

Semiotics like Methodological Tool in the Early Childhood Play Studies

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Abstract: The traditional plays constitute the transmission of knowledge from generation to generation as well as a preponderant resource to develop skills such as motor and abilities: intellectual, playful, socialization, organization, tactics, strategy, creativity, imagination, self-reliance and collective knowledge transfer, among its most relevant characteristics in contrast to the sedentarism proposed by the diversification and new forms of static game formulated by these technological advances previously mentioned in the ICT. This research main objective to spread the study of a science as important as the Semiotics, imperceptible but dichotomous to the system of signs that constitutes “the game”, used in this work as a methodological tool to precisely decode this system of signs across its fields: Nonverbal, gesture, observational and descriptive with the aim of evaluating them and exploring some possible directions towards the construction of a wider theoretical perspective which does not limit the pragmatic sphere with a well defined scope raised in the theoretical framework and methodology for its analysis. The study lends a transcendental goal on early childhood play as the struggle for sociocultural claims through its tradition which has been upset and displaced by what is imposed by the new Information and Communication Technologies (ICT) as consequence of the unstoppable standardization suggested by globalization where day after day people lose their identity as a people and without perceiving it are a little more alienated.

Key words: Semiotics, methodology, traditional play, early childhood, people

INTRODUCTION

Semiotics as a science that studies the systems of signs and their modes of perception through the senses is a field of study that despite its little diffusion intervenes in all areas that require decoding signs, its field study is vast and varied, without it is impossible to understand the culture of a the people.

Unesco has repeatedly recognized that traditional games constitute an important part of cultural heritage and are at the same time an instrument for the effective promotion of certain values by the UNESCO however, now a days, these disappear in a systematic way as it was exposed in the abstract of this work; it is important to ensure its continuity since they are also an important cultural tool for socialization and a playful resource. The play is moreover, one of the essential educational activities.

This study aims at evaluating some fields of Semiotics such as those previously mentioned, with the idea of contributing to the generation of a more extensive and innovative theoretical perspective, using the “observational and descriptive semiotics” which promote generalities and particularities of the action that constitutes the game based on its application. Are

analyzed two traditional ecuatorian games as a sample: rayuela (hopscotch) and florón from the 3-5 year of the early childhood.

The “semiotics of nonverbal communication” finds its place at every moment of the game. However, it specifically proposes the use of a more specific semiotics at the motor level of the game, called “semiotics of gesture”, since these are movements and expressions that communicate something and are necessarily dichotomous because the gesture is linked to movement, or the movement carries with it an expression or gesture is that perhaps the gesture does not propose a movement which arises first. It is preponderant to mention that 93% of the communication according Mehrabian (2007) is non-verbal contrary to what can be imagined; this is the most valid reason to study the game through these fields of Semiotics.

The main objective as explained above is to suggest to Semiotics as a methodological tool not only in the field of the game but in anyone who requires theoretical and practical analysis, its goal is to undertake a struggle in favor of the identity of the peoples from the rescue of the game in children of infancy (0-5 year), since at this stage is when are transmitted these membership values to the

children unconsciously because the adult does not know that teaches to uncoding a systems of signs to the children and trough its own value.

Early childhood is where important sensory motor development occurs. The motor activity is developed with greater precision of the 4-5 year because the movement is not unjustified but is oriented to a concrete achievement. It is the age of activity in which children are first and foremost beings in continuous and incessant movement and where the discovery is a raw material, gains intrepidity and easily, so that it increasingly likes the difficult and mysterious. For Camaneiro and Castaner (2015) at the end of this stage he is able to physically do what he wants within the forces that dominates at the end of this stage by the argued, this work considered this early childhood because during its beginning, reproduces the system of decoding signs to understand the use of certain objects within their context, such is the case of games as a determinant system of learning where the use of motor skills is evidenced.

There is no specific work on the subject in electronic sources, much less bibliographical, on the topic in question as it is explained inductorily is relevant to understand the system by which the signs in general are used specially at the level of the game in the transmission of the sense by rules, songs and motor skills: dynamic or anisometric, thick, medium and fine, when the play is evaluated in its motricity level.

The result is evidenced after the contribution to all fields of knowledge science through the theoretical analyzes of the proposed fields of Semiotics and their exploration for the construction of a wider theoretical perspective that is not limited to the sphere of pragmatics, that have knowledge and aware of them methodologic.

Theoretical framework: The science of Semiotics basically studies sign systems and how they are perceived through the senses. Sign studies are very complex, they embrace many heterogenous phenomena with a common element: being bearers of information or a meaningful value.

One of its founders, Ferdinand de Saussure, defines it as: "a science which studies the role of signs as part of social life". It has deepened its bases with collaborations from Hjelmslev, Pierce, Strauss, Bajtin, Lotman, Jakobson, Barthes, Eco, among others, the application of the signs concept to every significant aspects of human society. Peirce Houser and Koleser (2009) exposes a triad system, where is find the object sign and interpretant, riased as methodology and results to understand the sign system that supposed a play.

Lotman (2011) proposes a dynamic character to the concept of sense, therefore to its formalized manifestation: the text which in this study is analog to the play, it allows overcoming the strict limits of a traditional definition of "sign" to a more dynamic and complex approach. The previous notion turns out to be radical in the identification and characterization of research issues that characterize aspects of human life as derived from the "sense" as subsequently proposed in the qualitative analysis in methodology where basic signs in the traditional plays for the study are for Peirce: object (rayuela, floron), sign (early childhood), interpretant (organization, transmission of knowledge, exercise, social inclusion), etc., (Houser and Kloeser, 2009).

This text as a framework for relations of meaning, allows for a more complex dimension of the conditions in which human interaction processes are developed and enables the characterization of multiple intrinsic cultural relations by the play. This possibility will grant every social act, a temporary relevance from the actors/elements that are identified as early childhood from 3-5 year (sign fo the chilhood), into systems, like a matter of limits and formalized relations that, when considering based on sense processes, acquired mobility and dynamism related with the surrounding environment or culture.

From the importance Lotman (2011) assigned to "sense" as the dynamic element in the cohesion/coherence of a text, the notion of culture as a distinct semantic nature of the human being, tends to expand, what the members of an organization believe consensually which it is shared relationship senses and that is the organization (Windried, 1998) and it is in turn a reflection of a culture, how well that is established through play. A major contribution of the semiotics of Lotman (2011) is the idea of "semiosphere" where any sign system that presents levels of conventionality or socialization and therefore is delimited is likely to be treated as "culture".

It cannot be studied from the approach of symbolic forms, at this point it is essential to return to the idea of text as a network of signs that generates a positive or negative direction with respect thereto. The text not only becomes an image of the cultural system but of the methodological mechanism with which this system is addressed.

The play study has generally been done as rule of thumb and using natural languages to present their basic descriptive themes, of postures and significant movements and gestures, without considering the Semiotics as the study field for this reason this work raises an approach followed by the following theoretical analysis: the observational and descriptive semiotics

constitute a contribution to establish through the details to which kind of motricidad corresponds each traditional game; however the semiotics closest to this study is that of the gestures, considering that this constitutes a movement, its definition in the dictionary is: expression of the face//act or fact (Windried, 1998).

Hayes defines gestures as any bodily movement except that of vocalization made consciously or unconsciously to communicate either with oneself or with another.

The nonverbal semiotics of works such as Ekman and Friesen (1969) is also considered, despite a detailed reasoning of facial expressions is not established, although these are dichotomous to a motor movement as well as verbal semiotics can also be considered in the traditional game in all the oral expressions manifested in these which may be standard; nevertheless does not present an emphasis on the same ones.

Guiraud affirms that the Semiotics studies the different signs, signs and codes of communication linguistic and non-linguistic. Also in this theoretical context, we should highlight the works of semiotics such as: Roland Barthes who mentions that: "semiological research aims to reconstruct the functioning of systems of signification other than language in accordance with the project of all structuralist activity in the project to construct a simulacrum of the objects observed" (Beuchot, 2012).

Finally among these relevant works, the semiologist Greimas defines the semiotic picture as "the visual representation of the articulation of a set of given symbols" as happens precisely with rayuela and its representation, if not for the generational transmission of cultural information, runs the risk of not being decoded correctly, i.e., not being symbolized as a game, so this work represents as mentioned that struggle to maintain the tradition of peoples.

For Albert Mehrabian, this corresponds to 55%: gestures, postures, eye movement, breathing, etc. and results in the "7-38-55% rule", attaching greater importance to the nonverbal communication, since only 7% of information is attributed to words while 38% is attributed to the voice: intonation, projection, resonance, tone, etc., (Mehrabian, 2007) for this reason this study consider it.

The first general problems of semiotics in gestures, indeed are the spatial and temporal boundaries. Where does a gesture begin and end what geometric space what to delineate? How to circumscribe it? But this assumption falsely inverts the problem assuming a state of affairs to know that gestures have limits, instead of asking if have limits and if is like that, what is the nature of these limits (Bouissac, 2006).

Contemporary pioneers of semiotic research in gestures such as Efron (1972), Birdwhistell (1973), Eibesfeldt (1972) Morris *et al.* (1979) and Ekman and Friesen (1969) have explicitly supported the lexical resources of their respective languages to sintetize somehow, its observational framework. The numerous results they have produced inspired in the form of monographs, repertoires and dictionaries like those of Calbris and Montredon usually follows the encyclopedic pattern of a succession, each dedicated to a particular gesture.

The process of play in the richness of phenomena it contains, provides a broad area of research for various kinds of scientific reflection. A new perspective is the proposal of Vygotsky (1980), Russian psychologist, pioneer of evolutionary psychology and constructivism who was inspired by the historical-cultural paradigm of psychology, proposed from a playground, game theory and approached Semiotics as never before. Since then, the child's activity can be considered in several aspects but the motor aspect is the predominant in this document; however the same does not detach from the mental functions as previously was reviewed. Vygotsky (1980) semiologists and other experts of the subject matter field, link play to the development of higher mental functions mediated by meaning.

Argues that the game constitutes a sociocultural instrument and resource that has, for example, the leading role of promoting the mental development of the child, through his attention and memory. To paraphrase it, "the game is a changing reality and above all a driver of the mental reality of the child", that is to say, it fulfills the role of empowering the human being from its beginnings mentions two types of games: play as a socializing value, where children are allowed to socialize through this spontaneous action, placing it in its cultural context; i.e., transmitting part of their cultural values where the result of their development is determined by the characteristics of their environment (Yasnitsky, 2012).

The game as a development factor which allows the child to know, know and master the objects and situations by enhancing their abstract thinking; in this way he affirms that the game is not a trait subject to the age but a basic factor of the human development (Woolfolk, 1999).

Around constructivism raised by Vygotsky (1980) children construct their learning, their socio-cultural reality and the ability to solve adult-oriented problems or other stronger children cognitively or physically. It proposes two evolutionary phases of the children's game, the first phase of two to three years in which children play with objects according to the meaning that their immediate

environment gives them, taking as an example the “rayuela”: if they are not taught or transmitted what is the signified of determinate object would not know how to decode it, nor what that drawing means could be conceived perhaps as mere drawn on the floor without signified.

The generation of the semiotic function emerges punctually from the second year, in which a set of behaviors arise that involve the representative evocation of an absent object or event which implies the construction or use of differentiated signifiers. They learn in a playful way the real functions of the objects of their socio-cultural environment, in relation to the transmission of their family environment and of formal and non-formal education.

At least five of these behaviors can be distinguished: deferred imitation, starts in the absence of the model, for example, children who observe inappropriate behaviors around what they standardize as negative will be able to repeat and imitate that behavior; this deferred imitation constitutes a beginning of representation and the imitating gesture, a differentiated significant beginning.

Symbolic or fiction game, the representation is net and the differentiated signifier is, an imitative gesture but accompanied by objects that have become symbolic. They learn to symbolically substitute the functions of such objects (symbolic play) with the acquisition of language to operate meanings for example a spherical figure may be considered a ball. The drawing, the image is an intermediate between the game and the mental image, does not appear until two or two years and half.

Mental image appears as an intentional imitation, language allows verbal evocation of non-current events. When the child says “wow” without seeing the dog, there is a verbal representation in addition to imitation (Dziurla) but in no every culture the sound will be transmitted as in English like “wow”, in Spanish for example is “guau” and in Russian “**габ**” (gab), the question is how humans interpret those sounds and how learn to represent them from the early childhood.

Piaget (1977) argues that the first four of these behaviors are based on imitation and the last, the language is acquired in a necessary context of imitation (onomatopoeia). And that therefore imitation is a prefiguration of representation. He affirms that with symbolic play and drawing that step from representation in acts to representation thought is reinforced (Yasnitsky, 2012).

Later, the mental image enables imitation to cease to be only deferred, to be internalized thus, giving rise to a representation that is capable of becoming thought

(Yasnitsky, 2012). The acquisition of a possible language in these imitation contexts allows this recent representation to increase its level based on communication.

The phase from 3-6 year, denominated “sociodramatic game”, recreates the adult world, this to measure of its development represents an excellent psychopedagogical resource (Piaget, 1977) which contributes for the play with the following: rule manipulation, simulacrum of roles, power juice, strategy, planning, socialization and mental flexibility as part of the functions of mirror neurons, important tool in the human development which one is no possible to deep in this work.

Other important contributions in the field of play are those generated by Piaget (1977) an epistemologist and Swiss psychologist, who identifies the different stages of children’s mental development. The primary concern of a child in the early years was to learn about physical objects and to generate motor control. In relation to their development the child should develop tools such as: communication, verbal skills, words, writing and reading learning. As time goes on, abstract concepts such as relationships and logical reasoning are introduced.

With all of the above, it is clear how the human being initiates the decoding of signs determined by the objects for the play; the same as in the case of the traditional ones is engendered by the transmission of generational knowledge as a national culture.

It is also mentioned how the game constitutes a motor stimulus that develops brain connectors and generates the skills through the mirror neurons, mentioned throughout this document.

MATERIALS AND METHODS

The process of play in the richness of the phenomena it contains provides a broad area of research for various kinds of scientific reflection as discussed below in relation to Semiotics as a link of the proposed methodology.

As were indicated this work supposes a theoretically broad scope on the Semiotics and it is as a methodology, based on its art state analysis.

Methodologically, an analysis as quantitative as qualitative is proposed, reflects by “gesture, non-verbal, observational and descriptive semiotics analysis”, showed in the rubric, through two cases of traditional plays: rayuela and floron as was mentioned in the introduction as a puntual sample just to situate the analyze and conceptualize the study.

In order to decode the system of signs that suppose the children playing the two games pointing out, it was taken as sample an occasional game group of 5 children of ages of 3-5 year, of a private residential complex, since the behavior of children in schools are subject to rules that must be followed as Milgram proved in his famous experiment on obedience at Yale University, the universe is no longer extensive. The group was visited each for month for a year because the presence for the measures should be casual, for the reason presented.

The UNESCO classification of the Ivorian kids games into nine groups is useful for this work: playful practices involving toys, skill games, movement plays, plays of wit, dramatic games, sung games, games of chance, tales, dances within which those cited in this research would be found in 2, 3 and 6. This classification constitutes an additional point in this work to be incorporated in the results rubric, since it contributes to generate an organization that tends to dispose an order in the semiotic analysis.

Due to this analysis, we will use the work of Camaneiro and Castaner which summarizes the meaning of the game in three levels: Individual development represented by recreational activities individually and in company, Adaptation to objects and the environment through recreational activities with materials and spaces, Social interaction as a means of group recreational activities (Marzo, 2013) considered of importance in a rubric that will manifest in what level these characteristics are fulfilled around the motricity used in the traditional games.

RESULTS AND DISCUSSION

All research involves a theoretical framework that normally provides common sense and determines the range of phenomenological characteristics and events that are potentially worth mentioning from this point of view of this topic which has been generated in a thorough way, establishing a strong analysis of the art study as part of the methodology proposed. Complete studies require that the theoretical framework be adequately supported by reliable works which certain are used like methodical procedures and measurement tools, this allows the entire evaluation of the scientific observations needed in this research

The semiotic analysis, in the case of traditional game exposes as principal goodness the following: increase the corporal expression, strengthen the concentration and mental agility, improve the balance and flexibility, favor the social interaction and the development of abilities of leadership and cooperation in equipment, support the

fight against the sedentarism own of the new manifestations of electronic games and to propitiate around the recreation and physical activity intrinsic to the health but above all constitutes an alternative to keep the traditions, identity and nationality of a people, relevant value in this standarization time.



Observational semiotics also provides as a result the appreciation of aspects that are generated within the game such as: organization, strategy, social inclusion and transmission of knowledge. Therefore, the question to be addressed is: how to avoid taking too much for granted and how to position itself so that research does not transfer tautologies.

However, the task is complex because of the qualities of the problem in question, so the first thing is to locate it and make an analysis of sources from all perspectives as mentioned, although do not resolve a problem like the universalism, to think for example in a dictionary with a world plays collection is almost unthinkable, first of all because each play are no an icon, i.e., the "rayuela" for example is no play that everybody identified and if there is with another name, has another form, rules, also could be a song. To cite a close example, hopscotch exists in Argentina, with the same name but it is different, normed with eight squares, even with a meaning associated with heaven (death-paradise), including there is a book called Rayuela of Julio Cortazar, in Ecuador is usually a rabbit drawn on the floor as in the illustration.

The systematic study of gestures is often justified because gestures are in fact an essential part of both verbal and non-verbal communications, reason why the game was taken for analysis nonverbal semiotics in reason to the motricity, since in the game intervene both: the "verbal and the nonverbal", since the game is a system of decoding of signs that communicates multisensorially as suggests Albert Mehrabian mentioned twice, the 93% of communication is nonverbal thus, fully justifying the emphasis provided in this field. In these plays the silent is important for the concentration to win, it says too much, meaning values as patience and prudence, a part of tactic and strategy, important base to solve problems in the live.

This study has tried to point out the epistemological lack of some of the current works on which the research methods does not identifies the Semiotics when cited its "observational or descriptive, nonverbal or gesture" fields by the reading of this study. Research on gestures is a challenge for Semiotics because as was emphasized there are gaps in topics such as time and accuracy of meanings; nevertheless this can constitute the first incentive to conceive and to reflect on the signs as has been done in this work. The subject in question as it was put to consideration does not have a specific study which

Table 1: Semiotics as a methodology for plays

Observational semiotics		Nonverbal
Play group ¹ ; Rayuela:2,3; Floron: 2,3,6 ¹	Descriptive semiotics	Gesture semiotics
	<p>It is a game of yesteryear which consists of drawing a figure divided by drawers on the floor.throws a tab and jumps in Each player one foot for each drawer When returning,also on one foot,he should bend down without losing his balance take the tab with one hand and go back to where the game started. At the end of the whole round of the each player begins to have possession rayuela of one of the drawers, calling them“casita” (home). That box can not be trodden on by any of the other players. The rayuela, fulfills the basic sense of the game</p>	<p>The game requires great coordination of the motor skill,among them the fine one at the moment :of accurately throwing the tab so that, it falls in the predetermined space,the balance, thick: of the jump in one foot and the rest with two; generates too attention and coordination</p>
	<p>Children sit in line in front of an emitter or game guide. It shows a small object (tab) called “floron” The competitors join hands and their guide (in front) hides the floron between them, all limit the closing of hands and all sing in chorus:” The floron that is in my hands, from my hands is gone, the little nuns carmelites went to Popayan, to look for what they have lost under themyrtle and finishing with the question: ?where is the floron? while the floron is deposited in the hands of one of the participants pretending to have been imperceptible, thn the one of the children asks, where is must responds correctly to win and will guide and deliver the floron again and so on If do not guess, should agree on a kind of punishment garments, penance, etc. Floron, fulfills the basic sense of the game</p>	<p>The floron develops fine motor skills by opening and closing the hands together in a coordinated manner with a slight opening, order, teamwork so as not to reveal where the floron (tab) is among other positive notions</p>

Object: Rayuela and Floron; Sign: Early childhood; Interpretant 5: Organization, transmission of knowledge, exercise, social inclusion, etc.

makes it clear and even somewhat inexorable but at the same time complex because there are no point sources of consultation. In addition all research shuould be: inter, multi and transdisciplinary, it is complex because is indispensable to try to deepen and understand all the parts of this link.

It can be concluded that it is a relevant topic for the educational development of the human being, in embryonic state that needs to be studied which requires that its results be generated in an integral context. The descriptive semiotics with the noverbal contributed to generate the results of this study, since the first requires the observational and the second the gesture, all this specific fields support each other and measure the behavior during the game through the decodification of the sign system suggested before: object (rayuela, floron), sign (early childhood), interpretant (organization, transmission of knowledge, exercise, social inclusion), etc., the kind of: motor skill, non-verbal commnuication, gesture as show the rubric in the results (Table 1).

CONCLUSION

Is possible also inferred that at the level of verbal semiotics is possible standardize the lexicon used during

the game, in words repeated as: ¡Te toca! (¡It's your turn!), ¡Gane! (¡I won!), ¡Perdi!(¡I lost!), ¡Carambas! (¡Storms!), however the work only was placed on the noverbal topic.

The results represent a methodology, expressed in the importance of the traditional games through their contribution in the development of the childhood with obligatory points placed as contribution of the game, their organization in groups by UNESCO its decoding and the type of motricity present in the traditional game.

The traditional play has as goodness healthy recreation in green areas, the sociabilization but especially the exercise. In addition, this work disseminates cultural values based on the traditions of Ecuador which make each people unique in their identity and advocate a struggle for the socio-cultural demands so urgent in our day, this work to be read somehow awakens the awareness of teaching children, the traditional games of a people and make roots prevail.

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