Language Acquisition

Part 3 of 3
Language Universals – Lexical Contextures
Sociocultural Heritage

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ABSTRACT
In the third and last part of this work, we will develop two aspects that seem central when explaining how it was possible for us to acquire a natural language (NL) that allows communicating the vicissitudes posed by our universal language (UL). We refer concretely to linguistic universals and lexical categories, which will be known here as lexical contextures, but not observed from the grammar, but from a way of seeing reality. Applying everything learned so far, through the transcurssive logic (TL), we will try to give a coherent answer to questions that undoubtedly represent the key to understanding the place that occupies, in our subjective reality, the NL, and its relationship with the acquisition of conventional code, without the need to resort to any of the ontogenetic theories outlined in the first part of this work. Finally, after pointing out the importance of universals, lexical contextures and social inheritance in the acquisition of language, we will outline the general conclusions of the whole work.

Keyword: Natural language, language acquisition, Psycholinguistics, Transcurssive Logic.

CITATION:

1.0 INTRODUCTION
In living beings, the phenotype depends on the activation of genes according to a pattern of hidden colors, as we saw in the second part (Salatino, 2018). In a linguistic simile, the structuring of the expressions of the different natural languages could follow a pattern of hidden colors that would make it possible to arrange each expressive element in its proper place. Thus, constituting the true language in which a language (Universal Mother Tongue - UMT) is written, which has nothing to do with the language that communicates on the surface or Natural Mother Tongue (NMT). Therefore, two languages, however different they may seem, could have a similar hidden arrangement and, then, the superficial difference should be, to 1) an alteration, not of the code, but

of its interpretation and 2) an alteration of the elements that grant their identity. That is a different production of hidden colors.

What we want to express is that the relationship between the UMT and the NMT is similar to the one we can find between the genotype and biological phenotype.

The preceding is closely linked to the much-promoted opposition between universals and linguistic typology. In total agreement with what was sustained by Comrie (1989, p.35), we can say that these aspects, more than antagonistic, are complementary. Moreover, in reality they observe among themselves a triple relationship: opposition, complementarity, and concurrence, that is, what we already know as a complex relationship.

The language, both universal and natural, as we have already shown, obeys a common logical pattern with all subjective reality. This pattern (PAU), as we have already seen, is structured as an opposition: subject/object, mediated by another opposition: similarities/differences. Universals and typology, precisely, also show this last opposition, that is, to proclaim the existence of universals is to accept that among all known languages there are concrete and irreducible similarities. On the other hand, the attempt to typologically characterize the known languages is equivalent to the acceptance of obvious differences between them.

The transcurssive logic (TL) allows the study of these important aspects to understand our language a little better and does so from a genetic proposal. The genetic here differs substantially from the method proposed by Greenberg (1957) who addressed both the universals and the typology from a widely criticized 'comparative genetics.' However, I want to rescue the enormous and brilliant work of this linguist because, beyond being one of the primary sources of inspiration for the fundamental structure of the TL, he proposed solutions to substantial issues that, according to my estimation, are not so wrong.

The concrete proposal presented here is based on considering universals and typology as genotypic and phenotypic manifestations, respectively, of a specific language. That is, the implicit similarities and explicit differences that approximate and move away one language from another.

The universal has in this work, two different meanings that derive directly from the issues addressed. Both the 'order of words' and some lexical categories are considered universal. In the first case, the six possible logical combinations between the three constituents of a clause (S, O and V), proposed by Greenberg, that is: SVO, OSV, VOS, OVS, VSO and SOV, force us to divide the languages in two large groups: those in which some order of these becomes manifest and those that show a free order, since all languages belong to one of these patterns, of course not taken in the grammatical sense but transcurssive, that is, as subjectivons. What happens is that in those languages that appear to have no prevailing order, in reality, it is implicit, or what is the same, is part of its "genetic structure" that does not become manifest, but always is; they are "inactivated genes."

In the case of the lexical categories, as will be seen later, only the noun is justified as universal, and the treatment of the temporal axis that each language makes is added, based on superficial and deep aspects that the TL can characterize from the subjective, as the most essential functional facet of natural language. Figure 1 shows a comprehensive view from our perspective. There one can observe the relationships that link the different languages described in this work and also provide details that help to understand how its acquisition is possible.

Figure 1. Linguistic genetics
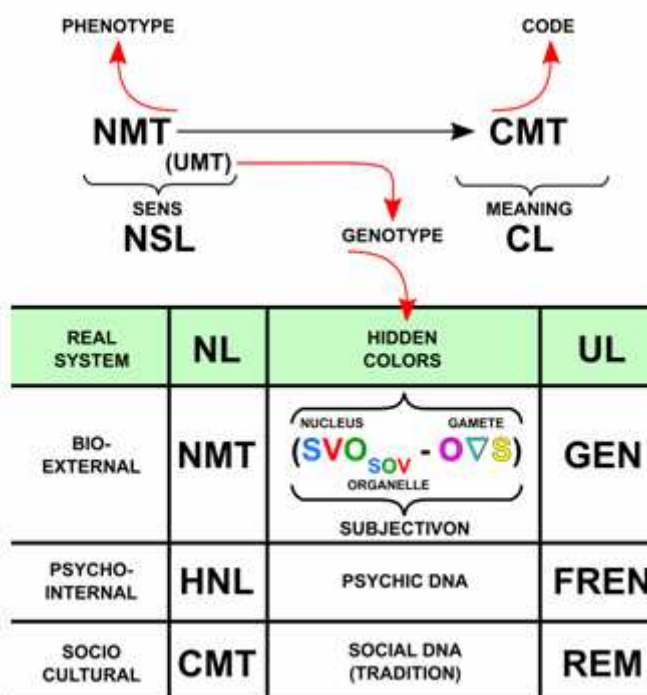
References: NMT: natural Mother tongue – CMT: conventional mother tongue. UMT: universal mother tongue – NSL: natural symbolic language – CL: conventional language – HNL: human natural language – NL: natural language. UL: universal language – CL: conventional (everyday) language. GEN/FREN/REM: structural units of real systems

In the previous figure, we can see the relationships that link the different languages described in this work and also provides details that help us understand how your acquisition is possible.

First, the relationship between NMT (phenotypic) and UMT (genotypic) is highlighted. This relationship is what serves to communicate the meaning of a fact, through the NSL. From here the CMT (the code) is derived, which carries a meaning that expresses through the CL.

The genotype is sustained, for its expression, in a series of hidden colors that determine the genetic behavior of a specific NMT. These "colors" are hidden in the subjectivon or in the "cell" in which the domain of a UMT is structured. There are its noble elements, that is, its nucleus, its gamete and its organelle (s), which define how an NMT will be and evolve, thus establishing a simile with the biological DNA.

From the NMT derives the HNL, of symbolic nature, which is acquired according to what is structured in the psychic DNA, as we will see in detail in this third part. For now, we will say that this acquisition is based on universal aspects that we will later develop. Finally, a CMT is acquired based on a logic that is reflected in the constant and automatic use of its categories, until it creates perceptive habits that divide the evident reality in a different way among the different populations, something that is later expressed in the grammar of its CLs. As defined by Chomsky (1992, p.278), a grammar is a system of rules that generate an infinite class of "potential percepts", each with its phonetic, semantic and syntactic aspects, the class of structures that constitute the everyday language in question, and we would add, facilitated by the social DNA, that is, the tradition that substance the social heritage.

All previous development is governed by a single UL, which is made manifest in the respective structural units (GEN, FREN, and REM) (See Appendix A), according to the real system from which the considered language derives.

2.0 ABOUT THE LINGUISTIC UNIVERSALS

The subject of universals, so discussed among philosophers in the first place and then among linguists and philosophers, has reached, according to what Mairal and Gil (2006, p.vii) see, regarding the linguistic approach, a moment of adequate explanations, by offering satisfactory answers to the why of the differences between the different languages. These answers are based, from the cognitive sciences, on the supposed demonstration that the differences are only superficial, since, there are also supposed and undeniable regularities that underlie their deep structures.

The previous assessment that carries the indelible Chomskian stamp, in fact, never constituted an adequate response to not being able to demonstrate concretely, that pretended double structure of the simple code, the one that sheltered in the tautological 'generative grammar,' that aspired to be a reflection of innate patterns controlled by the brain.

The problem of universals is neither philosophical, nor linguistic, but psycho-bio-sociocultural and is not even a problem, quite the contrary; it is a subjective solution to the real question: to survive.

However, we are going to approach the issue from the linguistic point of view because it is the closest approach, in appearance, to the subjective since it involves our preferred means of communication. However, we will not fall into the cognitive temptation to consider the distinction between internal (or theoretical or Chomskian) universals and external universal (or empirical or functionalist, semanticist or cognitive pragmatists: of Langacker, Dik Van Valin, Bybee, among others). We will only do a sterile analysis, by hybrid, for two reasons: first, to avoid the reproduction of preconceptions and prejudices; and, second, to invoke the order of words in a very superficial way, because it resembles in the terms, although not in the meaning, to our nomenclature and because in some way, it has syntactic connotations, just like our UL. The second reason forces us to also consider, the proposal of Greenberg.

Among the various proposed linguistic universals are those referred to the syntax and specifically, in what refers to the order of the words.

According to this criterion, languages are divided into configurational or those that are rigidly adjusted to a specific structure and those that are not configurational or that do not follow any predetermined scheme (Greenberg, 1963, pp. 73-113). Among the first ones, the Greenberg typology refers, among other aspects, to the position occupied by the Subject, the Object, and the Verb. Examples are Spanish (SVO) or Basque (SOV). Among the latter, we have, for example, Russian, with sequences: SVO, OVS, and VSO, which are used according to the context. The initial proposal of Greenberg included three types of languages, which he identified as I, II and III and represented the languages known today as VSO, SVO, and SOV, respectively. Over time and in the face of practical evidence, this initial amount was extended to cover all the combinatorial possibilities between the three essential elements, that is, they were added: VOS, OVS, and OSV.

Lehmann (1978, p.3) reduced the six previous types to only two: OV and VO, arguing that what was important was the order that the verb (V) kept concerning the object (O) and that the position of the subject (S), it was not important.

According to Lehmann, the VO languages would include the sequences: SVO, VSO, and VOS of Greenberg; whereas the OV would consist of the sequences: SOV, OSV, and OVS.

Currently, of the many proposals that emerged over time about universals, these two are considered to be those that remain in force: Greenberg's functional, of inductive nature and Lehmann's formal, of deductive nature. We will not consider the contributions of Vennemann and Dik for being of restricted management.

2.1 Greenberg's functional proposal

Many of the universals proposed by this author, out of a total of 43, formulate them regarding an implication, that is: if a language X has a property a, then it also has property b. Generalizing we can say: if x then y, and from here we get to:

Table 1. Functional proposal of Greenberg

x and y	11
x and not-y	10
not-x and y	01
not-x and not-y	00

In the previous table, extracted from Comrie (1989, p.17), x = absolute and y = unconditional. The binary digits are the correspondence with the transcurssive logic.
Dik (1997, p.27) shows the following table, where, with some modifications, there are four types of universals that are distinguished from the work of Greenberg (1963):

Table 2. Greenberg's universals

	IMPLICATIONAL (0)	UNCONDITIONAL (1)
RELATIVE (0)	TYPE D (00)	TYPE (01)
ABSOLUTE (1)	TYPE C (10)	TYPE (11)

TYPE A (11): Absolute and unconditional: all languages have the property x. For us it is the property that arises from the obvious, that is, superficial change.

TYPE B (01): Relative and unconditional: almost all languages have the property x.

TYPE C (10): Absolute and implicative: if a language has x, then it also has y. These are, in our case, universal tendencies or linguistic generalizations, rather than true universals.

TYPE D (00): Relative and implicative: if a language has an x, it will probably have a y. For our proposal, here are the true universals, those that remain hidden or that are not evident to the naked eye, that is, our primitive substantive and the temporal axis, which is in the +7000 languages known today in the world.

Comrie (1989, p.18) says that the following rule is fulfilled: there are always three of these four universals, in any language. That is, one is still hidden.

According to our proposal, types A, B, and C are phenotypic (superficial and evident), while D is genotypic (hidden and profound) and genuinely universal. This coincides entirely with the ABC model of the hidden colors and the Goethe proposal that we will see later, and thus Comrie's rule would be explained, three of the four types are fulfilled. One is always hidden, and that is, in my view, the true universal, because it is what conditions all others, that is, makes them manifest either alone or combined and can even come to hide them completely.

The conception of universals as a list constituted by the superficial variations of a large number of languages, including all of them, is likely to lead us to commit errors when assigning them to a particular type.

In German, for example, the controversy over the basic order of words could not be resolved until the underlying SOV order was noticed (German is SVO, like other germanic, English, pe). Through the syntactic operations that characterize the phenomenon of the verb in 2nd position (SVO), all the apparent orders of this language could be explained without problems, without the need to suppose that the main clauses, which are SVO, followed a different basic order subordinate or adverbial (among others), which are SOV.

The above, Givón (2001, p.247) explains it this way: when the main verb is grammaticalized, of the conservation of the position to the left of the complement [levo-rotated], it automatically becomes, the order of the words of the main clause, that is, SVO, that is, subordinate, adverbial, etc. They are more conservative (they persist in the OV format), while the main clause is more innovative, adopting the VO format. In our scheme, the German would behave as if we were facing a language 'inside another' or a second language had been acquired, that is, the scheme would be (Figure 2):

Fig. 2. German genetics
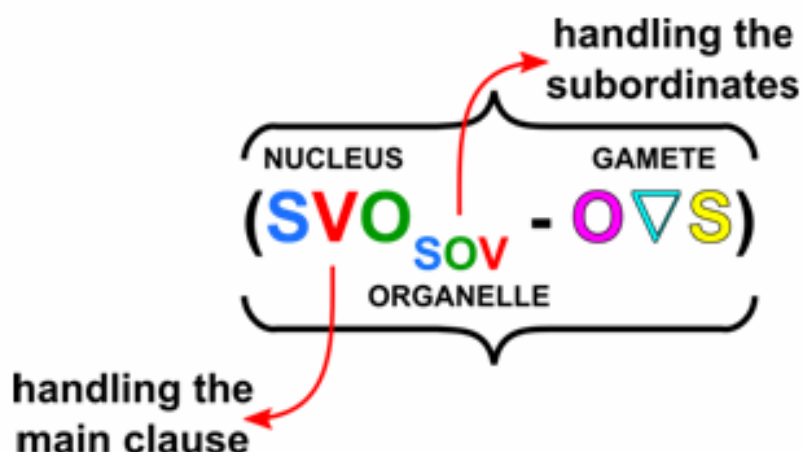
Is this why the German is so similar to English (which is SVO) (both are Germanic languages) and not Spanish (Romance language) which is also predominantly SVO? Answering this question would be important because it is being said that there are superficial elements that link the different languages of the different families (the right and left variants). But also, that there are deep elements that do so and explain why there are languages like Russian, for example, that has a surface order free, although it shows a slight levorotatory tendency in some of the variants.

2.2 Lehmann's proposal
This reduction approach divides the languages into VO and OV, which allows integrating other correlations, in addition to those suggested by Greenberg, and include within this simple scheme, more languages. The following table summarizes the most important guidelines of this approach.

Table 3. Lehmann's proposal

VO	OV
SVO	SOV
VSO	OSV
VOS	OVS
COMPLEMENT TO THE RIGHT	COMPLEMENT TO THE LEFT

In the previous table, the Greenberg patterns are grouped in the two types of languages, and also the concomitance factor is highlighted, that is, in the OV languages the concomitant element of O is V, to the right, therefore, the rest of the modifiers of O will go to the left (complement to the left). The same, but in the opposite direction, happens with the VO languages.

The above does not coincide with the disposition of the universal patterns proposed in this work, which is:

Table 4. Transcurssive proposal

D_X	L_V
*SVO	VSO*
VOS	SOV

As clearly seen in the table, there are two "crossed exceptions" (*) to the Lehmannian rule. The most frequent patterns are SOV and SVO (in that order), as established by Greenberg. Each of them is the paradigmatic pattern of the divisions suggested by Lehmann, that is, OV and VO, respectively. Our proposal characterizes the paradigm of the OV languages as levorotatory (L_V) and

that of the OV as dextrorotatory (D_X). Our difference concerning Lehmann derives from where we group the rest of the ordering possibilities.

In favor of Lehmann's proposal is that associations OV / VS and VO / SV are more frequent than OV / VS and VO / SV. In favor of our proposal is that SVO is an intermediate form between forms with initial V and final V (Dryer, 1991), which gives rise to our right-handed variant: SVO → OSV → VOS, thus nucleating three of the six defined domains by Greenberg.

The above is a true variant of languages grouped in this way, and on the other hand, would agree with those who do not accept VSO as a possibility VO, by interposing the S. This sequence also responds to the calculations made previously, as shown in Figure 3.

Fig. 3. Circle to the right in the dextro-rotated superficial variants
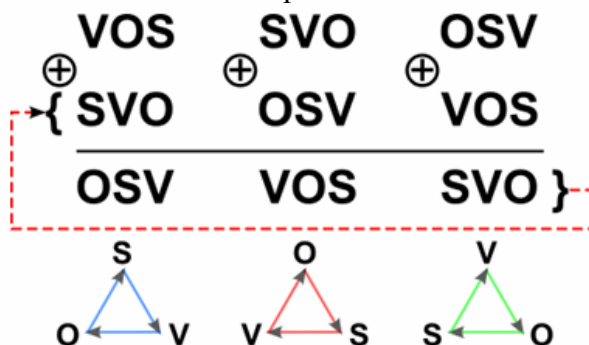
The levorotatory variant could be constructed in the same way and respond to the same calculations. That is SOV → VSO → OVS, according to Figure 4.

Fig. 4. Circle to the left in the levo-rotated superficial variants
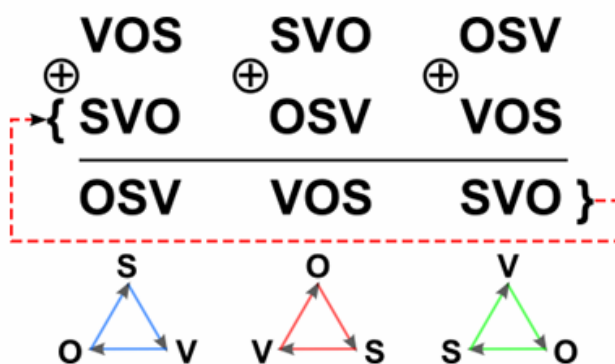
In the previous case, the intermediate form (OVS) would be the mirror image of SVO. Everything of the levorotatory variant is not proven, or, better said, it is not investigated, it is only a synthesizing induction.

There are some 'linguistic' details, not minor, that could support our proposal. For example, the investment of the SVO order in the order VSO, which is one of the exceptions, present in different constructions that denote emphasis. Thus, in English poetics (English is SVO) we can sometimes find the order VSO. Sentences in Arabic use the order SVO or VSO, depending on whether the important one is the subject or the verb, respectively. The non-VSO languages that use the VSO order in the interrogative form are: English and other German languages; French and Spanish (not always). With all the above it is demonstrated that VSO is less VO than levorotatory.

Something similar happens with the form OSV (the other exception), which, although it is a rare form, is seen in some Brazilian languages (Xavante, Jamamadi, Apurona, Kayabí, and Nabeti) and in spoken Italian. It is not uncommon in Yiddish, where it is used to highlight different

properties of the object. It is occasionally seen in English (future tense) or used with the conjunction "but." Both in English and in German, it appears in the relative clauses where, the relative pronoun, is the object (direct or indirect). It is also used in the American sign language. Other languages that use OSV are Arabic and the passive form of Chinese. Finally, and here is the most important detail, it is one of the two most common orders in Malay, the other is SOV. That is, it is shown that OSV is less OV than dextrorotatory.

If we take the Comrie table based on Greenberg, seen above, and distribute it in the six Greenberg universals (SVO, OSV, VOS, OVS, VSO, SOV) and then we distribute it according to the Lehmann division, with the reservations made previously, the "unification" of the two proposals is achieved. The functionalist (Greenberg's inductive) and the formalist (Lehmann's deductive), in one and universal. The abductive, proposed by the TL and that as we saw, serves as support to the UMTs, which will give rise to all the NMTs, which are acquired to respond to a UL that regulates all the real systems: the bio-external, the psycho-internal and sociocultural.
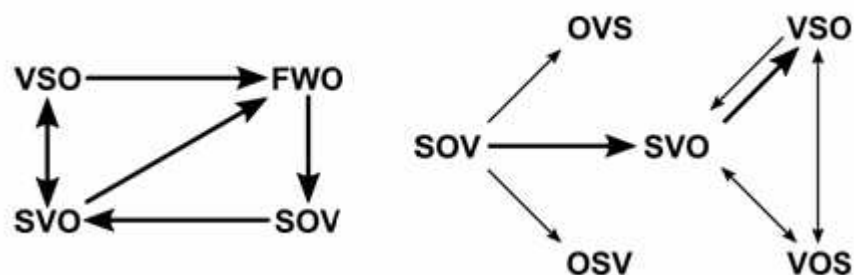
2.3 Genetics of the order of words

The great contribution of Greenberg's work (1963) was not to inventory the order of words but to recognize the existence of strong correlations between what appeared to be independent syntactic structures. In any case, he pointed out that of the six theoretical orders there were only three: SOV, SVO, and VSO. According to Gell-Mann & Ruhlen (2011), the works carried out in comparative linguistics suggest that all or almost all the languages now recognized, could derive from a previous language. If this is the case, these authors say, almost all the existing languages started from a basic "ordering" of the subject (S), the verb (V) and the object (O). From their comparative work, researchers draw three conclusions. 1) The order of the words in the ancestral language was SOV; 2) The direction of the syntactic change, when it occurs, has been for the most part SOV> SVO, and beyond, SVO> VSO / VOS with an occasional reversion to SVO; and 3) The two extremely rare word orders (OVS and OSV) derive directly from SOV.

Vennemann (1973) represented a possible order in the changes that the possible combinatorial patterns suffered. Figure 5 (left) shows that an SOV language can change only to SVO. SVO language can change to VSO or remain as a language with free word order (FWO) in which S and O can be marked by affixes, as in Russian. A VSO language can, at times, revert to the SVO type or become an FWO language. Finally, FWO language can, gradually, evolve towards the universally preferred type: SOV.

Gell-Mann & Ruhlen (2011), meanwhile, outlined a scheme (Figure 5, right) that illustrates the possible directions of change in word order. Thick lines indicate the most frequent changes, while the other lines indicate other possible changes. The suggested changes agree with what was proposed by Dryer (1991), who proposes that, naturally, the changes occurred from the OV> VO languages.

Fig.5. RD order models
Left: Vennemann – Right: Gell-Mann & Ruhlen

The TL provides a genetic model of the "order of words" based, on the one hand, on the pattern of hidden colors of a REM analyzed in the second part of this work. On the other side, in the structure established for a subjectivon.

Figure 6 shows the disposition of the "continents" that constitute our psyche and that allow us to make sense of a "real fact." Understanding by "real fact" the existing relations between a subject (S) and a generic object (O), using a double transformation (V / ▽), where the S is the source of those changes and the O the transformation (V / ▽), where the S is the source of those changes and the O the destiny of them. These references will be handy later when we approach the mechanism of acquisition of the lexical contextures.

Fig. 6. The continents that structure the psyche and the hidden colors of a REM or real fact
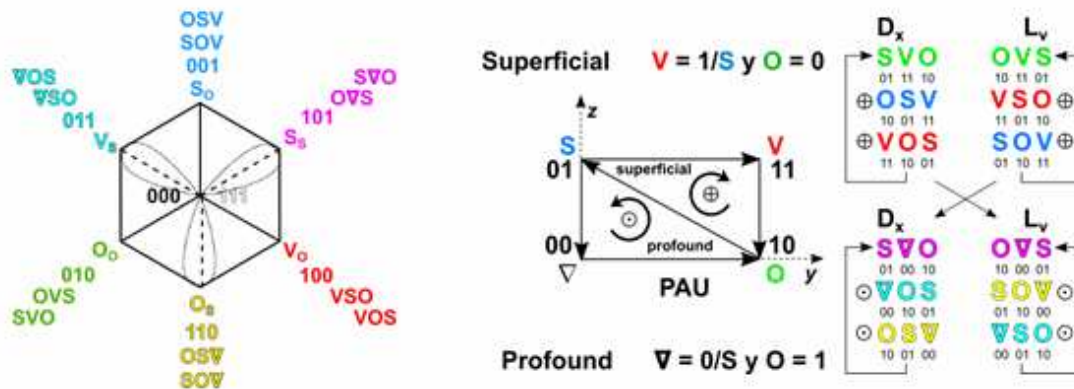
The scheme on the right side of Figure 6 justifies the assignment of the primary and secondary colors to the six universal patterns. Figure 6 (left), using the "genetic scheme" of a subjectivon, distributes the universal patterns and relates them according to the succession of changes proposed by the previously analyzed models.

We must emphasize that the model proposed by the TL (Figure 7), unlike the others, constitutes a dynamic expression of what is supposed to have occurred in the evolutionary history of the origin of our language. Dynamics that we see in this work is a replica of what happens when our psyche is formed, as we will see later.

Fig. 7. Genetics of words order
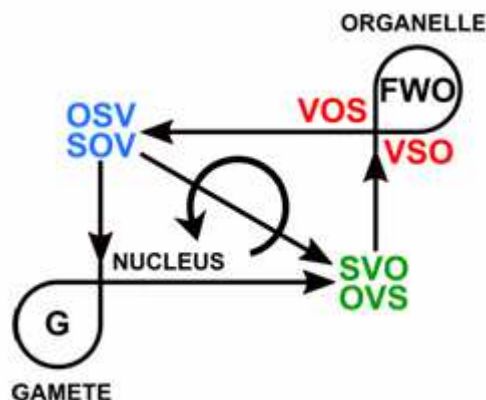
The previous scheme shows that, according to the proposals already reviewed, the "universal ancestral pattern" is SOV. All others derive from or are associated with it, forming something similar to the "core" of a subjectivon. In the appearance, there are those patterns that represent a change in themselves (they are preceded by an action) and as an "organelle", figure the "free word order" (FWO), which explains the apparent behavior of some languages that do not seem

to have a base pattern. Finally, the rest of the changes are given in a dynamic but hidden (deep) way whose support is in the "gamete" (G) of the subjectivon. When the system iterates several times at the apparent or superficial level and no significant change occurs, the way to generate "genetic variability" is to appeal to the "gamete", so that once the "order of words" is reorganized, all start again.

3.0 LEXICAL CONTEXTURES

Lexical contextures, taken as "word classes" (see Appendix B), and used as a frame of reference for language acquisition, present two significant limitations: 1) not all known languages show all lexical contextures, nor do they use in the same order and 2) do not coincide, in all languages, with the same conventional semantic categories.

The above considerations give grounds for suspecting that not only there are no structures, but also Neither is there universal functions. If the apparent characteristics are not constant, nothing prevents us from seeking the constant in what underlies that changing mantle.

Given the biological connotations that we have given to natural language, it, like any living being it is subject to two aspects that determine its appearance. That is, if two different languages are subjected to the same changes, they will show different states and do so in total consonance with their nature. This mutability of form, but not of function, would explain why different languages "respond" meticulously to particular causes, in a certain way and not of another (Theory of transference, Tesnière, 1965). The question is to unravel the laws that govern the mutability of form through the establishment of a function, to explain, the evolutionary adaptation and its 'intention' to survive, as we would do in the subject that makes natural language possible.

The germ of these presumed laws may be in accepting that the complex evolves from something simple. This means, neither more nor less, that natural language arose from an archetypal language, that is, from a universal language (UL). There would be no way to be able to state categorically that such or such a manifestation constitutes a language if they did not come from the same model. Although it can be argued that both the UL and the UMTs to which it originates are "theoretical constructs," no one can deny that the different known languages have specific characteristics, which are not fixed but can be given about a vast series of variations of an initial model.

All this suggests that it is as if the subjective reality were based on this archetypal language to elaborate each of the +7000 languages that we know today.

The individual changes exhibited by the different languages are, according to our proposal, the diverse expressions of an archetypal language that has within it the innate capacity to assume multiple forms and assign them different functions. Aspects that will adapt to the context to be able to evolve, once created.

Some details of the archetypal language, as we have already seen, allow us to show that it has autonomy, like any living being. For example, create different manifestations from itself and that these depend on a complex interrelation between its constituent elements, that is, they formed a true system, open and closed at the same time, which is affected by a continuous evolution or passing. The emergence of different languages is possible, insofar as each form/function that characterizes them is constituted according to a primary form/function. The latter is like saying that each aspect governed by a specific language is constructed according to the same formative type, that is, as if 'the whole language' were contained in each of its parts, and that, under appropriate conditions, each evident aspect can be created from any of them.

In this paper, it is postulated that the noun (See Appendix B) is the true universal of all existing languages. In fact, as a lexical structure, it is the only one that, on the surface, practically it is never absent. As we will see later, on this fundamental stone and guided by the model that represents the original language, the architecture of each known language will be designed, and the bases will be established to understand the phenomenon of natural language acquisition, which would be possible because each language would behave as a harmonious whole composed of other

languages. As conceived here, a language is only a noun as a "totipotential" seed (See Appendix B). Something similar to the "leaf" as the origin of all the organs of the flowers, according to the proposal of Goethe, that we will see next.

This allows us to affirm that each language evolves from contexture to contexture. Each one of these lexical contextures (here the name "lexical" is appropriate because, on the surface of the conventional language code, it will end up being expressed by one or more words) is identical to the others. Although different in its appearance (form) and fulfills a certain function according to the "place" it occupies in this interrelation, which gives it a particular identity. What produces that apparent difference of the lexical contextures, which, according to an internal principle, are identical? How is it possible that the laws that govern the evolutionary process of a language according to a single principle, can create once a noun and another a verb?

In principle, the answer to these questions is not in what can be evidenced by analyzing the apparent form of these manifestations, as has been done over time, for typological purposes, but as we already anticipated, the answer lies in what lies beneath.

To reaffirm our proposal, we will take as reference two models, one that emerged from biology and presented by Coen and Meyerowitz in 1991, called ABC model, which is based on the remarkable predictions made by Johann Wolfgang Von Goethe 200 years before, and the other from linguistics, created by Hengeveld in 1992, oriented towards typology.

Goethe, the immortal genius of the literary world, in 1790, reflected in his small and delightful work: "The metamorphosis of plants" the hypothesis that the organs of the flowers had as a common origin the leaf, understood as a universal structure: *"Even in regular and constant formations, nature has many ways of revealing the wealth hidden in a leaf."* (Goethe, 2009, p.67).

Coen and Meyerowitz based on the principle elaborated an explanatory, simple and elegant model of the formation of the organs of the flowers. (1991, pp. 31-37).

Three genes called A, B, and C (hence the name of the model) will be responsible for the formation of *sepals* (sp: flower calyx), when gene A is expressed; of the *petals* (pt), by the simultaneous expression of genes A and B; of *stamens* (et: male floral organs), by the joint expression of genes B and C, and of *carpels* (cp: female floral organs), by the expression of gene C (Figure 8).

Fig. 8. ABC model and hidden colors model
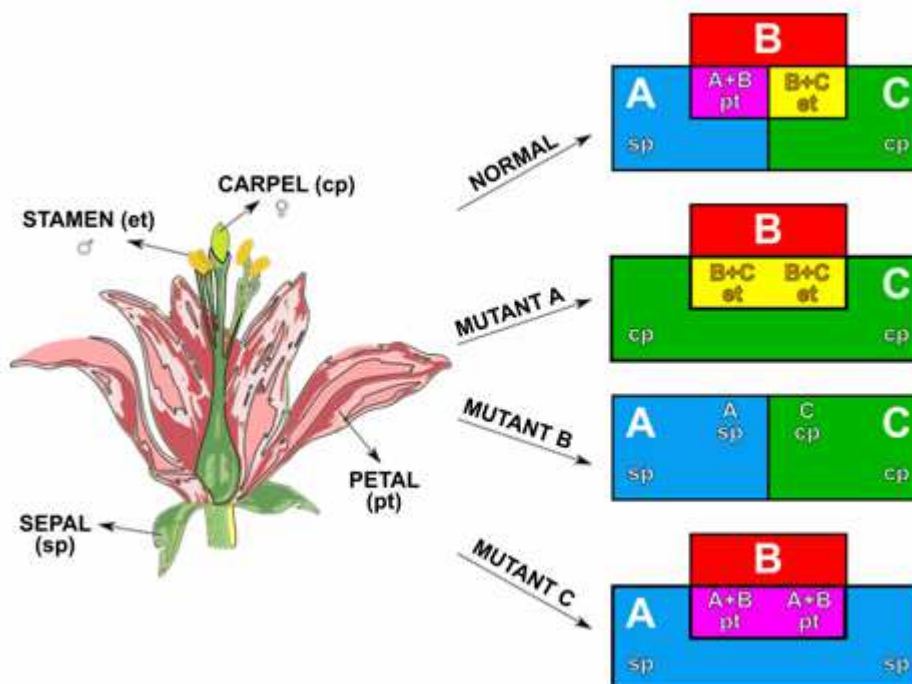
Genes A, B, and C are not true genes, but functions that fulfill a group of genes that can vary, within narrow limits, from one flower to another.

In 1999 Enrico Coen presented the model, assigning each gene an arbitrary color. We, in the previous figure, have chosen to assign the primary colors of light (blue, red and green), then according to the detail given above, the different organs will assume a color that, in some cases, will be the result of the combination (in pairs) of these three basic colors. That is to say: the **sp** will be blue, the **pt** will be magenta, the **et** will be yellow, and the **cp** will be green. In this way, as we can see in the figure, using the colors we can identify the genetic composition of the different organs in the normal flower, but also and here lies the usefulness of the metaphor of the colors, in the flowers that they show anomalies caused by genetic mutations. In this model, a mutation is represented by the absence of a particular gene (Coen, 2000, p.54).

A mutant flower A (Figure 8 - scheme without gene A) will have a genetic structure: **c**, **bc**, **bc**, **c** (colors: green, yellow, yellow, green) and will show the organs: *carpel*, *stamen*, *stamen* and *carpel*, that is, it will lack *sepals* and *petals*, it will only have reproductive organs. A mutant flower B (Figure 8 - scheme without gene B) will have a genetic structure: **a**, **a**, **c**, **c** (colors: blue, blue, green, green) and on the surface will show the organs: *sepal*, *sepal*, *carpel* and *carpel*, that is, the *petals* and *male organs* will be missing. Finally, a mutant flower C (schema without gene C, in Figure 8) will have as its genetic structure: **a**, **ab**, **ab**, **a** (colors: blue, magenta, magenta, blue) and show as organs: *sepals*, *petals*, *petals*, and *sepals*, that is, will lack sexual organs. Therefore, it will be a sterile flower. This last case represents the so-called "double flowers," the most beautiful, which far from being a "super flower," constitutes a serious genetic anomaly that sacrificed the sexual organs by petals, changing the offspring (profound) by beauty (superficial).

The description of the effects of hidden colors has been done in the negative sense, that is, showing what happens when one of them is removed and represents the inverse way in which one learns about the language of DNA through mutations, where it is observed what happens when a particular gene is defective. Using a positive analysis, from the hidden colors, we can say that there exists in the plant a specific set of genes, which we will call "genes of the identity" of organs, dedicated to producing the set of colors **a**, **b** and **c**. The positive meaning of these genes is that they ensure that a certain color will be produced. Mutations, where one of these genes is defective, will result in the loss of color and, therefore, change the identity of the organ to be developed.

Importantly, neither the genes nor the colors represent the instructions on how to build a certain organ. They simply tell us about the "region" where a specific organ should be located, linguistically, it's just a syntactic problem.

This model that we have just described was also applied to the rest of the living beings, as we saw earlier in the case of the *Drosophila Melanogaster* (Salatino, 2018) fulfilling itself completely, the predictions that Goethe made.

The linguistic model we have chosen is the one elaborated by Hengeveld in 1992, and in which the author proposes a differentiation of the kinds of words that can be used, among others, for typological purposes. This differentiation is based on the syntactic function that each lexical item fulfills so that the order of the words of a language can be partially determined, by the system of parts of the sentence of that language. This model in spite of the adverse criticisms (e.g., Croft, 2000), has enormous practical value because it allows a general view of the theoretical and real possibilities of organizing, according to well-established functional criteria, the kinds of words. The following table shows the elements considered for the model.

Table 5. Hengeveld's model

	NUCLEUS	MODIFIER
PREDICATIVE PHRASE	VERB	MODE'S ADVERB
NOMIAL PHRASE	SUBSTANTIVE	ADJECTIVE

As can be seen in the table, only the mode's adverb is included as a modifier of the verb, because the other classes of adverbs, rather than modifying the core of the predicate, modify the sentence in its entirety.

From the analysis carried out on 40 languages of very different origin, the author concludes that these languages can be divided into three large groups: 1) the *differentiated or specialized*, where each morphology takes its place (same morphology, same place); 2) the *flexible* ones, where the same morphology occupies different place; and 3) the *rigid* ones, where different morphology occupies the same place

Another parameter that establishes the model is the hierarchy of word classes. Some regularity is detected regarding the question of what functions a specific type of word is lacking and what functions can be combined in a single word class. (Hengeveld, 1992, p.68). The established hierarchy is:

VERB > SUBSTANTIVE > ADJECTIVE > ADVERB

This hierarchy says that a category of predicates is more likely to occur as a separate word class, further to the left of the hierarchy. From the combination of the two aspects analyzed, there is a classification of the word class systems in seven main types, according to Table VI (Hengeveld, 1992, p.69).

Table 6. Word class system

Flexible	1	1	V/S/Adv		
	2	V	S/A/Adv		
	3	V	S	A/Adv	
Specialized	4	V	S	A	Adv
Rigid	5	V	S	A	-
	6	V	S	-	-
	7	V	-	-	-

References: V: verb – S: substantive – A: adjective – Adv: adverb

As we can see, the degree of flexibility/rigidity varies from one language to another, which is not random but is adjusted to a specific hierarchy.

We will develop the content of the previous table succinctly, saying that languages such as Spanish or English that have separate word classes for each function have a differentiated word class system. Other languages, on the other hand, do not have separate word classes for each syntactic function.

In languages such as *Warao* (see Appendix B), for example, both adjectives and nouns can be used as the nucleus or modifier of a noun phrase. This type of language is characterized as an adjective-nominal.

In other languages such as the *Garo* (see Appendix B), adjectives and verbs are used, either as the nucleus of predicative sentences or as modifiers of a nominal phrase, so they are known as adjective-verbal languages.

The *Warao* and the *Garo* also differ in other aspects. For example, in the Warao, both the nucleus and the modifier of the nominal phrase can occupy two different syntactic positions, but in the *Garo*, this does not happen. To use lexemes that are defined as modifiers within a nominal phrase, they must be relativized, which shows that the position of the modifier is not occupied by a lexical unit (morphological), but syntactic (functional), so the construction is transformed into a relative clause. Within this clause, the core of the predicate (the verb) functions as in the main clause.

From all of the above, it is concluded that the *Warao*, because it has a type of lexeme that can occupy the position of the nucleus or the modifier within a nominal phrase, has a flexible word

class system. While the *Garo*, lacking a class of lexical elements that can occupy the position of the modifier of a nominal phrase (i.e., that morphologically lack adjectives, not so, functionally), made a non-lexical alternative (not morphological) and has, therefore, a system of rigid word classes.

To demonstrate the relationship of lexical contextures with language acquisition, we start with two basic assumptions. 1) natural language is not acquired suddenly, or as a whole, but starting from a basic structure/function (universal), it develops, and it evolves; and 2) this evolution is governed by the same logic that governs all subjective reality, that is, the differences and similarities that link in an operative unit, the complex relationships that are evident between the subject (S) and object (O).

Our demonstration will take elements of the two models analyzed previously, although with the appropriate adaptations. In the ABC model and the hidden colors, on the one hand, we will add a level of analysis, that is, it will be in any case ABCD. In fact, at a biological level, over time, the model has been extended, and today it is already considered ABCDE models, with which we are not forcing the comparison, and on the other hand, we will adapt to the handling of colors and nomenclature. Let's see all this in detail. Figure 9 shows the proposed new model.

Fig. 9. SVO∇ Model
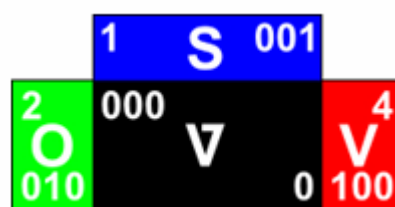
*References*: SVO: structural aspects (phenotypic) - ∇: functional aspects (genotypic)

We notice in the previous figure an essential modification in the assignment of colors, which in this case are not arbitrary, but respond to the code assigned in this work, to the different contextures.

As we have said before, the colors used are those that correspond to the theory of the color of light, something that is reflected in the binary codes (and decimals) that each color shows. If the codes of the superficial aspects (phenotypic) are added, give 7 (111) which is precisely the one corresponding to the white (additive synthesis of the primary colors: red, green and blue). On the other hand, the deep (genotypic) aspects, the true hidden colors, have a 0 (subtractive synthesis of the secondary colors). Assuming that the model described characterizes any language, the method using colors is a simple way to represent the different levels considered here, as mandatory constituents of any language. This is important because we are not going to analyze the acquisition of a particular language, but natural language in general. With this we want to emphasize; first, the universal principle of the archetypal language and, secondly, that all language derives from a *subjectivon*, that is, there is no language that is not included in any of the six patterns proposed by Greenberg. That some do not show it, it is only appearance, since, at the genotypic level, the one governed by the hidden colors is present.

In the SVO∇ model, colors do not represent genes, but contextures. However, their structure is genetic, since as we have seen, it is organized as a eukaryotic cell, with its nucleus, its gamete, and its organelle (s). The above explanation is relevant because, in this model, you cannot see the different variants (or mutants) by removing a gene, but by building them genetically. In any case, we do not consider a typological objective for the moment, but simply to show two fundamental mechanisms: a) how the natural mother tongue (NMT) is acquired through the archetypal language, and b) how natural human language is acquired (HNL), from which will derive the conventional mother tongue (CMT) and everyday language (CL).

The NMT, as well as the NHL, is not acquired all at once; instead, as we established in our basic assumptions, it is done gradually. There are fundamental differences between both mechanisms, Figure 10 will help us to understand better.

Fig. 10. Sequences in the acquisition of the natural maternal tongue (NMT) and the human natural language (HNL)
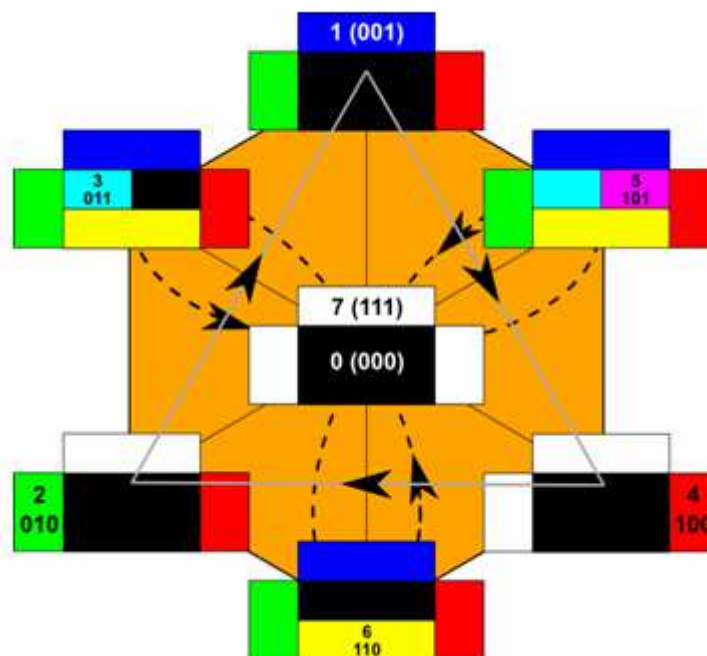
References: △: dextro-rotated ≅ HNL acquisition – levo-rotated ≅ NMT

The first thing that must be understood is that the HNL is a consequence of a structural process, while the NMT is a consequence of a functional process. By this, we mean that, although both begin at the same time and develop in parallel (heterarchical), do not start with the same aspect, or occupy the same level. That is, the NHL is a superficial process that begins with an apparent change or transformation and is structured in the same way as the psyche does, projecting itself phenotypically into the structural syntactic (word order) of the CMT. On the other hand, the NMT is a hidden process that begins in a profound change and acquiring its operation from the universal mother tongue (UMT), it is projected genotypically in the functional syntactic (types of words) of the CMT. The previous approach from the model of Hengeveld and reducing it extremely, suggests that in the NHL what is acquired first is the verb, while in the NMT the first to be acquired is the noun. This detail, which *a priori* seems irrelevant and even whimsical, becomes transcendental when trying to characterize some pathologies that cause alterations of the word; theme of a future work.

In the preceding figure, the two heterarchical processes outlined have been expressly distinguished. His *heterarchy* (See Appendix B) becomes evident in the central area of the scheme where we have represented the two levels in which we are going to handle: the superficial one with the white color that summarizes the structural and the deep with the black color that integrates the functional.

The dextrorotatory gray triangle, which is in the foreground, tries to show the relations between the primary colors (those that additively form the white one by direct summation gives 7 (4 + 2 + 1)) which are each in the place of the obligatory components of the superficial level, as we saw in the second part of this work when we spoke of the origin of the natural human language, where the details can be refreshed (Salatino, 2018). Here it suffices to say that, adjusting in part to the hierarchy proposed in the Hengeveld model (verb> noun [noun and adjective]), the first thing that is acquired to initiate the "order of words" is the verb or that which fulfills with its function

(according to the language). Then the object and ultimately the subject, thus ensuring the symbolic character that this language that is being acquired will have. Once all elements have been acquired (closed the triangle), the pattern will be "accommodated" to the one that governs the NMT, which in turn derives from the respective subjectivon. This fit is achieved when each of the elements acquired begins to have a functionalized structure.

The black levorotatory Trifolium, which in the figure is in the background, shows the relations between the secondary colors (those that by subtractive synthesis give black. The algebraic sum gives 0 $[(4-2) + (2-1) + (1-4)])$, and which constitute our hidden colors: yellow, cyan and magenta. Here, represented by the secondary colors, each types of words that are acquired is shown. This process begins with the noun, to follow by the verb, the adjective and finally, by the adverb, as shown in Figure 11, in which this dynamic has been superimposed on the basic elements that make up the Hengeveld model.

**Fig. 11.** Dynamics of the acquisition of word types

	NUCLEUS	MODIFIER
PREDICATIVE PHRASE	VERB Dx	MODE'S ADVERB Lv
NOMINAL PHRASE	SUBSTANTIVE	ADJECTIVE

References: Dx: dextro-rotated – Lv: levo-rotated

To better understand the above, we will propose a minimal theoretical example of a hypothetical language of the Hengeveld differentiated type, and that responds to the pattern (subjectivon): SVO. So that it shows us the management of the hidden colors in the assignment of the different functions, that is, in the identification of the different "types of words" and their successive acquisition.

Speaking of the CMT and the CL, the lexical categories noun, verb, adjective, and adverb morphosyntactically mark a specific language. Although not all of them are evident in any language, as Hengeveld showed, there is usually one that almost never lacks: the noun and not the verb as this author suggests. What we intend to show here is that all these categories have their contextural correlation, and its origin could well be where it seems to be universal: the name, and through those that, *a posteriori* will be transformed into the noun forms of the verb: infinitive, gerund, participle, and gerundive, would have evolved towards the other lexical contextures. Figure 12 shows all this mechanism, in which two well-differentiated stages can be recognized: a) the identification of the object and b) the identification of the subject, linked by the change.

Fig. 12. Evolution in the acquisition of lexical contextures
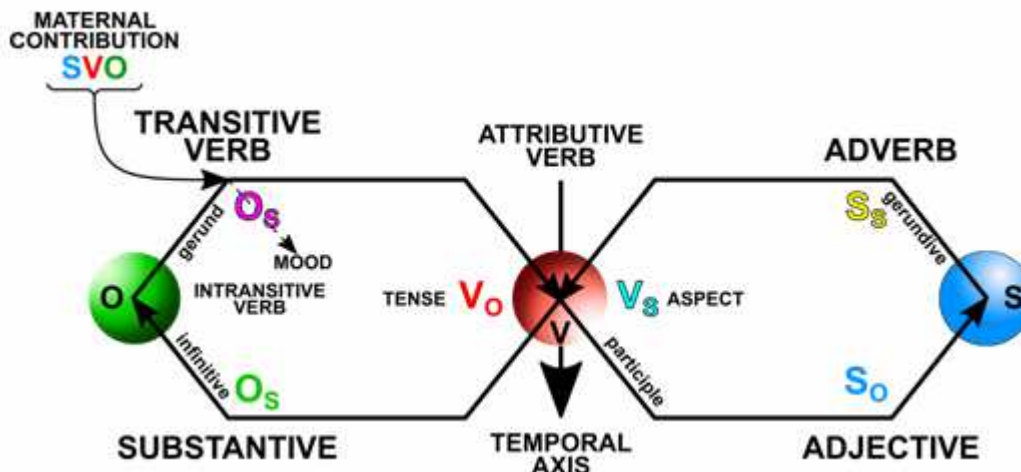
References: O: object – V: change – S: subject – SVO: maternal subjectivon
O_O: objective object – O_S: subjective object – S_O: objective subject
S_S: subjective subject – V_O: objective change (external) – V_S: subjective change (internal)

The child's psychic life begins with a perceived change that responds to a vital need manifested as dissatisfaction. If there is no external help to help solve this urgent need, death can only happen. If it exists and depending on the quality of such assistance (*Reverie* - see Appendix B), it causes an external change that provides the biologically necessary to achieve satisfaction. Simultaneously there is an internal change in the baby's psyche, which transforms into pleasure and allows it to emerge from it, an apparent change (external) that binds the previous changes and that becomes manifest when the sucking reflex is fired, the crying as a claim for satisfaction or other even more complex acts.

The identity of the object, as a psychic process, is something that is triggered after the perception of an authentic object (for example, the maternal breast), that which is destined to alleviate the vital need. Satisfied this and after its reappearance together with the simultaneous and transient absence of the authentic object, an apparent object is generated, which not only attenuates without eliminating the dissatisfaction, but replacing the now subject (object) in need, which is he, gives origin to the objective object (O_O), that is, what is perceived.

The genesis of the "primitive substantive" is in the apprehension, on the part of the child, of the evident and continuous change as a process that takes place in its environment, and it acquires it for the first time when it must characterize this dynamic process, that is, when it is used to identify entities that satisfy it. What does not satisfy him or is harmful to him, he discards it directly. The child has no choice but to "nominalize," that is, to transform an action, that someone who knows how to speak normally expresses using a verb, in a noun and in this way to leave fixed a situation that could not otherwise be capitalized. In other words, it is like "naming" something that for now cannot relate to your experience, the O_O, which is foreign to him and over which you have no control. Although this "naming" does not imply speaking, but only leave a record.

When the child can relate this first change to his own experience, there is a kind of *metabasis* (See Appendix B). That rudimentary noun is "verbalized." This verbalization represents a displacement, a projection, from the contexture of the objects, where he as an object has been rejected. The first thing that emerges in this complex process of verbalization is a kind of *infinitive*, like the noun form of the verb, but in the modality without its own subject, since, for now, it is he who will fulfill the function of the object that change.

The previous situation generates something similar to the first *intransitive verb*. The one that denotes a single participant, but that impels, on the one hand, the search for a true subject that helps him to solve the urgency for the object, different from him, that satisfies his need, and on the other, where he, as object and provider of virtual objects, ceases to have relevance.

It is important to explain why in an area where the subject prevails, that is, where no object is allowed (since as in all monocontexture the simultaneous presence of object and subject is not accepted), it is possible to operate with objects without suffering rejection or any sanction. This "condescension" is born because the "protective subject" (Here represented by the mother or her human substitute) who lawfully inhabits her world, generates at the expense of her subjectivity, a virtual space hidden from the prevailing binary norm. Where objects are admitted that they do not necessarily have to comply with the laws that govern the O_O, allowing the needy subject to 'play' with the coexistence of the authentic object and the apparent object, that is, learn to be tolerant of this antinomy (Winnicott, 2003, p.27). This is the first feature of the subjectivity of the 'needy subject,' which allows him to designate an object without disappearing.

In the virtual space (Winnicott transitional phenomena, 1975, p.240), the fictitious co-presence of the authentic object and the apparent object does not avoid the growing dissatisfaction that has not yet been alleviated since it derives from an unresolved contradiction. This makes it possible to change the search by projection, that is, one learns to identify through the projection of

dissatisfaction, an object that can be both a provider of satisfactory and unsatisfactory experiences at the same time. This alternative represents a synthesis that overcomes the previous contradictory event, the one that occurred between the satisfying object and the progressive dissatisfaction.

The continent thus configured, which tolerates fictitious objects and opposing sensations is erected in the first outline of *contexture* where the link with an external subject that acts as a virtual continent of objects begins. The mother or substitute with this act of attention, allows the child to generate a place where, from here, he can "house" the objects that are not himself. We will call this place: *subjective object* (**O$_S$**), representative of our first "hidden color" (see Figure 12).

The emergence of **O$_S$** gives rise to two transcendent facts in the acquisition of natural language. In the first place, the mother to "give up" the **O$_S$**, makes it "wrapped" in its own subjectivity, that is, it dyes it of the psycho-bio-socio-cultural aspects that characterize it as a subject. Among the things that are inherited by the baby, is the *maternal subjectivon*, that pattern on which his universal mother tongue was built, that was given to him, in turn, by his grandmother to his mother and that represents the "way of seeing" the subjective reality that his biological mother has.

Secondly, by capitalizing on relationships with what is different from one's own being, in the hand of something similar to the *gerund*, since we are dealing with an action that has been characterized regardless of time or any other element, it ends up in something like a *transitive verb*. That which allows an action to be defined as what passes or is projected from a particular actor to an object. The particularity of the *gerund* of being able to typify simultaneity of two actions or the way in which that action occurs and still, its possible cause or origin, makes it appear as an element to be considered for a characterization of the evident action. We must also point out that the emergence of the **O$_S$** now gives the possibility of defining the load of reality that action has on the objects perceived. This last will lead, in conventional language, in the *mood*, or what it tells us about the reality or unreality of the action characterized.

As a result of the completion of the first stage in the acquisition of natural language, we have: 1) the identification of the object through a kind of *noun*; 2) the characterization of the evident change through an action that is implicit in something similar to a *transitive verb*; and 3) the acquisition of the universal mother tongue (UMT), as an indelible pattern from where, now and always, the child will observe reality.

The second stage in the acquisition of natural language begins when what has been achieved in the previous stage is sufficient to tolerate the ambiguity of the sensations, but not to admit that same ambiguity between the objects.

It has already been learned that there is an external object (**O$_O$**) that is related to an external subject, but nothing is known about that relationship. Knowing implies a higher level of integration, basically because learning has to do with facing the changes proposed by reality but knowing involves finding differences. The first difference that must be sought is what is between observed object and observer object.

The generation of the first continent, that of the objects, in the psyche of the child, thanks to the link established with an external subject (the mother or its human substitute), allows that observer object represented by the child to become an objective subject (**S$_O$**); thus, differentiating itself from the perceived object. This transformation allows the baby to inhabit, in its own right, the "monocontexture of the subjects," like his mother, but with the marked limitation that entails only detecting signals, that is, changes. If we had to qualify this primitive newly acquired language, we could call it *taxic language*, since it works in total dependence on displacements or projections of the child's psyche, as a response to the perception of changes that occur both in him and in his environment.

Through something similar to a *participle*, that is, something that allows an object to be qualified without losing its verbal nature (participating in both natures implicit in the achieved object), perhaps has reached something like an *adjective*, or something that could qualify a noun or object distinguishing it from others, modifying it. This modified object is the **S$_O$** (see Figure 12).

What has happened up to now is very important because a rudimentary management of the apparent or superficial reality has just been validated, that is, of the real aspects that relate two objects: the O_O and the S_O, through an apparent change. In this way, we move on to a kind of natural language that we could call *signic language* or that which allows us to put an object in the place of another, but without confusing them.

The process that we have just described contains the germ, the rudiment of the first psychic structure, the one that will have the mission of integrating the whole psyche. What will give sustenance to its definitive structure and that will be the representative of the external time in the psychic depth. Something, the latter, which does not mean anything other than the *structural memory* or the place where the ideas will be emplaced to sustain the history or the becoming of the subject. After a certain chronological time and because the perennial search for satisfaction of the primary need never stops, the process begins again. When this happens, the first structural psychic unit is confirmed, that is, the first *idea*, that which promotes the emergence of a sign as a fundamental element of natural language. The successful completion of the previous process leaves as a result, in addition to the first psychic structure, an active mechanism of integration between the sensations transformed into perception and ideas. This mechanism is in turn, which makes it possible to combine a second type of memory, the *operational memory*, where the motor actions elaborated in response to what is perceived will be "recorded" (These FAPs (fixed action patterns) will be responsible for receiving in the future development of the child, the necessary motor operations to be able to emit the word).

The passive stability achieved is not enough to cover for a long time the primary need to survive. Although having completed the cycle that allows fairly adequate management of what happens in the environment, making the system output a new input and correcting a deviation (negative feedback that corrects deviations following a linear causality), allows the system to be 'alive' and maybe stay. This will not happen permanently given the inability of the system to adapt and evolve in an environment that cannot be modified and where to stay alive depends exclusively on its passive modifications. Which is not exempt of inability errors that will lead, when accumulating, to the disappearance of the objects, unless there is a structural change that allows reversing the situation.

The previous situation begins to revert when you capitalize on learning about changes and what is known about differences to lay the foundations of a rudimentary act of understanding, to be able to individualize the primitive mechanism that leads to the superficial organization and thus highlight its manifest inefficiency.

Everything that has been learned before the imminent destruction of the treasured internal object is discarded. This generates a high degree of dissatisfaction, but that differs from that felt in the first instance where what was at stake was his own life, in which now what is threatened is the object achieved and in which this threat does not come from the outside, but from himself. Then arises the urgent need to reorganize this object that is assumed destroyed, disorganized by own action and associated with his mother.

To adequately elaborate the above, the child must be able to identify himself momentarily with that his only internal object (his mother), thereby mitigating the fear or dissatisfaction that arises from having destroyed the internal object in the past; in his short experience, or that there is some possibility of doing it again in the future, something that depends exclusively on what has already been lived. This reorganization of the internal object is the mechanism that the child uses to successfully complete the psychic structure, by achieving a stable relationship with that object. This reorganization is never complete, and its insufficiency is felt every time a new object is internalized, or in its adult life, each time it goes through a traumatic situation at the psychic level, which will force it to reconstruct each time, its inside world. The non-existence of psychic modifications that could have relevance in the acquisition of natural language will depend on the good preparation of the first reorganizing process.

The identification process that occurs at a deep or not apparent level, consists not only in tolerating differences as in a first moment, but in "understanding" that the similarities that exist between the child and his mother, are those that separate him from her, with which emerges a subjective subject (S_S), which differs in addition to the S_O, that explicit observer already known. The first rudiment of a category is thus configured, on a psychic level. In Figure 12, the SS represents the creation of the second continent, that of the subjects, and of the second hidden color, which completes the process of identification of the subject.

Something similar to the *gerundive*, that is to say, that relative to leave a record of what must be carried out, such as the fact that a subject is the source of a change or of an action that will fall on an object, which can be responsible for the emergence of an *adverb* simile, that is, a qualifier of the action exercised by a subject and even a representative of that action (Tesnière, 2015, p.479). The figure of the *adverb* is adequate to characterize this instance basically in its superficial and apparent invariability, since in the deep it operates assuming modifications on the three instances previously described, that is, the *noun* (O_O), the *verb* (O_S) and the *adjective* (S_O) and even on itself (S_S). The action that is being characterized does not respond to obvious or superficial transformations, but to profound or hidden changes. With the identification of subjective change (VS) or deep, represented by our third hidden color, which completes this second stage in the acquisition of natural language, which now has all the characteristics of natural human language. That is, it is a *symbolic language* or where a subject and an object are related through a change, thus emerging the symbol as a sign understood, that is, as a carrier of a certain meaning.

The dynamics of the whole system described would operate on two levels: the superficial one that links the *noun*, the *verb* and the *adjective*, and the profound level that would be reserved for the *adverb*. This distribution in a dynamic assembly has time as its axis.

The temporal aspect, which is considered by us, next to the name, as the only universals within the natural language, is controlled in the aspectual by the profound change (V_S) and in its temporality, by the superficial change (V_O). (See Figure 12). This *time axis* covers two different issues. On the one hand, it defines the necessary nexus that must exist in the given relations between subject and object, in their temporal regimes, with the purpose of synchronization. In other words, in the *now* the *before* and *after* of the *superficial time* must be synchronized with the *past*, the *present* and the *future* of the deep or *internal time*. On the other hand, it leaves evidence of whether an action is permanent or transitory and this is done by varying the location of the *now*. That is, placing it in the present or in the past. The above perfectly could be equated with the so-called *attributive* or *copulative verb*s, which, without reference to an action, indicate its modality or aspect or that at some point that action became evident.

In summary, according to our proposal, natural language is acquired as a consequence of a process that could be equated to a *denominalization* (see Appendix B) that operates at the level of the form through a *metabasis*, gives origin to the other lexical contextures and through a mutation at the level of the function. It has the possibility of locating each contexture in the place of another, that is, operating at the level of the hidden colors, so that, as happens in the biological, each language that is acquired according to genetic patterns that govern which lexical contextures will be operative, when they will do it, how they will do it, and why.

We must clarify that everything described above is a process that is supposed to be unconscious, that is, where the child's consciousness does not participate at all, and that has nothing to do with the process of acquiring conventional language, which is done to through the child's conscious imitation of what his relatives are trying to teach him.

The preceding would explain why the human being begins to handle his language in a fast, efficient and almost as if by magic. In the time that elapses between his birth and the moment he learns his first words (at least about 18 months), the child acquires his natural language. When he begins to speak, he already knows its structure and functioning perfectly; he only has to 'fill in' this scheme with the conventional words that in the place where he was born, are used to name things and their relationships, as products of a sociocultural inheritance.

What we have just proposed is against what is affirmed by psycholinguistics and in general, by all cognitive sciences. That is, the cognitive (whatever that means) is not the product of an innate construction supported in formal or conventional language and then 'filled in' by some supposedly psychic aspects, as Chomsky claimed and all the current sciences that he helped create, if not and as we have established, it is the exact opposite.

4.0 SOCIOCULTURAL INHERITANCE

In "Deconstructing Darwin," Sampedro tells us (2002, p.194): "what is learned becomes instinct" by referring directly to the evolutionary theory known as the *Baldwin effect* in honor of the proposal made in 1896 by American psychologist James Mark Baldwin, who suggested a mechanism for the selection of learning skills. The selected offspring would acquire a greater capacity to learn new skills that would allow them to overcome the barrier imposed by genetically codified and relatively fixed skills. Emphasizing the fact that sustained behavior can model the evolution of species.

Referred to human natural language we could say, that at the beginning it was the universal language, originated from "the change made action" (taxic language) and thanks to the *Baldwin effect* that action "became flesh", certifying the biological roots which show the signic language, and from there emerged through the psychic structuring, the human symbolic natural language. Therefore, and as Sampedro (2002, p.95) points out to us, language is not an accessory device that we can plug into the brain of a monkey to make it speak like us.

Each living being has its natural language, and this tells us what the world is like for that particular being. This rule, which of course involves humans, states that languages are not interchangeable between species, such as the HOX genes are seen in the second part (Salatino, 2018), but can only be integrated from a primary level to man same that transforms for this reason, in a "compiler of footprints" of all of them.

Starting from the basis that we consider the individual as a social subject, that is, as the result of society and not its unit, since the social unit is the "real fact" or REM, we could try a definition of social inheritance saying that: " it would be the set of acquisitions resulting in each generation, from the progressive integration and reabsorption by the individual, of all the transmitted culture ". This would give a continuous incardination of elements of subjective nature (language, institutions, customs, etc.) that would be transmitted hereditarily through a process that is commonly known as *tradition*.

The word *tradition* (Coromines, 2009, p.548) appeared in Spanish in the mid-seventeenth century and derives from the Latin: *tradere* (de *tra*: "to the other side," "beyond," and *dere*: "to give"). That is to say: "to give beyond," thus enclosing the notion of transmitting or delivering, that is, communicating. *Tra* derives from successive transformations of *trans*, which happened to *tran*, then to *tras* and finally to *tra* (Monlau, 1856, p.144) and which does not mean only, as is commonly believed: "to the other side" or "through," But:" from one side to another." This is how it gives the idea of a space covered, pass from part to part, transmit, transform; although not only highlighting the fact of the transfer or passage from one situation to another but leaving a record of the existence of a place or situation of origin and another of destination.

In a more general sense, the term *tradition* has been related to the term *ultra* saying that *tra* or *trans* denotes beyond in a sense or only one direction and *ultra* denotes beyond in every way. However, it is considered, it was chosen to integrate the transcurssive denomination that characterizes the logic used in this study because it summarizes in a single particle the spirit of our psycho-bio-sociocultural approach.

In an article that Baldwin published (1896a, pp. 441-451) under the title of "A New Factor in Evolution" is conceptually raised what later became known as the *Baldwin effect*. An important work because it proposes to us, not only what transcended in time, but a series of concepts that will help us to perceive more clearly the enormous influence of the biological and evolutionary in the social, and even, how the author sees it the social heritage, which defines.

Baldwin tells us that organic development can be approached from three different aspects:

a. Ontogenic
b. Phylogenic
c. Hereditary

a. Ontogenic (organic selection): there are two types of facts that can be distinguished from the point of view of the functions that an organism carries out in the historical course of its life. *i*) the development of its hereditary impulse together with the congenital variations that characterize it or phylogenetic variations that are constitutional and *ii*) a series of functions, acts, etc., which learns in its life course, especially the modifications that an organism suffers during its ontogeny, which as a whole, are known as "acquired characters" and which the author calls "ontogenetic variations".

It is assumed that these acquired characteristics arise by the law of "use and disuse." Now, how can an organism be modified during its history? The answer to the question can be found in three different types of ontogenetic media that produce modifications, adaptations or variations. These are *i*) the physical environment and the influences of the environment that act on the organism producing modifications of its forms and functions. All chemical, physical agents, contacts, obstacles to growth, etc. are included here. All the changes produced by the previous agents are considered as fortuitous or accidental, and the author calls them physical-genetic; *ii*) there is a kind of modifications that arise from the spontaneous activities of the organism itself while carrying out its functions. These variations that are evident in every living being are considered as selective properties. In animals, it is characterized as neuro-genetic; and *iii*) a large number of adaptations of the conscious medium that involve intelligence, such as imitation, gregarious influences, material instruction, lessons of experience, reasoning from the means to the ends, etc.

Adapting the above to our purposes, which the author characterizes as "organic selection," we could say that the ontogenetic modifications are of three types: psycho-genetic, bio-genetic and socio-genetic, so the inheritance affects them all by likewise through the *frenes*, *genes*, and *remes*, respectively. Which would represent the acquisition, by organisms, of new modes or modifications of the adaptive function that influence its structure and that result in the possibility of survival.

b. Phylogenic (physical inheritance): or determined variation that neo-Lamarckism tries to explain using its principle of inheritance of "acquired characters" but that the author does through instinct as a survival strategy. It proposes certain results obtained on phylogeny, and that originate from organic selection, such as *i*) ensuring the survival of certain lines of phylogenetic variation in the direction of certain ontogenetic adaptations of the first generations. As this happens, there is time for other skills to emerge that will then be transmitted and *ii*) the phylogenetic modifications achieved are again used ontogenetically. The two previous considerations distance Baldwin's proposal from the idea of Lamarck (See Appendix B) on the inheritance of acquired characters. To the influence of organic selection, the author calls it the "new factor." The ontogenetic adaptations are new and not preformed, and they effectively reproduce in the successive generations, but not through the biological inheritance but, through the social inheritance, as is the case of the transmission of the *maternal subjectivon* that we saw in the previous point.

c. Hereditary (social inheritance): as Baldwin proposes what can be learned innate through the instinct that becomes a habit. It looks like Lamarck's idea, but it differs from it in that it operates through purely Darwinian mechanisms. It is based on the basic similarity that supposedly exists between innate brain architecture, formed by reinforced synaptic connections, and learning that, in itself, supposedly consists of creating and reinforcing certain synaptic connections. In our case, without affirming exactly the above, we propose that there is a homology between the psychic, the biological and the social and that the fundamental motor of this homology, as proposed by Lamarck, is the need to survive and not natural selection. According to our point of view, at a cerebral level, the survival instinct allows the experience to generate habits and socially, favorable

stimuli for the appearance of certain behaviors and their effects, allowing the diffusion of such behaviors in resonance with a genetic predisposition (social) in certain individuals or social subjects, facilitate their execution. Thus, these individuals will be benefited with social survival. The paradigmatic case of these behaviors, at a psychic level, is natural language and at the social level, through the use of projection in conventional language, the courtesy.

The *Baldwin effect* is also known as "genetic assimilation" and is a perfect substitute for the inheritance of acquired characters. Baldwin, in the case of man, above all, emphasizes imitation as the fundamental element of learning.

4.1 Why REMES and not MEMES?

In "Heredity and Instinct" (I) (1896b, pp. 438-441), Baldwin tells us that there are two great hereditary influences (we have proposed three: biological, psychic and social). a) the natural inheritance using which they have congenitally transmitted the variations with their original foundations and b) the social inheritance by which socially acquired functions are transmitted imitatively, and that cover all the conscious acquisitions that arise from the interrelation between animals. The first is phylogenetic, while the second is ontogenetic. These two hereditary lines influence each other. The congenital variations, on the one hand, keep the animal alive and make it effective for the conscious use of its intelligence and imitative adaptation in its individual life. On the other hand, intelligent and imitative adaptation is made congenital by further progress and refinement of the variation in the same line of function acquired by the individual, and it is not necessary, to assume the acquired factor of Lamarck.

Richard Dawkins in his as renowned as controversial book "The Selfish Gene," in Chapter XI (1976, p.189) entitled "MEMES: The New Replicators," states that most of the features that are unusual or extraordinary in man can be summarized, in a word: "culture." That cultural transmission is analogous to genetic transmission in that, despite being conservative, it can show a certain evolution. According to the author, in this evolution, language is an example among many others, including fashion, eating habits, ceremonies, and customs, art, and architecture, engineering, and technology. Everything would evolve in historical time in a way that seems like a highly accelerated genetic evolution, but which, in reality, has nothing to do with it. Dawkins, while accepting that kin selection and selection in favor of reciprocal altruism could act on human genes to produce much of our tendencies and our basic psychological attributes, believes that these ideas are not enough to explain the culture and its evolution. Then, just as he proposed a replicating machine (the gene) as the one responsible for biological inheritance, he proposes another type of replicator: the MEME (A neologism that derives from a whimsical apocope of mimesis), with the idea that it represents a unit of cultural transmission or a unit of imitation that, resembling a gene, allows cultural evolution.

As we can see, imitation is the axis of the proposal, and there are good reasons to suppose that Baldwin was the inspirer of such a proposition.
In whom was Baldwin inspired?

Gabriel Tarde, a French sociologist, criminologist and social psychologist who conceived sociology as based on small psychological interactions between individuals (much like chemistry), the fundamental forces being imitation and innovation, published in 1890 (1895), perhaps his most well-known work: "The laws of imitation." There he told us that everything social is only invention and imitation and that with the novelty provided by all kinds of social phenomena (language, religion, politics, industry, art), whether large or small, nothing changes on the surface.
Baldwin mentions Tarde in his work and is inspired by it to invoke imitation as the fundamental motor of learning.

Tarde himself, in the prologue to the second edition of his theory of imitation (1895, p.10), apologizes for the confusion he has caused with the use of the word "imitation", which he uses without morphological changes, so as not to use a neologism, but with an absolutely different meaning to the one that appears in the dictionary. It clarifies that the 'crime' of the abusive use of the term has not been committed since it clarifies duly, and, on several occasions, what is the sense

in which he uses it. That is, to record a remote action of one spirit over another and an action that consists of an almost photographic reproduction of a cerebral "cliché" of another brain. He understands by imitation any impression provoked by an "inter-spiritual photography," whether intentional or not, passive or active. Wherever a social relationship is established, there is imitation in this sense. In this same writing, what Tarde does consider abusive is the elastic meaning given by many naturalistic sociologists to the word "inheritance" that they use to express confusingly as a transmission of the vital characters, the transmission of ideas, of customs, of social things that are usually transmitted by ancestral tradition, by domestic education or by imitation-custom.

It is evident that Baldwin did not read this prologue and Dawkins did not either. By this, we mean that the imitation-custom as the absolute engine of learning is not appropriate since not even the origin of its proposal has solid foundations.

What has been said allows us to offer the REM option as a social unit instead of the MEME. Where imitation is not considered, but rather its operationality is based on a structural functionality that, as a "social protein", allows adapting and promoting the evolution of a psychic structure that absorbs the traditional precepts acquired by social inheritance and can transmit them by psychic inheritance and communicate them through a symbolic natural language. In other words, it allows the generating of a culture that can be transmitted from generation to generation. The imitation will be transcendent when once acquired the natural language; it becomes necessary to project it to the conventional language.

5.0 CONCLUSION

As a partial conclusion, we can say that viewed from the TL, both the universals of language, lexical contextures, and even social inheritance, represent fundamental elements in the arduous task that constitutes the analysis of the acquisition of natural language.

The importance of the universals is that they represent a subjective solution found in the assembly of the psycho-bio-socio-cultural aspects that define the human being; defining aspects also of its survival. Using the syntactic metaphor of the "order of words" we have managed to base a solid "linguistic genetics" that helps us to better understand the close relationship between a "universal language" and our natural language. This relationship comes together in the formation of subjectivity that all humans have inherited from their mother. Beyond the patterns, we also suggest that structurally, there would be only two universals: the primitive noun and the temporal axis, something that became evident in the analysis of lexical contextures.

The lexical contextures allowed to unravel one of the mysteries of our natural language, when we could make evident the "constant" that underlies the changing mantle of structures and functions that characterize, in appearance, all the languages that are spoken today in the world. On the other hand, it was feasible, following the metaphor of the "word classes," to determine a possible evolutionary chain that intertwines the different basic contextures and complete the formation of the "continents" that structure our psyche. This last detail is fundamental when elaborating a theory that explains with some degree of coherence the acquisition of our language.

The social heritage, based on the premise that each living being has its natural language and that this tells us what the world is like for that particular being, made us understand, in the case of man, the importance of *tradition*. Through the "ontogenetic variations," Baldwin showed us the enormous influence of the biological and evolutionary in the social, and even, what are the determinants of "social inheritance." As we showed in this part of the work, the "ontogenetic modifications," from TL, could be classified into psycho-genetic, bio-genetic and socio-genetic. Thus, the "triple inheritance" (biological, psychic and social) affects everyone equally. Through the *genes*, *frenes*, and *remes* (the operative units of the real systems that make up the subjective reality) the acquisition, on the part of the organisms, of new modes or modifications of the adaptive function and its structure can be evidenced. Natural language, as one of the specific elements that promote survival, does not escape the above considerations.

As a general conclusion of this work, there is evidence of the marked contrast that results from focusing on the acquisition of natural language from the genetic point of view. The transcurssive logic provided the elements that allowed probing the very roots of human subjectivity that empower the emergence of a symbolic language.

The *universal language* as a germ, the *subjectivon* as a way of seeing the reality that our mother bequeathed to us, and the "hidden colors" that justify the typology of a language, allowed us to approach one of the subjective aspects by antonomasia. The acquisition of our language is the hallmark that distinguishes us from the rest of living beings, with whom we share almost everything. But, also, it teaches us which one could be a way among many, that the human being was favored with a psychic apparatus, that something very similar to a language, helped to build.

Possessing a symbolic language is a unique fact in the biosphere, but its acquisition, as we have shown throughout the three parts in which this work has been divided, follows its same genetic guidelines. A discovery that allows us to dismiss all the speculations elaborated over our supposed superiority.

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APPENDIX A

- SUBJECTIVE REALITY: We have already defined the frame of reference where the subject develops. This is one of the real systems that define the TL: the sociocultural, which as we saw is a composition of what is present, that is, of the facts as they are shaped by representing interrelations between subject and object, the two only components of subjective reality It is considered as the 'motor' that drives the gestation and regulation of the dynamics of other real systems. Its structural unit is the REM or real fact.

Another of the real systems is the bio-external: characterization from the logical point of view of the three major biological levels that record the physical aspects of life. These levels of life that can be qualified by TL are: a) unicellular or multicellular without central nervous system (CNS), which comprises simple animals and plants; b) multicellular with CNS, which include the animals themselves; and c) the animal that, through understanding, can use the sense it gives to its environment to adapt and evolve, the man. Its structural unit is the GEN.

Finally, the psycho-internal system: all living beings are autonomous and this autonomy becomes evident when they are observed as different from their surroundings. Little life can have a structure that ignores that it is different from what surrounds it. Setting a boundary between the 'inner' and the 'external' is a privilege of the living being. To the real system capable of sustaining this 'knowledge' and relating it to the environment, we will call it psycho-internal and it is the one that takes care of the concrete subjective aspects, both volitional and cognitive. Its structural unit is the FREN.

All units reviewed, show the same structure, that is, they are arranged on two levels, one superficial or evident and one profound or hidden, which arise from the interrelationship of the subject and the object (or their equivalents) through two transformations or changes. These two levels form a group and maintain a complex relationship with each other; that is, a triple relation of opposition, complementarity and concurrence or simultaneity, and with a common logical denominator: the PAU or universal autonomous pattern.

The two levels that the units display is: in the REM, the superficial: they seem and the profound: the being; In the GEN, the superficial: the phenotype and the profound: the genotype. While in FREN, the superficial: the idea and the profound: thought. (Figure A1).

Fig. A1. Structural unit of the subjective reality
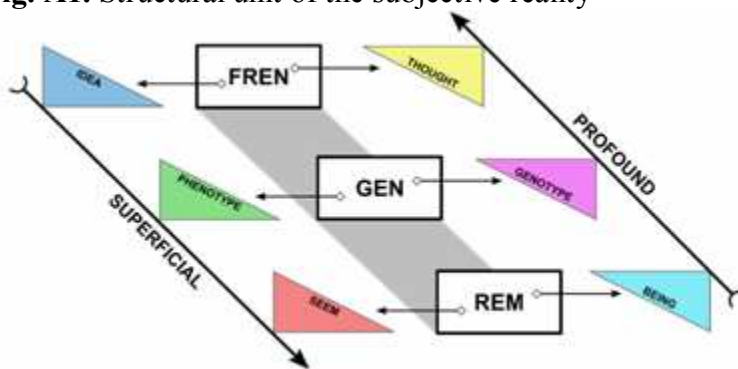
APPENDIX B

Class of the word: in this work, this expression should not be taken in its morphosyntactic meaning, but in its transcurssive connotation, that is, as a continent that is related to others to specify its profound function, an element that, in its superficial emergence, it gives a certain shape or appearance. The term "word" should not be taken in the phonological sense, neither formal or morphological, nor functional, nor semantic, but psychic (Salatino, 2014).

Denominalization: is the evolutionary transformation of the contexture that houses the noun in the other lexical contextures.

Garo: language belonging to the baric group of the Tibetan-Burmese branch, spoken in the Indian state of Meghalaya and surrounding states (Author's Note).

Heterarchy: it is when two different processes are carried out simultaneously.

Lamarck, JB: in his "Zoological Philosophy" (from 1809 - year of the birth of Darwin) he presented his theory of evolution (chapter VII - Lamarck, 1986, p.165) according to which organs are acquired or lost as a result of the use or disuse and the characters acquired by a living being are inherited by their descendants. For Lamarck, the principle that governs evolution is necessity or desire, which he called *Besoin* (necessity) and which Darwin then changed by natural selection. This theory is also known as the "inheritance of acquired characters." Baldwin's proposal, instead, revolves around a behavioral version of Darwin's theory of evolution, suggesting that cultural innovations and learning could broaden and predispose the course of natural selection.

Metabasis: in this work, this term is taken as a process of identity transformation.

Reverie: a maternal psychological source that meets the child's needs for love and understanding (Bion, 1987, p. 58). In the case of the so-called wild children, in which, because of their condition of extreme isolation, they are provided with what is necessary to remain alive, but not of what is necessary for the development of their psychic life, appear in them irreparable psychic alterations, for example, they never learn to talk.

Substantive: here noun is taken, not as the lexical category we know, but as a contexture, that is, the continent of a certain function given by the relationship it maintains with the other contextures.

Totipotential: from Latin - *totus* (all) and *potens* (power or ability). A term used in biology to refer to cells that can originate any other type of cells, tissues, organs, and even embryos. A current example is the "stem cells" (Author's Note).

Warao: isolated Amerindian language is spoken by an ethnic group that inhabits the Orinoco delta and includes part of Venezuela, Guyana, and Suriname (Author's Note).