It is clear that Wittgenstein thought of the following theses to be central to his theory:

“1 The world is all that is the case.

1.1 The world is the totality of facts, not of things.

2 What is the case – a fact – is the existence of states of affairs.

2.1 We picture facts to ourselves.

2.2 A picture has logico-pictorial form in common with what it depicts.

3 A logical picture of facts is a thought.

3.1 In a proposition a thought finds an expression that can be perceived by the senses.

3.2 In a proposition a thought can be expressed in such a way that elements of the propositional sign correspond to the objects of the thought.

4 A thought is a proposition with a sense.

4.1 Propositions represent the existence and non-existence of states of affairs.

4.2 The sense of a proposition is its agreement and disagreement with possibilities of existence and non-existence of states of affairs.

4.3 Truth-possibilities of elementary propositions mean possibilities of existence and non-existence of states of affairs.

4.4 A proposition is an expression of agreement and disagreement with truth-possibilities of elementary propositions.

5. A proposition is a truth-function of elementary propositions. (An elementary proposition is a truth-function of itself.)

6 The general form of a truth-function is $[\bar{p}, \xi, N(\xi)]$. This is the general form of a proposition.” (Nyíri, 1983)¹⁹

¹⁹ “The theses listed above – both in terms of their numbering and their wording will remain largely unchanged in the *Tractatus*,^[57]...”

Endnote 57: “Prototractatus 3.2 in the Interpretation is not corresponding to anything; Prototractatus 5 in point 5 of the Interpretation is supplemented by a note in brackets; Prototractatus 6 in point 6 of the Interpretation is also supplemented by an addition ("This is the general form of the statement"), and the "form" - formula - is given in this form: $[\bar{p}, \xi, N(\xi)]$. Points 2.1 and 2.2 in the *Tractatus* are worded slightly differently - The numbering of the lower-

An additional note, which Nyíri himself makes is that the last thesis of the published *Tractatus*, thesis 7 is missing. To contextualize this thesis better, I will here cite the penultimate thesis, numbered 6.54, as well. These two theses are central to other interpretations of the *Tractatus*, which we will touch on briefly after explaining the orthodox reading.

“6.54 My propositions serve as elucidations in the following way: anyone who understands me eventually recognizes them as nonsensical, when he has used them – as steps – to climb up beyond them. (He must, so to speak, throw away the ladder after he has climbed up it.)

He must transcend these propositions, and then he will see the world alright.

7. What we cannot speak about we must pass over in silence.”

From the theses listed above giving a summary of the *Tractatus* and reading the book, one can organize its contents in the following way: theses 1 and 2 are concerned with the basic elements of Wittgenstein’s metaphysics; theses 3 through 5 are concerned with his theory of representations, also called the picture theory of representation; theses 6 and 7 branch out and explain some of the consequences of the theory in the case of science, value and the nature of philosophy.

In the following, I lay down a reconstruction of the theory presented in the *Tractatus*; which is similar in many aspects to Russell’s logical atomism, though there are quite a few points of contention between the two.

On Wittgenstein’s conception there are objects and there are facts, made up of states of affairs, which are combinations of objects. Facts are the building block that the world is made up of, each being totally independent of each other, such that each and every one’s attributes can be changed with no influences on the others whatsoever. The way objects make up states of affairs is divergent from that of Russell; he says that atomic facts are always made up of particulars and universals in every case, while Wittgenstein says that states of affairs are

order items differ greatly in the two versions; the differences in wording are rare and of little importance.” (Nyíri, 1983)

composites of objects which “2.03 (...) fit into one another like the links of a chain”. – This, for Wittgenstein and the western tradition of philosophy is of great importance, this conceptualization of atomic facts, and thus propositions, which mirror their logical form seems to solve the problem of the unity of the proposition, and also deal with universals as abstract entities. The proposition can become unified, because the elements in it, just as the atomic objects of the atomic fact, “fit into one another”, this is a way, a formulation of unification, which avoids any form of regress. For Wittgenstein, as propositions mirror the structure of facts, nothing more is needed for unity, propositions are unified precisely in virtue of their structure. It also has the pleasant side effect of doing away with universals, as properties and relations are themselves also just objects in this chain, they do not have special importance or any sort of abstract reality, though they are of different types of objects than particulars. I will return to the status of properties and relations at a later point.

The nature of objects is different from what is traditionally thought of them; they are simple, and they are “2.0271 (...) unalterable and subsistent” through any and all kinds of change. From the definition of these types of entities Wittgenstein then explicates the buildup of the world: “2.04 The totality of existing states of affairs is the world.” Meaning, states of affairs are fundamental, knowledge of them describes all knowledge of the world. There is no need for negative or general facts contra Russell, as the “2.05 (...) totality of existing states of affairs also determines which states of affairs do not exist.”

Turning to the picture theory of representation, which concerns a particular kind of fact, one that is a representation of another. Wittgenstein explains that facts can be representatives of other facts just as pictures can be representatives of objects in physical space, in virtue of their form. Just as pictures have a pictorial form, a structural identity with what they are representatives of; facts can have structural identity with other facts by sharing a logical form. The pictorial and logical forms, however, cannot be explicated, they cannot be made subject to representation, as they are displayed only in pictures or facts containing them. At a later point in the text, Wittgenstein takes a stance on the side of a fully extensional logic, against Frege; with this theory of representation, however, Wittgenstein can salvage part of intensionality in logic and through it, natural language. This intensional meaning will be the “2.201 (...) possibility of existence and non–existence of states of affairs.”

After the description of the basic elements of reality and the theory of representation,

Wittgenstein turns to talking about propositions and propositional signs – as the linguistic objects –, which are a kind of picture of facts and states of affairs as they share a logical form with each other along with the projective relation which allows a movement between the different types of representatives. The inner structure of propositions is much the same as the world's, names stand for objects, while elementary propositions are correlated with states of affairs, which make up the propositions about the complex facts. Finished with laying out the building blocks of both the world and the language with which it can be represented, Wittgenstein makes remarks on the nature of connection between them. He states:

“4.12 Propositions can represent the whole of reality, but they cannot represent what they must have in common with reality in order to be able to represent it – logical form. In order to represent logical form, we should have to be able to station ourselves with propositions somewhere outside logic, that is to say, outside the world.”

As mentioned briefly above there is one more interesting part of Wittgenstein's theory, which is his differentiation between external and internal properties, which could also be stated as accidental and essential properties of given objects. This would not be anything groundbreaking if not for the connections with the structural representationism of Russell. Here, internal properties take the place of monadic properties or qualities in Russell's terminology, while external ones take the place of the polyadic relations. What's important here is, as Wittgenstein's theory shows is that the internal properties, which we are most interested in from an epistemological standpoint, are necessary, as they express the essence of a given object or state of affairs, but, as Wittgenstein states:

“4.122 It is impossible, however, to assert by means of propositions that such internal properties and relations obtain: rather, this makes itself manifest in the propositions that represent the relevant states of affairs and are concerned with the relevant objects.”

What one can see here, and also in the propositions 4.1212 to 4.125 is that Wittgenstein

supposes that there are some properties of objects, which cannot be stated of them, but which determine the ways in which they can interact with other objects, properties and relations, that is, the kinds of facts they can be fitted into. These internal relations however, are pre-linguistic features, they cannot be expressed by language or logic, which can make one wonder as to where exactly locate them ontologically? A kind of essentialism can, under the right circumstances, imply some form of reality of abstract entities.²⁰

After this point, Wittgenstein goes on to talk about his system of logic and notation, the concept of number and a variety of other questions regarding science, value and philosophy. As these theses are not central to our investigation at hand, I will forgo a detailed explanation of their contents but examine some parts which are connected to Wittgenstein's metaphysics.

As seen above, Wittgenstein paints a picture of the world with the help of states of affairs and a language describing it with elementary propositions corresponding to them. It is stated, that

“2.021 Objects make up the substance of the world. That is why they cannot be composite.”

The existence of a physical reality is clearly posited here, however

“2.0231 The substance of the world *can* only determine a form, and not any material properties. For it is only by means of propositions that material properties are represented – only by the configuration of objects that they are produced.”

The properties, that is, the internal properties, which would be of interest are unknowable; only the external properties and the logical forms of states of affairs and propositions can come to be known, the latter two only by being displayed. The contents of atomic objects and states-of-affairs are inherently unknowable, they are always represented as the functions of the relational properties of the objects.

From 2.1 through 2.3 it is seen how the picture theory works, we see the elements, the possibility of the structure in which elements are related to one another in a determinate way,

²⁰ This line of thought, however is only weakly implied by any part of the text and we only briefly discuss it here, for some pointers to the nature and interpretations of internal properties: (Copi, 1958), (Glock, 2005, pp. 189–191) and (Keyt, 1963).

that is the pictorial form, and similarly the same possibility of structure for objects in states of affairs, logical form. We read certain descriptions of the correlations between the structures of these different kinds of entities, how they “touch”, how these correlations “are, as it were, the feelers of the picture’s elements, with which the picture touches reality.” These are, obviously, simply literary tools to allow for ease of understanding, but they suggest an implied meaning which more of can be found in the later theses.

Under thesis 4 we read:

“4.001 The totality of propositions is language.

4.01 A proposition is a picture of reality.

A proposition is a model of reality as we imagine it.

4.023 (...) A proposition constructs a world with the help of a logical scaffolding, so that one can actually see from the proposition how everything stands logically if it is true. (...)

4.04 In a proposition there must be exactly as many distinguishable parts as in the situation that it represents.

The two must possess the same logical (mathematical) multiplicity (Compare Hertz’s *Mechanics*²¹ on dynamical models.)

4.12 Propositions can represent the whole of reality, but they cannot represent what they must have in common with reality in order to be able to represent it – logical form.

In order to be able to represent logical form, we should have to be able to

²¹ “428. Observation 2. The relation of a dynamical model to the system of which it is regarded as the model, is precisely the same as the relation of the images which our mind forms of things to the things themselves. For if we regard the condition of the model as the representation of the condition of the system, then the consequents of this representation, which according to the laws of this representation must appear, are also the representation of the consequents which must proceed from the original object according to the laws of this original object. The agreement between mind and nature may therefore be likened to the agreement between two systems which are models of one another, and we can even account for this agreement by assuming that the mind is capable of making actual dynamical models of things, and of working with them.” Hertz, Heinrich *The Principles of Mechanics: Presented in a New Form 1857-1894* <https://archive.org/details/principlesofmech00hertuoft/page/177/mode/1up>

station ourselves with propositions somewhere outside logic, that is to say outside the world.

4.121 Propositions cannot represent the logical form: this mirrors itself in the propositions.

That which mirrors itself in language, language cannot represent.

That which expresses itself in language, we cannot express by language. The propositions show the logical form of reality.

They exhibit it.”

From these one can see that the logical form is not something that is part of reality the same way as objects and states of affairs and all other facts are. It is true, that in Wittgenstein's conception, propositions and the corresponding atomic facts outline the possibility of the world and reality itself. This outline comes from the fact that the truth of any proposition contains falsity of its negation as well and all propositions which can be possibly formulated thus determining what is and what isn't possible to be stated. Logical forms are not part of linguistic reality either, as there would then be names or elementary propositions signifying these logical forms, as we have fact-proposition correspondence. These forms, if they are to have existence, which Wittgenstein clearly posits, them being not part of reality as actual or non-actual states of affairs must mean there is something outside reality. This implies a kind of logical space detached from reality, but by which reality is determined in this outlining. It is this logical space where the logical forms have existence. Looking at another thesis:

“5.641 There is therefore really a sense in which in philosophy we can talk of a non-psychological I.

The I occurs in philosophy through the fact that the “world is my world”.

The philosophical I is not the man, not the human body or the human soul of which psychology treats, but the metaphysical subject, the limit – not a part of the world.”

Language, and logical form, which is present in it, outlines, outstretches the possibilities in which propositions and thus facts can be ordered. The logical form is only mirrored in,

represented pictorially in language, but it can never be explicitly talked about. The “world is my world” refers to the state of the outlined propositions that are actualized by and reachable for us by the state of our language. The I, the metaphysical subject – a telltale description – is in contact with the logical form, through language, but as it is something which cannot be expressed by, only represented in propositions, we cannot draw the conclusion that it is something in the world or even reality. One can make an objection to the characterization of Platonic realism. We could say that the essential, or in Wittgensteinian terminology, internal properties of the atomic objects determine the atomic propositions, as these internal properties delimit the possibilities of the connections between the atomic objects. This, in turn, would be congruent with an Aristotelian in re universal realism.²²

To see why such an interpretation of objects is to be rejected, I turn to arguments from David Keyt’s paper *Wittgenstein’s Notion of an Object* (Keyt, 1963). The kind of in rebus universalism which seems to arise naturally from a logical atomist theory is supported in the case of the *Tractatus* by the sort of ‘stretching-out’ or outlining of the totality of the states of affairs which we arrive at by seeing all the given objects. From Wittgenstein’s depiction of the objects, which have their internal and external properties, the latter being their configurations in different states of affairs, the former being the possibilities for them to enter into such configurations, and the fact that the totality of all actual configurations makes up the logical space of the world, it would seem that the logical space itself cannot be somehow abstract or independent of the objects, the substance of the world. I would like to point to some of the theses in the *Tractatus*, following Keyt, to show that it is contradictory to think of objects as being some form of in re universals and that they – or at least their internal properties – are, or must be more like Platonic Forms. Here, I will give a short summary of Keyt’s points, which I mostly agree with.

In thesis 2.021, Wittgenstein states that “The objects form the substance of the world.”

²² What one has to see here is that in Wittgenstein’s own view, what cannot be expressed propositionally, cannot be part of physical reality. The internal properties, or essences of objects, while they have a great influence on the structure of the actual logical world, themselves are only implicitly given to us in experience, by the way they allow the objects to combine with each other; this can either mean an in re universalism, which we reject, or that the essential properties of objects aren’t part of physical reality, every object by default characterized by some abstract properties.

Keyt approaches the question of “in what sense are Wittgenstein’s objects substance?” (Keyt, 1963, p. 15) by turning to Russell’s discussion of his own particulars. Russell states that particulars have the quality of self-subsistence, but not the quality of persistence through time (Russell, 2015, p. 32). Self-subsistence is to be taken in the sense, that each particular is logically independent from any other particulars. It would be possible that each and any particular could be the whole universe, it is just an empirical fact that it did not turn out to be so. This criterion of self-subsistence is brought into comparison with Aristotle’s criterion of separability, “which when strictly applied yields him the conclusion that the individual thing (Socrates, Bucephalus), which is a compound of form and matter, is substance.” Keyt makes the point that Wittgenstein’s objects do not have this sort of self-subsistence; “his objects *do* depend logically upon one another. “It is essential to a thing that it can be a constituent part of an atomic fact” (2.011). “An atomic fact is a combination of objects ...” (2.01)”. For Wittgenstein, it cannot be the case that only one object is in existence, there must be others with which it is possible for it to combine. Objects, in Wittgenstein’s conception are not self-subsistent with respect to each other, but they are self-subsistent regarding the atomic facts.

“Substance is what there is independently of what is the case.” (2.024), and it is possible that nothing is the case. For with regard to the existence of n atomic facts there are 2^n possibilities. But one of these possibilities is that there are no existent atomic facts. (See the bottom row of each of the schemata of 4.31.) The self-subsistence of Wittgenstein’s objects is similar not to the separate existence of Aristotle’s concrete individuals one from another, but to the separate existence of Plato’s Forms from his particulars. The Forms are internally related to one another, and thus one Form cannot exist separately from other Forms; but the world of Forms as a whole exists whether there are any particulars or not. On the other hand, there can be no particulars without there being Forms. Of course, Plato’s particulars are not made out of Forms; the analogy breaks down at this point. Plato’s Ideas provide the form but not the content of the world. Wittgenstein’s objects, on the other hand, are both form and content (2.025).” (Keyt, 1963, p. 16).

Keyt goes on to examine the second criterion of substance. “The argument stated very briefly is this. All that can be said of an object is that it enters or that it does not enter into particular configurations. Therefore, it cannot be said of an object either that it exists or that it does not exist. Therefore, it cannot be said of an object either that it will continue to exist

or that it will not continue to exist.” and, later “Once again Wittgenstein’s objects turn out to resemble Plato’s Forms more than Aristotle’s concrete individuals: “We say indeed that it [i.e. being] was and is and will be, but in truth ‘is’ alone fits it” (*Tim* 37e5-38a1).”

Up to this point, we have seen arguments in favor that objects are to be taken as similar to Platonic Forms, but if we accept such an interpretation, we must see to its consequences to the other parts of the Wittgensteinian theory. Most importantly, we have to see how such objects and possibility in logical space, that is, the non-actual states of affairs of logical space interact with each other.

“4. *The objects and possibility.* The objects determine the limits of logical possibility. “If all objects are given, then thereby are all *possible* atomic facts also given” (2.0124). “The objects contain the possibility of all states of affairs” (2.014). “Empirical reality is limited by the totality of objects” (5.5561). Since an atomic fact is a configuration of objects, when all objects are given, all possible configurations are also given. Once a deck of cards is given, all possible hands are also given. On the other hand, “substance is what there is independently of what is the case” (2.024). So when we know what objects there are, we know what is possible, but not yet what is actual.

Wittgenstein goes on to say in 2.025 that the objects are form and content. Form and content of what? Of the world: “Only if there are objects can there be a fixed form of the world” (2.026). The form of the world consists, I take it, of the possible configurations of objects; the content of the actual configurations.” (Keyt, 1963, p. 18). Keyt also makes an argument which separates the objects, the substance of Wittgenstein’s reality, from logic:

“The only empirical matters are which configuration of objects are actual, which not. Thus what objects there are is not an empirical matter.

But oddly enough, it is not a logical matter either. For “the *application* of logic determines what elementary propositions there are” (5.557). But what elementary propositions there are determines what names there are, and, consequently, what objects there are. (Compare: “What the axiom of infinity is meant to say would be expressed in language by there being infinitely many names with different references” (5.535).) Therefore, the application of logic determines what objects there are. However, “what lies in its application, logic cannot anticipate” (5.557). Therefore, what objects there are, logic cannot

anticipate. But this is to say that what objects there are is not a logical matter. Logic is simply to uncover them.

“Logic “is before the How, not before the What” (5.552). Wittgenstein has said earlier that “a proposition can only say *how* a thing is, not *what* it is” (3.221). That is, it can only show how a thing is related to other things. Thus the How is the existent atomic facts. (See also 6.432 and 6.44.) The What, on the other hand, is the objects. So logic comes after the objects but before the existent atomic facts. But what occupies this middle position? The possible atomic facts. Given the objects, logic determines what the possible atomic facts are.

What objects there are is a nonempirical, nonlogical matter. It is an empirical matter what configurations of objects are actual. It is a logical matter what configurations of objects are possible. But what objects there are to be configured is neither.” (Keyt, 1963, pp. 18-19)

From these lines of argument, one can see that taking objects, determined by their internal properties with regards to what states of affairs they can enter into, cannot be consistently depicted as Aristotelian substances. We must see that they, somehow more closely resemble Platonic Forms, their internal properties, a kind of essence is determined not by contingent circumstances in the ‘physical’ world around us, but a kind of logical necessity contained within them.

What Keyt, in the last paragraph of his paper arrives at, is a similar description of the entirety of the Wittgensteinian picture of reality, along with its limit. “Similarly, the world in the *Tractatus* floats between qualityless and eternal objects, on the one hand, and the metaphysical subject, which is an “extensionless point” (5.64), on the other. For Schopenhauer matter and the knowing subject turn out in the end to be the very same thing, the will. On this point he is not followed by Wittgenstein.” (Keyt, 1963, p. 25)²³

I would like to propose another argument in favor of depicting logical form as separate or independent from the substance of reality, objects. As we have seen above, the logical forms of the atomic propositions themselves are not part of the world or reality. They are

²³ Later, we will see that the other authors, who proposed a Platonic realist interpretation of the *Tractatus* (Weissmann, Nyíri) went further along with this point and attributed such a position to Wittgenstein which Keyt here – correctly – states not be the case.

independent of the actual state of our language, but they also determine what is allowed to us to be said in the language. This independence, in turn, raises the possibility of there being other logical forms, or, parts of the logical space, which are unreachable to us, as the structure of our language, and through it, our thought cannot formulate these objects. To see this one must simply turn to what Wittgenstein says about tautologies; there are logical forms which never become empirically realized, as would be needed for an in re universal realism; the forms which are never realized are the tautologies and contradictions in the logical space, these are conceivable but are never represented in any atomic facts of the world. See:

“4.462 Tautologies are not pictures of reality. They do not represent any possible situations. For the former admit *all* possible situations, and the latter *none*. In a tautology the conditions of agreement with the world – the representational relations – cancel one another, so that it does not stand in any representational relation to reality.

4.463 (...) A tautology leaves open to reality the whole – the infinite whole – of logical space: a contradiction fills the whole of logical space leaving no point of it for reality. Thus neither of them can determine reality in any way.”

And,

“4.4611 Tautology and contradiction are, however, not senseless; they are part of the symbolism, in the same way that “0” is part of the symbolism of Arithmetic.”²⁴

This – being part of the symbolism – is taken to mean that they are part of the logical space. It is just a property of the logical space that it contains some elements, namely the tautologies and contradictions, which can never become actualized as the logical forms of any propositions.

Let us turn back to the problem of universals, and their metaphysical status, as we have seen above in the beginning of this section. Wittgenstein polemizes with Frege in theses 4.063, 4.0641, 4.431 and 4.442, in which he rejects Frege’s conception of ‘the True’ and ‘the False’ as having objective reality as abstract entities.²⁵ These then, are thrown out of the set of

²⁴ See also: 4.463, 4.464, 4.465, 4.466, 4.4661.

²⁵ We have to note, that many considerations that have gone into the writing of the Tractatus came from a need for Wittgenstein to solve the problems of logic – contra Frege and Russell – without having to rely on empirically unverifiable theoretical entities.

possible platonic entities, however the notion of states of affairs being made up of objects which “fit into one another like the links of a chain” leads us to question the state of other types of universals: properties, and relations. It is a point of contention in the discourse around the *Tractatus* if only particulars can be atomic objects or if properties and relations are also allowed. In the *Notebooks* Wittgenstein himself writes, “Relations and properties, etc. are *objects* too.” (Wittgenstein *et al.*, 1984, 16.6.15).

Of course, this is not part of the canonical text of the *Tractatus*, we will however give an argument to Wittgenstein’s realism towards properties and relations. We can see that properties and relations are linguistically given to us, as syntactical and semantical objects in our sentences. Logic, as per its ultimate goal, is to give a correct analysis of language and thought, if language and thought contains some elements which are properties or relations, then they must bear some reality. This, of course, doesn’t mean that properties and relations are abstract entities in their own right – as they were theorized to be in the past –, we could very well say that Wittgenstein was a nominalist at this point, regarding them. What we have to see though, is that a property being related to or a relation connecting some atomic objects itself also must be present in the state of affairs, as another atomic object. Otherwise, we wouldn’t have the fact–proposition correspondence, if the logical forms of the facts were different from that of the propositions, which clearly contain relations and properties.

Properties and relations as they are characterized by Wittgenstein can be taken to be equivalent to monadic and polyadic or internal and external properties and relations. However, they must have some type of existence; especially the latter as they are necessary for the existence and knowledge of the objects at all as can be seen:

“2.01231 If I am to know an object, though I need not know its external properties, I must know all its internal properties.”

“2.0233 If two objects have the same logical form, the only distinction between them, apart from their external properties, is that they are different.”

However,

“4.122 In a certain sense we can talk about formal properties of objects and states of affairs, or, in the case of facts, about structural properties: and in the same sense about formal relations and structural relations.

(Instead of ‘structural property’ I also say ‘internal property’; instead of ‘structural relation’, ‘internal relation’. (...))

It is impossible, however, to assert by means of propositions that such internal properties and relations obtain: rather, this makes itself manifest in the propositions that represent the relevant states of affairs and are concerned with relevant objects.”

If then, the internal properties cannot be asserted by means of propositions, they, or at least the forms which they are represented by, also must have existence somewhere outside reality as it is defined by Wittgenstein. These internal relations can be taken to mean the internal structure of the atomic objects, which make up the atomic facts, and thus compositionally, all of the world.²⁶ These are attributed reality, and in fact, they are the properties which determine the ways in which atomic objects can enter into relations with one another. However, neither these properties or internal relations, nor their logical forms (as if they are relations, they also must have some logical form which represents the connection between the relata) can be represented in propositions. From the above line of argumentation, if some entity cannot be explicitly talked about in propositions, they must be outside the possible outlines of language and reality. We will be reserved in our assertions and state only that the logical forms – if there are any – of these internal relations are posited to be abstract entities, just as well as the logical forms of propositions and the logical space created by these are abstract entities, with reality assigned to them.

Another important point, which Wittgenstein talks about later in the text:

“5.63 I am my world. (The microcosm.)”

“5.631 There is no such thing as the subject²⁷ that thinks or entertains ideas. If I wrote

²⁶ “Internal relations are not genuine relations at all, since they cannot be meaningfully expressed by a proposition. They are *structural* relations, namely between propositions, or between propositions and the states of affairs they depict. (TLP 4.014).” However, any entities, properties, etc... which cannot be expressed by propositions, as per Wittgenstein, cannot be said to be part of the world or reality. (Glock, 2005, p. 189)

²⁷ It is interesting to see that several different authors during this time period made statements about the nonexistence of the Self; Husserl and Russell being very influential thinkers to have done so. What is even more interesting is the lack of evidence of one influencing the other regarding these ideas.

a book called *The World as I found it*, I should have to include a report on my body, and should have to say which parts were subordinate to my will, and which were not, etc., this being a method of isolating the subject, or rather of showing that in an important sense there is no subject; for it alone could not be mentioned in that book.–”

“5.632 The subject does not belong to the world: rather it is a limit of the world.”

“5.633 Where *in* the world is a metaphysical subject to be found? (...)”²⁸

These are important notions, not just because of this current examination of the remaining traces of abstract or platonic realism in the early analytic philosophy of language, but because it is these theses of Wittgenstein that explain what the linguistic turn truly means. We can only think about what we have the linguistic capabilities to formulate, our – and any – world is equal to some language and all the problems arising from the use of language will be the problems of philosophy, some more general, some more specific in nature, and they allow us to have knowledge of the world as well:

“4.1 Propositions represent the existence and non–existence of states of affairs.” “4.11 The totality of true propositions is the whole of natural science (or the

whole corpus of the natural sciences).”

“4.111 Philosophy is not one of the natural sciences.

(The word ‘philosophy’ must mean something whose place is above or below the natural sciences, not beside them.)”

Turning to thesis 6, we can catch a glimpse of the logical structure itself:

“6.1 The propositions of logic are tautologies.”

²⁸ “5.8.16 The thinking subject is surely mere illusion. But the willing subject exists. [Cf. 5.631.] If the will did not exist, neither would there be that centre of the world, which we call the I, and which is the bearer of ethics.

What is good and evil is essentially the I, not the world. The I, the I is what is deeply mysterious!

7.8.16. The I is not an object.

11.8.16. I objectively confront every object. But not the I. So there really is a way in which there can and must be mention of the I in a non-psychological sense in philosophy. [Cf. 5.641.]” (Wittgenstein *et al.*, 1984)

“6.11 Therefore the propositions of logic say nothing. (They are the analytic propositions.)”

“6.111 All theories that make a proposition of logic appear to have content are false. (...)”

“6.112 The correct explanation of the propositions of logic must assign them a unique status among all propositions.”

“6.113 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.”

“6.12 The fact that the propositions of logic are tautologies *shows* the formal – logical – properties of language and the world. (...)”

“6.232 The propositions of logic demonstrate the logical properties of propositions by combining them so as to form propositions that say nothing. (...)”

“6.1222 This throws some light on the question why logical propositions cannot be confirmed by experience any more than they can be refuted by it. Not only must a proposition of logic be irrefutable by any possible experience, but it must also be unconfirmable by any possible experience.”

“6.124 The propositions of logic describe the scaffolding of the worlds, or rather they represent it. (...)”

“6.13 Logic is not a body of a doctrine, but a mirror-image of the world. Logic is transcendental.”

This last thesis ties together what one can call the transcendental²⁹ view of logic in Wittgenstein’s opus. We see, that similarly to Kant’s own transcendentalism, logic in the case of the *Tractatus* is transcendently real to us. It is the shape or structure of our empirical experiences, which are all determined by our language. It permeates all experience of humans,

²⁹ It is to be noted that there are two interpretations of transcendentalism, the orthodox reading, and Wittgenstein’s own interpretation is akin to a Kantian transcendentalism, that is, logic is the possibility-condition of any experience, which is transcendental in the sense that it is a priori in our epistemic processes. The sense in which I talk about transcendentalism here states, that logic is transcendent, or over empirically perceivable, physical reality.

but it can never be made subject to any analysis or examination. As above, however, we must see, of course, that some elements of logic itself make themselves manifest in our everyday experiences, as they shape the form of facts and propositions. Other elements, however, are the tautologies, and there are elements which aren't part of the actual logical structure – contradictions, which are excluded, as our reality is modeled by a complete logical structure. We can still make out the forms of these empty logical sentences, however, and they are “part of the symbolism”, they are required for the logical structure to hold together. This must then mean that there are entities which can never have any material content, only their form, and which can never be empirically experienced, outside of the mirroring representations which they take part in. However, we must also see that there are some such entities, which cannot ever take part in the mirroring representation, as they are empty. We must therefore conclude that these entities (tautologies and contradictions) have reality independent and separate from our physical reality³⁰ but are sometimes instantiated in them – or at least some of them are.

From these examples one can see that the nature of logic and the logical space as being independent and different from that of reality as a collection of all possible states of affairs. Logic is void of any content, detached from all possible experience and something that cannot itself be propositionalized. It is the collection of possible logical forms which are represented by states of affairs, facts, elementary propositions and composite propositions; they display them, but there is no possibility of ever stating these, as they are nothing more than the possibilities of relations between symbols.

From this it is clear that the entirety of logic, as a “mirror–image of the world” has reality outside of the reality described in the *Tractatus*, as something which is not built up of states of affairs. Wittgenstein rejected the existence of abstract entities, such as ‘the true’ and ‘the false’ and properties and relations as abstract universals, still there remained the idea of the logical scaffolding located outside of and being represented in the world. One last point of examination remains to us that of mathematics and the natural sciences, where we can see

³⁰ The same can be said of the metaphysical subject as well, but this would result in a different line of argumentation, which we will see later.

the gains one can expect from a theory such as this:

“6.234 Mathematics is a method of logic.”

“6.3 The exploration of logic means the exploration of everything that is subject to law. And outside logic everything is accidental.”

“6.31 The so-called law of induction cannot possibly be a law of logic, since it is obviously a proposition with sense. – Nor, therefore, can it be an a priori law.”

“6.32 The law of causality is not a law but the form of a law.”

“6.33 We do not have an a priori belief in a law of conservation, but rather a priori knowledge of the possibility of a logical form.”

“6.34 All such propositions, including the principle of sufficient reason, the laws of continuity in nature and of least effort in nature, etc. etc. – all these are a priori insights about the forms in which the propositions of science can be cast.”

“6.36 If there were a law of causality, it might be put in the following way: There are laws of nature.

But of course, that cannot be said: it makes itself manifest.”

“6.362 What can be described can happen too: and what the law of causality is meant to exclude cannot even be described.”

“6.363 The procedure of induction consists in accepting as true the simplest law that can be reconciled with our experiences.”

These remarks are complemented by the construction of a purely formalistic idea of number, which also shows Wittgenstein’s commitment to rejecting a traditional idealist ontology. Taking all of the above into account means that through the scaffolding of logic, human minds can and do have access to the forms of the laws of natural science. This could be seen as a clear influence of Russell’s structural representationism, and its familial attachment to the theory of logical atomism. The contents of the world, the internal properties of objects may evade understanding, but through the external properties, the forms of the laws and the logical, structural forms found all throughout this world and reality we experience – or can bring into our experience – allows humanity a bright lookout, a positive view of the future of science and of itself. Still there remains the possibility of the scaffolding

proving to be nonexistent, and human experience once again being thrown into chaos and uncertainty about the world around us.

2.3 Platonic Realism

I would like to give a short summary of the arguments lined up in favor of realism about logical forms and the logical space:

Facts and propositions have correspondence to each other, which is determined by the pictorial logical form of the facts and propositions, and that they share these forms with each other. However, I must also say, with Wittgenstein, that these logical forms can never be explicitly stated through language, these only ever show themselves or are represented in the facts and propositions they are part of. But this, meaning that they are not parts of propositions, but are transcendental regarding them, means that they are outside language and thus reality. Additionally, as there are logical forms, which can never be instantiated in any facts or propositions,³¹ but still are adequate and proper parts of the symbolism – the logical space – one must say that these entities are fully and completely independent of our reality, they are only ever instantiated in it, by facts and propositions. This line of reasoning was the result of an independent research and study, we now look to the literature to see if there are any other arguments in favor of platonic realism in the *Tractatus*.

David Weissmann, in his book, *Eternal Possibilities: A Neutral Ground for Meaning and Existence (Philosophical Explorations)* (Weissmann, 2008, pp. 17-57), as explicitly stated in its first chapter, has argued for a platonic realist reading of the *Tractatus*, along much the same lines that I have done in the above. However, I think that he approached the issue at hand

³¹ “4.461 Propositions show what they say: tautologies and contradictions show that they say nothing. A tautology has no truth-conditions, since it is unconditionally true: a contradiction is true on no condition. Tautologies and contradictions lack sense.

4.462 Tautologies are not pictures of reality. They do not represent any possible situations. For the former admit *all* possible situations, and the latter *none*. In a tautology the conditions of agreement with the world – the representational relations – cancel one another, so that it does not stand in any representational relation to reality.” See also: 4.463, 4.464, 4.465, 4.466, 4.4661.

slightly differently than I have done. What Weissmann starts out with is a characterization of the metaphysical subject, which is the delimitation of reality, it is what contains the possibilities of the logical space, the possible facts that can come to reality. See:

“The single idea which directs my reading of the Tractatus is this: sentences can represent states of affairs because the sentences are themselves expressions of the possibilities which are instantiated as states of affairs. Possibilities are facts in logical space, logical space being just the array of possibilities. Possibilities are collectively the neutral ground which provides forms of definite difference for expression in sentences and states of affairs. They are an ontologically prior ground. For a sentence and state of affairs are expressions of a possibility which is distinguishable from them. It is an eternal possibility for form, they are more or less evanescent tokens of it. Each of these remarks is, defensibly, a claim of Wittgenstein.” (Weissmann, 2008, pp. 22-65)³²

And:

“Here is the final echo of an idealism having mystical overtones: all forms are known immediately to the metaphysical subject, because they are configurations within it; the metaphysical subject is immanent within every empirical subject; so then is every empirical subject credited with a power for the immediate apprehension of form. Seeing or hearing a propositional sign, the empirical subject discerns the form expressed within it; and achieves, thereby, a kind of self-knowledge.”

However, he also introduces some other differences from a traditionalist reading of Wittgenstein, which coincide with much of what was outlined in the above. He differs from Wittgenstein in two respects:

“Wittgenstein supposes that a possibility for form has no reality apart from its actual instances; they exist necessarily in rebus: "Nothing in the province of logic can be merely possible" (2.0121). I will argue to the contrary that possibilities exist ante rem; they are distinguishable and separable from sentences and states of affairs. For there are myriad possibilities which are not instantiated in either way. These forms of definite difference do nevertheless persist as possibilities. Why is it that possibilities already instantiated are any less

³² The following citations are from these two pages of the text.

separable from their expressions in language and the world?” This, as we have seen is supported by the existence of logical forms, which can never be instantiated, that is, tautologies and contradictions, which we nevertheless assign reality as part of the logical space. Also:

“Second, Wittgenstein argues that the world may be known because possibilities having instances there are also available for expression in language: every state of affairs that may occur in any world is representable by a sentence in logic. That is important and true, I think. But Wittgenstein also supposes that a sentence may express a possibility instantiated in the world only if it is, itself, a second instantiation of that possibility. I disagree. For he never does establish that the principles or laws for combining objects are essentially like the rules that operate upon words ordered as sentences. No one need establish that, because isomorphism is not required for the representation of facts by sentences. Possibilities instantiated in the world are representable in sentences having convention and the mind's intentional activity as the sole basis for their application to the world. There is knowledge of the world, says Wittgenstein, as we apprehend in sentences the very forms that are instantiated in the states of affairs they represent. Language is, therefore, no barrier to our knowledge of the world in-itself; it is a high road running wide and straight into its heart. This is a simple but powerful idea. I regret that the changes I propose will somewhat complicate Wittgenstein's austere formulation.”

Another interpreter has made similar remarks to Wittgenstein's work. J. C. Nyíri, at the end of his two-part investigation of Platonic Realism in the XIXth and XXth centuries, titled *At the starlight of nonexistents* (Nyíri, 1972a, 1972b) gives us an interpretation of the *Tractatus* similar to Weissmann. His interpretation also hinges on a Platonic conception of the substance of the world, “Substance exists, it is a solid form, but it is not *mere* form, but also content. Wittgenstein's concept of substance is undoubtedly Platonistic. Substance is what logic is about.”³³, but, similar to Weissmann's conception, Nyíri takes the Metaphysical I central to such a Platonic reading of the *Tractatus*: “A psychologistic motive is the assumption of the

³³ „A szubsztancia fennáll, szilárd forma, de nem *puszta* forma, hanem tartalom is. A szubsztancia Wittgenstein-i fogalma kétségkívül platonisztikus. A szubsztancia az amiről a logika szól.” (Nyíri, 1972b, p. 729) [Translation – G. G.]

individual moral subject – the "willing" subject – or the concept according to which the sign becomes the *image* of the fact in such a way that a *thought-relation* is established between the sign-elements and the image-elements, the sign and the elements are *related to each other by us* in mental acts: the cognizing I can only be absent here in name, in fact it proves to be ineliminable."³⁴ Both interpreters thus take the metaphysical system of the *Tractatus* to be such: the possibilities in the logical space are abstractly real, however, they are contained in the Metaphysical subject, this is the merger done by Schopenhauer, and in Nyíri's and Weissmann's interpretation replicated by Wittgenstein. The form and the content are taken to be abstractly real and one and the same as well. "Wittgenstein reduces the logical-mathematical necessity to a *psychological* necessity, while eliminating the *conceptual* from the psychological. In logical deduction, no act of thought is wedged *between* the premises and the conclusion, the conclusion follows from the premises as from a stimulus; the answer to the mathematical question is given without thought, or the thinking - in mathematical proof, say - is nothing more than the emergence of the links that mediate, and the proof is not an *interpretation* of the chain, but the chain itself. 'It is not something behind the proof, but the proof, that proves.'"³⁵ (Wittgenstein and Wright, 1996, II. 43. §.) For Nyíri, the logical space, and thus reality, is mathematical-logical in nature, a set of theses, Weissmann does not make it explicit whether on his interpretation the structure of logical space is to be thought of as such. He however states clearly "that *logos* is equally in mind and the world, that the real is the rational and the rational the real." (Weissman, 2008, p. 34)

I disagree with Nyíri and Weissman that the metaphysical I, the limit of the world contains in it the entirety of logical space, the non-actual states of affairs, waiting to come to

³⁴ Pszichologisztikus motívum az individuális erkölcsi szubjektum - az "akaró" szubjektum - tételezése, vagy ama koncepció, mely szerint a jel oly módon válik a tény *képévé*, hogy a jel-elemek és a képelemek között *gondolati kapcsolatot* létesítünk, a jelet és a trágakat mintegy lelki aktusokban *egymáshoz rendeljük*: a megismerő Én csak névleg hiányozhat itt, valójában kiküszöbölhetetlennek bizonyul." (Nyíri, 1972b, p. 729) [Translation – G. G.]

³⁵ Wittgenstein a logikai-matematikai szükségszerűséget *pszichológiai* szükségszerűségre vezeti vissza, a pszichológiaiból ugyanakkor kiiktatja a *gondolatit*. A logikai következtetésben a premisszák és a konklúzió *közé* nem ékelődik gondolati aktus, a konklúzió a premisszákra mint ingerre következik; a matematikai kérdésre a válasz gondolatlanul adódik, illetve a gondolkodás - mondjuk a matematikai bizonyításban - nem más, mint a közvetítő láncszemek felbukkanása, s a bizonyítás nem a láncolat *értelmezése*, hanem maga a láncolat. "Nem valami a bizonyítás mögött levő, hanem a bizonyítás bizonyít." (Nyíri, 1972b, p. 730) [Translation – G. G.]

be. Wittgenstein, as in so many other places is cryptic on these points, but in some theses he makes clear that the Metaphysical I, the subject is not identical with the whole of reality.

“5.62 (...) The world is *my* world: this is manifest in the fact that the limits of *language* (of that language which alone I understand) mean the limits of *my* world.

5.632 The subject does not belong to the world: rather, it is a limit of the world.

5.641 (...) The philosophical self is not the human being, not the human body, or the human soul, with which psychology deals, but rather the metaphysical subject, the limit of the world – not a part of it.”

It is true, that the metaphysical Subject also plays an important role in the theory presented in the *Tractatus*, however we have to put a separating line between the metaphysical Subject and the totality of the logical possibilities; logic is isomorphic in structure to the internal structure of the metaphysical Subject, but it is stated nowhere that these two entities would be coincident with each other. As Keyt formulates it, describing Schopenhauer’s influence on Wittgenstein: “For Schopenhauer matter and the knowing subject turn out in the end to be the very same thing, the will. On this point he is not followed by Wittgenstein.” (Keyt, 1963, p. 25)

Now, we can see that not only the existence of some types of logical forms agree with my interpretation to the metaphysics of the *Tractatus*, but the logical structure presented in it is also a supporting fact in this reading.

4: Conclusion

In the foregoing, I have made an attempt to lay down some foundational arguments in favor of a Platonic realist reading of the *Tractatus*. As we have seen similar, but – at least in their approach – not exactly the same arguments have been laid down in the literature previously, at least concerning the content of the work itself. This is supplemented by another argument, of a different variety, which seeks to make an inference to some abstract entities being present in any theorizing about language in the western tradition. If this is the case, which we tried to show, then one can make the assumption that the *Tractatus* isn’t exempt from this

rule either. Our goals in this paper were twofold: to provide strong enough evidence for Platonism in the *Tractatus*, which, as we have seen, partly coincided with the work of another author in the literature; and, through the results of this paper, lay down a foundation for a similar examination of the works of members of the Vienna Circle, especially since there were authors associated with it, or connected with it to some extent (ambivalently) who were e.g. mathematical Platonists, which seems counterintuitive when looking at the core doctrines of the Circle.

What we have seen is that the forebears had influence on Wittgenstein's work, e.g. Frege's Platonism regarding the truth-values, propositions and universals, as well as Russell's quick-to-change stance regarding different entities and their ontological status. Our arguments derived from the *Tractatus* were constructed from the characterization of the logical space, the metaphysical subject and the possibility of science and any other epistemic enterprise that humans are able to take, the argument that I here propose takes the following form:

(P1) Facts and propositions have their sense from the different atomic objects that are contained in them.

(P2) All atomic objects are physical.³⁶

(P3) The totality of the facts and propositions makes up the logical space of the world.

(P4) The totality of the possible combinations of the actual and possible atomic objects make up the logical space of reality.

(P5) Tautologies and contradictions do not contain any objects, they are just empty logical forms.

(P6) Tautologies and contradictions, do however exist, as part of the "symbolism" of logic.

(P7) There exist some objects which aren't made up of atomic objects, thus aren't part of physical reality.

(P8) Objects which aren't physical are, in some sense, abstract.

³⁶ I take physical here to mean part of the world, that is, actualized by some objects entering into states of affairs.

(C) There exist some object which aren't part of physical reality, but are real, thus they must be in some sense abstract.³⁷

In light of our above arguments, I think that there are two possible interpretations that come through to the reader:

A Kantian transcendentalist reading: Wittgenstein, in his work, commits himself to an ontology, in which there's two distinct types of entities, one which is available to our experience and perspective, and one that is not. The latter reside somewhere behind or above, but parallel and 'surrounding' the entities that are empirically available to us. This is the weaker reading, and there are some proponents of such interpretations in the literature (Glouberman, 1980), however, I contend these views, because of the argument from the existence of tautologies.

1. A Platonist realist reading: Wittgenstein, although consciously working against any such theoretical entities, couldn't avoid their inclusion because of the nature of the subject matter, that is, a philosophy of logic. This reading would suggest what Weissmann's and my own arguments support, that is, that there are some theoretical entities, objects in the theory, which cannot be coherently thought to be physical entities, but still they are assigned reality, which can only be done abstractly. This would of course, have several far-reaching consequences; one is ontological pluralism, the necessitation of some domain where these abstract entities exist, apart from the one which we are empirically acquainted with, and another is logical pluralism, the possibility of other logical structures than the current, actual one. The first is a necessary and possibly uncontroversial statement, the latter, however could be reasonably doubted.

Though as stated above, I am not committed or dedicated to either reading, the

³⁷ Weissmann and Nyíri's interpretation and the argument supporting them differ from mine. I reconstruct them along the same structure, which is different from my own only in the 5th and 6th premises, as such:

(P5) There exists some object, the metaphysical subject, which acts as the limit of the world (it is the subject which perceives the actual and possible states of reality).

(P6) The metaphysical subject contains all actual and possible states of affairs, the totality of logic.

Thus, we can come to a conclusion that all non-actual states of affairs are in some sense existent, or actualized, in the metaphysical Subject. Therefore, we have to see that even non-actual states of affairs are to be taken as existent.

apparent – at least to me – inconsistencies and general ambiguity in some parts of the text led me towards the second, stronger interpretation being thought of as the correct one. This, with the obvious consequences stated above, along with possibly many more subtle ones, warrants at least some consideration from the reader trying to interpret not just the *Tractatus*, but authors influenced by it. I would, however, here turn to Wittgenstein's own, clear intention which he wished to reach by this work, which is delimiting what can and what cannot be talked about; dividing that which logic and its derivatives, the sciences can talk about, and what cannot be said, ethics and aesthetics. These latter are, of course, the most important matters not to Wittgenstein, but his interpreters as well, but seeing and accepting an interpretation of logic and the metaphysics which seemingly constitute it will undoubtedly determine our conception of these infinitely more important matters as well.³⁸

I hope to have given a good summarization of the contents of not just the *Tractatus*, but the literature surrounding it and especially this problem. I hope to continue this work and extend it not to just the Vienna Circle, but also to the entirety of Wittgenstein's oeuvre, firstly by looking for evidence to the continuity of the different stages of his life's work and then arguing that these abstract entities, in some form of another, subsist throughout it.

³⁸ „6.41 The sense of the world must lie outside the world. In the world everything is as it is, and everything happens as it does happen: *in* it no value exists – and if it did exist, it would have no value.

If there is any value that does have value, it must lie outside the whole sphere of what happens and is the case. For all that happens and is the case is accidental.

What makes it non-accidental cannot lie *within* the world, since if it did it would itself be accidental. It must lie outside the world.

6.42 So too it is impossible for there to be propositions of ethics. Propositions can express nothing that is higher.

6.421 It is clear that ethics cannot be put into words. Ethics is transcendental.

(Ethics and aesthetics are one and the same.)

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