Expression and Symbol in Wittgenstein’s Tractatus Logico-philosophicus

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The last proposition of Wittgenstein’s Tractatus logico-philosophicus states, <Wherof one cannot speak, thereof one must be silent>¹. The simplicity of the phrase hides a complex philosophical position: this is to be found in the tradition of Frege's Thought ². It is possible to overlook the ontology of TLPh ³, and to concentrate one's attention on the uses of terms expression and symbol in this work.

Expressiveness is the kernel of tractarian philosophy, just as intentionality plays a basic role in the second period of Wittgenstein’s Thought. The phenomenological problems that aroused the interest of the austrian philosopher (in the period of

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² See G. BAKER, Wittgenstein, Frege & the Vienna Circle, Basil Blackwell, 1988, chapters 1, 2, 3.
³ In TLPh 1 Wittgenstein says, <the world is everything that is the case>, and states in TLPh 5.621, <the world and life are one>. If one replaces "world" with "life" in TLPh 6.373 and 6.374, then one understands that <solipsism strictly carried out coincides with pure realism..> (TLPh 5.64). Regarding tractarian ontology see HINTIKKA-HINTIKKA, [Investigating Wittgenstein ], Basil Blackwell, Oxford-New York 1986, chapters 2, 3. About solipsism see P.CARRUTHERS, The Methaphysics of Tractatus, Cambridge University Press, Cambridge 1990, chapter 8.
transition, as Hintikka's analysis has showed) could only have been generated in a philosophical investigation, which presents some common attributes between expression and intentionality.

Expressiveness and symbolism are the "diastole" and "systole" of tractarian concept of Thought. They converge in the proposition that the Thought < is expressed perceptibly through the senses > (TLPh 3.1). As expression this last Thought is also a symbol in the new expressive projection that contains it.

The use of terms "expression" and "symbol" appears in the levels of meaning, which characterize the use of the term "proposition" in TLPh. In order to show tractarian semiotics it

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5 The use of "expressiveness" instead of "expression" comes from remark that in TLPh 3.312 "expression" is meant as constant, and occurs in propositions which contain it. A given proposition is only one expression, but this last is not the german "Ausdruck", about which Wittgenstein speaks in 3.311, 3.312. Therein a given proposition is only a member of proposition's class, in which "Ausdruck" is the characteristic mark, and in which "Ausdruck" occurs.
6 See TLPh 3, 3.1, 3.31, 3.34, 3.42. Thought is the logical picture of facts, but expresses itself in propositions. Symbol exists only in the proposition which, <...determines a places in logical space> (TLPh 3.4). Concerning the use of "expressive projection" see TLPh 3.13: < to the proposition belongs everything which belongs to the projection...>, and, < in the proposition the form of its sense is contained >, in relation with TLPh 3.31, < Expressions are everything - essential for the sense of proposition...>. What is essential for the sense of proposition is sense's form, which is the possibility of projection. See also TLPh 3.13, wherein "the possibility of expressing" sense is sense's form, and TLPh 3.11, wherein one could easily interpret "sense" as synonymous of "projection".
7 The term "proposition" has in TLPh a composite meaning, denoting both the sense of expressed Thought and the characteristic of assertion, expressions as symbols. Perhaps
is enough to examine the nexus expression-proposition, and the theme of understanding symbols.

In **TLPh** 3.31, 3.311, 3.312 the ambiguity of the word "proposition" arises. Proposition is an expression that consists of parts which are also expressions. Expression (in an absolute sense) <..is the common characteristic mark of a class of proposition>, and it is essential (*wesentlich*) for the sense of each proposition <. The expressive flux <. presupposes the forms of all propositions in which it can occur >, that is the possibility to structure those propositions.

The expressiveness of Thought, says Wittgenstein, <.is.. represented by the general form of the propositions which it

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9 The use of “expressive flux” is justified by TLPh 3.311, wherein the background of meaning of the german verb “vorkommen” is refered to manifestation of expressions as process, which presupposes an actual continuum although this actuality is, in other words, the pure sphere of possibility.

characterizes..>. As expressive [continuum] it will have to be constant, and consequently represented through a variable (TLPh 3.312, 3.313). In TLPh 3.313 Wittgenstein affirms that the values of this variable are < the propositions which contain the expression >, that is the discrete values of the expressive continuum. Wittgenstein has previously stated, < in the proposition the form of its sense is conained, but not its content > (TLPh 3.13). The austrian philosopher seems therein to interpret the proposition as [any] expressive event, a [part] of the expressive continuum, in the possibility of its realization. This hypothesis is confirmed by Wittgenstein's opinion, that < the possibility of what is projected, but not this itself > would be contained in the proposition, and that < its sense is not yet contained, but the possibility of expressing it > (TLPh 3.13.). If one observes ultimately that, < the content of the proposition means the content of the significant proposition > (TLPh 3.13), then one must deduce that the proposition would contain only the form of its sense, as long as it is interpreted as [any] expressive event.

The content is bound to the determination of a proposition. This determination is also a distinct expression of Thought, an unrepeatable, ineffable event. It is [unrepeatable] regarding the dimension of the "erlebnisse" that vanishes into an action, where the use of a sign is the projection of a determined situation.

In order to understand the symbolic "systole" of the expressiveness of Thought, it is necessary to analyse TLPh

11 The word "possibility" has several meanings in TLPh; see BLACK (1964), and CARRUTHERS (1989) and (1990). Its basic meaning is explained in TLPh 2.033, wherein "possibility", "form" and "structure" could be mutually exchanged. "Structure" means the < connexion of the elements of the picture .>, and the < possibility of this structure > is <. . form of representation of the picture .>

12 Concerning ineffability of semantics see HINTIKKA-HINTIKKA, (1986), chapters 1.
3.326, which says, < in order to recognize the symbol in the sign, we must consider the significant use >. Here the term "use" is synonymous with "any significant use whatsoever", or with "any given use whatsoever". The sensorial aspect of the actual event is called "propositional sign" because Thought expresses itself in the proposition.

Wittgenstein says in TLPh 3.5: < the applied, thought, propositional sign is the Thought>. If the significant use exists only in a given proposition, then the recognition ( [das Erkennen]) in TLPh 3.326 is to be interpreted as " [any recognition whatsoever] ". It exists only in an expressive event, with the condition that this event is different from the expression, to which the propositional sign refers.

It is no coincidence that Wittgenstein adds in TLPh 4.027, < It is essential to propositions, that they can communicate a [new] sense to us >, and in TLPh 4.03, < a proposition must communicate a new sense with old words >. The sign's capacity to refer depends on the interpreting proposition, as Wittgenstein confirms in TLPh 4.02, while in TLPh 4.021 and 4.022 he points out, < I understand the proposition, without its sense having been explained to me >, because < the proposition [shows] its sense >\(^{13}\). TLPh 3.326 has explained, there is no comprehension of symbols, without their significant use. The activity designated by the verb "to consider" ( [achten auf] ) is also an expression of Thought. The symbol is understood because the use of the propositional sign occurs in the interpreting proposition apart from the "Erlebnisse" that vanish in the action. The interpretation being an expressive event, allows the propositional sign to become a symbol if it uses that sign judiciously.

Here emerges the speculative kernel of tractarian semiotics. Because a significant use is a given projection, it is also to be understood as "[any projection whatsoever]", the homogeneity of the two expressive events (their belonging to the

\(^{13}\) Regarding the ostensive demonstration and showing see HINTIKKA- HINTIKKA (1986), chapter VI.
expressive flux) is assured by the character of projection. *The interpreted proposition is the argument, the interpreting proposition the function.*

The interpretation believes itself to reintroduce the interpreted projection. Wittgenstein states in TLPh 4.021, ‘.. I know the state of affairs presented by it - by the proposition - if I understand the proposition..’. Moreover it is possible to give a plausible explanation of the grounds, which induced Wittgenstein to speak of a [new] sense in TLPh 4.027: new, because it exists in a discrete event of the expressive continuum. Theoretically the content is reduced to the virtual realization of the sense's form.

On the level of pure possibility the expressive events cannot ever be the same, and their existence is generated by the expressiveness of Thought. Logic is transcendental, because it is a reflexion ([Spiegelbild] ) of the world (TLPh 6.13), consequently of life (see note 3). The same life, with respect to symbolism and sense's form, is pure expressive flux. Its realization (the expressive event which imprisons life in the ineffability and incommunicability of the "Erlebnisse") is always partial, and will have to become solipsism. Wittgenstein says, "that the world is [my] world, shows itself in the fact that the limits of the language ([the] language -only- which I understand) mean the limits of [my] world" (TLPh 5.62).

Another important characteristic of tractarian semiotics lies in Wittgenstein's conception of "showing". In TLPh 4.022 he states, 'the proposition shows its sense'. Here the expression is described in its development of manifestation. The proposition, still not contracted in a propositional sign, shows its sense. Composition principle (‘I conceive the proposition as a function of the expressions contained in it’, TLPh 3.318) and the Context principle (‘only the proposition has sense; only in the context of a proposition has a name meaning’ TLPh 3.3) are expressions of the metaphysical nexus between sense's form and symbolization. They explain the necessity of Thought's
expressiveness 14.

Concerning form, the sense of a proposition and the sense of its interpretation have the same origins in the expressive continuum, because they agree with the possibility of projection (Composition principle). In order to show the homogeneity in the actual interpreting proposition, the noun's use is required. It is a semiotic phenomenon, in which "noun" denotes <.. that which all symbols, which signify an object, have in common ..> (TLPh 3.3411). Furthermore, the Context principle links the essence of symbols with the projection's possibility. The basic role of the metaphysical nexus stands out.

The propositional sign becoming a symbol in a given proposition is generated in its projection, and the act of referring (in which the trace again becomes a symbol) is also a projection. That to which the symbol is referred is homogenous to that by which the sign becomes a symbol 15.

14 About Context principle see CARRUTHERS (1990), chapter 2. The adjective “metaphysical” is used in order to display the transcendental characteristic of the nexus between sense's form and reference. Wittgenstein claims for logic this characteristic, which is distinguished from the use of word “natural” in TLPh 4.11.

15 The metaphysical nexus is very important, in order to understand Wittgenstein's concept of tautology, expressed in 4.461 - 4.462 - 4.463 - 4.464 - 4.466. Wittgenstein asserts, <it is the characteristic mark of logical proposition that one can perceive in the symbol alone that they are true..> (TLPh 6.113). He states also, <the fact that the propositions of logic are tautologies [shows] the formal - logical - properties of language, of the world..> (TLPh 6.12). Furthermore, Wittgenstein affirms, <whether a proposition belongs to logic can be calculated by calculating the logical properties of the symbol> (TLPh 6.126), and <there is only a [logical] necessity> (TLPh 6.37). The projection's possibility of logical symbolism stands out in 4.463, wherein the Austrian philosopher speaks of <the whole infinite logical space>, which is left by tautology to reality. Concerning
Wittgenstein's Tractatus renders a semiotics of expressive potentiality of Thought. Thinking is an universe of structural possibilities, and it is at the same time an actual universe. Its actuality is necessity, because every part of this universe (each expression) is reflected through an endless filling of references in all the other parts of the expressive continuum. Working from his formal ontology the role of expressiveness in logical symbolism see TLPh 6.124: 

<>we said that in the symbols which we use something is arbitrary, something not. In logic only this expresses: but this means of signs, what we want, but in logic the nature of the essentially necessary signs itself asserts>. Symbolism and sense's form are the only characteristics of logic expressiveness.

An interesting comparison between Wittgenstein's and Leibnitz's ontology is proposed by H.BURKHARDT, "WittgensteinsMonadologie", in Wittgenstein toward a Re-Evalutation, vol 1, Verlag Hoelder-Pichler-Tempski, Wien 1990. Nevertheless the mereological standpoint proposed by Burkhardt seems to overlook tractarian semiotics, when he states < Im Tractatus haben wir nur zwei Eben: als Basis fungieren die Gegenstaende, die sich zu Sachverhalten verbinden. Diese Sachverhalte bilden die zweite und auch schon letzte Ebene. Aus ihnen besteht die Welt. Es gibt weder eine psychologische noch eine metaphysische Reflexionsebene>. One could ask: what is the “reflexionsebene”, in which Wittgenstein speaks of “metaphys- ical subject” in TLPh 5.641?

TLPh 2.026 ( < Only if there are objects can there be a fixed form of the world > ) enables one to interpret Wittgenstein's ontology as formal ontology, according to the identification of world and life. Otherwise one couldn't explain how the austrian philosopher joined language and reality in solipsism. Concerning the “Erlebnisse” every expressive event is unrepeatable. It is also incommunicable, considering that the interpreter perceives only traces, ways of use those signs, and related behaviour. The “Erlebnisse” vanish, and the expressive event exists only in the comprehension, which supposes for it (
the austrian philosopher interprets from a semiological standpoint the concept of truth. In TLPh 4.022 Wittgenstein says, <The proposition [shows] how the things stands, [if] it is true...>. Moreover the content of the verb "to say" ([sagen]) is bound, as far as the truth concerned, to the content of the given proposition, which <says, that they - the things - do so stand>.

It is possible <to understand a proposition> only when it is possible <to know what is the case, if its true> (TLPh 4.024).

Here Wittgenstein also tells, <One can therefore understand it - the proposition - without knowing whether it is true or not>. In order to understand the meaning of a proposition the knowledge of its truth is neither necessary nor sufficient condition. The difficulties originating in the distinction between showing and saying in relation to the proposition's truth can be resolved from semiological point of view.

Understanding a proposition is also in itself a proposition, in which the propositional sign is refered to a previous given projection. In the projection of the interpreting expression that which is projected is formed by both the nexus projection-projected, ascribed to the previous proposition to understand, and that which is itself projected ([Sachverhalt]). The truth of the proposition to understand comes from the relationship (developed in interpreting projection) which has as first member the nexus projection-projected ascribed to the first, and as second

about role of the verb “to suppose” in history of logic and semiotics see for example RICCARDO NOTTE, La semiotica ockhamiana alla luce del dibattito filosofico contemporaneo, degree Thesis (typewritten), Neaples 1987). Because the actual expression is the limit of expressive flux, the subject is <a limit of the world> (TLPh 5.632). The philosophycal subject is<.., the metaphysical subject, the limit - not a part of the world (TLPh 5.641).

In TLPh 4.024 there is a distinct difference between the german verbs “verstehen” and “wissen”.

118
member the "Sachverhalt" projected in the second. In TLPh 4.023 Wittgenstein adds, <.. one can actually see in the proposition all the logical features possessed by reality, if it is true.> Seeing is interpretation of what is logical, in other words of the metaphysical nexus. This nexus grounds the homogeneity between what is logical in the expressive event to interpret, and the projection of the logical interpretation designed by the verb "to see".

Understanding also appears in signs, that is in signifiers referring to the truth-relationship (in German described by "W") and to the interpreted proposition (as argument it is described by a propositional variable)\(^{19}\). They are only traces, and become symbols in logical interpretation.

Since the sense's form is the possibility of projection, when only a truth-argument is given and reduced to one propositional variable, there is only one possibility of structure. In TLPh 5.01 Wittgenstein states, <The elementary propositions are the truth-arguments of proposition>. In TLPh 5 he has said, <An elementary proposition is a truth-function of itself>. When

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\(^{19}\) Wittgenstein says, <Agreement with the truth-possibilities can be expressed by co-ordinating with them in the schema the mark “T” (true) > (TLPh 4.43). The basic role of expressiveness in logical understanding is confirmed by TLPh 4.431, while in 4.442 he suggests that logical proposition [expresses] itself as “propositional sign”. Furthermore one cannot doubt that a semiological point of view is justified, if one reads TLPh 5.31: <it is easy to see that the propositional sign in No 4.442 [expresses] one truth-function of elementary propositions even when “p” and “q” are truth-functions of elementary propositions> (author's italics). Other interesting and perhaps stronger symbolization of logical operations is given by Lesniewski. He does not use marks for truth-value, but represents those in his protothetic by an “index-input” in symbols for functors of two propositional arguments. See S.Lesniewski's Lecture Notes on Logic, Srechedniki & Stachniak editors, M. Nijhoff, D. Reidel publishing, Netherlands 1988, part one, pag. 4.
the references of two propositional signs appear in logical projection, then all the possibilities are fulfilled, to construct in the logical projection the truth-relationship of both the expressive events (of which propositional variables are only traces)\(^\text{20}\). The semiological point of view here proposed, finds the kernel of tractarian semiotics in the metaphysical nexus and in the expressiveness of Thought. It helps one to explain Wittgenstein's conquest of a logical symbolism, that enabled him to symbolize the truth-relationship in an intrinsic way.

Tractarian semiotics invites one to reconsider the continuity between the first and the second phase of Wittgenstein's philosophy, and to investigate the characteristics which join tractarian concept of Thought to the *Begriffsschrift* of Gottlob Frege.

**ABBREVIATION**

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

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\(^{20}\) The tractarian way of looking at operation in connected with acknowledgment of the “transcendental” role of logic. Hence there is no Wittgenstein's intuitionism in Tractatus, because <..<intuitionism proceeds indipendently of the formalization.> (A.HEYTING, *Intuitionism*, North-Holland publishing Company, Amsterdam 1965, pag. 5). Nevertheless tractarian reflexion on mathematical concept of operation seems to be the background of his later research, in which his position, as W. J. Gonzalez has showed, <..is closer to Intuitionism than to Logicism or to Formalism..> (W.J.Gonzalez, “Is Wittgenstein's Philosophy of Mathematics Intuitionist ?”, in *Wittgenstein, toward a Re-Evaluation*, Verlag Hoelder-Pichler-Tempsky, Wien 1990).
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