THE SPECTER OF SIGNIFICATION: MEILLASSOUX'S SPECULATIVE MATERIALISM AND WITTGENSTEIN'S *TRACTATUS* ON THE EMPTY SIGN AND ITS ITERATION

Jakub Mácha
(Metropolitan University Prague)

Résumé
En défendant son matérialisme spéculatif, Quentin Meillassoux a accusé de nombreux penseurs d'un « corrélationnisme » dans lequel le sujet connaissant est incapable d'atteindre la réalité indifférente à la pensée humaine. Les principaux exemples qu'il donne d'un corrélationnisme fort sont le Tractatus de Wittgenstein et l'ontologie fondamentale de Heidegger. Dans cet article, je soutiens que le matérialisme spéculatif de Meillassoux ressemble beaucoup au Tractatus de Wittgenstein. Ils partagent une croyance fondamentale dans la contingence de toutes les entités. Wittgenstein avance la théorie de l'image de la signification, dans laquelle le langage et la réalité sont corrélés. Cependant, à y regarder de plus près, la théorie de l'image opère à deux niveaux : le niveau des noms se référant à des objets et le niveau des propositions se référant à des faits. Je soutiens que le premier niveau est très proche de la théorie de Meillassoux sur le signe vide, dépourvu de sens et capable d'itération identique. C'est, selon lui, la caractéristique distinctive du discours mathématique, qui est capable d'accéder à une réalité indépendante de l'esprit. S'il en est ainsi, soit certaines corrélations sont capables d'accéder à cette réalité, soit, ce qui est plus important, la notion de corrélation doit être spécifiée de manière plus précise. En même temps, je souhaite soutenir que la dérivation du signe vide de Meillassoux peut être considérée comme un complément au Tractatus, parce que Meillassoux soutient qu'un signe est pensable sans aucune signification. Dans la dernière partie de l'article, j'évalue l'argument de Meillassoux en faveur de la facticité de toute corrélation, et je soutiens que le Tractatus de Wittgenstein, sous certaines interprétations, peut échapper à cette critique.

Abstract
While defending his speculative materialism, Quentin Meillassoux has accused many thinkers of a « correlationism » in which the cognizing subject is incapable of reaching the reality indifferent to human thought. The prime instances he gives of strong correlationism are Wittgenstein's *Tractatus* and Heidegger's fundamental ontology. In this article, I argue that Meillassoux's speculative materialism closely resembles Wittgenstein's *Tractatus*. They share a fundamental belief in the contingency of all entities. Wittgenstein advances the picture theory of meaning, in which language and reality are correlated. However, on closer inspection, the picture theory operates on two levels: the level of names referring to objects and the level of propositions referring to facts. I argue that the former level is very close to Meillassoux's theory of the empty sign that is devoid of meaning and capable of identical iteration. This is, he claims, the distinguishing feature of mathematical discourse, which is capable of accessing mind-independent reality. If this is so, then either some correlations are capable of accessing that reality or, more importantly, the notion of correlation must be specified more precisely. At the same time, I wish to argue that Meillassoux's derivation of the empty sign can be taken as complementing the *Tractatus*, because Meillassoux argues that a sign is thinkable without any signification. In the final part of the paper, I evaluate Meillassoux's

argument for, the facticity of every correlation, and argue that Wittgenstein's *Tractatus*, under certain interpretations, can escape this critique.

This article will compare Meillassoux's speculative materialism and Wittgenstein's *Tractatus Logico-Philosophicus*. At first glance, their views appear highly contradictory. According to Meillassoux, the picture theory of meaning in Wittgenstein's *Tractatus* is the epitome of correlationism, which is the main target of his criticism of the Kantian and post-Kantian traditions. Meillassoux's issue with the picture theory is that it cannot be expressed in language and is, therefore, beyond the realm of rational discourse. He is troubled by the idea that the fact that the world can be expressed in language is ineffable and mystical. I will address this criticism and suggest a way Wittgenstein's theory could avoid it.

Before delving into Meillassoux's critique, it is important to note other differences between his speculative materialism and Wittgenstein's *Tractatus*. Firstly, Wittgenstein[1] argues that there are necessary objects that comprise the substance of the world[2], whereas Meillassoux believes that everything, including objects and facts, exists contingently and may cease to exist at any moment. Secondly, Wittgenstein's atomistic perspective does not account for Meillassoux's concept of the virtual, where something entirely new can emerge unexpectedly, such as a novel law of nature. Wittgenstein maintains that the range of possibilities is predetermined by the possible combinations of simple objects[3]. However, as we will soon see, these differences can be reconciled with Meillassoux's metaphysical approach.

The primary reason for comparing Meillassoux's speculative materialism and Wittgenstein's *Tractatus* is that they share several similarities and fundamental points of agreement. While some of them are readily apparent, others are less obvious and have not been fully explored by Meillassoux. Both authors maintain that every fact is contingent, that there is no law of causality, that the law of noncontradiction is absolutely valid, and that the principle of sufficient reason is optional rather than necessary. However, Meillassoux overlooks that Wittgenstein agrees with him on this last point. Additionally, there are several points of agreement that have not been addressed by Meillassoux. These include the primacy of facts over objects, the idea that simple objects lack material qualities, and, most importantly, the claim that the world can be fully described without using signs that are directly correlated with objects. This final point will be the main focus of this article, as it can be restated in Meillassoux's framework as the claim that the world can be accessed through mathematical discourse consisting of signs devoid of meaning, i.e., empty signs.

This last point raises questions about Wittgenstein's alleged correlationism. Can one describe the world adequately in the language of mathematics and still be a correlationist? Furthermore, what exactly is correlationism? It appears that we must differentiate between two levels of correlation: correlation between names and objects and correlation

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[1] Except where indicated otherwise, I shall be referring to Wittgenstein's early work: specifically, the *Tractatus* and the notebooks from prior to the *Tractatus*'s publication.

[2] Wittgenstein's renowned Argument for Substance (TLP, 2.0211–2) establishes the necessary existence of simple objects. The argument's main structure is largely uncontroversial (Proops 2022, §3.2 ; Zabardo 2015, §4.12). However, Proops contends it has an implicit premise excluding contingent simples, which I will challenge. More aligned with the present approach, Zabardo upholds that « substance has to do with possibilities of combination of objects into states of affairs » (2015, 145). Zabardo's proposal here is not exactly the same as Meillassoux's necessity of contingency, but it does share similarities in that direction.

[3] « If all objects are given, then thereby are all *possible* atomic facts also given » (TLP, 2.0124).

between propositions and facts. Wittgenstein initially proposes an explicit one-to-one correlation on both levels. However, the correlation between names and objects is later dismissed (names are substituted for variables) in order to allow access to the world independently of the cognizing subject, which is precisely what Meillassoux aims to achieve. Consequently, Meillassoux's intricate derivation of the sign devoid of meaning can be made compatible with the framework of the *Tractatus*. The distinction between sign and symbol presupposes that we can think of a sign, i.e., the perceptible aspect of a symbol, in abstraction from its semantic function. Although the *Tractatus* does not argue for this possibility, there are a few hints toward such a view. Thus, Meillassoux's derivation of the sign devoid of meaning can complement the Tractarian approach.

In the following sections, I will provide a brief overview of the points of agreement and disagreement between Meillassoux's speculative materialism and Wittgenstein's *Tractatus*, which will serve as a basis for exploring Meillassoux's concept of the sign devoid of meaning and its compatibility with Wittgenstein's account of names and variables. I will organize this overview around points of agreement, and will briefly touch upon divergences as they arise[4].

I. Agreement Points

I.a Contingency

Meillassoux and Wittgenstein share the belief that everything is contingent, which is a recurring theme in Meillassoux's works. For him, every entity, including material things, events, facts, and physical laws, is contingent. In his words, « the sole eternal property of every thing is its facticity – now identified with a contingency […], but a speculative, not an empirical, contingency (one that concerns every entity – not only things, but also physical laws) » (IRR, 179). The concept of contingency is crucial in understanding the sign devoid of meaning, which Meillassoux argues can be intuited by recognizing the eternal contingency of every entity.

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[4] Methodological note: In this article, I will refrain from discussing secondary sources. Due to the constraints of a journal article, this is the most practicable approach. Wittgenstein's *Tractatus* is notoriously challenging to interpret. There are, without doubt, many interpretations of Wittgenstein's early philosophy that would be impossible to bring in any contact with Meillassoux's thinking. My point is merely that the way I present the *Tractatus* here is compatible with Meillassoux. I do not argue here that my current interpretation is correct or plausible. However, I have provided footnotes indicating the sources of my main interpretive decisions. In general, I rely on interpretations that view Wittgenstein as expressing significant philosophical insights about the nature of possibility and contingency, as well as its logical and metaphysical aspects. This is also how Meillassoux approaches the *Tractatus*.

The chief interpretative issue concerting the *Tractatus* is the ladder analogy at the end of the text. Wittgenstein suggests that the propositions in the *Tractatus* are nonsensical and should be discarded, like a ladder once we have reached the point we were climbing to. Numerous suggestions have been made about what this analogy means and how ultimately nonsensical propositions can provide any insight at all. I will take these propositions at face value and briefly revisit the ladder analogy in the concluding section. It would be legitimate to ask how Meillassoux's sign devoid of meaning is related to such nonsense. However, I must leave this issue unresolved for future research.

Meillassoux's writing is comparatively clear and lucid, but his arguments are controversial, as indicated in some secondary sources. I will only examine responses to Meillassoux's work that either take a Wittgensteinian viewpoint, broadly defined (Benoist 2017 ; Livingston 2013 ; Muller 2020), or analyze Meillassoux's treatment of the concept of meaningless signs. My interpretation of Meillassoux's ideas is critical, yet largely positive and charitable. If my overall argument is correct, then Meillassoux's speculative materialism should be as controversial as Wittgenstein's *Tractatus*.

Contingency has two ramifications: an entity can be contingent because it lacks a necessary cause or because it lacks a necessary reason for existence. Aristotle, who identified four fundamental modes of explanation or causality, distinguishes causality and rationality. This distinction is also present in Kant and Schopenhauer, who influenced Wittgenstein.

Meillassoux, in contrast, aligns causality and rationality more closely, echoing the early modern philosophy he seeks to resurrect. The concept of *causa sive ratio*, or « cause ou raison » was introduced by Descartes and later embraced by other major thinkers such as Spinoza and Leibniz. For Meillassoux, causality and rationality, or the lack thereof, emanate from the fundamental principle of eternal contingency.

I.b Causality

I will address the principle of causality briefly, as it is relatively straightforward. Meillassoux utilizes Hume's critique of causality, accepting the argument that there is no direct proof of causal necessity (AF, 89). Kant's indirect transcendental proof of this principle asserts that without causal necessity, no representation would be possible. Meillassoux's own argument rests on dismantling this transcendental proof. He contends that a world without causal necessity, i.e., a world of complete chaos, is consistent with the relative constancy of laws of nature that we experience. According to him, one cannot claim that this constancy would be *improbable* in such chaos, as there is no relevant account of *probability*. Although this argument is not without problems, I shall not dispute it here.

Wittgenstein maintains in the *Tractatus* that:

> "5.135 There is no possible way of making an inference from the existence of one situation to the existence of another, entirely different situation.
> 5.136 There is no causal nexus to justify such an inference.
> 5.1361 We *cannot* infer the events of the future from those of the present.
> Belief in the causal nexus is *superstition*."

Wittgenstein's rejection of the causal nexus may have been influenced by Hume. He asserts that since factual situations are mutually independent, the principle of causality cannot be justified. This is similar to Meillassoux's position. However, there is a key difference: Meillassoux would not accept Wittgenstein's reasoning for why the principle of causality is unjustified. Wittgenstein's argument relies on the tenets of his logical atomism[5], which holds that atomic facts are mutually independent (TLP, 2.061) and that « one elementary proposition cannot be deduced from another » (TLP, 5.134). The debate over which of these claims is derived from the other is not relevant here[6].

This type of contingency is more limited than Meillassoux's, in which everything, including facts and propositions, is contingent. Like Meillassoux, Wittgenstein does not entirely reject causality, stating that it is not a law but the form of a law (TLP, 6.32). This statement can be interpreted *objectively* (some laws have the causal form, some do not) or, following Kant, *subjectively* (laws of nature are thinkable in the causal form), with the

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[5] Sandis and Tejedor (2016, 576–79) provide a detailed elaboration of this argument. Commentators disagree on whether Wittgenstein was committed to the view that logical necessity is the only form of necessity. Our current discussion does not hinge on resolving this exegetical issue.
[6] Cf. Kremer (1997, 98), McGinn (2006, 142), and Mácha (2015, 52–53).

latter interpretation being more credible. However, unlike the Kantian approach, this form is optional (TLP, 6.341), although not completely arbitrary[7].

I.c Sufficient reason

Meillassoux interprets the principle of sufficient reason in accordance with the early modern philosophy of Descartes and Leibniz. The principle states that for every fact or occurrence, there must be a reason why it is so and not otherwise. Meillassoux equates this with the thesis that every entity is absolutely necessary (AF, 33 ; IRR, 119), which may be a misinterpretation given that the principle was primarily concerned with events rather than entities. However, he does not argue that the principle is wrong or nonsensical. Rather, he objects to its absolute validity as a metaphysical principle. Meillassoux follows Kant's argument and extends it from the principle of causality to the principle of sufficient reason. He argues that no absolute necessity, whether causal or rational, can be demonstrated. Instead, the principle has heuristic validity. Meillassoux rejects the metaphysical principle of sufficient reason that seeks an absolute reason for the given, but he accepts various heuristic principles that explain everyday facticity (IRR, 148).

The principle of sufficient reason has no metaphysical significance for Wittgenstein[8]. According to him, the principle is an « *a priori* insight[] into the form in which the propositions of science can be expressed » (TLP, 6.34). In other words, the principle belongs to the form of scientific description of nature, rather than the form of nature itself. Wittgenstein's observation that « laws like the principle of sufficient reason, etc. are about the net and not about what the net describes » (TLP, 6.35) further clarifies this point. It is unclear what Wittgenstein means by « net » in this context, but it could refer to a net of descriptions, a system of descriptions, or a conceptual schema that describes the world. Regardless of the interpretation, the principle of sufficient reason is a form of this system of description, rather than a form of nature itself. Immediately following the previous remark, Wittgenstein makes a comment about the law of causality: « If there were a law of causality, it might run: 'There are natural laws'. / But that can clearly not be said: it shows itself » (TLP, 6.36). This suggests that the principles of causality and sufficient reason have the same formal status, which we shall now examine more closely[9].

According to Wittgenstein, taking the principles of causality and sufficient reason as forms of description renders them arbitrary: « This form is arbitrary [*beliebig*] » (TLP, 6.341). This indicates that the two principles are not metaphysical laws but rather arbitrary forms of scientific description of the world[10]. These forms are not expressed in a single formal proposition, but rather belong to a system or net.

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[7] Sandis and Tejedor (2016, 579) elaborate on the optional nature of causal laws. They contend that « the laws of the natural sciences (including physics) are optional, insofar as the system to which they belong can be replaced by others; and they are a priori in that, being instructions for the use of sings. They are constitutive of senseful propositions [...] they generate ».

[8] Wittgenstein's treatment of the principle of sufficient reason has roots in Schopenhauer's philosophy (Griffiths 1976 ; Jacquette 2017). Schopenhauer viewed the principle as the foundation for logical, physical, mathematical, and moral necessity. Griffiths (1976, 6) argues that Wittgenstein retained much of Schopenhauer's perspective. However, as this text argues, Wittgenstein places less emphasis on the metaphysical implications of the principle. Although Wittgenstein may be committed to logical necessity, it is important to note that this necessity is not based on the principle of sufficient reason.

[9] In a letter to Russell from January 1914, Wittgenstein equates the principle of sufficient reason with the law of causality (McGuinness 2008, 65).

[10] However, it is necessary that there is a net (representational system), and one net may be superior to another.

In summary, both Wittgenstein and Meillassoux reject the absolute validity of the principle of sufficient reason and the law of causality, viewing these as heuristic tools rather than metaphysical laws. Meillassoux's view of contingency is unrestricted, applying to every entity, while Wittgenstein's is more limited, applying only to facts. Additionally, Meillassoux sees contingency as the foundation of his philosophical outlook, while Wittgenstein sees it as a consequence of his logical atomism.

I.d Contradiction

Wittgenstein and Meillassoux also agree on the importance of the principle of noncontradiction, but their justifications differ. Meillassoux derives the principle from the absolute contingency of all things, arguing that if there were a contradictory entity, it would be necessary, which would be inconsistent with the premise that all things are contingent (AF, 67). However, Meillassoux's argument relies on the assumption that everything follows from a contradiction (AF, 70–71), leaving no room for alternative possibilities. This eliminates the possibility of considering the possibility of conceiving a contradictory entity being other than it is (AF, 70–71).

One may object that Meillassoux is relying on classical logic, where any contradiction leads to a logical implosion. However, there exist paraconsistent logics that allow useful logical inferences to be made despite contradictions. Therefore, it cannot be claimed that Meillassoux's argument is entirely flawed. Nonetheless, a derivation of any logical principle presupposes a logical system in which the principle operates. Meillassoux seems to assume, without argument, the validity of classical logic[11].

Meillassoux claims that Heidegger's and Wittgenstein's strong correlationism relativized the principle of noncontradiction. However, this claim is incorrect, since Wittgenstein accepted the principle in his earlier work, specifically in the *Tractatus* where he employs it on multiple occasions. For example, at 5.101, Wittgenstein presents sixteen basic truth-functions, with the last one explicitly labeled as a contradiction:

> "(FFFF) (p,q) Contradiction (p and not p, and q and not q.) ($p. \sim p. q. \sim q$)"

We get the principle of noncontradiction if p is the same variable as q ($p = q$), which entails:

> "(FF) p and non p, and p and non p
> $\equiv$ (FF) p and non p"

In other words, a contradiction – p and non p – is always false. Another explicit endorsement of this principle can be found at 6.1203, where Wittgenstein presents his a–b schemes. And finally, the principle follows from Wittgenstein's claim that « contradictions are not pictures of reality » (TLP, 4.462).

Wittgenstein views the principle of noncontradiction as necessarily valid, as logic operates under necessity (while everything outside logic is contingent). This contrasts with the principles of sufficient reason and causality, which are accidental and do not belong to logic. As a logical principle, the principle of noncontradiction is necessary for Wittgenstein. (TLP, 6.3)

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[11] Meillassoux's defense of the principle of non-contradiction has been heavily criticized (cf. Livingston 2013 ; Clemens 2013 ; Meyerson 2023). However, I will not delve into this critical line of thought as Meillassoux and Wittgenstein both adhere to the principle of non-contradiction.

II. Correlation(ism)

We have identified some key similarities between Meillassoux's speculative materialism and Wittgenstein's *Tractatus*, but there are also important differences. The picture theory of meaning that the *Tractatus* presents as a fundamental insight embodies correlationism, which is the target of Meillassoux's critique of the philosophical tradition. Can one hold that all things are contingent and still be a correlationist? A positive response would challenge Meillassoux's critique, while a negative one would question the *Tractatus*'s internal coherence. Before attempting an answer, we must clarify the concepts of correlationism and correlation.

Meillassoux offers several definitions of correlationism, but few explicit definitions of correlation itself. While one might expect correlationism to entail some form of correlation, matters are more complex than that. The clearest definition of correlation comes from the start of *After Finitude*:

> "By « correlation » we mean the idea according to which we only ever have access to the correlation between thinking and being, and never to either term considered apart from the other." (AF, 5)

A direct definition of correlationism follows:

> "We will henceforth call *correlationism* any current of thought which maintains the unsurpassable character of the correlation so defined." (AF, 5)

The first definition seems to be circular. Correlation is just the correlation between thinking and being. Let us consider some of Meillassoux's other definitions of correlationism:

> "So by correlationism I mean [...] any philosophy that maintains the impossibility of acceding, through thought, to a being *independent* of thought." (IRR, 118)

And on the next page:

> "I call « correlationism » any form of deabsolutization of thought that [...] argues for the enclosure of thought into itself, and for its subsequent inability to attain an absolute outside of itself." (IRR, 119)

We can observe that the term « correlation » does not occur in these definitions. We can only surmise what the opposites of correlation are: independence of being and thought, and the ability of thought to conceive an absolute outside of thought. In *After Finitude*, Meillassoux enumerates several kinds of correlation: « the subject-object correlation, the noetico-noematic correlation, [and] the language-referent correlation » (AF, 6).

It is important to clarify that the concept of correlation refers to a correspondence of *structures*. This is the common usage of the term in mathematical statistics. When we speak of a correlation between thinking and being, we are referring to the idea that structures of thought correspond to structures of being. However, it is also possible to imagine structures of thought that do not correspond to any structures of being, and *vice*

versa. In other words, we can conceive of nonbeings, such as golden mountains, and there can be beings that are not thought of by anyone. These structures are independent, in the sense that they may or may not have counterparts in the other domain.

Meillassoux, however, argues that this simple understanding of independence between structures is flawed. According to various strands of transcendental philosophy, the possible structures of being are limited by the possible structures of thought. Kant famously wrote that « the conditions of *possibility of experience* in general are at the same time conditions of the *possibility of objects of experience* » (KPR, A158/B197). An idealist version of this view holds that any structure is a product of thinking and, therefore, any structure of being is imposed on being by thinking. If this were the case, it would be impossible to think a structure of being independently of thinking because thinking would produce the structure. In other words, thinking cannot be correlated to a structure that is not correlated to any thinking.

A useful starting point for addressing the problem is to clarify what is meant by « access » to a being independent of thought. Meillassoux, adopting Graham Harman's term « philosophies of access », recognizes the significance of this concept (Meillassoux 2014, 10). But what does access mean in this context? Is it an epistemological relation, where to have access to something is to know it? Or is it an ontological relation, where access implies changing or distorting the being in question? Or a semantic one? Meillassoux suggests that correlationism is committed to the ontological understanding of access, which implies that we can only access things that are modified or come into existence as a result of our attempts to know them.

II.a Correlation(ism) in the Tractatus

Our task now is to investigate the types of correlations *endorsed* (see note 4 above) in the *Tractatus*. While the *Tractatus* makes reference to many correspondences between language and thinking on one side, and the world on the other, the main correspondence it posits is between language and the world. This correspondence serves to draw a limit to thought (TLP, Preface). Wittgenstein suggests that to limit thought, we need to focus on « the expression of thoughts » (TLP, Preface), that is, on language. This allows us to equate thinkability with expressibility in language (TLP, 3.001) and, further, with possibility: « What is thinkable is possible too » (TLP, 3.02)[12]. By examining the correspondence between language and world, we can explore the correspondence between thinking and being.

Wittgenstein establishes a hierarchical correspondence between language and the world consisting of three levels. On the side of being, there are simple objects, atomic facts (also known as states of affairs), and complex or molecular facts. These correspond, respectively, to names (simple signs), atomic or elementary propositions, and molecular propositions on the side of language[13].

The correspondence on the lowest level is expressed in the following remarks:

> "3.203 A name means an object. […]
> 3.21 The configuration of objects in a situation corresponds to the configuration of simple signs in the propositional sign."

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[12] On the notion of thinkability in the *Tractatus*, see Mácha (2015, 44–46), where I follow Bradley (1992).
[13] The terms « atomic » and « molecular » are taken from Russell's introduction to the *Tractatus*. They serve to indicate the hierarchical nature of these levels.

The first remark expresses the horizontal correspondence between names and objects. The second one deals with the vertical configuration of objects into atomic facts – which horizontally corresponds to the vertical configuration of simple signs/names within atomic propositions. These two remarks express the lower two horizontal arrows in Fig. 1. The correspondence between atomic facts and atomic propositions is expressed in the following remark:

> "4.21 The simplest proposition, the elementary proposition, asserts the existence of an atomic fact."

With the lower part of our schematic figure now complete, we can move on to the upper part. The relation between atomic propositions and propositions in general, whether atomic or molecular, is truth-functional:

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

The vertical relationship expresses how atomic/elementary propositions can be combined into more complex, molecular ones. However, our main concern is with horizontal relationships, i.e., ones between different domains. Let us focus on the correspondence between molecular facts and molecular propositions, which is captured by the following remark:

> "3.24 A proposition about a complex stands in an internal relation to a proposition about a constituent of the complex.
> A complex can be given only by its description […]."

Internal relations are primarily concerned with structures[14]. Wittgenstein's first claim asserts that the structure of a molecular proposition corresponds to the structure of a molecular fact. As we already know, this structure has a truth-functional character and can be adequately captured by truth-functions, as Wittgenstein conceives them in the *Tractatus*.

The second claim may seem trivial at first, but I argue that it has far-reaching consequences. Remark 3.24 actually expresses a second-order horizontal correspondence between two vertical correspondences: the correspondence between atomic and molecular facts and the correspondence between atomic and molecular propositions. The horizontal correspondence equates two structures. However, the structure on the factual side is not pregiven (which is why it is marked by dotted lines in our figure). The structure can only be given by its description, which is a structure on the language side. This means that there cannot be any structure independent of language, due to the inherent contingency of all facts, as we previously discussed. According to TLP 2.061, atomic facts are mutually independent, and there is no ontological relation between them that binds them into a molecular fact. Thus, the structure cannot be inherent to facts; it must be imposed on molecular facts by language. Complex or molecular facts are not independent ontological entities, unlike atomic facts. The truth-functional logical framework engendered by language is what constitutes a molecular fact.

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[14] As argued in Mácha (2015, 43). This interpretation builds on McGinn (2006).

The main lesson to be drawn from this discussion is that while Wittgenstein describes the correspondence between language and reality on multiple levels, only the highest level can be seen as a correlation in Meillassoux's sense. While there is a one-to-one correspondence between names and objects, objects can still exist independently of their names. Their combinatorial properties[15], such as how they can be combined into atomic facts, are essential properties not imposed by language. Combinatorial properties are a logical reinterpretation of Democritus's physical hooks.

Atomic propositions correspond to atomic facts, and there is a one-to-one correspondence between them. However, neither has any internal combinatorial properties. The combination of atomic propositions is arbitrary, as long as they preserve a truth-functional structure. Any combination is possible and arbitrary, and this arbitrary combinatorial structure is imposed on atomic facts by language.

In the next section, we will focus on the lower part of the figure. I will argue that Meillassoux's account of the empty sign has many similarities to the *Tractatus*'s treatment of names and variables.
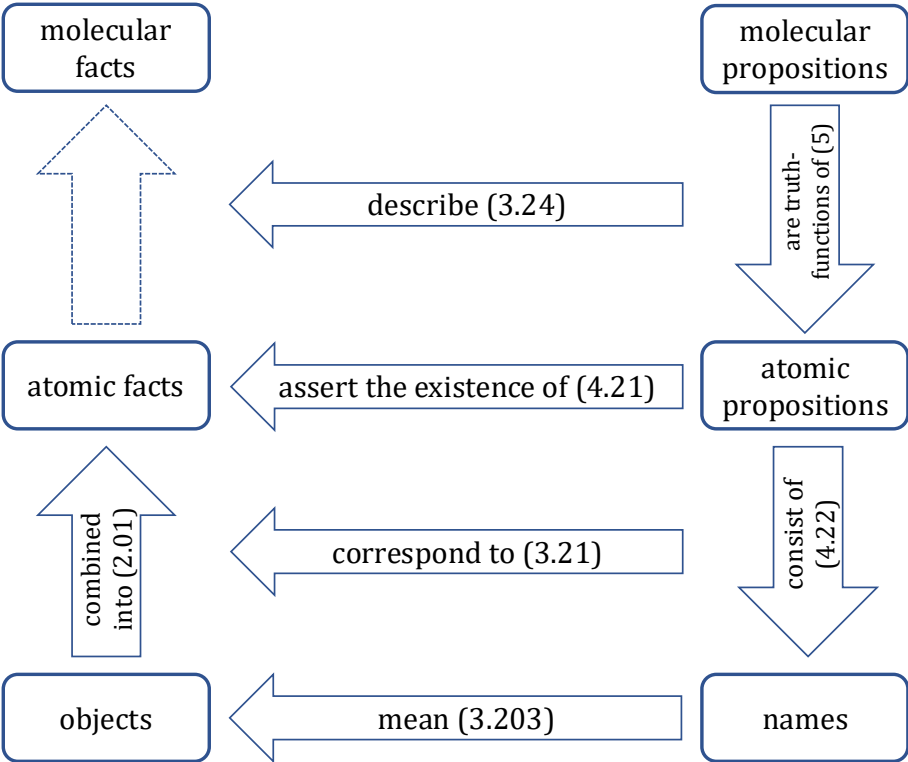

Fig. 1 Correspondences in the Tractatus

III. Meillassoux's derivation of the sign devoid of meaning

Meillassoux argues that mathematical languages are able to represent reality independently of thought, without resorting to the principle of sufficient reason and

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[15] The term « combinatorial properties » does not appear in the *Tractatus*. However, it aptly captures the nature of the internal properties of objects, as discussed by Lando (2012) and Zabardo (2015, Ch. 5).

correlation. The distinguishing feature of such languages, he argues, is their ability to conceive of the empty sign – a sign devoid of meaning[16]. This minimal requirement is what allows them to capture the absolute contingency of entities[17].

We need to distinguish two claims: first, that it is possible to think the empty sign; and second, that the capacity to think the empty sign enables access to mind-independent reality. Meillassoux provides a detailed argument for the former claim but only briefly sketches the latter. I will argue that Meillassoux's empty sign corresponds to Wittgenstein's concept of a sign (a perceptible mark) that is taken independently of its symbol or meaning. Therefore, the capacity to think the empty sign, within Wittgenstein's framework, means the ability to take a sign independently of its symbol. Wittgenstein does not provide an argument for the existence of this capacity[18]. Meillassoux's derivation of the empty sign can therefore be seen as supporting Wittgenstein's distinction between sign and symbol.

To understand the concept of a sign devoid of meaning, consider the following observation: ZF set theory is grounded in axioms that dictate what can be done with sets, but it lacks an explicit definition of what a set is. Instead, the axioms serve as rules for how signs representing sets can be combined. These signs lack any preassigned or precorrelated reference, making them empty or devoid of meaning.

The term « devoid of meaning » is somewhat misleading and implies a referential theory of meaning; better would be « devoid of explicit definition. » This problem may be due to the translation of the French « sens » as « meaning ». « Sens » can also mean « sense » or « direction » (see IRR, 195, fn. 38). Meillassoux argues that a sign is empty because it does not appear as the *definiendum* in a definition of the form *definiendum = definiens*. However, empty signs can still appear in normative rules, such as the ZF axioms, that specify what can be done with those signs[19].

Before delving into the nature of the empty sign, it is important to introduce Meillassoux's distinction between base-signs and operator-signs. Base-signs consist of constants and variables and are supposed to be empty, whereas operator-signs typically involve logical or mathematical connectives and allow the formulation of rules for what can be done with base-signs. However, Wittgenstein argues that these operator-signs must be eliminated from a logically perspicuous language, and he takes this to be *the* fundamental insight of the *Tractatus* (TLP, 4.0312)[20]. Wittgenstein presents a complex argument in the *Tractatus* that reduces all logical connectives to the generalized Sheffer stroke and introduces the

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[16] Several authors, most notably Livingston (2012) and van Gerven Oei (2014), have argued that Meillassoux is mistaken in thinking that empty signs mark the distinctiveness of formal languages. They, drawing on insights from Derrida's deconstruction, suggest that empty signs mark formal aspects of any language. This is an apt criticism. Besides, this point brings Meillassoux's account of empty signs closer to Wittgenstein's *Tractatus*. Wittgenstein differentiates between everyday language and sign-language (TLP, 3.323, 3.325). The purpose of sign-language is to reveal the inherent logic of everyday language. Everyday language is « logically completely in order » (TLP, 5.5563).

[17] Capturing the absolute contingency of all entities is the main reason of Meillassoux' discussion of the empty sign. We will address this point in more detail later on.

[18] However, as we shall see, some commentators see this capacity as implicit in the *Tractatus*. Cf. fn. 24.

[19] As Livingston (2012) states, Meillassoux believes that defining a sign contextually, known as an implicit definition, does constitute equipping it with meaning. However, for Meillassoux, the sole way to imbue a sign with meaning is by correlating it to something outside of the system – an external referent. This is an idiosyncratic use of the term « meaning ». It would render many parts of natural languages devoid of meaning, such as adjectives, adverbs, verbs, and terms for abstract concepts. Therefore, an empty sign cannot be considered the distinctive feature of formal languages.

[20] I align with Landini (2007, 79) in equating this fundamental idea with the doctrine of showing, as also discussed in Mácha (2015, 51).

general form of propositions, where the logical operation is captured by its formal properties. This argument can be adopted into Meillassoux's theory to enrich and strengthen his speculative materialism.

Let us now return to base-signs, which are devoid of explicit definition. Meillassoux claims that base-signs are arbitrary, meaning that any perceptible mark can serve as a base-sign. The visual or auditory properties that represent a concrete sign are arbitrary and unrelated to the meaning or function of the sign. Meillassoux argues that this radical arbitrariness allows the sign to capture the contingency of every entity.

Meillassoux attempts to demonstrate the possibility of the empty sign, and reflects on how it can be recognized as the same sign across numerous instances, given its arbitrary nature. He proposes a unique solution: The empty sign must be capable of potentially unlimited reproduction, and while each instance may differ slightly (as, for instance, in handwriting), it must still be recognizable as an instance of the same sign.

Meillassoux investigates the difference between repetition of the same ornamental pattern and iteration of the same sign (and similarly, for the auditory modality, between repetition of the same tone and iteration of the same acoustic signal). Although the perceptible appearance of these two series is the same, Meillassoux introduces the following terminology to distinguish them: A series of ornamental patterns is called *repetition*, while a series of signs is called *iteration*. The question then arises: What distinguishes repetition from iteration?

Meillassoux draws on Bergson's idea that a repetition produces a differential effect that is not based on any distinguishability between patterns or tones. The same tone is heard differently when repeated. This effect is called the *threnody* effect, and although Bergson believed it only occurs in the auditory modality, Meillassoux argues that it occurs in the visual one too. He calls this the *frieze* effect, and provides architectural examples. If a sign is to be recognized repeatedly, this differential effect must be negated.

Meillassoux posits a connection between the iterability of a sign, its arbitrariness, and the contingency of every entity. According to him, the contingency of a thing is iterable identically from mark to mark without any differential effect of repetition (IRR, 180). This connection between contingency and iterability indicates that a sign must be seen as arbitrary, i.e., replaceable by any other shape, if it is capable of unlimited iteration. In other words, any visual or auditory appearance is contingent, and to see a thing as an iterable sign is to see this thing in its contingency.

To understand how a thing can be perceived in its contingency, Meillassoux distinguishes between two modes of perception: ordinary and semiotic. In ordinary perception, we first grasp the thing through its properties and only secondarily consider its contingency/its facticity, i.e., the fact that it is given to us as what it is (IRR, 182). On the other hand, in semiotic perception, we begin with the thing's facticity, which surrounds it like a « diffuse aura » (IRR, 182)[21]. Perceiving a thing in this way allows it to be iterated, meaning it can escape the differential effect of space-time. This does not mean that empirical properties of the thing are disregarded. A visual mark perceived as a sign retains its empirical

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[21] According to van Gerven Oei (2014), Meillassoux's belief that repetition and iteration are fundamentally distinct may be called into question. Van Gerven Oei refers to the tradition of asemic writing or lettrism, where the distinction between the two modes of apprehension is blurred. However, it should be noted that this is a relatively uncommon phenomenon in the broader context of writing. Instances where readers or viewers are uncertain whether they are encountering a text or an ornament are rare. Furthermore, Meillassoux demonstrates awareness of this phenomenon when discussing pseudolanguages, such as those featured in the Voynich manuscript (IRR, 168 and 196). Therefore, the distinction between repetition and iteration can be preserved.

properties, but its facticity, its occurrence within a fact, takes precedence over its physical properties.

Meillassoux proposes a way to recognize a thing as a sign without invoking meaning or reference: by perceiving it in its facticity. In ordinary perception, we first grasp a thing through its properties and then consider its contingency. In contrast, semiotic perception begins with a thing's facticity as its primary aspect, while its physical properties are secondary. Meillassoux has yet to provide a comprehensive argument for how such a sign can access mind-independent reality[22]. In the next section, we will explore the Tractarian account of names and variables, which aligns with Meillassoux's proposed view of semiotic perception.

IV. Names in the Tractatus are empty signs

I argue that Tractarian names and variables capture the essence of Meillassoux's notion of empty signs. Wittgenstein's logical atomism highlights the primacy of facts over things, as stated at the beginning of the *Tractatus*: « The world is the totality of facts, not of things » (TLP, 1.1). Objects do not have material properties, only formal ones, which show how objects combine into atomic facts (TLP, 2.011). Meillassoux describes Galilean materialism as the view that matter has no qualities, and is therefore « entirely mathematically describable » (2010, 6). As signs are objects like everything else, they are iterable by default. Thus, any fact can assume the role of an empty sign. To understand the Tractarian account of signs, we can turn to Wittgenstein's clear definition: « The sign is the part of the symbol perceptible by the senses » (TLP, 3.32). A symbol is a sign with meaning, whereas a sign considered in isolation, without its meaning, is abstracted from a symbol and therefore devoid of meaning[23]. Wittgenstein's terminology of « sign » and « symbol » corresponds to Meillassoux's distinction between a « sign devoid of meaning » and a « sign provided with meaning » (IRR, 182).

To clarify, Tractarian names are devoid of explicit definition, which is what Meillassoux means by « devoid of meaning ». Wittgenstein confirms this at several points throughout the *Tractatus* and his later work. For example, he says that « objects can only be *named* » and « I can only speak *about* them: I cannot *put them into words* » (TLP, 3.22). While the meaning of a name cannot be put into words, it must be explained to us for us to understand it (TLP, 4.026). This is true in ordinary perception, where names and objects are considered in isolation from their roles in propositional signs and facts. However, in semiotic perception, which is the default mode of apprehension in the *Tractatus*, no such explanation is needed. Wittgenstein emphasizes this in a later remark:

> "3.33 In logical syntax the meaning of a sign should never play a role. It must be possible to establish logical syntax without mentioning the *meaning* of a sign."

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[22] Meillassoux acknowledges this when he concludes an earlier draft of his article « Iteration, Reiteration, Repetition » with the statement: « But we have not at all shown that the empty sign allows, in turn, the description of a world independent of thought. » (2012, 37)

[23] Here, I follow Proops (2022, §1), who equates symbols with signs together with their meanings.

The remark emphasizes that in logical syntax, signs are defined based on their combinatorial properties rather than explicit referential definition. As a result, these signs are devoid of meaning[24].

I will now argue that, according to Meillassoux, these signs are arbitrary. Wittgenstein believed that a notation is essentially arbitrary (TLP, 3.342), as the way it is produced determines its arbitrary character. What is necessary is its capacity to signify, as « the real name of an object was what all symbols that signified it had in common » (TLP, 3.3411). This means that a name does not necessarily have to signify the object it does. There cannot be a pictorial relationship between names and objects, even though they are part of the overall picture theory of meaning.

IV.a Names as variables

To put my main point more clearly and succinctly: Tractarian names, when viewed as variables, are equivalent to Meillassoux's signs devoid of meaning. This is because the arbitrary nature of the notation used to signify objects means that the name can be substituted with any object, and its formal properties, rather than its referential ones, are what matter.

Wittgenstein's account of variables is peculiar in that variables must always occur within a proposition. There are no individual variables that refer to objects, only propositional variables whose values are the propositions that contain the expression (TLP, 3.313). It is incorrect to say that x ranges over objects a, b, c, etc. Rather, the propositional variable « There is an x » ranges over propositions like « There is an a », « There is a b », and so on. Wittgenstein's crucial point, and this is relevant to my argument, is that:

> "5.526 We can describe the world completely by means of fully generalized propositions, i.e. without first correlating any name with a particular object."[25]

This is the most explicit expression of Wittgenstein's anticorrelationism in the *Tractatus*. Wittgenstein also refers to such description as « impersonal representation of the world » in his *Notebooks* (NB, 20). This complete representation is achieved by turning all simple signs into variables, which are signs without explicit referential definition: « All the signs in [a proposition] that have arbitrarily determined meanings are turned into variables » (TLP, 3.315).

Atomic propositions are composed solely of names, which are then converted into variables, resulting in fully generalized propositions that are composed entirely of variables. Wittgenstein gives an example of such a proposition (TLP, 5.5261):

> "$(\exists x, \phi).\phi x$"

This has the logical form of a second-order predicate calculus, as it quantifies over predicates (ϕ). However, adopting such a logic raises philosophical issues, mainly due to

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[24] What is suggested here is that signs can appear with syntax but without meaning. See Johnston (2007) for a defense of this somewhat controversial view.

[25] van der Does and Stokhof (2020, 780) find Wittgenstein's focus on « fully generalized propositions » puzzling. They rightly note that remark 5.526 leaves the use of quantifiers unclear. They also rightly point out that the notion of propositional variables can help resolve this lack of clarity. Evidently, if we recognize that a fully generalized proposition is a propositional variable with all names turned into variable names (i.e. « variables » in the modern sense), no quantification is involved or needs explaining.

its incompleteness. While I cannot discuss these issues here, they must be addressed to support the argument that the world is fully describable through fully generalized propositions. Wittgenstein grapples with the tension between the contingency of fully generalized propositions and their necessity as formal properties of logical notation in a remark from his *Notebooks*:

> "What the completely general propositions describe are indeed in a certain sense structural properties of the world. Nevertheless these propositions can still be true or false. Even after they have meaning, the world still has that range [*Spielraum*]." (NB, 20, translation modified)

The German word *Spielraum* captures the idea of contingency (*Spiel*) within a general framework (*Raum*). Wittgenstein explains what this *Spielraum* is in the *Tractatus*: « And the range that the totality of elementary propositions leaves open for its construction is exactly the same as that which is delimited by entirely general propositions » (TLP, 5.5262). The formal properties of the logical notation correspond to the structural properties of the world. This is similar to Kant's above-quoted claim about the transcendental conditions of experience, but with a crucial difference. Wittgenstein sees the formal properties of the world as contingent, allowing generalized propositions to be true or false. This type of contingency is distinct from *Spielraum*[26]. Wittgenstein's acknowledgment of this radical contingency – which is given little emphasis in the *Tractatus* – enables him to avoid Meillassoux's critique, which I will present shortly.

V. Meillassoux's critique of the Tractatus

Meillassoux criticizes what he calls strong correlationism and later subjectivism, which he argues is endorsed in *Tractatus*. He puts forward the argument of *correlational facticity*, which highlights the « *thinkable* nonnecessity of correlation » (IRR, 135). Meillassoux agrees with the strong correlationist that there is no reason for the correlation itself; but he is concerned that the strong correlationist takes the correlation as the *arche-fact*, meaning a fact that cannot be conceived as different from what it is or as not existing, but whose necessity cannot be demonstrated (IRR, 135).

How does Meillassoux's argument apply to Wittgenstein's case? Meillassoux quotes several remarks about the mystical from the *Tractatus*, such as 6.522 (cited in AF, 41–42): « There are, indeed, things that cannot be put into words. [...] They are what is mystical. » This wording suggests that there are *things* or *objects* that cannot be named and thus cannot be expressed in language. However, the expression « things » does not occur in the German original, which refers merely to « *Unaussprechliches* » – rendered more directly in Ogden/Ramsey's older translation as: « There is indeed the *inexpressible*. [...] it is the mystical. » This inexpressible/mystical is specified in 6.44 (also quoted by Meillassoux): « It is not *how* things are in the world that is mystical, but *that* it exists. » Again, the word « things » has no counterpart in the German original, and it is misleading to say that there are inexpressible mystical things. Ogden/Ramsey's translation is more accurate: « Not *how* the world is, is the mystical but *that* it is. » Recall that the term « world » has a technical sense in the *Tractatus*: « The world is the totality of facts, not of things » (TLP,

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[26] Bradley (1992) envisages this kind of higher-order possibility in the *Tractatus*, though his argument and textual evidence differ from my approach.

1.1)[27]. It is thus misleading to say that there are inexpressible mystical things. What is inexpressible is that there is the totality of facts. In *Time Without Becoming*, Meillassoux uses slightly different wording: « The *Tractatus Logico-Philosophicus* [...] designates as 'mystical' the mere fact that there is a consistent world » (2014, 12), which is a plausible paraphrase of Wittgenstein's words. However, why speak here of « consistency »? The mere fact that there is a consistent world does not imply anything about its correlation with language or thought.

Wittgenstein says quite explicitly that the world can be changed: « If good or bad willing changes the world, it can only change the limits of the world, not the facts; not what can be expressed by means of language » (TLP, 6.43). The world could have been constituted by a different totality of facts, even without there being any single fact that differs between that other totality and the one that actually constitutes the world. This means that the world is contingent in Meillassoux's sense of the term, i.e., it « could have existed otherwise » (IRR, 135). On the other hand, it is mystical whether the world is capable of not being – which is another sense of « contingent » in Meillassoux.

Since a different world is conceivable, it is thus *factual* (again, in Meillassoux's sense). As we know, the world is fully describable by means of fully generalized propositions. We can conceive a different collection of such propositions. That means that different fully generalized propositions will be true or false. Such a different world is thinkable outside any correlation between names and objects. Of course, within our world and language we cannot express factual statements about the other world because we lack its language. This language has a different collection of names or names with different internal/combinatorial properties.

Hence, the world is contingent and factual. This contingency and facticity are of a more fundamental order than the contingency and facticity of empirical facts (see IRR, 135). This is how the *Tractatus* can accommodate correlational facticity. And so the argument presented above can be employed in support of (not against) the general outlook espoused in the *Tractatus*.

Conclusion

We began by discussing the different types of contingency present in Wittgenstein's *Tractatus* and Meillassoux's writings. Although their accounts differ in scope, both deny the absolute validity of the principle of sufficient reason and the law of causality. Since correlationism – as construed by Meillassoux – postulates some kinds of necessary entities, it is startling that Meillassoux takes the *Tractatus* as the epitome of strong correlationism[28]. Our next task was to explore correlationism, and correlation itself, and to determine whether the *Tractatus* aligns with this perspective. We found that Wittgenstein presents a multilayered system of correspondences between language and reality, known as the picture theory. While the uppermost level of the picture theory, which links propositions and facts, can be considered correlational in Meillassoux's sense, the lower and more fundamental levels, which link names and objects, and atomic propositions and atomic facts are not based on explicit correlations. I then argued that the

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[27] M. Beaney's recent translation accurately renders 6.44 and 6.522, without implying that Wittgenstein was committed to the existence of mystical things.

[28] As demonstrated, it is not a straightforward matter to attribute correlationism to Wittgenstein. This supports Livingston's (2013, 104) observation that Meillassoux presents a straw argument under the label « correlationism ». See also Muller (2020), who distinguishes various kinds of correlations and categorizes Wittgenstein's *Tractatus* as espousing so-called « metaphysical correlationism ».

lowest level of the picture theory aligns with Meillassoux's concept of the sign devoid of meaning, which supports his broader claim that formal discourse can capture a mind-independent reality. To avoid correlationism, signs must not be correlated with their objects through an explicit referential definition. Wittgenstein accordingly allows names to be transformed into variables that are not tied to any preexisting correlation with objects.

Wittgenstein's proposal that the world can be effectively described using fully generalized propositions composed solely of variables goes further than Meillassoux's argument. Meillassoux's mathematical discourse, comprising signs devoid of meaning, still requires that the way of working of operator-signs be stipulated (through implicit definitions). The *Tractatus*, by contrast, can do without such signs (for truth-functions). However, this approach comes at the cost of embracing a higher-order logical calculus, which introduces additional philosophical issues.

Finally, I addressed Meillassoux's charge that the *Tractatus* absolutizes correlation by excluding it. However, the *Tractatus* can be understood such that the limits of the world, i.e., the set of names and corresponding objects, can be changed by the willing subject[29]. This is a different kind of change than discarding the ladder, i.e., recognizing that the propositions of the *Tractatus* as useless once its insights have been accepted. With our current language, it is not possible to describe such an altered world, because the current world lacks suitable language to refer to the other world. In Meillassoux's terminology, the Tractarian framework is open to the category of the virtual, i.e., the emergence of something « which is not dominated by any pre-constituted totality of possibles » (Meillassoux 2007, 72).

This brings us to my final point that I want to revisit. Both Wittgenstein's *Tractatus* and Meillassoux present two types of contingency. Firstly, there is the ordinary contingency of facts, where every fact could be different and could change without any reason. Secondly, there is the fundamental contingency of things. As we have seen, this contingency can be thought through signs devoid of meaning, which amounts to saying in the Tractarian framework that objects can only be named (TLP, 3.221). Wittgenstein refers to this kind of contingency as *Spielraum*, whereas Meillassoux identifies it as the speculative contingency of the empty sign, which can be marked by any empirical particularity[30]. Clearly, speculative contingency of objects underlies ordinary contingency of facts. However, neither the *Tractatus* nor Meillassoux detail the exact link between these contingencies[31].

In conclusion, we can say that the extensive parallels between Wittgenstein's *Tractatus* and Meillassoux's speculative materialism can be looked at from two seemingly opposite perspectives. A critic can argue that Meillassoux's ideas are not as revolutionary as he

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[29] Meillassoux could reasonably object that if the limit of the world is alterable by the willing subject, then the world fails to be independent of that subject. However, Wittgenstein's willing subject is no ordinary psychological entity (TLP, 5.641). And the world (in contrast to its limit) remains independent of that willing subject (TLP, 6.373). This interrelation clearly constitutes a complex matter exceeding the scope of this paper. I develop this idea in my forthcoming essay Mácha (2025).

[30] « any sensible reality whatsoever being able to serve as a mark » (IRR, 182).

[31] Livingston notes this gap in Meillassoux's argument when he writes: « it is not clear why we must understand the 'contingency' involved in the fact that any lexicographic sign could serve the same role as any other as having anything to do with the kind of contingency Meillassoux wishes to assert of events in the actual, mind-independent universe » (Livingston 2012, 28). I would concede Meillassoux made a serious attempt to explain the potential relationship between these two contingencies.

claims[32], while a sympathetic observer would claim these parallels confirm a certain depth in Meillassoux's thought. Both perspectives, in my opinion, are correct and can be adopted in tandem[33].

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[32] See Livingston (2012), Clemens (2013), and van Gerven Oei (2014) for this line of criticism, albeit limited to the context of continental philosophy. Livingston argues that « virtually every aspect of Meillassoux's discussion of the iterable structure of the 'meaningless' or 'empty' sign and is prefigured in existing twentieth-century structuralist and post-structuralist discussions of the character of signs and their syntax, and *pre-eminently* in Derrida's project of deconstruction ».

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