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**The (In)dependence of Elementary Propositions in
Early Wittgenstein**

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Abstract

In my Master's thesis, I focus on the problem of dependence and independence of elementary propositions in the *Tractatus* and *Some Remarks on Logical Form*. The main issue I wish to analyze in my investigation is the question of whether the independence of elementary propositions (asserted in the *Tractatus*) is necessary for the maintenance of *Tractarian* truth-functional analysis of propositions. The motivation behind this is the fact that, in the *SRLF*, Wittgenstein explicitly rejects, after precise argumentation, the independence of elementary propositions concerning characteristics allowing gradation. After analyzing the essential arguments and precise rendering of independence of elementary propositions in the *Tractatus* and considering arguments for their dependence in the *SRLF*, I argue that (based on my analysis of both works) the mutual dependence of some elementary propositions is not problematic for *Tractarian* truth-functional analysis.

Keywords

elementary propositions, picture, truth-functional analysis, dependence of elementary propositions

List of Abbreviations

The following abbreviations are used to refer to Wittgenstein's works, listed in chronological order:

- [NB] *Notebooks 1914-1916*, Blackwell, Oxford, 1988
[PR] *Philosophical Remarks*, Blackwell, Oxford, 1975
[SRLF] *Some Remarks on Logical Form*, Philosophical Occasions 1922-1951, Hackett Publishing Company, 1993, pp 29-3
[Tractatus] *Tractatus Logico-Philosophicus*, Pears, D. F., McGuinness, B. F. (trans.), Routledge, London, New York, 1974

These abbreviations refer to works on Wittgenstein, also listed in chronological order:

- [Anscombe] Anscombe, G. E. M., *An Introduction to Wittgenstein's Tractatus*, London, Hutchinson, 1967
[Griffin] *Wittgenstein's Logical Atomism*, Oxford University Press, London, 1964
[McGuinness] McGuinness, Brian, *Approaches to Wittgenstein*, Routledge, London, New York, 2002
[Medina] Medina, Chosé, *The Unity of Wittgenstein's Philosophy (Necessity, Intelligibility, and Normativity)*, State University of New York Press, Albany, 2002
[Morris] Morris, Michael, *Wittgenstein and the Tractatus*, Routledge, London, New York, 2008
[Sullivan] Sullivan, Peter, *A version of the picture theory*, in: W. Vossenkuhl (ed.), *Wittgenstein: Tractatus - Klassiker Auslegen*, Akademie Verlag, Berlin, 2001, pp. 89-110
[White] White, Roger, *Wittgenstein's Tractatus Logico-Philosophicus*, Continuum International Publishing Group, London, New York, 2006

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Introduction

The aim of my Master's Thesis is to investigate Wittgenstein's conception of the independence of elementary propositions in the *Tractatus*, changes of this conception in *Some Remarks on Logical Form* (where the argument for the *dependence* of elementary propositions is to be found) and the consequences of these changes for the *Tractarian* conception. The main question lies in asking whether the recognition of the mutual dependence of elementary propositions presents a fatal problem for the *Tractarian* conception of logical analysis (leading, according to Wittgenstein, to the mutually independent elementary propositions). My answer will be in the negative, which this Thesis aims to explain and justify.

Even though it is asserted by Wittgenstein in the *Tractatus* that elementary propositions are mutually independent, many commentators¹ agree that, taking into account the whole of the *Tractatus* and its theory of logical analysis, there is no necessity to thus assert. While we may try to enumerate several possible reasons² why Wittgenstein was led to such a conclusion, we

1 Even though this interpretative claim is to be found primarily in the anti-ontological reading of the *Tractatus*, even the famous commentators from the opposite side (Griffin (Griffin, 77), Pears (Pears, *The Logical Independence of Elementary propositions*, in: Block, Irvin (ed.), *Perspective of the Philosophy of Wittgenstein*, MIT Press, Cambridge, Massachusetts)) agree that there is no persuasive reason for the necessity of the independence of elementary propositions.

2 In this connection, Pears (Pears, *The Logical Independence of Elementary propositions*, in: Block, Irvin (ed.), *Perspective of the Philosophy of Wittgenstein*, MIT Press, Cambridge, Massachusetts, 1981, 83) asserts that the main assumption, which can support the independence of elementary propositions, is that simple objects are strictly only mutually independent particulars (see also Griffin, chapter "States of Affairs"). On the contrary, if we accept (as Wittgenstein did in the *SRLF*) that e.g. brightness or (shade of) colour can be counted as simple objects in elementary propositions, we can clearly see that two elementary propositions mentioning two intensity of brightness (or two (shades of) colours) cannot be mutually independent. Moreover, it is not easy to imagine which simple objects could be completely mutually independent. As Griffin notes, only the fact that simple objects are "objects" means that they are supposedly *spatially* configured. But, as Griffin sees (Griffin, 77), spatial configurations exclude one another: "*a* and *b*'s being one inch apart, for example, means that they are not two, three, or four. This is why I said earlier that the mutual independence of states of affairs and elementary propositions is a puzzling affair. If things like this do not qualify, what will? On the face of it, the answer is either *nothing*, in which case Wittgenstein has simply failed to see how extreme the consequences of his claim were going to be, or *very little*, in which case it is hard to see how an entire language can be built out of such scanty resources – far scantier, certainly, than any other analyst of the period allowed himself", Griffin, 77. And

shall nevertheless find (as I will attempt to show) that no persuasive argument can be found in the *Tractatus* to substantiate this assertion. On the contrary, the view ascribing a mutual dependence to (some of) the elementary propositions is more comprehensible. Based upon this, I shall interpret *Some Remarks on Logical Form* not as a denial of the *Tractarian* conception, but rather as its *correction*, even though I will also show that this correction could potentially lead to the abandonment of many *Tractarian* assertions.

Thematically, I shall thus proceed as follows. I will investigate the independence of elementary propositions in the *Tractatus* and the argumentation for its dependence in *Some Remarks on Logical Form*. In order to do this, it is necessary to access the broader realm in which the theme of elementary propositions is introduced in the *Tractatus*. I shall interpret the elementary propositions as an indirect result of the argumentation from (1) 2.021-2.0212 and (2) 3.23-3.24 of the *Tractatus*. Thus, both argumentative procedures will be introduced, as well as both their presuppositions and consequences. I shall try to show that while both arguments begin with the theme of “picture” (and of propositions as pictures), they subsequently proceed to the discussion of truth-functional analysis of propositions.

I shall further interpret these two themes (pictures and truth-functional analysis) as being connected in a way in which pictorial metaphor of propositions leads inevitably (through the notion of logical form) to the concept of propositional truth-functional analysis which subsequently leads to the theme of elementary propositions. This transition from the theme of “picture” to truth-functional analysis is significant, because from the picture alone, we cannot proceed to the theme of elementary propositions. The theme of truth-functional analysis thus represents a theme allowing the transition from “picture” to “elementary propositions.” After the explanation of this transition, elementary propositions and its(in)dependence will be investigated.

To be more specific about the content, in *the first chapter*, I shall begin by considering the argument for the existence of objects (2.021-2.0212) which can lead us (albeit only indirectly) to the issue of elementary propositions and their independence. I devote some space to introducing the notions important for a precise understanding of the argument, namely that of “objects,” “facts,” “states of affairs,” and, the most importantly, “pictures,” “pictorial form,”

Griffin also believes that this problem is solved in the *SRLF* (Griffin, *Ibid.*).

“logical form,” and “proposition.” I shall carefully investigate the fourth chapter of the *Tractatus*, trying to show that it gradually proceeds from the themes of “picture” and “pictorial form” to “logical form” and, subsequently, to the logical truth-functional analysis of propositions, where the theme of *elementary propositions* and *their independence* is to be found.

The *second chapter* is structured in a similar manner, interpreting the argument for the existence of simple signs (3.23-3.24). I will try to show that the structure of the third chapter of the *Tractatus* is similar to its fourth chapter, again leading from pictures to the theme of logical analysis.

Finally, in the *third chapter*, I shall interpret the argument for the mutual *dependence* of elementary propositions from *Some Remarks on Logical Form*. Following this, I shall proceed to the central question of whether the dependence of elementary propositions leads to the abandonment of the *Tractarian* conception of truth-functional analysis.

In the *conclusion*, I will summarize the results of my investigations, and also try (even though in a very sketchy manner) to define the place *Some Remarks on Logical Form* has in Wittgenstein's early and transitory philosophy. (The necessity to define this place is given by the fact that I was led by my interpretation not to consider *SRLF* as being transitory in the true sense, but rather still being very “*Tractarian*.”)

1. Pictures and Pictorial Form

1.1 Argument for the Necessity of Objects

In this section, I begin with a consideration of the *Tractarian* argument proving the existence of objects. The reason for thus proceeding lies in the fact that this argumentation can further lead to the argument for the existence of the elementary propositions. Further in this section, we shall proceed to the central theme of “pictures” and “pictorial form,” for which initial considerations on the argumentation for the existence of objects pave the way. Let us now begin the argument, quoting the relevant passages of the *Tractatus* and trying to grasp the argumentation to be found there.

2.021

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

2.0211

If the world had no substance, then whether a proposition had sense would depend on whether another proposition was true.

2.0212

In that case we could not sketch any picture of the world (true or false).

The argument can be understood as an *argumentatio ad absurdum* with the premise that “there is no substance of the world,” i.e. no objects. On this interpretation, the argument runs as follows:

(1) The world has no substance.

If (1), then (2) whether a proposition had sense would depend on whether another proposition was true.

If (2), then (3) we could not sketch any picture of the world (true or false).

Let us take (1) for granted and ask what the consequences shall be. Firstly, we have to focus on the first consequence, i.e. that if there are no objects, then whether a proposition had sense would depend on whether another proposition was true. What Wittgenstein attempts to say is that, under the assumption of non-existence of the world-substance, the sense of a proposition would be dependent on the truth of another proposition. A proposition having sense means that proposition can represent a possible state of affairs (either actually existent or non-existent)³. Now, this proposition having sense would depend, there being no world-substance

³ It is a basic unquestioned presupposition of this argument as well as the whole *Tractarian* theory of

(i.e. objects), on the truth of another proposition. The exact rendering of this argument is still widely discussed insofar as it is probably the most elusive one in the *Tractatus* (White, 38).

As Michael Morris notes (Morris, 355), the main point of disagreement lies in the exact understanding of what it means for the sense of a proposition to depend on the truth of another proposition. The main question, then, is obviously what is that proposition whose truth is needed for another proposition to have sense. According to “a broad tradition of interpretation” (Morris, *Ibid.*), this other proposition is that which asserts the existence of what the initial proposition speaks about. Thus (using a proposition “Socrates is wise” as an example), the sense of this proposition depends on the truth of the proposition *asserting the existence* of the Socrates, i.e. “Socrates exists.” This interpretation is given by Griffin who employs Wittgenstein's example from the *Philosophical Investigation* to elucidate his point, speaking about “a broom” in the proposition “*the broom is in the corner*”:

The first proposition in the analysis [“the brush is attached to the stick”] specifies what I mean by 'the broom'. In order for me to be talking about anything at all, this proposition must be true. In other words, in general, *the proposition that must be true in order for another to have sense is the proposition which, by specifying the application of the description, gives it a sense.* By now we get into a regress, because *the same indeterminateness holds for the descriptions I used in the proposition which gives the sense of the first description.* What do I refer to in the world when I here speak of 'the brush' and 'the stick'? Unless we eventually reach names, the regress is infinite. The sense of a proposition will never be specified.” (Griffin, 67, emphasis mine)

To summarize Griffin's interpretation, he asserts that firstly, a proposition having sense depends on another proposition which asserts the existence of what is being spoken about in that proposition (in case of “Socrates is wise,” there has to be a proposition “Socrates exists,” in case of the broom, “the broom exists”). But, as Griffin further notes, the necessity of the proposition which asserts this existence is not enough for the infinite regress to begin. What we “need” for the infinite regress are another propositions which further define the expression used in the proposition. Thus, we have to further define what “stick” and “brush” mean or what “Socrates” and “wise” mean. In this sense, we would have to proceed in defining *ad infinitum*, unless there are simple signs (names) which stop this regress, being the basic signs which are not defined any more.

Michael Morris criticizes this interpretation, the main point⁴ (at least as I see it) of his critique

propositions that the sense of a proposition is its possibility of depicting (representing) a state of affairs.

being the assumption that there is a conflict between this interpretation and what Wittgenstein actually writes. While according to Wittgenstein, there is *a* proposition which must be true in order for another proposition's having sense, according to the mentioned interpretation, there is an infinite number of such propositions:

“[T]he end-to-analysis interpretation gives a strange over-reading of 'whether a proposition had sense would depend on whether another proposition is true'. It takes it to mean: whether a proposition had sense would depend on whether *an infinite number* of other propositions were true.” (Morris, 358)

We cannot deny that Wittgenstein really speaks only about one proposition making another proposition's having sense. Thus, Morris is certainly right on this point. I believe, however, that we can still maintain Griffin's interpretation, since we can explain how to read it in accordance with Wittgenstein's words. This can be achieved as follows: There is really only one proposition having the function of making another proposition having sense, this being “[that what is speaking about in the proposition] exists.” But this proposition can be further analyzed in the sense that the expressions used there still need further analysis. And even though there will be more than one proposition that represents this further analysis, it does not contradict Wittgenstein's saying that there is *a* proposition giving rise to another proposition having sense, since these further propositions do not analyze the first proposition in question, but the one asserting the existence. Thus, to make it more perspicuous, the analysis of “Socrates” and “wise” can be said to analyze the proposition “Socrates (who is wise) exists,” not the initial proposition “Socrates is wise.”

Thus, to proceed in our interpretation of the argument, if we do not wish to state that there is the possibility (or rather threat) of an infinite regress, it has to be curtailed somehow. This can be done by denying the initial presupposition which led to the undesirable condition we have been dealing with (i.e. whether a proposition has sense would depend on whether another proposition is true). The presupposition we are denying is that there is no substance. By this proof of contradiction, it was proved that there *is* a substance of the world, i.e. objects, these objects being the *necessary condition* which we have to postulate in order to stop the

4 There are other points Morris criticises. Most importantly, he asserts that the interpretation of Griffin and others presupposes several features language must have, e.g. that every language must contain names or at least their possibility (Morris, 356), if there are no objects being referred to, propositions would be nonsensical (Ibid.), etc. I do not consider these further points now, since I believe that the presuppositions Morris criticizes are reasonable and I not deny them in my interpretation.

threatening infinite regress. In this sense (objects conceived as the *necessary condition for the possibility* of the proposition having sense without depending on the truth of another proposition), we can say that Wittgenstein introduces a transcendental argument⁵ here for the substance of the world, i.e. for objects.

But we seem not to be finished as yet. From the way the argumentation proceeds, we are led to the further step which, according to Wittgenstein, follows from the condition that a proposition having sense would depend on whether another proposition is true. If this is valid, then we also have to admit the consequence that we could not sketch any picture of the world (true or false) which, generally speaking, means that we cannot construct a proposition or think a thought with sense (both propositions and thoughts being the pictures of reality).

But it is obvious that this argumentation presupposes several concepts which Wittgenstein only implies before the argument of 2.021-2.0212 is settled. Most importantly, it assumes that we picture the world, a thesis explicitly stated only in 2.1 where Wittgenstein says that “we picture facts to ourselves.” Moreover, the notion of a “picture” in general and the conception of proposition as a picture in particular need several explanations which are not to be deduced in the 2.021. Thus, the following sections will be devoted to the closer investigation of the

⁵ Anscombe also renders Wittgenstein's argumentation as a transcendental one, enforcing this interpretation by the citation from notebooks to the effect that we know about the existence of simple objects by the process of analysis leading to them: “Again, the simple objects are presented as something demanded by the nature of language at 2.0221, 2.0211 [...] We get further (though, I should judge, unnecessary) confirmation from an entry in the notebooks out of which he composed the *Tractatus*, in which he remarks (23.5.15): 'It also seems certain that we do not infer the existence of simple objects from the existence of particular simple objects, but rather we know them – by description, as it were – as the end product of the analysis, by means of a process leading to them.' The thought of this entry in the notebooks is in fact echoed in the *Tractatus* text at 4.221: 'It is obvious that in analysing propositions we must arrive at elementary propositions consisting of names in immediate combination.'”, Anscombe, 30. Moreover, she adds, Wittgenstein at the Notebooks is “absolutely certain that there are elementary propositions, atomic facts, and simple objects, even though he cannot produce one single example.” (Ibid.) But how could he be so certain (not knowing any example of simple objects), not having reached these objects by the apriori deduction? In a similar sense, Anscombe also notes that we should not simply assume Wittgenstein's “simple names” are Russell's “simple symbols,” since while Russell proceeds by epistemological arguments, Wittgenstein's procedure is closer to the Frege-like transcendental argumentation: “Wittgenstein shares with Russell the idea that the meaning of a name is its bearer: but in him this is not noticeably based on the British empiricism epistemology that influences Russell. We have, rather, a Frege-like argument: Unless names have bearers, there is no truth or falsehood.”, Anscombe, 49-50

theme of “pictures” and propositions as pictures.

1.2 Pictures

It is no exaggeration to assert that the “picture theory” forms the core of the *Tractatus*, even though interpreters differ in their individual renditions of what this “picture theory” exactly is and how broadly it is to be understood. In order to be clear in our interpretation, I assume the notion of the picture theory in what Michael Potter calls a more narrow interpretation⁶, which asserts that “picture theory” simply means that we make pictures of reality (these pictures being further identified with propositions with sense). I do not wish to dispute the central role picture theory plays in the *Tractatus*; rather, I will attempt to show that by proceeding from the general notion of “picture” to the “pictorial form,” picture theory gradually loses its importance in the *Tractatus*, being replaced by the more general notion of “logical form.”

Before speaking about pictures and picturing itself, Wittgenstein specifies at the beginning of the *Tractatus* what it is that we picture to ourselves.⁷ In the 1s' and the beginning of the 2s', we come to know that these *facts* of which we are making pictures are the constituents from

⁶ “Everyone who writes about the *Tractatus* agrees that the picture theory is one of its central themes. There is less agreement, though, about just what is meant by the 'picture theory'. Some use the phrase broadly as a sort of catch-all for the logical doctrines of the book, others much more narrowly for the specific proposal that propositions are pictures of reality. Exponents of the resolute reading of the *Tractatus* sometimes take 'picture theory' to be just what we recognize to be nonsense when we throw away the ladder. And a similar vagueness of reference is widespread in the literature on Wittgenstein's later writings, where it is commonly (and dubiously) asserted without further specification that he 'abandoned the picture theory'.”, Potter, Michael, *Wittgenstein's Notes on Logic*, Oxford University Press, New York, 2009, 224

⁷ In the most straightforward sense, we can say that by speaking about things we picture, we are making some ontological commitments about the things we picture. The proponents of the anti-ontological (Marie McGinn, Rupert Read *et alii*) and resolute readings (Cora Diamond, James Conant) of the *Tractatus* would stongly dissagree with the interpretation according to which Wittgenstein is interested in ontology and proposes any ontological commitments in the beginning of the *Tractatus*. They would assert rather that the ontological remarks are the mere „gibberish“ designed for being recognized as pure nonsense by our throwing away the ladder. Anyway, I do not intend to deal with these kinds of objections, since I do not intent to decide here whether Wittgenstein is employing an ontology or not in the *Tractatus*. In this sense, I leave the question open of whether Wittgenstein is insisting on the ontological commitments concerning objects or not. What I wish to emphasize is not so much the status of objects in the *Tractatus* (which theme would deserve another work to be written), but the role of the picture theory in general, and pictures and pictorial form in particular within the *Tractatus*.

which the world is composed (1.1 “the world is the totality of facts, not of things,” 1.13 “the facts in logical space are the world” and 1.2 “the world divides into facts”). Furthermore, a fact is the existence of a state of affairs (2), while a state of affairs is a combination of objects (2.01), the necessity of whose existence was proved in the argument discussed above. Based on these introductory remarks, we can grasp what we picture if we picture the fact. What remains to be understood is the process of picturing, which is the central theme of the second half of the 2s' (2.1-2.225).

A *picture* which we create about facts (or more generally, about possible states of affairs) is a *model*⁸ of reality (2.11). The model character then lies in the fact that, in the picture, pictorial elements are composed in such a way that for each pictured object, there is a corresponding element in the picture.⁹ In other words, in a picture, pictorial elements are related to one another in a way in which the objects are related to one another in the possible state of affairs. The fact that the connection is made only between elements (and not between the whole picture and what is being pictured) is essential, because it enables Wittgenstein to explain the thorny problem of how a false picture is possible: It is possible because elements of the picture have a different ordering from the elements of the pictured fact.¹⁰

8 As Morris notes, it is important to bear in mind that German “Bild” is etymologically more closely connected with English “model” (rather than “picture”). While the word “picture” evokes rather the pictures in art gallery, the word “model” is more straightforwardly connected with what Wittgenstein wishes to emphasize, i.e. the ordering of the pictorial elements. This is also why, Morris claims, the example of Paris courtroom model creates the central example for Wittgenstein's picture theory: “The core of Wittgenstein's new theory of language is presented in his famous remark in the notebook he was writing in September 1914: *In the proposition a world is as it were put together experimentally. (As when in the law-court in Paris a motor-car accident is represented by means of dolls, etc.)* This courtroom model seems to have been the inspiration for what has come to be known as Wittgenstein's 'picture' theory. But the term 'picture' here can be misleading. It translates the German 'Bild', which does not mean quite the same. 'Bild', like 'picture', is applied primarily to visual representation, but it gets there by a different route: 'picture' is linked etymologically with painting, while 'Bild' is connected with the more general notions of composition and formation. This means that 'Bild' is naturally applied to models, which 'picture' is not.”, Morris, 118-119

9 “[...] the only correlations which are required are between *elements* of the picture [...] and *things* in reality, not between the whole picture (sentence) and something in reality which might be taken to be the correlate of a picture (sentence).”, Morris, 129

10 The possibility to explain easily how the false picture is possible is the main achievement of the picture theory. It is exactly this point at which we can say that Wittgenstein's theory is more than the Russelian saying that the structure of the symbol must be identical with the structure of what is represented. See Michael Potter:

Probably the most important aspect of picture theory comes when Wittgenstein begins to distinguish between several forms of picture and what is pictured, i.e. between pictorial form (*Form der Abbildung*), representational form (*Form der Darstellung*) and logical form (*logische Form*). Even though we can say that *pictorial form (Form der Abbildung)* is the essential notion of the picture theory, as Peter Sullivan correctly notes¹¹, its rendering in the 2s' is highly ambiguous, since three senses in which pictorial form can be understood are presented (in 2.15, 2.151 and 2.17). While in 2.15, pictorial form is ascribed to the picture (being the possibility of its structure, i.e. of the connection of the pictorial elements), in 2.151 it is presented as a characteristic of things (i.e. of their being related to one another as the elements of the picture), while, finally, at 2.17 it is introduced as something that the picture and what is being pictured must have in common:

2.15 [...] Let us call this connection of its [of picture] elements the structure of the picture, and let us call *the possibility of this structure* the pictorial form of the picture.

2.151 The pictorial form is the *possibility that things are related to one another* in the same way as the elements of the picture.

2.17 What a picture must have *in common* with reality (in order to be able to depict it – correctly or incorrectly – in the way it does) is its pictorial form. (all italics mine)

Thus, pictorial form is (1) the possibility that elements of the picture are interconnected in a certain way, (2) the same possibility in the case of objects and (3) that what the picture and what is pictured must have in common so that the picture can depict what is being pictured.

“The idea that there is a harmony between the structure of a fact and the structure of the symbol it is quite explicit in the lectures Russell gave at Harvard in 1914, where he said that 'the structure of the symbol must be identical with the structure of the symbolised', and that 'there is always a sort of fundamental identity between symbol and symbolised. [...] The doctrine that 'the structure of the symbol must be identical with the structure of the symbolized' is certainly a key component of the picture theory [...] “ (Potter, 224); “It is, of course, natural to think of the essence of the picture theory as being the eye-catching claim that a proposition is a picture. But to decide whether that natural thought is right, we need to look at how far the eye-catching claim takes us beyond Russell's remark in 1914 that the structure of the symbol must be identical with the structure of the symbolized. [...] What the analogy of the picture aims to add to it is something positive – an *explanation* for the harmony. It is *by* standing in a certain configuration that the components of a proposition represent that that is how things are.” (Potter, 226) It is not only, as Potter says, that Wittgenstein can *explain* why there is a harmony between picture and what is pictured – more importantly, he can also explain why there is a possibility of a dis-harmony, i.e. the possibility of a false picture.

11 Sullivan, Peter, *A version of the picture theory*, in: W. Vossenkuhl (ed.), *Wittgenstein: Tractatus - Klassiker Auslegen*, Akademie Verlag, Berlin, 2001, pp. 89-110

While in cases (1) and (2), Wittgenstein draws attention to the above mentioned fact that the picture and what is being pictured are composed from mutually interconnected elements, point (3) brings new information.

There, Wittgenstein claims that in order to picture a fact, the picture must have something common with it (2.16), something identical (2.17), which in turn (according to Wittgenstein) is to be called “pictorial form.” While in the cases of (1) and (2) we can speak about the structure of the pictorial elements and what is being pictured, we should lay the main emphasis on the pictorial form as something common to the picture and what is being pictured.¹²

We can thus assume that the main emphasis concerning the notion of “pictorial form” is laid on the fact that it is something common with the picture and what is being pictured. Logical form (*logische Form*) is to be identified with pictorial form¹³, as I shall emphasize in the next section. But there is yet another form which is not to be identified either with pictorial form or logical form, i.e. the so called representational form (*Form der Darstellung*):

2.173 The picture represents its object from without (Its standpoint is its representational form [*Form der Darstellung*]). That is why a picture represents its object correctly or incorrectly.

2.174 Nevertheless, the picture cannot place itself outside of its representational form.

As Griffin emphasizes, representational form is identical neither with pictorial nor logical

12 It is again Peter Sullivan whose analysis of the notion of “pictorial form” focuses primarily on the third answer (pictorial form as something in common), calling Wittgenstein's account *deflationary*. It means that Wittgenstein does not explain, but rather *presupposes* (again, in the style of transcendental presupposition) that there must be something in common between picture and what is pictured: “[...] the most natural way to understand this [2.17] remark is to suppose that alignment between the combinatory possibilities for names and objects is a *condition* of the representing relation: And this is indeed what Wittgenstein goes on to make explicit: To be a picture a fact *must have something in common* with what it pictures. In the picture and what it pictures there *must be something identical*, in order that the one can be a picture of the other at all. What the picture *must have in common* with reality in order to be able to picture it as it does, truly or falsely, is its pictorial form. [2.16, 2.161, 2.17]. This is enough to justify a deflationary response at the point where we were inclined to detect a kind of superstition.” (Sullivan, 14, italics mine).

13 It is deduced already in 2.18, where logical form is given the same characteristic as pictorial form (in the sense (3)): What any picture, of whatever form, must have in common with reality, in order to be able to depict it – correctly or incorrectly – in any way at all, is logical form (*logische Form*), i.e. the form of reality (*Form der Realität*).

form.¹⁴ Wittgenstein tells us that a picture represents its object (what is pictured) from without, i.e. from a peculiar standpoint, while precisely this standpoint is to be called “representational form.” Already from this we can see that representational form cannot be identified with pictorial form: while standpoint is arbitrary, pictorial form is never arbitrary. What “pictorial form” designates is the fact that the picture and what is being pictured have something in common. On the other hand, representational form is the standpoint of the picture on the basis of which the picture represents what is being pictured from the outside. As Wittgenstein clearly states in 2.173, it is exactly the fact of standing outside of what is being pictured, that a picture can represent it correctly or incorrectly (truly or falsely).

Thus, while the pictorial form expresses a necessary condition of the picturing (i.e. that the picture and what is being pictured must have something in common), only the representational form can explain how it is possible that we can create a false picture. In that sense, it is striking that representational form is not mentioned again as the *Tractatus* proceeds. As we shall see, the main emphasis is laid on the pictorial form, which is subsequently identified with logical form. In the next section, I shall try to show that, to the extent to which we are concerned only with pictorial form, we can say that the pictorial metaphor gradually disappears from the *Tractatus*, since pictorial form is identified with more general logical form, which leads us to the theme of propositional truth-functional analysis. But still, we have to bear in mind that the pictorial metaphor is present in the *Tractatus*, because without the full account of picture (with pictorial as well as representational form), we would not be able to understand the possibility of a false picture (which is to be understood not through pictorial form alone, but with the aid of representational form).

14 „Representational form [*Form der Darstellung*], I believe, is sharply to be distinguished from pictorial form [*Form der Abbildung*]. A picture represents its object from outside it, Wittgenstein tells us, and its representational form is its standpoint. To depict something we must adopt a standpoint and pictures of the same situation may differ because in making them we adopt different standpoints. This is why picture's representational form must be different from its pictorial form; the latter is never arbitrary. This also explains why it is through its representational form that a picture is true or false. By co-ordinating the elements of a picture with objects in a fact we give the elements reference and make possible combinations of them possible bearers of sense. But it is not until we choose a standpoint – that is, determine that *this* structure of the elements will be used to say that the objects are structured in *that* way – that the picture can be true or false. Put roughly, a picture's pictorial form [*Form der Abbildung*] has to do with its having *sense*, and its representational form [*Form der Darstellung*] with its being *true or false*.”, Griffin, 95-96

1.3 From Pictures to Logical Analysis

The aim of this section is to answer the question of how the picture theory and elementary propositions are mutually interconnected. I shall hold the thesis that they are connected through the notion of “pictorial form” which finally leads, through reflection on the logical form, to the truth-functional analysis of propositions, where elementary propositions have their proper place.

It is not obvious that picture theory and truth-functional analysis could be connected so straightforwardly, i.e. in the way that truth-functional analysis is the result of investigation concerning picture theory. Rather, it is posed as a problem of how these two conceptions (picture theory on the one hand and truth-functional analysis on the other) are mutually connected in the *Tractatus*. We may think they are connected somehow externally, the final theory being the “mixture” of these two. In this chapter, I shall try to show it is not so; rather, the theory of truth-functional analysis of propositions is the *result* of the initial presentation of the picture theory. I believe the mutual connection of these two conceptions is to be traced by attentive interpretation of the fourth part of the *Tractatus*, where the transition from picture theory, through reflections on logical form, towards truth-functional analysis is presented.

The transition from pictorial to logical form takes place already in the 2s', namely from 2.18 to the end of the 2s'. In 2.18, a decisive step is made when the definition of logical form is offered, saying it is that what *any* picture must have in common with reality in order to picture it: “What *any picture, of whatever form*, must have in common with reality in order to be able to depict it – correctly or incorrectly – *in any way at all*, is a logical form, i.e. the form of reality” (emphasis mine). Thus, logical form has much in common with the pictorial form, being that what picture must have in common with reality in order to picture it. But there is an essential difference, arising from the fact that logical form is a form *any* picture (viz my emphasis in the quotation) must have in order to represent reality. While a picture *can* have a spacial form to represent something spatial or form of colour to represent something colored, it *must* have, from its nature of being a picture, also a *logical form*: “Every picture is *at the same time* a logical one. (On the other hand, not every picture is, for example, a spatial one)” (2.182).

Thus, it seems that logical form is the most general pictorial form, because, to be also called

the “form of reality” (2.18), it can represent anything from reality (while e.g. the spatial picture can represent only something spatial). In this sense, logical form became to be very vague and we can be justified in asking what exactly that what every picture *must* have in common with reality is. I believe the most concrete description of logical form is offered when (in 4.04) it is identified with logical multiplicity: “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.” (4.04). Thus, the most general feature which *must* be common to the picture and what is pictured is the fact that both have the same multiplicity in the sense of being theoretically divisible into the same amount of parts (in the case of language, parts being the expressions from which propositions are composed).

Now, the essential question is why exactly Wittgenstein initially talks about pictorial form when the result is the logical form as a logical multiplicity, i.e. something that has fairly little in common with general notion of a “picture.” In other words, while logical multiplicity suggests rather an idea of language being divisible into simple elements (and thus being the first step to the idea of the analysis), “picture” is such a general notion that it cannot in itself lead to the idea of language analysis. I believe Peter Sullivan interprets this transition in a convincing and illuminating way. He also begins by asking why Wittgenstein employs the general metaphor of a “picture,” when in logical form there remain only the most general features of it (in my interpretation, the same multiplicity), answering that by this, Wittgenstein simply follows his own line of thoughts which led him to the logical form:

“According to this passage [2.181-2.19] logical form is simply the least determinate picturing form. [...] The logical picturing form which all [pictures] share is simply the least determinate, and so most widely applicable, notion of form. [...] If there is no more to it than this, *why did Wittgenstein complicate his exposition by approaching the least determinate notion that centrally concerned him through the determinate and parochial?* I believe that the order of presentation here reflects an order in development of Wittgenstein's thought, and he maintained this order in the finished work, in the belief that some of the transparency that determinate forms give to the notion of picturing would be inherited by the notion of logical picture.” (Sullivan, 16-17, italics mine)¹⁵

15 See also Potter speaking about the “thinness” in connection with logical picture: “Wittgenstein later remarked that the *Tractatus* contains kitsch (Diary, 16 May 1930), and there is something to be said for the view that the picturing analogy is among the kitsch. For a spatial picture represents a way things might be configured in space, and it does so by configuring representatives of these things in space in just this manner. But a proposition is a *logical* picture. What this means is that the manner of combination in a proposition is not spatial or musical, or of any other particular kind. Rather it is whatever all these particular kinds of combination have in common. One way of putting this would be to say that the notion of logical picture has certain thinness to it:

Still, the fact that the remarks on pictorial form (and about pictures in general) follow the way Wittgenstein arrived at the idea of logical form is not the only reason why they are presented at the beginning of the *Tractatus*. The second reason lies, again according to Sullivan, in the fact that the metaphors of “pictures” and “pictorial form” are *transparent* in presenting the idea of representational relation. While in language, its logical form is in the generality of cases hidden (4.0416), the metaphor of spatial or colour pictures is clear and perspicuous in introducing the main features of the pictorial form.¹⁶ This transparency is owed to the fact that “some of least of the features of the represented situation are taken up into the manner of representation, and so *represent nothing outside themselves* [...] In the simplest, suggestive case that *transparency was achieved through certain natural features of the models* we envisaged *representing nothing but themselves*” (Sullivan, 18-19). Thus, the main feature of the picture metaphor is not expressed as a fact that the picture is connected with the pictured via something they have in common. While this connection is presupposed, the essential importance of pictorial metaphor lies in the fact that in some pictures, that what is pictured is presented perspicuously. Thus, the spatial picture represents something spatial, the coloured picture something coloured. In that sense, we can say that a picture represents nothing outside itself, in the sense that it has the form which the presupposed reality has (spatial form, of colour etc.) Even though language is not particularly perspicuous in this sense, it still “retains the grounds for its transparency” (Sullivan, 18) and represents for Wittgenstein the main subject of investigation.

1.3.1 Propositions as Logical Pictures

The fourth part of the *Tractatus*, beginning with the identification of thought to the proposition with sense (4), is already fully concerned with language, namely with propositions. After describing language as a “totality of propositions” (4.1), it seems that we

there is something unsubstantial about the manner of combination, in contrast to the case of a spatial picture, for instance, in which the manner of combination itself plays a representational role. And this thinness is essential to Wittgenstein's account.”, Potter, 227

16 “The story is endlessly told of how Wittgenstein fell upon the picture theory while considering how, in French law courts, models are used to clarify claims about, for instance, a traffic accident. This story may be, for all I know (or care), completely apocryphal; it is nonetheless significant. Such a model has a particular transparency, in that how things are represented as being can be *read off* from the model.”, Sullivan, 18

will be further led by the picture metaphor, since in 4.01, it is said that a proposition is “a picture of reality” or “a model of reality as we imagine it.”¹⁷ (The notion of “picture” and “model” amounts to the same metaphor, as we have already seen in the 2s'.) Nonetheless, the fact I want to emphasize is that even though at the beginning of 4s', propositions are compared with the picture (model), it is the last time this metaphor is given real significance in the fourth part. Further on, we shall proceed through *logical form* to the theme of language *analysis*, arriving finally at the thesis about *propositions being truth functions of elementary propositions*.

After asserting that language is a picture (4.01), Wittgenstein proceeds by noting that at first sight, a proposition does not seem to be a picture (4.011). But it is not a proof against its being a picture, because language often disguises its proper character and functioning (4.002). Even though we do not generally consider propositions to be pictures (of the world), we have to admit that a proposition of the form 'aRb' (“a” is in relation to “b”) “strikes us as a picture” (4.012). Thus, in the case of a proposition of the form 'aRb', Wittgenstein still emphasizes “the likeness” of the picture and the pictured as that which strikes us. But it is for the last time that “likeness” is given such an important role. Already in 4.014, a decisive transition from pictures and pictorial forms towards the “logical form” is made:

4.014 A gramophone record, the musical idea, the written notes, and the sound-waves, all stand to one another in the same *internal relation of depicting* that holds between language and the world. They are *constructed according to a common logical pattern* (*Ihnen allen ist der logische Bau gemeinsam*). (Like the two youths in the fairy-tale, the two horses, and their lilies. They are all in certain sense one.) (italics mine)

In the case of (1) a gramophone record, a musical idea, written notes and sound-waves and of (2) two youths, two horses and two lilies, there is no pictorial likeness, but still they are somehow connected (being “in a certain sense one”) through the *internal relation of depicting*. In other words, they are constructed according to a *common logical pattern*. Thus,

¹⁷ A decisive step stating that a “*proposition*” is also a picture is made already in 3s'. The peculiarity of the proposition (among other pictures) lies in the fact that, while other pictures are *also* logical pictures, a proposition is logical picture *par excellence*, because the logical form is its only important characteristic, *logical form* (or “the form of reality”) being that which all pictures must have in common in order to picture reality (2.18). A picture for which logical form is that which defines it is called a logical picture (2.181). Thus, a *proposition*, being defined by the fact that it has a logical form common with what it depicts, is a *logical picture*. (*Thought*, which is said (in 4.) to be “a proposition with sense,” is similarly defined.)

the pictorial similarity disappears and *internal relation of depicting* remains as the essential part of the picture metaphor, this relation becoming the central theme of forthcoming paragraphs. Already in the subsequent paragraph (4.0141), Wittgenstein describes *the law of projection (a rule)*, which is to be interpreted as identical with the above mentioned *internal relation of depicting*:

4.0141 There is a *general rule by means of which* the musician can *obtain* the symphony *from* the score, and *which makes possible to derive* the symphony *from* the groove on the gramophone record, and, *using the first rule, to derive* the score again. That is what *constitutes the inner similarity* between these things which seem to be constructed in such entirely different ways. And *that rule is the law of projection which projects* the symphony *into* language of musical notation. *It is the rule for translating* this language *into* the language of gramophone records. (italics mine)

We can interpret “general rule,” “law of projection” and “internal relation of depicting” as identical. While in 4.0141 the items (score, groove on the gramophone record, symphony) stand in the internal relation of mutual derivability, in a similar sense language stands in the internal relation to the world (even though the derivability is presumably not mutual, since we always begin with language and proceed by deriving the corresponding facts of the world). The internal relation (i.e. the rule, law of projection) can also be identified with the essential notion of *logical form*, i.e. with the most general feature being essential to the possibility of depiction. Based on these remarks concerning internal relation as a rule and law of projection, proposition is considered as a *logical picture* (4.03), i.e. as something whose main feature lies in having *logical form*.

Wittgenstein further introduces his essential theory of showing, asserting that proposition cannot say – but only *shows* – *logical form* (4.12, 4.121). Then, after investigating formal relations and properties (4.122-4.152), Wittgenstein proceeds by focusing on the essential theme of analysis and, subsequently, by concerning elementary propositions. The whole part 4.2 elaborates on the theme of analysis of propositions, beginning with essential statements about analysis leading to the elementary propositions:

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

4.21 The simplest kind of proposition, an *elementary proposition*, asserts the existence of a state of affairs.

4.211 It is a sign of a proposition's being elementary that there can be *no elementary proposition contradicting it*. (*kein Elementarsatz mit ihm in Widerspruch stehen kann*)

4.22 An elementary proposition consists of names. It is a nexus (*Zusammenhang*), a concatenation (*Verkettung*) of names.

4.221 *It is obvious that the analysis of propositions must bring us to elementary propositions* which

consist of names in immediate combination. This raises the question how such combination into propositions comes about. (all italics mine)

Beginning with the sense of a (meaningful) proposition, this is asserted to lie in agreement or disagreement with the possibility of states of affairs. In other words, if a proposition corresponds to the presupposed state of affairs, it is true; if not, it is false. After this general description of the sense of meaningful propositions, Wittgenstein finally introduces the “elementary proposition,” being described as “the simplest kind of proposition” asserting the existence of state of affairs. The independence of these elementary propositions is then expressed somewhat indirectly by asserting that the sign of the elementary proposition is the fact that “there can be no elementary proposition contradicting it” (4.211). We should take this assertion as saying that such a proposition which would be contrary to a elementary proposition cannot be elementary. As we can deduce from the fifth part of the *Tractatus*, Wittgenstein conceives this impossibility as a logical, i.e. *a priori*, and not merely an accidental impossibility. It is a necessary truth that from one elementary proposition, we cannot deduce another (5.133, 5.144).¹⁸ Elementary propositions are further described as consisting from the mere concatenation of simple signs (names), i.e. there are no logical connectives present in the elementary propositions, only interconnected names in “immediate combination.” It is obvious, asserts Wittgenstein finally, that analysis of meaningful propositions must lead to the “discovery” of the elementary propositions.

Why is there such a certainty about elementary propositions as the final step of the analysis? It arises (even though somewhat indirectly) from the initial argument we have been considering, i.e. from the argumentation in 2.021-2.0212. There, the argument shows us that we have to presuppose objects in order to avoid an infinite regress based on the fact that the sense of one proposition depends on the truth of another. Now, we have been reminded that sense of a given proposition is its possibility of describing a state of affairs (presupposed, similarly as objects, by the argumentation). It is probable that the assertion of the existence of the states of affairs means at the same time the assertion of the elementary propositions describing these states of affairs, since Wittgenstein considerations about objects and states of affairs are closely connected with the focus on how language represents them. Thus, even

¹⁸ “All deductions are made a priori. One elementary proposition cannot be deduced from another.” Similarly, from one situation, we can deduce no information about another situation, this consideration leading Wittgenstein to the claim that belief in the causal nexus is only a superstition (5.1361).

though the argument focuses on the necessity of presupposing the objects, it can be interpreted as implying also the considerations on the elementary propositions as describing the concatenation of the objects, i.e. states of affairs.

The final step of the transition from the picture theory to the theory of truth-functional analysis is made in 4.27-4.45, where Wittgenstein lays the foundation of this analysis. The basic step consists in asserting that a (meaningful) proposition is “an expression of agreement and disagreement with truth-possibilities of elementary propositions” (4.4). Even though this notion of “the expression of agreement and disagreement” is vague, it is in fact only a less precise formulation of Wittgenstein's central idea that a proposition is *a truth-function of elementary propositions* (5).

The truth-possibilities of elementary propositions are, in other words, their possibility of being true or false (these possibilities being described as “T” or “F” in a truth-table). The resulting proposition, then, expresses in what combinatory situations it is in agreement or disagreement with these truth-possibilities of the elementary propositions. We have only to add that a combinatory situation can be perspicuously described in a truth-table and that the resulting proposition is a *function* of which the truth-possibilities of elementary propositions are the arguments. Based on this consideration, we can also assert that there is a general form of proposition (4.5) in which a proposition is defined as a *function* resulting from the successive application of logical operations on elementary propositions (6.001). To summarize, we have begun with the notion of picture and ended with the theory of truth-functional analysis of propositions, the chain between those being the notion of logical form.

2. Truth-Functional Analysis

2.1 *The Argument from the Determinateness of Sense*

While in the preceding chapter, we focused on the argument for the existence of objects, we will investigate here the argument for simple signs (names) from 3.23-3.24. Similarly, this argument also leads to the theme of truth-functional logical analysis and, subsequently, (even though also indirectly) to elementary propositions. 3.23 identifies the requirement for the possibility of simple signs (i.e. names) with the requirement for the determinateness of sense, while 3.24 deals with the propositions about complexes. There is only one, gradual argumentation to be found in 3.23 and 3.24 and *the demand for the determinateness of sense is connected with the complexity of the propositions*. Let us see the whole passage of 3.23 and 3.24 with my emphases on the main lines of argumentation:

3.23 The requirement that simple signs be possible is the requirement that sense be determined.

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, which will be right or wrong. A proposition that mentions a complex will not be nonsensical, if the complex does not exist, but simply false.

When a propositional element signifies a complex, this can be seen from an indeterminateness in the propositions in which it occurs. In such cases we know that the proposition leaves something undetermined. (In fact the notation for generality contains a prototype.)

The contraction of a symbol for a complex into a simple symbol can be expressed in a definition.

Let us focus on 3.24, which we have to understand in order to grasp the idea that the demand for names is the demand for the determinateness of sense. In 3.24, we find closer elaboration of what determinateness (or, strictly speaking, its contrary, indeterminateness) is. In the first proposition, it is said that proposition about complex is somehow related to the proposition about constituents of the complex, the connection being realized by the internal relation.¹⁹ Now, the essential question is how we are able to recognize that the proposition deals with the complex. The criterion based on which we can decide whether a proposition contains a complex sign is the existence of the *indeterminateness (Unbestimmtheit) of sense* in the proposition. In that case, we know that the proposition leaves something indeterminate (*durch*

¹⁹ Even though the internal relation is the essential issue in the *Tractatus*, I shall not consider it in greater detail here. Internal relation, being identified with formal relation, is said to be the relation which the thing must have, without which we cannot think it, but which we cannot express; rather, formal relation is only *shown*. In this case, we can say that an internal (formal) relation between the two propositions in question means that these propositions are in a mutual connection which cannot be expressed, but is *shown* in the use of the propositions.

diesen Satz ist noch nicht alles bestimmt).

Two steps are obviously needed. First, we have to explain what a “complex” is and, secondly, what a “propositional element signifying complex” (i.e. complex sign) is. Even though Wittgenstein does not describe the nature of complex explicitly in the *Tractatus*, we can find its description in the *Notebooks*. There, Wittgenstein explicitly focuses on the question of what a complex is, primarily with the comparison to the fact (*NB*, 48). Taking the case of the relation of *a* and *b*, the corresponding fact is *that a* stands in a relation to *b*. A complex, on the other hand, is the “complex *a* in the relation to *b*.” A complex is then said to be something that is designated by a “complex sign” (*Ibid*). From this connection, we can see that that what corresponds to the fact that *a* stands in the relation to *b* is the statement “[complex *a* in the relation to *b*] exists.”²⁰

Now, the problem (which returns us to 3.23) is how the complex in the proposition is to be analyzed. The demand for simple signs (names) from 3.23 is the clue for this question concerning the analysis of complex signs. The demand for the simple signs is identified with the demand for the determinateness of sense. Furthermore, the determinateness of sense is obviously an abbreviation for the determinateness of the sense of *a proposition*, the sense of a proposition being the fact that it can represent a possible state of affairs. This brings us to the possibility of interpreting this argument again in a transcendental manner.

We have seen that in 2.021-2.0212, there was a proposition having sense, and in order this sense to be independent of another proposition's truth, we had to presuppose objects. In a similar sense now, the thought about complexes can be understood as a transcendental argument as follows: *We have seen that in the propositions, there are complex (non-simple) signs to be found. Subsequently, we also have to presuppose there is a complex which is represented in the proposition by the complex sign.*²¹ The basic problem then arises from the

²⁰ Viz White, 40

²¹ Similarly, Anscombe also interprets the argument in 3.23-3.24 (as well as 2.021-2.0211) as an apriori (transcendental) demand: „At 5.5563 we find: 'If we know, on purely logical grounds, that there must be elementary propositions, then this must be known by anyone who understands propositions in their unanalysed form.' But it is clear that he thought we did know this on purely logical grounds. This is to say, the character of inference, and of meaning itself, *demand*s that there should be elementary propositions. And that there should be simple names and simple objects is equally presented as a *demand* at 3.23: 'The demand for the possibility of the

fact that if there are only complexes in the propositions, the sense of proposition would be undetermined (*unbestimmt*), presumably in the sense that a proposition can be true in more than one way.²² In order to assert that it is possible to determine the sense of a proposition, we have to postulate simple objects corresponding to the simple signs.

2.2 Complexes and Truth-Functional Analysis

After summarizing the main steps of the argument, I will describe the broader context (i.e. the third chapter of the *Tractatus*) in which argument is embedded. In the case of pictures, I have tried to show that the picture metaphor gradually disappears from the fourth part of the *Tractatus*. Now, I shall attempt to show that, in the third chapter, the situation is similar - in this case proceeding from the notion of logical form, through “projection” and the “propositional sign as a fact,” towards propositional signs and *propositional analysis*.

It is true that at the beginning of the third chapter, we also encounter the notion of a “picture.” Similarly as in the fourth chapter, thought is said to be “a logical picture of fact” (in 4, as we have already seen, a thought is further identified with a sensible proposition). Thus, pictorial metaphor is here again, already in the form of a “logical picture.” In several remarks, the metaphor of the logical picture is further investigated, the possibility of thinking something being identified with the possibility of “picturing it to ourselves” (3.001). But this part concerning logical picture in general is very short, ending already in 3.1 where the essential theme of the proposition as a *propositional sign* is introduced.

According to 3.1, it is in a proposition where thought (identified with logical picture in 3) “finds an expression that can be perceived by senses.” From then on, Wittgenstein is thus concerned with the proposition which can be described by the *propositional sign*, defined in 3.12 as a “sign with which we express a thought.” This propositional sign is used to *project*

simple signs is the demand for definiteness of sense.“, Anscombe, 28

²² There is an extended discussion in White (54-60) of what the “indeterminateness of sense” exactly means. Anscombe is also concerned with this question, mentioning both the possibility of the various ways of proposition's being true and false. As a result, nevertheless, she also comes to the conclusion that Wittgenstein means primarily the possibility of the proposition being *true* in many ways, a canonical example being “there is a watch on the table.” In this example, the precise location of the watch is not determined, and thus, the proposition mentioning the fact that a watch is on the table can be “verified” by various propositions describing the exact location of the watch.

(3.11) a situation represented by a proposition. In this context, the proposition is to be considered as a propositional sign in its projective relation to the world (3.12).

This projection and projective relation can still be conceived as being similar to the picture and pictorial form, since it is said (3.13) that a proposition includes the possibility of that which is projected, but does not contain the projected itself (similarly, a picture includes the possibility of the pictured, but not the pictured itself). Similarly, we can also relate the subsequent theme of the propositional sign as a fact (3.14) to the issue of pictures, since the main feature of a propositional sign as a fact is that, in the proposition, “its elements (the worlds) stand in determinate relation to each another.” (Similarly, in the picture and what is pictured, elements - words and objects - are in relation to one another.) In the context of this relational arrangement, Wittgenstein also mentions the famous example comparing the arrangement of elements in propositional signs with the spatial elements of a situation:

3.1431 The essence of a propositional sign is very clearly seen if we imagine one composed of spatial objects (such as tables, chairs, and books) instead of written signs. Then, the spatial arrangement of these things will express the sense of the proposition.

But the famous metaphor comparing the arrangement of expressions in a proposition to the spatial arrangement of spatial objects can be, again, potentially misleading, suggesting too strong a connection with the general notion of a “picture.” It is true that some connection is there, but it is not a similarity to spatial pictures, but only to logical ones (to be mentioned in 3). And, as we have already seen, a logical picture has in common with more concrete pictures (e.g. spatial pictures) only the most general features. And, we can add, these features in common are certainly not those of being arranged in a concrete manner similar to spatial arrangements. What there is in common is rather the mere fact that in propositions, expressions with sense are connected to create a proposition with sense. Emphasizing that the proposition is a fact, Wittgenstein wishes only to suggest that it is not a mere “blend of words (*Wörtergemisch*)” (3.141), but that it has some arrangement (*Elemente sich auf bestimmte Art und Weise zueinander verhalten*, 3.14). But this arrangement needs not suggest that a proposition is a picture, it only says that the elements it contains are somehow interconnected to create a meaningful proposition.

A direct way to the argument 3.23-3.24 then leads through the assertion that there are simple

signs in the propositions, to be called *names* (3.202), names meaning objects, objects being the meanings of the names (3.203). A *configuration* of names in proposition corresponds to the configurations of the objects (again, we have to be careful with the notion of picture, there is only a similarity to the logical picture). After mentioning the configuration, the argument 3.23-3.24 unfolds, showing that there are complex signs and simple signs and, subsequently, we have to presuppose there are also (simple) objects and (complex) concatenations of objects. Right after the argumentation, i.e. in 3.25, Wittgenstein notes that “a proposition has one and only one complete analysis.”

Employing the notion of analysis, I believe, it is obvious that the preceding argumentation was also concerned with language and its analysis, using the objects and its concatenations as only *necessary presuppositions*. In a further remark (3.251), which is the addition to 3.25, Wittgenstein adds that “what a proposition expresses it expresses clearly: a proposition is articulate (*artikuliert*).” There, we can see the interconnection of two themes of our interest, i.e. the determinateness of sense (discussed in the argumentation of 3.23-3.24) and of the notion of a “propositional sign” as an *articulated, internally arranged fact*. This again, I believe, points to the fact that in mentioning the arrangement of the signs in proposition, Wittgenstein points to the connection with propositional analysis, rather than to the connection with the general notion of a picture and its elements. Even though elementary propositions as themselves are not mentioned in the third part of the *Tractatus*, we could now proceed by the line of thought to be found in the fourth part, leading from logical form to the notion of propositional (truth-functional) analysis and, subsequently, to the elementary propositions as the simplest elements to be reached by this analysis.

To summarize, in the analysis of pictures presented here, the general notion of “picture” and “pictorial form” is again gradually abandoned, being replaced by the notion of “logical form,” this notion subsequently leading to the theme of analysis and elementary propositions. One “proof” for this interpretation can be the fact that in *Some Remarks on Logical Form*, there is no notion of “picture” any more. But still, there is a theme of logical form (being even in the name of this lecture) and truth-functional analysis, these themes being the central themes to be discussed there.

3. Dependence of the Elementary Propositions in *Some Remarks on Logical Form*

In this chapter, I shall finally focus on the argument against the independence of elementary propositions in *Some Remarks on Logical Form*, my commentary being divided into three parts. In the first subsection, I shall briefly mention Wittgenstein's analysis of colour exclusion (this problem further leading to the thesis about mutual dependence of elementary propositions) in the *Tractatus*, while in the second subsection, I shall summarize the main ideas of the *SRLF*. Here, I shall again place special emphasis on the colour exclusion problem and the subsequent conclusion concerning the dependence of elementary propositions. The third subsection then represents the main part where I try to answer my question of whether the dependence of elementary propositions (as presented in the *SRLF*) necessarily leads to the denial of the *Tractarian* conception of truth-functional propositional analysis.

3.1 Tautologies and Contradictions (*The Colour-Exclusion Problem in the Tractatus*)

It is well known that in the *Tractatus*, Wittgenstein is concerned with the theme of colours almost exclusively in 6.3751, i.e. almost at the very close of the *Tractatus*. In this article Wittgenstein used the colour incompatibility problem (i.e. the fact that two colours cannot simultaneously be in one place of my visual field) to show that an assertion that there could be two colours at the same time in the same place is contradictory:

6.3751 For example, the simultaneous presence of two colours at the same place in the visual field is impossible, in fact logically impossible, since it is ruled out by the logical structure of colour. [...] The statement that a point in the visual field has two different colours at the same time is a contradiction.

In order to fully understand the sense of this conclusion, we have to first focus on the question of what constitutes a contradiction according to the *Tractatus*. Contradiction and tautology are, according to Wittgenstein, two borderline cases which delineate the realm of meaningful propositions which are correctly created according to rules of logic. Contradictions and tautologies embody a special cases which are neither in the realm of meaningful propositions nor outside it, since they are not nonsensical (*unsinnig*), i.e. they are not outside the realm of meaningfulness, but at the same time they are not meaningful either. In the proper sense, they are meaningless (*sinnlos*), which means that they do not tell us anything. But still, they are not nonsensical (*unsinnig*) propositions, i.e. the kind of propositions which transgress the limit of meaningfulness by saying nonsense.

Neither contradiction nor tautology is mistakenly created; they only tell us nothing because contradiction says that nothing is possible, while tautology says that everything is possible. Instead of informing us which state of affairs is the case in the world, they tell us nothing at all since tautology allows the truth of every possible state of affairs, while contradiction denies all possible states of affairs. Speaking in terms of elementary propositions and their compositions, whatever the value of elementary propositions will be, in the case of contradiction the final truth-value will be false (in the table of truth-function will be the result FFFF), while in the case of contradiction it will be always true (TTTT).

Therefore, when speaking of the above mentioned proposition concerning colours as contradictory, we insist that this proposition is not nonsensical, but that it nevertheless tells us nothing since it denies that whatever possible state of affairs is the case. Using the example of a concrete situation which the proposition is concerned with, when asserting that “red and green cannot be at the same time in the same place,” we are insisting that whatever the truth-values of elementary propositions will be, the statement will be false in all cases. Because contradiction is a proposition which is arrived at by the composition of elementary propositions (a composition such as *every result is F*), it at the same time means that there have to be at least two propositions from which this contradiction resulted.

Although Wittgenstein speaks explicitly only about one proposition (“two colours cannot be at the same time in the same place”), we can attempt to conjecture which propositions this statement can consist of. We can say that probably the most straightforward answer will be the one which takes into account two propositions in the relation of conjunction: “One colour is at a certain time in a certain place” and “another colour is at a certain time in a certain place”. For the sake of clarity, let us think of two concrete colours, say red and blue. Now, we can formalize two propositions as RTP and BTP, where R and B are the names of colours (red and blue), T stands for one concrete time and P for one concrete place (time and place are in both cases the same).²³ The analysis with the result of contradiction then employs the values of

23 It is necessary to note that although we show how the proposition concerning colours (“red and blue cannot be at the same time at the same place”) can be analysed into two further propositions, it is not automatically asserted that these propositions are already the elementary ones. They could be, but it should not necessarily be presupposed – we can also suppose that even these propositions could be further analyzed or that the correct analysis is completely different. Wittgenstein does not mention explicitly what the proper analysis is, neither

RPT and BPT as arguments and the TTTT as a final value. The problems of this account is to be shown in the *SRLF* as we will see in what follows.

3.2 Exclusion, not Contradiction (Colour-Exclusion in Some Remarks on Logical Form)

At the beginning of the *SRLF*, Wittgenstein insists (*SRLF*, 29) that when trying to analyze any proposition, we inevitably reach the conclusion that this proposition is a logical sum (product or truth-function) of elementary propositions. In this formulation, Wittgenstein simply reformulates the *Tractarian* thesis that each complex proposition is to be understood as a truth-function of elementary propositions (5), i.e. as a proposition created by the various logical operations applied to the elementary propositions. Therefore, Wittgenstein adds in the *SRLF*, by analyzing complex propositions, we finally reach the propositions from which there are no further composites, i.e. *Tractarian* elementary propositions.²⁴

Thus, the beginning of the *SRLF* could be understood as a summary of the *Tractarian* view, while then, several new ideas are introduced. Whereas in the *Tractatus* Wittgenstein insisted that our investigations of elementary propositions have to be *a priori* (in the sense that elementary propositions can be found by *a priori* logical analysis, not with the help of empirical analysis), now he seems to hold the opposite view and asserts that our investigations have to focus on phenomena, and in this sense these investigations are *a posteriori*. In other words, we should focus not only on the *a priori* possibilities of elementary propositions and their combinations, but we should rather begin our investigations by focusing on the phenomena to which propositions are related.²⁵

here nor in any other place in the *Tractatus*. The essential presupposition of the *Tractarian* conception of logical analysis lies in the fact that propositions are supposed to be necessarily analyzable into elementary ones, but it is not important (not even probable) that we know the exact form of presupposed elementary propositions.

24 Wittgenstein does not, in fact, speak in *SRLF* about elementary propositions, but calls them (after B. Russell, as he explicitly states) atomic propositions. According to Wittgenstein, these propositions are atomic because they consist of an immediate connection of the terms from which they are compounded which cannot be further analysed. Thus, we can see that in *SRLF* Wittgenstein wants to emphasize primarily the fact that atomic propositions are elementary as they form the basis for the analysis of composite propositions.

25 “That is to say, we can only arrive at a correct analysis by, what might be called, the logical investigations of phenomena themselves, i. e. in a certain sense *a posteriori*, and not be conjecturing about a priori possibilities.”, *SRLF*, 30

Wittgenstein now believes that by investigating phenomena we can find what their “logical multiplicity” (*SRLF*, 30) is, i. e. what is their characterization in accordance with which they can be expressed in language. If we use Wittgenstein's favourite example with colours, we can say that instead of investigating the *a priori* possibilities of compositions in elementary propositions expressing colours, we should look at colours themselves and try to find their possibilities of composition which are then expressed in language.

Wittgenstein asserts that in investigating “phenomena themselves,” the essentially important discovery which we will make is that these phenomena are of a greater variety than we could expect only on the basis of analyzing *a priori* propositions and their logical structure. In the realm of phenomena, we shall find “the whole manifold of spatial and temporal objects, as colours, sounds etc., etc., with their gradations, continuous transitions, and combinations in various proportions, all of which we cannot seize by our ordinary means of expression” (*SRLF*, 31). Therefore, it seems that the phenomenal realm is so rich that our language is not even able to capture the essence of this manifold correctly.

Now, although phenomena appear immensely rich, they can nevertheless be described. This description is, however, far more complicated than Wittgenstein was able to see in the *Tractatus*. The main new feature of the description is that numbers must enter into the structure of *atomic* (i.e. *elementary*)²⁶ propositions (*SRLF*, 30). While the assertion that we

26 The essential assertion necessary for the denial of the independence of elementary propositions is that ascriptions of colours, brightness and other phenomenal properties enter into *elementary* (atomic) propositions. While in the *Tractatus*, Wittgenstein did not offer any example of the elementary propositions, here he asserts that propositions concerning colors and other phenomenal qualities are the examples of elementary propositions. This change can be explained e.g. by pointing to the fact that Wittgenstein began to be interested in the „investigations of phenomena themselves,“ which led him to the conclusion that phenomenal properties are so basic as to be necessarily counted as elementary properties described by elementary propositions. Apart from this possible general reason, Wittgenstein has also a more particular reason why he asserts that these phenomenal qualities are to be counted as simples. It can be demonstrated by the example from *SRLF*: Take b to be the unit of brightness and $E(b)$ to be saying that an entity E possesses this amount of brightness. What does then mean the assertion that $E(2b)$ (E possesses twice the unit amount of brightness) can be analyzed into the logical product $E(b).E(b)$? It could only mean that $E(b)$, not that $E(2b)$, and thus, it is not a proper analysis of the initial propositions $E(2b)$. The other possible analysis proceeds as follows: Distinguishing between the units of brightness, we could analyze $E(2b)$ into $E(b').E(b'')$. But this analysis is also unintelligible, because “if we

have to begin with the “investigation of phenomena themselves” is a very uncommon and highly transitory thesis of Wittgenstein’s, the conception of numbers entering into the structure of elementary propositions represent the essential and long-lasting achievement of the *SRLF* which we will be now focusing upon.

This enigmatic assertion about numbers which must enter into a description is understandable if we take into account Wittgenstein's example designed to illustrate this assertion: Let us imagine two intervals on the axes x , y and the area which corresponds to both intervals. Then, if we know that the area lies, for example, between an interval $(3, 8)$, we at the same time know that it does not lie in the intervals $(-\infty, 3)$ and $(8, \infty)$. What does this example show us? In a similar sense in which we know that if the area is extended from 3 to 8 it is not extended from $-\infty$ to 3 and from 8 to ∞ , we know this about all features which admit gradation (colours, tones, brightness); if they have a certain quality (concrete colour, concrete pitch of tone, brightness etc.), they cannot have all other qualities *in the same category* (another colour, another pitch of tone, another brightness etc.). Now, the obvious question is why exactly properties allowing gradations have this peculiar quality. Wittgenstein's answer is that the descriptions of these qualities are *complete*, i.e. they *need no supplementation* (*SRLF*, 32). This means that when we make a description of colour, tone or brightness etc., in asserting that some phenomenon has one colour (pitch of tone, brightness), we automatically know implicitly that it cannot have any other colour (pitch of tone, brightness).

Thus, when we say that something is red, we can see the situation of this concrete description as one in which the whole colour-scale is laid as a “yardstick” to the “measured” phenomenon whose colour we are describing. Therefore, when we say it is red, we at the same time implicitly know it is not green, blue, yellow, i.e. it does not have (and cannot have) another colour than just the one (red) it actually has. It is the “discovery” of this complete description of phenomena allowing gradations which is the main and long lasting achievement to be found in the *SRLF*. Even though it is true that the discussion of colour-scale and of properties

assume different units of brightness, then when an entity has only one unit the question could arise as to whether it is b' or b'' , which Wittgenstein rejects as absurd. Thus, he appears to be claiming: no patching of this analysis work: there is no other analysis; so it has to be admitted that ' $E(2b)$ ' is unanalysable. [...] So when in the *Tractatus* Wittgenstein held that propositions involving such properties were analysable into propositions which did not, this was tantamount to holding that really elementary propositions could not exclude one another.”, Griffin, 82-83.

allowing gradation can be found also in other texts, the reason why we should be interested primarily in the *SRLF* lies in the fact that the most precise argument for the dependence of elementary propositions (concerning characteristics allowing gradation) is offered here. The main thesis of the argument we will be now focusing on is that the above mentioned case of complete descriptions is not a case of mutual contradiction of descriptions, but rather of mutual exclusion.

When describing the sense in which descriptions of phenomena allowing gradations are mutually exclusive, Wittgenstein uses again the illuminating example with colours, namely the one of two mutually incompatible propositions - “A red colour (R) is at a certain time (T) in a certain place (P)” (RTP) and “A blue colour (B) is at a certain time (T) in a certain place (P)” (BTP), while the place and the time (T, P) are the same. These two propositions could be understood as reformulations of the *Tractarian* proposition asserting that two colours cannot be at the same time (T) in the same place (P). Therefore, by analysing these propositions differently now, we shall see the main difference from the *Tractarian* conception, according to which these propositions are contradictory.

According to the *Tractarian* conception, RTP and BTP would be contradictory propositions, an assertion Wittgenstein now wants to refute by pointing out that this account, according to which these propositions are contradictory, is impossible, at least in the *Tractarian* notation. Wittgenstein now believes that the impossibility of the *Tractarian* “solution,” according to which the above mentioned propositions are contradictory, is visible already in the fact that we cannot plausibly create an accurate account of the conjunction of RTP and BTP. In showing that the conjunction cannot be created, we can at the same time show that the contradiction as a result of a conjunction of RTP and BTP is also impossible.

How does Wittgenstein prove that the conjunction of RPT and BTP is impossible? He believes this impossibility becomes clear if we consider the form by which the conjunction is described in *Tractarian* T-F notation. The conjunction of two propositions (p, q) is represented by the line which has one true value (for p is T and q is T) and three false values (p is T and q is F, p is F and q is T, both p and q are F). Therefore the truth-values for the conjunction are TFFF. To see the difficulties, let us remember that in order to be a contradiction, RTP and BTP have to allow of being described by this conjunctive notation, therefore the truth-values of

their conjunction have to be TFFF. But is this possible? How can we assert that one of the truth-values for RTP and BTP could be T? It could have been possible to state that red and blue can be in the same place at the same time, which is obviously nonsense. The first line of the table for T-F notation (T) represents a nonsensical result for the conjunction RTP and BTP and must therefore disappear. But in this case, the result is no longer a *Tractarian* conjunction in which all cases have final truth-values in the form of TFFF.

On the basis of this argumentation, Wittgenstein shows that in the notation used in the *Tractatus* it is not possible to assert that RTP and BTP result in a contradiction. Rather, he now asserts that the relation of these two propositions is an exclusion, i.e. both RTP and BTP are complete propositions which are in a relation so that if one of them is asserted, the other is automatically false. When we assert that, at a certain time and in a certain place, there is e.g. a red patch in my visual field (RTP), it is at the same time automatically certain that there is not a blue patch in this place and at that time, i.e. the assertion BTP is excluded, because the description RTP is a *complete* one which leaves no place for another description (neither for BTP nor for any other colour-ascription). And precisely in this sense propositions concerning characteristics allowing gradation are *mutually dependent*, based on the fact that one proposition *excludes* any other proposition describing the characteristic within the same category (colour, brightness etc.)

We might suppose that, after denying the possibility of description in the form of contradiction, Wittgenstein will show us how the description using exclusion can be symbolized in notation. In a case where it is not possible in *Tractarian* T-F notation, Wittgenstein should be able to form a new notation with broader descriptive power. It is true that at the end of *SRLF* (*SRLF*, 35) Wittgenstein acknowledges that perfect notation should be able to exclude impossible combinations, e.g. the impossibility of contradiction in the case of describing properties allowing gradation. But Wittgenstein is in fact as silent about the exact appearance of this notation as he was in the *Tractatus* about the nature of elementary propositions. The exact rules, by the aid of which we would be able to exclude impossible combinations from our notation, cannot be stated “before we have actually reached the ultimate analysis of the phenomena” and “this as we all know, has not yet been achieved,” asserts Wittgenstein in the very end of *SRLF* (*SRLF*, 35).

To summarize, what are the main achievements of the *SRLF*? We have already noted that, as a whole, *SRLF* is highly transitory, primarily in arguing for the primacy of investigations of phenomena rather than of language investigations, a position to which Wittgenstein shall never return in such a decisive fashion. While the thesis about the primacy of phenomena-investigations is quickly abandoned, the thesis concerning the new notion of exclusion, leading to the assertion that elementary propositions are mutually dependent, is sometimes interpreted as the main paving stone leading to the abandonment the *Tractarian* conception of logical analysis.²⁷ In the following section, I shall ask whether this interpretation is tenable. In other words, my question will be whether we can really insist that the dependence of elementary propositions (to which the analysis of colour-exclusion problem leads) is fatal for the *Tractarian* truth-functional account of this analysis.

3.3 Consequences: Mutual Dependence of Elementary Propositions

In order to answer the question of whether the denial of the independence of elementary propositions (as presented in the *SRLF*) is sufficient for abandoning the *Tractarian* conception of truth-functional analysis, it is necessary to reconsider previously mentioned arguments from the *Tractatus* and ask whether they *really* prove the independence of elementary propositions. Let us first summarize what these arguments proved. We have seen that both arguments (2.021-2.0212, 3.23-3.24) have in common the gradual transition from a general reflection on pictures and pictorial form to logical form, and, from that, to considerations regarding truth-functional analysis. While the first argument tried to prove the existence of objects as a necessary condition for using language (objects being the basic “indefinables”²⁸

27 See for example Medina's rendering: “However, despite its short-lived arguments, *SRLF* constitutes a decisive turning point and it contains crucial ideas that determined the subsequent development of Wittgenstein's thought.”, Medina, 31

28 Wittgenstein speaks about *names* as “*indefinables*” in pre-tractarian writings, most importantly in *Notes on Logic*. There, he takes names as particular indefinables without further argumentation (see Griffin: “It is clear enough that Wittgenstein regards names as indefinable, for he asserts it without argument” (see NL II, 21). 7). What he questions is only whether some functions can be understood as being generally indefinable, answering finally in the affirmative, based on the following argumentation: “We must be able to understand propositions we have never heard before. But every proposition is a new symbol. Hence we must have *general* indefinable symbols; these are unavoidable if propositions are all indefinable.”, NL II, 13-16, cited from Griffin, 6. See also Coffa, Alberto, *The Semantic Tradition from Kant to Carnap: To the Vienna Station*, Cambridge University Press, New York, 1993, 149: “These ultimate elements of analysis, these *indefinables*, are precisely

which have the ability to stop the process of indefinite definitions), the second argument moved explicitly in language, proving the necessity of objects to which simple signs refer.

Now, the question to be asked is as follows: is the truth-functional analysis as presented in the *Tractatus* realizable also when the independence of elementary propositions is denied? In other words, why should this analysis be rendered impossible based on the fact that some elementary propositions are mutually dependent? This question is appropriate as we have already noted that the independence of elementary propositions is proved only indirectly by *Tractarian* arguments. Because the independence of elementary propositions is not proved by any other means in the *Tractatus*, these arguments (however indirect in arguing for this independence) are the only ground on which the justification of the independence of the elementary propositions can be based.

The argumentation in 2.021-2.0212 runs as follows: There have to be objects, because were there none, then the sense of one proposition would depend on another proposition being true. If this is so, then, we would not be able to picture the world. Thus, we have to presuppose the objects of the world in order to being able picture the world. Similarly, we can render 3.23-3.24 as saying that we have to presuppose the objects for the sense of proposition being determinate. Now, we need to focus on the way in which we describe the transition from the argumentation proving existence of objects to the statement that states of affairs are independent. This deduction is indirect not because Wittgenstein does not mention it explicitly in the *Tractatus* (which is not in itself a sign of the proof being indirect), but because it deduces the independence of states of affairs without any convincing argumentation.

We have seen that Wittgenstein introduces the notion of the “elementary proposition” no sooner than in the fourth part of the *Tractatus*, describing it as “the simplest kind of proposition” which *asserts the existence of state of affairs*. Thus, there is a correlation between a state of affairs and an elementary proposition, probably a correlation similar to one between an object and a name. The independence of elementary propositions is then expressed as an assertion that the sign of an elementary proposition is the fact that “there can

Wittgenstein's objects.” Even though it is misleading that Coffa speaks about objects (not names) as being “indefinables,” he also emphasizes that indefinables are the final product of logical analysis.

be no elementary proposition contradicting it” (4.211), i.e. one elementary proposition cannot contradict another elementary proposition.²⁹

If we try to reconstruct the argumentation which leads Wittgenstein to the assertion of the impossibility of a contradictory relation between elementary propositions, the only way we can proceed (at least as I understand it) is as follows: By the arguments 2.021-2.0212 and 3.23-3.24, the necessity of the existence of objects was proved by following argumentation: were there no objects, one proposition with sense would depend on whether another proposition were true and sense of the propositions would not be determinate. Since we can accept neither the mutual dependence of propositions nor the indeterminateness of their sense, we have to presuppose the existence of objects. Then, the connection with elementary propositions is created by the assertion that the presupposition of the existence of the state of affairs (i. e. concatenation of objects) at the same time asserts the existence of the elementary proposition describing this state of affairs. What is really problematic is not this transition from objects to states of affairs itself, but the fact that *the independence is ascribed to the states of affairs*. This is done, *without* previous argumentation, in 2.061 and 2.062 of the *Tractatus*:

2.061 States of affairs are independent of one another.

2.062 From the existence or non-existence of one state of affair it is impossible to infer the existence or non-existence of another.

It is important to note not only that Wittgenstein does not explicitly argue for this ascription of the mutual independence of states of affairs, but also that the kind of argumentation that could lead to this conclusion cannot easily be explained. The essential question is why we should presuppose such an independence. Is there any problem which can be resolved by the presupposition that states of affairs are mutually independent? It does not seem so. There is only a need for the presupposition that there are objects and their concatenations (states of affairs), these being that to which language refers. The need for objects then lies in the fact that without them, the process of definitions of the propositions and words would never stop and, thus, the sense of one proposition would depend on the truth of another proposition.

²⁹ We have also noted that Wittgenstein understands this impossibility as a logical (*a priori*, necessary) impossibility. It is, he says in 5.133 and 5.144 „a necessary truth that from one elementary proposition we cannot deduce another.” This thesis about logical, necessary impossibility is only a dogmatic statement, not an argument; we can thus leave it for the time being.

But while the necessity of objects is based on those grounds, there seems to be no need for presupposing the independence of the concatenation of objects (i.e. states of affairs). Or, at least, this need is not to be found in this direction. If objects are there, we can use words without threat of infinite defining, and it is not problematic that when objects are connected in states of affairs, these states of affairs are mutually dependent. The demand for objects is only a transcendental demand for the “determinateness of sense” in propositions and this is achieved whether states of affairs are independent or not. Thus, to summarize, I believe we can assert, on the basis of the arguments presented in the *Tractatus*, that there is neither a necessity of the independence of states of affairs nor of elementary propositions.

If there is, nevertheless, such a demand (for the independence of elementary propositions), it can be conceived only as a very general demand for truth-functional analysis. I believe this demand is correctly explained by Margaret Anscombe in the beginning of her *Introduction to Wittgenstein's Tractatus* (Anscombe, 31-33). Anscombe presents her general consideration about propositional independence as an explanation of the independence of elementary propositions. This account is particularly interesting insofar as it seems that she can omit the arguments we have been considering and which are employed also by the generality of other commentators as main proofs and interpretative foundations for the treatment of the independence of elementary propositions. But since we have already seen that these arguments do not directly prove the independence of elementary propositions, it is interesting to consider her interpretation.

Anscombe begins with general considerations about tautologicity as a possible form of truth-function. She attempts to show that, based only on the logical character of tautological propositions, we can argue that elementary propositions have to be independent. In this sense, she writes: “*It is worth noticing that the existence of a great class of mutually independent propositions is implicit in the common explanation of truth-functions and truth-functional tautologies.*” (Anscombe, 31). Anscombe asserts that this conclusion is (albeit only in a “restricted form”) present in Wittgenstein’s assertion (from the *Tractatus* 6.3751) that “the logical product of two elementary propositions can neither be a tautology nor a contradiction.” Based on this, she further investigates primarily the case of tautologicity, even though her conclusions can (as far as I can see) also be valid for other forms of truth-

functions. However, since she believes that Wittgenstein shows (though only implicitly) the mutual independence of elementary propositions by means of his statement about tautologicity as a logical product, she is further concerned with this example.

We know from Wittgenstein that a proposition is a truth-function of elementary propositions if and only if the truth value of the resulting proposition is determined by the truth values of these propositions. In a case of tautology, the resulting – tautological – proposition must be true for all combinations of the truth values of contained propositions. Now, Anscombe asserts that even though there are special cases in which contained propositions are not mutually independent,³⁰ in the generality of cases they *are* independent, the tautology resulting from the dependent propositions being only boundary cases. And similarly, also the arguments of all kinds of sentences as functions can be mutually dependent, but generally they are not.

This argumentation is, as I understand it, correct, even though very general. But it is probably true that the independence of the elementary propositions really can be proved only by these general considerations about the nature of truth-functional logical analysis, not within the scope of this analysis itself. In other words, if the argumentation for the independence of elementary propositions is to be achieved, it is valid only through the general requirement for the truth-functional analysis employing propositions as basic units. This theory presupposes that these units, written in the truth-table, are, at least as far as the generality of them is concerned, mutually independent.

But still, the mere fact proved in the *SRLF* that *some* elementary propositions (those concerning colours, weights, measures etc.) are mutually dependent does not prove the uselessness of truth-functional analysis, since the dependence of some propositions need not be a great problem. Moreover, at the end of the *SRLF*, Wittgenstein seems to assert that truth-functional analysis which would be able to deal with these propositions (analyze them,

³⁰ Anscombe uses as an example the Aristotelian dilemma with the statements: “All triangles are either isosceles or scalene; all isosceles triangles have the property ϕ ; all scalene triangles have the property ϕ , therefore all triangles have the property ϕ . This case is unusual, because the arguments are not independent, since being isosceles exclude from definition the possibility of being scalene. In this cases, there have to appear an “inconsistent row” in the truth-table, namely the row in which resulting value will be false (e.g. in the case of a conjunction of the propositions “x is scalene” and “x is isosceles”) even though the resulting proposition is a tautology (“All triangles have the property ϕ .”), Anscombe, 32

probably, in a way to achieve their independence or incorporate them as dependent)³¹ is possible and potentially achievable (although Wittgenstein speaks about this analysis as sparsely as about the actual form of elementary propositions in the *Tractatus*). Thus, even though *SRLF* is generally considered as a transitory text, it does not actually leave the truth-functional analysis of the *Tractatus*. The feature which most explicitly distinguishes it from the *Tractatus*, the “investigation of phenomena themselves,” is abandoned right after writing it, thus it cannot be taken very seriously.

31 Similarly, Roger White asserts that the denial of the independence of elementary propositions alone is not sufficient to render *Tractarian* logical analysis invalid: “In the *Philosophical Remarks*, matters are more complicated, and it is frequently unclear whether he [Wittgenstein] is seeking to adapt *Tractatus* account or to reject it for something entirely different. The 'colour exclusion problem' continues to exercise him, but a far more significant step towards a rejection of fundamental aspects of the *Tractatus* is his ceasing to believe in the possibility of a purely truth-functional account of generality and the quantifiers. [...] By comparison, worries over the colour exclusion problem are a relatively minor matter, which could be coped with either by *finding a more convincing way of giving a truth-functional analysis of colour propositions*, or by *modifying the letter but not the spirit of the Tractatus account of logical truth*.”, White, 140, italics mine

Conclusion

Throughout my Thesis, I have tried to focus on the problem of elementary propositions and their (in)dependence as it is found in the *Tractatus* and *Some Remarks on Logical Form*. The conclusion of this investigation was summarized already in the previous chapter. Briefly, I have tried to show that none of the arguments found in the *Tractatus* necessarily prove the independence of elementary propositions. This being so, it does not seem plausible to assert that the change of mind concerning this issue can in itself lead to the abandonment of the *Tractarian* conception. Even though we can be tempted to understand *Some Remarks on Logical Form* as a transitory text *par excellence* (based on fact it was written as late as in 1929), an appropriate account and evaluation of the *SRLF* should be more ambiguous.

On the one hand, it is inevitable to acknowledge that there are ideas leading potentially to a different kind of philosophy; on the other hand, they are not (in the *SRLF* itself) elaborated in such a way as to be able to deny fully the *Tractarian* account of truth-functional analysis. As I have already noted, the mere fact that *some* elementary propositions are independent need not represent the essential problem for the *Tractarian* conception of truth-functional analysis. In what follows, I want to offer only a few very sketchy remarks trying roughly to find the place of the *SRLF* in Wittgenstein's transitory philosophy.

The decisive step to be made, with the result of abandoning the *Tractarian* conception of analysis more decisively, is that of acknowledging that all (or, at least, the vast majority) of propositions are mutually dependent. This step (made in *Philosophical Remarks*, the real “transitory” text) leads further to the conclusion that the division of elementary and non-elementary propositions is abundant (as well as the method of logical analysis leading to these propositions), since all (or almost all) propositions are mutually dependent. In *Philosophical Remarks*, this mutual dependence of elementary propositions is described by means of the metaphor of (logical) *space*, in which “space” is understood as that in which all mutually dependent propositions are located.

Should I wish to express something, I already “must be in the space in which what is to be

expressed is located” (PR, 111). Thus, should I wish to assert that something has a colour, I already have to be located in a colour-space, i.e. I must be able to ascribe one colour to the object, while knowing that in this case other colour-ascriptions are not possible. A direct consequence of this is, then, according to Wittgenstein, the fact that “the concept of 'elementary proposition' now loses all of its earlier significance” (PR, 111). This significance is lost based on the fact that all propositions are located in a space in which they are in various ways dependent on each other. In other words, there are no propositions (elementary propositions) independent from other propositions. As Wittgenstein noted, already his remarks in *Tractatus* about infinite space “should have put him straight on this” (PR, 111):

“In my old conception of an elementary proposition there was no determination of the value of a coordinate; although my remark that a coloured body is in a colour-space, etc., should have put me straight on this.” (PR, 111)

The place Wittgenstein is referring to is certainly 2.0131 of the *Tractatus*, where he speaks about an “infinite space” in which objects must be situated:

2.0131 A spatial object must be situated in infinite space. (A spatial point is an argument-place.)
A speck in the visual field, though it need not be red, must have some colour: it is, so to speak, surrounded by colour-space. Notes must have *some* pitch, objects of the sense of touch *some* degree of hardness, and so on.

Thus, already in the *Tractatus*, it should have been possible to acknowledge that an object is situated in a colour space, and, consequently, that propositions concerning colours are mutually interconnected (most importantly, by the relation of exclusion focused on in the *SRLF*). Were there only the dependence of some propositions (as expressed in *SRLF*), it would not present a problem for the *Tractarian* conception of logical analysis. On the contrary, as we can see now, already the example from 2.0131 has potential to show that *some* elementary propositions can be mutually interconnected. But, as we have seen while considering Anscombe's explanation of the reason for the independence of elementary propositions, the problem arises when *all* (or the vast generality) of propositions are rendered mutually dependent, because truth-functional logical analysis is based on the presupposition that the generality of propositions appearing as arguments in truth-functions are mutually independent.

Thus, by suggesting that presumably all propositions are located in one space, being in

various mutual relations, the *Tractarian* conception of truth-functional analysis seems to be already untenable. Moreover, there is yet a second feature incompatible with this analysis, which Wittgenstein begins to emphasize in *Philosophical Remarks*, namely that the dependence of propositions seems to be highly *content-specific*. In this sense, it seems necessary to take into account the content of the propositions, in whatever manner it will be done (by another kind of logical analysis, or by means of a different manner of investigating language). Wittgenstein demonstrates this on the example of basic logical connectives, i.e. “or,” “and” etc. In *Philosophical Remarks*, he asserts that in the *Tractatus* he did not appropriately describe the nature of these words:

“This is how it is, what I said in the *Tractatus* doesn't exhaust the grammatical rules for 'and', 'not', 'or' etc.; there are rules for the truth functions which also deal with the elementary part of the proposition.” (PR, 109)

In the *Tractatus*, these connectives (“or,” “and”) or even the basic negation (“not”) have not been fully described, simply because these words, too, are content-specific. In other words, there must be a possibility that they can have different meanings in various contexts of various propositions in which they appear. Thus, for instance, in the situation where the connective “and” is used in propositions concerning colour exclusion, the meaning of “and” is different from the common cases, because in the case of colour exclusion the resulting truth-function is not a common combination (TFFF), but only (FFF):

The proposition $f(g):f(r)$ [f has property g (green) and property r (red)] isn't nonsense, since not *all* truth possibilities disappear, even if they are all rejected. We can, however, say that the ' $:$ ' [symbol for 'and'] has a different meaning here, since ' $x:y$ ' usually means (TFFF); here, on the other hand, it means (FFF). (PR, 107)

Thus, to summarize, two main steps are further needed to reach Wittgenstein's “transitory philosophy.” *Firstly*, Wittgenstein has to come to the conclusion that elementary propositions are abundant, since all propositions are similarly mutually dependent, and, *secondly*, the content of the propositions must be taken into account. Even though *SRLF* can be said to pave the way for both of these essential changes, it contains none of them explicitly; and in this sense, it can still be said to be only correcting the *Tractarian* conception (by adding that some elementary propositions are dependent), not denying it. For the radical abandonment of the *Tractarian* conception of logical truth-functional analysis, we have to wait for *Philosophical*

Remarks and Wittgenstein's discussions with the Vienna Circle.³²

³² These are recorded and collected in: *Ludwig Wittgenstein and the Vienna Circle, Conversations recorded by Friedrich Waismann*, Blackwell, 1979

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