Picture and Representation in Wittgenstein's Tractatus Logico-philosophicus

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The Tractatus Logico-philosophicus of Ludwig Wittgenstein has structure, which gives rise to manifold interpretations. Hermeneutical problems are generated by the interdipendency of TLPh's parts\(^1\) from a speculative whole, which sets this work free from the standard Wiener Kreis interpretation.\(^2\)

The tractarian subject matters: picture (Bild) and representation (Abbildung) seem to constitute a point of balance between ontology, logic and semiotics in TLPh's theoretical development.\(^3\)

_We make to ourselves pictures of facts_,

says the Austrian philosopher in TLPh's proposition 2.1. In spite of the explicit reference to activity or generical operations

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\(^1\) The symbol "TLPh" is an abbreviation of *Tractatus logico-philosophicus* Routledge & Kegan Paul, London 1922 (Translated by Bertrand Russel).

\(^2\) See D. ANTISERI - M. BALDINI [1989] p. 16: "(...) Il Tractatus è da leggersi in chiave non neopositivistica (...)."

\(^3\) The german terms Bild and Abbildung are in some respect synonymous: one could translate them with the italian term "raffigurazione" (see for example E. RIVERSO [1970] p.102, note 16). Nevertheless the meaning of the German term Abbildung seems to define the activity as a bildliche Darstellen, the life of a picture as §n°rgeia, not as dÉnamiw or (aut) event.
Wittgenstein does not investigate Intentionality as psychological structure or as metapsychological and phenomenological field of research. He also rejects the philosophical leadership of Gnoseology (Erkenntnissstheorie) in logic, a concept previously critized and refuted by Ernst Schröder. Wittgenstein has no historical or methodological relation to the Phenomenology of Edmund Husserl. He could not share Husserlian semiological identification of intentionality reduced to intentional act of symbolization.

**Representation**

Tractarian propositions 2.14, 2.141, 2.15 develop a complex analysis of picture themes. There is no relation to description of Erlebnisse. From Wittgenstein's point of view they are ineffable and unthinkable.

The Austrian philosopher means the reference of "Picture" as an actual relation among elements of picture being in a determined connexion (TLPh 2.14), this last being the picture's structure, its element's combination and relationship (Zusammenhang). So it appears very difficult to distinguish between the form of picture and the form of representation. Perhaps the German term "Abbildung" has in a TLPh context a wider meaning than "structure of picture" (see TLPh 2.15). Its

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4 See TLPh 5.631, 5.641.
7 See F. FERRANTE [1990].
reference involves both the above mentioned connexion and the represented existence of a real relation among objects, which is theoretically isomorphic to the connexion. Tractarian Sachverhalt seems to be an isomorphical entity, produced by the actual existence of this relation of relations.

Therefore the term "representation" denotes any structure of structures whatsoever, as produced by an activity (TLPh 2.1), an application to which an atomic fact corresponds, a Sachverhalt as denotation. This structure exists as application in virtue of the ontological input of matter of facts underlying structure of objects (TLPh 2.11). Every determined picture is sub specie aeternitatis an isomorphical entity or structure of structures. Its semiological existence is the realization of sense's form.

\[A\] picture is determined if it represents one factual matter and not others. Every true picture is determined. Therefore in a special sense there is no determined picture, which is not true. Picture's Truth (and not the truth of its structure of elements) lies on the representation of a determined situation, which can be mental or not, and which can belong to one universe of reference and not others. What we mean with the predicate "existent", is a Hamlet-like question in Ontology and Gnoseology, but it does not seem to play an intrinsic role from a semiological point of view. When one predicates "distinct" of the Abbildende Beziehung, the related Bild, that contains it, is true if and only if this Beziehung determines an individuation on Bild's Sachlage. The predicate "distinct" does not mean how one must make up the representation's structure, but how this last is structured with regard to the Sachlage. If one asks how it happens, then - on a different level of reflexion - one could understand the perplexity of René Descartes: “(...)je jugeai que je pouvais prendre pour regle generale, que les choses que nous concevons fort clairement et fort distinctement sont toutes vraies; mais qu'il y a seulement quelque difficulté a bien remarquer quelles sont celles que nous concevons distinctement (...)” R.DESCRATGES [1987], Quatrieme partie, p.33, 19-24.
Form of Representation and Logical Form

In TLPh 2.151 and 2.1511 Wittgenstein investigates the role of the form of representation understood as a formal condition of the representing relation ("abbildende Beziehung"). The form of representation is the possibility of this relating structure: the same abbildende Beziehung will belong to pictures with regard to picture as an actual whole, of which the representing relation is a part too.\(^9\) It is not possible to say that the logical form and the form of representation are the same. Every picture is in act a representing relation, and also has a form of representation. The corresponding representation's form is too, not only a logical form.

If it is true that every picture has a form of representation, which it :“(...) must have in common with reality in order to be able to represent it (...)” (TLPh 2.17), then it is true that a determined picture has a determined form of representation, not others. When Wittgenstein claims that a picture is picture of every reality of which it has the corresponding form, the expression "every reality" ("jede Wirklichkeit") seems to be referred to different, manifold realities, to distinct denotation's universes, which change when the form of representation varies.

Nevertheless the meaning of the verb "to vary" is not to be

\(^9\) See TLPh 2.1513. With "\(\Sigma E\Pi\)"= "the class of picture's structures" "\(\Pi P\)" = "the class of the representing relations", and with "\(U\)" = "the class of states of affairs", one could define: \(\Sigma E\Pi = \{x : \varphi(x,y)\}\); \(\Pi P = \{\varphi : \varphi(x,y)\}\); and \(U = \{y : \varphi(x,y)\}\). One could also define: \(\Pi P = \{\varphi : \varphi(x,y)\}\) belongs to I. There is no representing relation without at least a determined SEP or (vel) a determined Sachverhalt, both elements or individuals of SEP and U, which are subsets of I. On the meaning of the word "individual" referring to determined pictures, see note 12. The logical synonymy of terms "individual" and "element" comes out in G. PEANO [1958] p. 94. Peano mentions the mereological etymology of the verb “to belong” (Italian appartenere) from latin ad-pertinere.
misunderstood. From Wittgenstein's point of view ontology, events are not a product of the thinking activity.\textsuperscript{10} On the contrary the relation mind-word is to be interpreted from a linguistical viewpoint, as it will emerge during the analysis of Tractarian conception of "agreement"(Übereinstimmung). It is plausible to interpret the logical form as open class (as genus)\textsuperscript{11} of forms of representation, to each of them corresponds a virtual denotation's universe. If one means every element of this class as virtual set or collection of individuals, and every individual as a distinct, existentially determined picture,\textsuperscript{12} one could infer that every

\textsuperscript{10} See E. RIVERSO [1970] pp. 91-96. Riverso speaks of a linguistic ontology, "(...) fondata sull'equazione fra possibile e dicibile (...)"(p.92). It is possible to interpret the term "Wirklichkeit" (TLPh 2.171) as "denotation's universe", in a wider meaning of the interpretation proposed in A. J. K. KENNY [1973] chapt. 4.

\textsuperscript{11} A very interesting analysis of the pragmatical relation among the distinct uses of the word genus with regard to the logical development of this concept is given by A. M. S. BOETHIUS, \textit{In Isagogen Porphyrii Commenta} [1906] pp. 32-63, and pp. 171-197.

\textsuperscript{12} The word "individual" here means any determined expressive event whatsoever, intended as semiological whole individuated through Erlebnisse."Individual" denotes no object, because it is not possible from logical point of view to single out Erlebnisse. It denotes the virtual existence of expressive events, or the actual existence of determined pictures, which are manifestations of the representation's form. Those events are indivisible, because they are structured (or potentially structurable) as unities through thethetic characters of expressive projection. If the individuation of an actual picture refers to its semiological structure with no regard to Erlebnisse, then the denotation of the word "individual" is a determined representing relation between an SEP (structure of elements of a picture) and a state of affairs, a relation singled out through making reference to speakers and to pragmatic context.
picture exists as actual manifestation of an *abbildende Form*. Concerning variety there are manifold form of representation (for example chromatic or spacial form, see TLPh 2.171).

**Picture's Sense**

In TLPh 2.22 Wittgenstein explains that a determined picture “represents what it represents, indipendently of its truth or falsehood, through (durch) the form of representation (...)”. What the picture represents? Its sense, as claimed in TLPh 2.221. Every picture has a sense, no picture is senseless.\(^{13}\) It is possible to consider a picture with no regard to states of affairs of its denotation's context (TLPh 2.203).

The Austrian philosopher seems to use the word “Sinn” in order to specify the modality by which the representation's form comes to existence in the structure of the manifesting picture, or the modality by which the possibility of to structure the picture's relation of elements comes out in a specific context.

The picture will represent its sense, because it shows the modality by which the above mentioned possibility will become actual in a linguistical (pragmatic) context, in connection to other pictures and to its representing relation. In order to acknowledge picture's truth or falsity it is necessary to consider both the members of representing relation.

There is no picture true *a priori*, because the activity which generates a representing relation is a necessary but not sufficient condition of the picture.\(^{14}\)

\(^{13}\) In TLPh 3.03 the Austrian philosopher observes that it is not possible to think nothing, which is illogical. No picture can be nonsensical (*un-sinnig*): tautologies and contradictions too (see TLPh 4.461).

\(^{14}\) What is an activity *a priori*? If one means the trascendental as linguistical (see D. ANTISERI - M. BALDINI [1989] p.12), then the Kantian distinction *a priori-a posteriori* plays no role in contemporary thought.
Agreement

The term "Agreement" (Uebereinstimmung) in TLPh 2.222 is referred to picture's truth. As stated in TLPh 2.151, 2.1511, 2.201 the Austrian philosopher means that picture's sense and the reality are members of this representing relation. The reality is conceived as any state of affairs whatsoever in the denotation's context of a determined representation's form, and picture's sense is the actual modality to structure picture's elements.

Picture's truth is a peculiar relation, in which the first member (the relation among picture's elements) corresponds to the second member (the relation among objects of the state of affairs underlying the Sachverhalt). The correspondence is only represented (vorstellen) in existing picture (TLPh 2.15). In order to raffigurate this correspondence it must become Sachverhalt of a new picture too. The disagreement (Nichtuebereinstimmung) of picture's sense and states of affairs is equivalent to absence of correspondence between the first and the second member, or (vel) to the absence of correspondence between picture's elements and objects.

The determined pictures will be true or false neither in virtue of (a) their sense, nor in virtue of (b) the thetic characteristics of a specific representation's form, nor through (c) the ontological status of a reference's universe.

Any picture whatsoever will be true or false through the correspondence of (a) and (b) with (c) in the background. This last is only partially generated by the contextual and the compositional specificity of the realizing abbildende Beziehung.15

In TLPh 2.1513, 2.1514 Wittgenstein explains that the representing relation exists as actual concordance and belongs to the picture.

In order to clarify the implications of this agreement's conception with regard to the nexus thought-language, logical form and linguistical form, it seems suitable the use of both

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15 See for example P. CARRUTHERS [1990] Chapt.2.
logical and symbology of Set Theory. One could take two variable, for example "x" and "y":

\[ x = \text{def} \ (a_1 \ldots a_n) \quad \text{and} \quad y = \text{def} \ (sv_1 \ldots sv_n) \]

The constant "a" is referred to any determined structure of picture's elements whatsoever, and "sv" is referred to any determined states of affairs whatsoever. Taking "PPP" as abbreviation of "representing relation", one could say by Tlph 2.1513:

(I) \[ \text{PPP} = \text{def} \ ^\wedge \varphi \ ((\varphi \ (x,y))). \]

The symbol "I" means any picture's set whatsoever, \{i_1, i_2, \ldots, i_n\}. It will be possible to define "P" and "PPP" as classes:

(II) \[ \text{PPP} = \text{def} \ ^\wedge \varphi \ ((\varphi \ (x,y) \quad \text{and} \quad \varphi \ (x,y) \text{ belongs to P}); \]

\[ P = \text{def} \ ^\wedge \varphi, \ ^\wedge x, \ ^\wedge y, \ (\varphi \ (x,y)). \]

The symbolical abbreviation of one determined picture is:

\[ p_1 = \varphi_1 (a_1, sv_1) . \] If one considers both the set of structures of picture's elements - symbolized by "ΣΕΠ" - and the set of states of affairs - symbolized by "U", they will be defined as classes too:

(III) \[ \Sigma\Pi = \text{def} \ ^\wedge x \ (\varphi \ (x,y) \quad \text{and} \quad x \text{ belongs to P}); \]

(IV) \[ U = \text{def} \ \hat{y} ( \varphi (x,y) \text{and } y \text{ belongs to } P ). \]

They are also subsets of \( I \).

If there are various representation's forms, then there will be also various sets of pictures, various sets of structures of picture's elements, various sets of states of affairs, various sets of representing relations:

(V) \[ \langle P_1 \ldots P_n \rangle, \ \langle \Sigma E \Pi_1 \ldots \Sigma E \Pi_n \rangle, \]
\[ \langle U_1 \ldots U_n \rangle, \text{ and } \langle \Pi \Pi P_1 \ldots \Pi \Pi P_n \rangle. \]

Furthermore: \( P_1 \) contains \( \Sigma E \Pi_1, U_1, \Pi \Pi P_1 \).

The identity between world and life, stated in TLPh 5.621, could be explained as equivalence of open classes: 17

(VI) \[ \text{Lf iff Wrld =def (p) (p belongs to Lf iff p belongs to Wrld)} \]

in which the variable "p" is referred to any set of pictures whatsoever as existing in the Life, in the World. 18 If every determined picture is a proposition, an expressive event too, and if the elements of picture's structures are nouns (see TLPh 3.21, 3.22), then every set of pictures is a language. Philosophical expressions as "representation's form" and "linguistical form" will become well then synonym. With "L" as abbreviation of "language" one could obtain:

18 The existence of set of pictures in life cannot be confused with the virtual (theoretical) existence of the same. This distinction plays a similar role to the distinction between Langue and Parole in Saussure's thought.
(VII) L1 contains ΣΕΠ₁, U₁, ΡΠΡ₁ ..... 
...... Lₙ contains ΣΕΠₙ, Uₙ, ΡΠΡₙ.

and:

(VIII) Wrld contains L₁ ......Lₙ ;
Lf contains L₁ ..........Lₙ ¹⁹

One could observe in Tractatus the metamorphosis of the meaning of "Ideography": this last becomes the logical language as pure semeiotics or metasemeiotics. ²⁰

Logical Picture

¹⁹ Life and World contain the existing languages: underlying the latter is the Langue, which could be also understood (on a metatemporal level) as class of forms of representation, in other words as the logical form.

²⁰ Hjelmslev speaks about: “(...) la semiotica come tipo gerarchico superiore, la langue come concetto, o come classe in quanto unità (...)” L. HJELMSLEV [1968] p.122. If the tractarian Wittgenstein means "form" as "possibility of the structure", Hjelmslev adds: “(...)di una singola semiotica in contrapposizione ad altre sappiamo che il teorico del linguaggio la prevede nel suo calcolo come possibile tipo di struttura(...)” (ibidem, p.122). Hjelmslev speaks about the various Metasemiotics. They are semiotics, which have as content one semiotic. One could designate tractarian Ideography with the term “pure metasemiotics”, because it has as content, that which is common to every semiotic, and is showed in L1 by the truth function and by the logical properties of symbolism (sense's form and referring-to). A reflexion on Wittgenstein's Thought from the viewpoint of contemporary linguistics is given by C. H. BROWN [1974].
The symbol "T" (Thought, Gedanke) could be referred to the set of pictures, whose have two properties:

\[ \Phi T = \text{to be a determined manifestation of the "general form of truth-function";}^{21} \]

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21 Every proposition, as picture, has a SEP (structure of elements of the picture) and a RPR (representing relation). Ideography means by the propositional variable any proposition whatsoever of any language whatsoever, and the proposition is perceived as any SEP whatsoever which inheres (inherence as Zusammenhang, see TLPh 4.03) to a situation (Sachlage). Furthermore the RPR is the internal property (interne Eigenschaft, see TLPh 4.124) of every picture, and the propositional variable is the expression of the formal concept (formale Begriff). Characteristic of the latter is any inherence whatsoever of SEPs to situations (see TLPh 4.126 and 4.127, 4.1271). The values of the propositional variable are SEPs designed by constants. They are "(...) all symbols, whose meaning falls under the concept(...)"(TLPh 4.126). The mark used as symbol, in order to design the propositional variable, is not a SEP, but an index, the values of which can be any determined SEP whatsoever. The variable "V" designs the formal characteristic of every SEP, and denotes the inherence as expressive condition of any picture whatsoever. Every picture must be conceived as the value of a propositional variable, and as occurrence or manifestation of the general propositional form (allgemeine Satzform, see TLPh 4.53). The expressive existence of the picture shows always its virtual reducibility to the ambiguous Bedeutung of the logical picture. The latter shows as element of its SEP both the propositional index (for example "p"), which designs the propositional variable and denotes any SEP whatsoever, and the truth-index ("V"), which denotes the possibility of the REPRESENTING RELATION of the former and shows in the logical expression the logical property of the concept designed by the propositional variable. The absence of the denotation of "V" is designed by "F", when a picture is not a value of the propositional variable, in other words when the propositional
\[ \Phi_O = \text{to be base of any operation whatsoever, which is a determined occurrence of the general form of the operation.}^{\text{22}} \]

The set \( T \) will represent\(^{\text{23}} \) the total class of pictures:

\[ (IX) \ G =_{\text{def}} \hat{\Phi} (\Phi_T(p) \ .\text{and.} \ \Phi_O(p)) , \]

where the variable "i" has the meaning of VI.\(^{\text{24}} \) One could have too:

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variable denotes a SEP, which has no REPRESENTING RELATION on the Sachlage of the reference's Universe of the variable's values. Consequently the values of the negated propositional variable are not pictures regarding to the field of values of the negated variable, but virtual, possible pictures with regard to other fields of values of other propositional variables. This interpretation could answer the hermeneutical questions, generated by Tractarian representation of the general form of the truth-function as negation of the values of a propositional variable (TLPh 5.502). From a dynamic point of view one could mean this general form as a successive Application (TLPh 5.32, and 6.001).

\(^{\text{22}}\) See TLPh 5.3, and 6.002: every picture with the property FT also has the property FO.

\(^{\text{23}}\) On the meaning of the verb "to represent" in Set Theory see P. BERNAYS [1958] p.63.

\(^{\text{24}}\) Thought (Gedanke) is both the logical product of existing languages, and the virtual logical space of the logical form, understood the latter as the possibility of structuring the RPRs and the expressive sequences of pictures. However the ideography presents linguistical universals as expressive events of the propositional calculation, which is also understood as calculation of pictures. Perhaps emerges a semiologic platonismus.
(X) \( G = \text{def } \phi, x, y \text{ that } (\phi(\,x,y\,) = \text{def } L_1 \text{ and } L_2 \),
\text{and} \ldots \text{and } L_n \).

(XI) \( \text{Lf contains } G \); \( \text{Wrd contains } G \).

There is no distinction between thought and languages, because the existence of Gedanke is the same logical nature of pictures, of languages, of semiological processes. This existence sets itself among limits of life. Thought exists in the Life, then in the World.\(^25\)

Wittgenstein states: “Logic fills the world: the limits of the world are also its limits...” (TLPh 5.61). The plurality of thought's manifestations is the same existence of languages. In order to become object of investigation this last must coincide with a language, which has a specific representation's form (TLPh 2.181).

The logical language or Ideography (Ll) will be understood as set of representing relations. Every picture which belong to Ll will have as Sachverhalt what is common to every picture of every language: presence or non-presence (absence) of the representing relation showed in Ll by the propositional variable (which denotes any expressive event whatsoever) together with truth values "T", "V" (symbols whose are refered to presence or not of a RPR).

Every logical picture is a virtual base of logical operations, whose show in the interpreting logical proposition and express in Ll the inherent formal characters of every operation in \( L_1 \) \ldots \( L_n \). In the interpreting logical operation the logical Sachverhalt is a SEP which shows to be virtual base of any logical operation whatsoever. The new logical Sachverhalt will be a virtual part of any logical Sachverhalt whatsoever. Every logical picture is

\(^{25}\) See TLPh 5.61, 5.621.
truth-function, because its SEP shows the possibility to be in all the SEPs of any ideographic representation's relation whatsoever between symbolic nexus and state of affairs. The truth-function expresses in L1 the formal concept of picture, and every determined picture of any language whatsoever will unterfallen in this concept, as showed by XI.

Ideography is the limit of speakable, then of thinkable, because what can be said by thought about thought (by language about language) is showed, not represented in L1. Denotation's universe of this last is the open class of languages. Logical pictures “(...) are parts of the symbolism (...)”, and are tautologies or negations of tautologies (contradictions).26

The tractarian proposition 4.462 says: “Tautology and contradiction are not pictures of reality. They present no possible state of affairs. For the one allows every possible state of affairs, the other none (...).” One could draw the content of second part of Tlph 4.463:

26 Tautology is the only proposition of logic (see TLPh 6.1). If it is true that it “(...) leaves to reality the whole infinite logical space (...)” (TLPh 4.463), then it is true that, negating tautology, the logical space also disappears. Contradiction is only a negation of tautology, using the word "negation" like in TLPh 4.0641. It is impossible to express the absence of logical space, because the expression of a contradiction is also an expressive event, which needs logical space in the background. Nevertheless it is possible to deny a part of logical space, because this negation does not deny logical space, in which tautology lives as an expressive event. The only logical pictures, which are necessary, are tautology and its negation. Concerning necessity as modal operator, one could add “(...) that does not exist - or should not exist! - a sentence modal logic which is distinct from the standard sentence logic (...)” A. G. GRAPPONE [1990].
Tautology and Contradiction are without sense (*sinnlos*, TLPh 4.461) but not nonsensical (*unsinnig*, TLPh 4.4611). They show as symbolic nexes, and represent as actual representing relation the first any linguistical Sachverhal whatsoever, the second none. What they express as essential is not a determined sense but sense's form common to every linguistical representation.

The Austrian philosopher adds: “(...) Tautology and contradiction are the limiting cases (*Grenzfaelle*) of combinations of symbols, namely their dissolution (*Auflösung*)” (TLPh 4.466).

The German terms "Aufloesung" and "Grenz" seem to have a metasemiological and ontological meaning. Tautology and contradiction are both limits and dissolution of symbolic nexus. With regard to this consideration Wittgenstein affirms: “(...) Contradiction is the external limit of the propositions, tautology their substanceless centre ” (TLPh 5.143).

In virtue of the analogy between logical and geometrical space in relation to tractarian eye's metaphor (TLPh 5.633) one could pay attention to the drawing:

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27 There is a suggestive affinity with some characteristics of mythical thought concerning the relation between *aletheia* (+) versus *lethe* (-). See M. DETIENNE [1983] pp.51-52.

28 See TLPh 2.013 and especially TLPh 2.0131, in which the Austrian philosopher states: “(...) a point in space is a place for an argument (...”). The analogy between geometrical space and logical space is confirmed in TLPh 3.411: “(...) The geometrical and the logical place agree in that each is the possibility of an existence”. See also TLPh 3.42: “(...) Although a proposition may only determine one place in logical space, the whole logical space must already be given by it (...”).
The projection represented by a cone generates the logical space, and the same cone's surface is its extern limit. Cone's volume will coincide with the logical space, which becomes in L1 the reference of tautology. If this last has manifold graphic formulations, then the empty logical space - the reference of ideographic statements - could be represented by the logical product of all the expressive projections that are origined from the same projection's source. One could obtain the sphere:

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29 Parmenides speaks about the identity of being, and also about its immobility and its limit (H. Die=ls [1922] p. 157, 29-33). Parmenides makes also the analogy between being and sphere, an analogy founded on the concept of limit (ibidem, p. 157, 42-45). We have the metaphor of the sphere's centre as the source of expressive projection, and the sphere's volume as logical space. We also have tautology and contradiction as expressions, which refer in L1 to logical space or its absence. All those subjects of tractarian semiotics come out in classical ontology, although in a different philosophical context. Concerning for example the relation between philosophical lògow and mÊyow in Parmenidean sources see L. RUGGIU [1991].
It is very interesting to remark that every point of the logical space is extensive and becomes Sachverhalt of any determined tautological RPR whatsoever. Every point of the logical space will can be conceived as all the logical space.

Wittgenstein seems inaugurate a semiological conception of the infinite, which is compatible with his finitism.30

The projection's source of every possible linguistical projection is unextended.31 The Austrian philosopher states: “(...) The I in solipsism shrinks to an extensionless point and there remains the reality coordinated with it (...)” (TLPh 5.64).

Why then Wittgenstein speaks of tautology as "substanceless centre" of propositions?

Any tautology whatsoever although determined expresses the nature of symbolism. The tautological representing relation is the centre - in the logical space - of any picture whatsoever of any language whatsoever: every expressive event implies symbolism and logical space. Furthermore the manifold graphical formulations of tautology will say all the same, being irrelevant from Bedeutung's viewpoint how they do it.

This interpretation could explain why Wittgenstein uses the term ‘substanceless’ (substanzlos) in TLPh 5.143. All the ideographical pictures would express the possibility of logical space as possibility of projection and representation. On metasemiotical level this possibility is expressed as real, existent, actual. It is the reality of the expressive continuum, which Ideography can not individuate but must postulate as

conditio sine qua non of linguistical form and of languages. Regard the expressive continuum Wittgenstein adds: "Propositions cannot represent the logical form (...)", because: "(...) that which mirrors itself in language, language cannot represent. That which expresses itself in language, we cannot express by language (...)(TLPh 4.121).

**Sinn und Bedeutung**

The representing relation: \( \varphi (a, sv) \) belongs to every logical picture. In REPRENTING RELATION the elements (of logical picture) which constitute the symbolic nexus are propositional variables, operation's signs and truth-values. The logical Sachverhalt coincide with logical space.

All structures of elements expressed in L1 have, as extralinguistical meaning or reference (Bedeutung), the existence's condition of any REPRESENTING RELATION

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32 The semiological conception of the infinite, as expressive continuum which does not exclude the finite point of view, is formulated from C. S. Peirce. Admitted that: "(...) a true continuum is something whose possibilities of determination no multitude of individuals can exaust (...)" C. S. PEIRCE [1965-66] vol. VI p.117, par. 6.170). Peirce affirms: "(...) Synecchism is that tendency of philosophical thought which insists upon the idea of continuity as of prime importance in philosophy and, in particular, upon the necessity of hypotheses involving true continuity" (ibidem, p.117, par. 6.169).

33 There is coincidence between the logical Sachlage and the logical Sachverhalt. The reference of any logical expression whatsoever is its Sachverhalt, but it is also the Sachlage both of this expression and of every other ideographical expression.

34 For an analytical comparison between the ontological and metalogical meaning of the Fregean word "Bedeutung" and the ancient conception of Reference (and related debate) see I. ANGELELLI [1965].
whatsoever: logical space. Furthermore "to express a structure of elements", a symbolic nexus in L1, is equivalent to make the successive application (successive Anwendung) about which the Austrian philosopher speaks in TLPh 5.32.

There are manifold graphic representations or formulations of tautology in L1. The structures of elements of logical pictures have different senses but the same Bedeutung, because the structures of elements are symbolic bases (input) or result (output) of REPRESENTING RELATIONS, which are distinct as thetic becoming from a phenomenological or psychological point of view. Wittgenstein seems to state that this thetic variety: “(...) is quite unessential to logic (...)” (TLPh 6.126).

If every tautological expression were a determined expression in L1, an ideographical expressive event,36 then sense's form (possibility to structure a use of signs) would be in every tautologic expression both condition of determination and Bedeutung of the logical expressive projection and as Sinn of the latter. On a metatemporal level37 the logical representation's form

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35 How could one interpret the graphical representations of tautology in TLPh 6.1203? There is here an REPRESENTING RELATION, which differs from the traditional representation borrowed from P.M. Perhaps this difference is irrelevant, because it is inherent to the thetic modalities of the tautological expressive event. But the identity between sense's form and the logical reference is expressed symbolically by the coordination of proposition's truth with all the combinations of its argument.

36 For the use and meaning of "expressive event" see F. FERRANTE [1990].

37 What is simultaneity among the moments or parts of an expressive event? What does "existence" in the time of expressions mean? Apart from the psychological experience of duration, how could one speak about an objective time, with no reference to the unambiguous symbolism of numeration? If time is a semiotical event, how could one set the determined expressive events in the time? It seems to be a vicious circle. For an
becomes simultaneously concept and object (Begriff and Obiekt).

Wittgenstein adds: “The possibility of all similes, of all the imagery of our language (Bildhaftigkeit unserer Ausdruckweise) rests on the logic of representation” (TLPh 4.015). If the logic of representation exists as calcul: “(...) of the logical properties of the symbol (...)” (TLPh 6.126), then the definition of L1 as:

\[
\text{(XII)} \quad L_L = \text{def} \ \hat{\phi}_L, \hat{x}_L, \hat{y}_L ( \phi_L (x_L, y_L))
\]

could be synonymous to:

\[
\text{(XIII)} \quad L_L = \text{def} \ \hat{\phi}, \hat{x}, \hat{y}, ( \hat{\phi}, x, y ).\tag{38}
\]

Wittgenstein states: “(...) A possible sign must also be able to signify. Everything which is possible in logic is also permitted (...)” (TLPh 5.473).

**ABBREVIATION**

TLPh: L.WITTGENSTEIN, *Tractatus logico-philosophicus*. (1922)

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38 Here the values of a variable are tautologies, *stricto sensu* tautological SEPs, each of them represents a part of logical space. Note that every part of the latter is, as infinitive, equivalent to every other and to the whole logical space. Consequently the ideography has no relation to any determined reference's universe whatsoever. Similarly the existence of logical syntax - as formal theory - has no relation to the meanings of symbols of the object-language, as stated by R.Carnap. See R. CARNAP [1966] p. 30. On the philosophical implications of Carnap's logic see M. MALATESTA [1974]. The discovery of the constant is originated in the ÉÄOrganon of Aristotle (An.Pr. 25 b 37-39).
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