

THEMATIC SECTION:  
ART EXPRESSIONS  
AND CONTEMPORARY  
SUBJECTIVITIES

**Educação**  
& realidade

## **Maria Helena Wagner Rossi's Critical Study of Empirical Research**

**Hamlet Fernández Díaz<sup>1</sup>**

<sup>1</sup>Universidade de Uberaba (Uniube), Uberaba/MG – Brazil

**ABSTRACT – Maria Helena Wagner Rossi's Critical Study of Empirical Research.** This article presents a Maria Helena Wagner Rossi's critical study on the empirical research written from 1996 through 2004. The starting point was a qualitative bibliographical research, whose fundamental object of study was the author's theoretical output on the nature of the aesthetic-visual comprehension of Brazilian students, based on their empirical studies. In the article body, topics are addressed in terms of problems dealing with visual arts training from which the author departed; as well as the objectives and the general features of her empirical research; the way in which data was interpreted, the epistemology involved and the theoretical results she arrived at.

**Keywords: Aesthetic-Artistic Comprehension. Aesthetic Thinking. Visual Arts Training. Empirical Research.**

**RESUMEN – Estudio Crítico sobre la Investigación Empírica de Maria Helena Wagner Rossi.** En el artículo se expone un estudio crítico sobre la investigación empírica de Maria Helena Wagner Rossi, llevada a cabo entre los años 1996-2004. Se partió de una investigación bibliográfica de carácter cualitativo, cuyo objeto de estudio fundamental lo constituyó la producción teórica de la autora sobre la naturaleza de la comprensión estético-visual de alumnos brasileños, con base en sus estudios empíricos. En el cuerpo del artículo se analizan tópicos tales como: las problemáticas concernientes a la enseñanza de las artes visuales de las que partió la autora; los objetivos y características generales de su pesquisa empírica; la manera en que fueron interpretados los datos, la epistemología involucrada y los resultados teóricos a los que arribó.

**Palabras Clave: Comprensión Artística. Pensamiento Estético. Enseñanza de Artes Visuales. Investigación Empírica.**

## Introduction

Since the late sixties in the United States, art psychology began to move through the cognitive perspective of human development. An important number of academic researches, on an empirical and experimental basis, target, as a subject matter, the cognitive capabilities related to art; the development of skills for the use of symbolic systems with an aesthetic intention – a sort of operation valued in arts – and the step-by-step description/conceptualization of aesthetic thinking development from the perspective of art comprehension.

Two thinkers in particular are considered as founders of this sort of epistemology by several researchers: James M. Baldwin, the early benchmark to attempt to systematize the aesthetic experience in the perspective of cognitive development. He was in turn the immediate predecessor of Jean Piaget, founder of the pilot studies on the cognitive development during childhood (Parsons, 1992; Gardner, 1994; Housen, 1999; Rossi, 2003).

In the case of research describing stages in the development of aesthetic thinking, they are based upon collecting empirical information through interviews enquiring the way in which subjects face artworks, the manner they try to interpret them, understand them and on what preconditions, they value them. According to Howard Gardner (1994), Abigail Housen (1983; 1999) and Michael Parsons (1992; 2011) are the researchers in the North American context who would have succeeded in establishing in a more elaborate manner the sequences of phases or stages in the development of the reading/understanding of artworks. Another element that Gardner highlights (1994, p. 41) is that, even though the manner in which the stages are established and described, they vary from one author to another in terms of subtle aspects:

However, what most impressed the majority of observers was the similarity in the sequence observed by almost all researchers, including the two researchers who carried out the most continuous work [Housen and Parsons]. Such a consensus is rare in behavioral sciences and clearly suggests that here we have an example of an authentic sequence of development.

In Brazil, professor and researcher Dr. Maria Helena Wagner Rossi is considered as a forerunner regarding studies on the aesthetic development in elementary education students. From the mid-nineties of the last century Rossi began to work within the perspective of cognitive psychology that deals with the description and conceptualization of different levels taking place in the understanding of visual arts from the early grades of primary schooling. In her Doctorate in Education research (Rossi, 2000), she portrayed a three-level classification of aesthetic thinking, based on an empirical study implemented in schools in the city of Caixas do Sul (RS). It would be the first formulation, within the framework of cognitive development psychology, of a proposal

framed in Brazil on the way in which children and adolescents face the reading of artworks<sup>1</sup>.

The notion of postmodern art-education, which in Brazil refers to Ana Mae Barbosa's Triangular Approach (2010), emphasizes the practice of reading images at all levels of the schooling process. However, for Rossi, this perspective also implies wondering what goes through the student's mind in the process of aesthetic reading. In her opinion, most of the professors' teaching materials neither uphold nor take into account the reading abilities of students at different times and in different contexts in the schooling process. If teachers are not aware of their students' aesthetic development, then they will not be able to evaluate correctly the reading proposals they are capable of. Another problem found by the author is that many of the reading methodologies still in use in Brazil are limited to the analysis of formal elements and principles of composition, so they are far from favoring the expression of the students' own ideas, based on their experience and on what they are capable of seeing by themselves.

According to this problematic situation, the author poses a number of questions: what does a student see in an image? What is the emphasis while analyzing an image? How does he or she interpret it? What questions does he or she wonder before an image? What criteria does he or she assume to judge the image quality? What is the difference in terms of reading for each student? What are the premises conveyed by the student? What is really the student's reading in the Brazilian context? May reading be imposed upon? (Rossi, 2003, p. 11).

This number of questions brings about a turning point in the research objectives regarding students and their ability to understand arts. It is no longer a question for arguing the need or significance of the art teaching insertion at schools, for the insertion of image or artworks in teaching, for theorizing about methodologies or teaching models to interpret visual arts, and so on. The aim is to focus attention on the process of interpreting and understanding art, in correspondence with the possibilities, abilities or cognitive capacity of students.

## **Features of Empirical Research**

Maria H. W. Rossi set to work by using a sample of 168 children and adolescents from four schools in the city of Caixas do Sul, for a period of three years. This sample was structured as follows: 56 children ranging from 6 and 9 years of age; 56 from 10 and 13; and 56 adolescents from 14 and 18 years of age. In turn, the whole amount was split into two groups, A and B, forty-eight students each. Group A was made up of students from a state-run public school, with no systematic contact with art, neither at school nor in their everyday environment. On the other hand, group B was made up of students from three private schools, in which there was a systematic involvement with visual arts assisted by highly trained teachers. In addition, all the students benefited from art exhibitions tours accompanied by teachers, two or three times a year.

The researcher's main goal was to identify the peculiarities of the students' aesthetic thinking, as well as the way in which the construction of meaning takes place while being encouraged to interact with artistic images. This paper was arranged following a sample of selected artworks, based on notions of diversity, such as means of expression, gender, style and time<sup>2</sup>. The author refers that questions were asked to students in front of images, trying to encourage as much as possible the interpretation and the evaluative judgments on artworks. After this first stage, the dialogue focused on a more general aesthetic aspect. In this sense, the author states that she followed the methodology developed by Parsons (1992), Freeman and Sanger (1995).

Following Piaget's methodology (2001), Maria H. W. Rossi refers that, in her research, the student's thinking was seen as a whole, without discriminating any of the possible sources of their answers. The author started out from the principle that, in order to understand a student's thinking, it was more helpful to let him or her express himself freely, without trying to guide his or her aesthetic reading. The interviews were devised according to the following theoretical and methodological conception: "Students may reveal their thinking more spontaneously than when led to follow a pre-established script, emphasizing formal analysis, which may distract them and cause them to get lost among 'lines, strokes and textures', leading them in a direction that do not allow them an interpretation" (Rossi, 2003, p. 31).

Maria H. W. Rossi states her methodology for collecting empirical data closely followed the procedures used by Parsons and Freeman in several of their investigations. From a brief systematization of these two authors' results, Rossi summarizes that between these theoreticians there is a consensus that subjects, while trying to extract meaning from images, tend to redirect themselves or to establish a relationship between these and three external dimensions: the represented reality, the artist creating the artwork and the reader itself.

Even within the great diversity of criteria expressed in the interviews on the part of Brazilian children and adolescents, Rossi considers that her research revealed coincidences with the results presented by Parsons, Freeman and Housen at other times and in other cultural contexts. Based on these authors' theoretical syntheses, Rossi arranged the diversity of ideas expressed by the subjects in her sample according to three ways of relating the image to external elements mentioned above, but establishing a variation in the first type of relationship. Thus, in the context of her findings, *the image-world relationship* is divided into three types or stages, followed by the *image-artist relationship* and the *image-reader relationship*. Her scheme is structured in five types of eventual relationships, and the author considers that it is an adaptation of the Freeman and Sanger's network of intentions (1995), as well as the sequence of stages for the development of art understanding established by Parsons (1992).

In the final proposal for the classification of *aesthetic thinking levels*, the author limits to three sets, the five types of relationships set

around the image, which was her initial starting point, seeking a greater synthesis in this classification, as well as a greater flexibility in the interrelation of its own elements.

## **Analysis of the Interpretation of Empirical Data**

In a qualitative empirical research, the provided results, generalizations and theses largely depend upon the theoretical scope from which the data are read and interpreted. In this kind of studies, the reality intervention using collecting techniques of empirical information, as well as the theoretical scope from which this methodology is structured, and act as an epistemological basis for the qualitative interpretation of information, are dialectically complemented. This is a reason why that in this section, we will proceed to analyze the way in which the author interprets the interviewed students' statements.

### *Image-World Relationship*

The image-world relationship (I-W) is the most basic primary reading level of an artistic image found by the researcher in her interviews. In this type of reading, the subject shows signs of believing that the image is literally a representation of things existing and occurring into reality. For this reason, the author adds that the reader at this level values the artwork by stating the same criteria used to render moral considerations about the reality facts. In addition, the artist is described as someone who merely transfers the characteristics and qualities of the world into an image.

Within this type of image-world relationship, Rossi stands out three variations, whose differences allow us to observe a linear development of the way in which aesthetic thinking becomes more complex. Therefore, this development of aesthetic understanding would match with, or depend on, the last two stages of cognitive development established by Jean Piaget (1998; 1999). Thus, the first stage of the image-world relationship prevails in students in the early of elementary teaching grades, which is a stage for *concrete operations*, and less frequently, this can be depicted even at the beginning of adolescence (5th and 6th grades at the elementary level).

Let's see two examples. The researcher asks about Segall's work: *I wonder why the painter did it that way*; and the student replies (from early grades): *Suddenly, the painter saw a destroyed house, similar to that of the five women*. In reference to the same Segall's artwork, the fifth or sixth grade student says: *I think he saw a family that was in that condition. He thought about it and drew it! How could this image be made?* – a question. *The person was thinking about what he had seen and drawn. So do you think he saw that?* – insists the interviewer. *I think he saw that* – reassures the student. *Where?, on the street while walking* (Rossi, 2003, p. 39).

Through the examples provided by the author, it is easy to find out that the students consider that what they observe on an image happened or existed into reality. The cognitive approach, acting as a framework for reading data, allows Rossi to conclude that, since children at that stage depend on direct concrete experiences to think, it is then that sort of cognitive determination that leads them to consider that the creator of an artwork should have experienced or seen what had been shown. Therefore, they manage, at best, to imagine that such things or events really happened.

However, in all examples shown, the students' answers are motivated by questions drawing the attention into the relationship that the image establishes with something else that is external to it. (Where is this image displayed? Why does the artist draw this picture? How was this image made? And so on.). In this regard, one might think that the relationship subject that the reader establishes between the image and elements that are external to it, does not appear spontaneously in their interviews, but rather appears because one wonders about it. The author does not expose any case in which the student is asked to mention what is seeing upon an image, and that the child answers anyway that what he or she perceives is a thing or a fact that artists should have seen before. The questions asked by the researcher result in why the artwork was made, what the artist wanted to show, how it was made, and so on, which induces the child to respond to what he or she considers justifies the artwork existence; and this justification is found outside, in concrete reality.

With respect to the second variation, in terms of the type 2 image-world relationship, Rossi finds students begin considering that the artist can choose the reality represented in the artwork. Creation would no longer be just a matter of chance, a certain intention is found within the artist's mind, but this recognition does not go beyond the possibility that the creator has to choose or set up a scene he wants to show. Students continue to assume that what is found upon an image, are related to things and characters existing into reality.

This type of reading appears at the early grades and remains until adolescence, especially in students who have not been familiar with arts. After the 5th and 6th grades, the author points out that many students already show a development of abstract thinking, found in their interviews, but they continue to portray the artist's role as a mere copyist of reality. In front of a Cindy Sherman's photograph, says an 11-year-old student:

*– I think she is dealing with unemployment in that story! – Was this really happening to her, or did she pose just to take that picture? – I think it was happening, because I did not want to present that pose she is doing. – What does this image mean? – A shame of unemployment in Brazil (Rossi, 2003, p. 42).*

It is very interesting how Deise, an 11 year-old girl, already manages to lead the image meaning into a problem, a social reality phenomenon, such as unemployment. Undoubtedly, a level of generalization that provides an essence summarizing the visual information she gets from the picture. In addition, she adds a moral value to this general meaning: the shame of unemployment in Brazil. Deise is capable of establishing a relationship between the expressiveness that the image conveys to her and a specific social context, that of her country, even though nothing in the picture indicates that she is a young Brazilian woman. The will to establish a correlation between an ambiguous image semantic structure and a hypothetical plane of content can already be considered as an interpretation, no matter how rudimentary it may be.

However, when Deise starts her interpretative gesture she is immediately asked: *Was this happening into her reality? Or did she have this pose just to take the picture?* Which immediately diverts her attention into an inquiry that seems to interest the researcher much more, namely, whether the student gives priority to reality or not, over the artist, in the responsibility for the existence of the picture. When asked again, what does this image mean? Deise begins to sketch out another interpretative process even much more interesting: she involves a moral judgment and displays a link with her social context. However, from that moment on, we know nothing more about the conversation; the fragment shows the intention of illustrating a concrete theoretical finding and according to that thesis is when the data is registered.

Finally, the third type of image-world relationship is one in which students begin considering that the artist conveys its feelings into the artwork. That expressed on the image ceases to come directly from reality, and begins to relate to the artist's inner world, its state of mind, its feelings, etc. Rossi considers that the fundamental difference between this type 3 relationship and the two previous ones is that the *outer world* takes a back seat, while the artist's inner world becomes the main source to which the artwork is subjected.

If the basic difference is that the *outer world* takes a back seat, then, why this third type of reading is also described as an image-world relationship, if the fundamental reference begins to be the artist's inner world? The solution found by Maria H. W. Rossi is that the image-world type 3 relationship is the transition towards the image-artist relationship, because students do not evolve from a notion seeking the artwork meaning in the concrete world directly towards a relationship of the image with its creator. Hence, it is necessary to formulate a third variation that allows us to think about this transition.

It is significant that, for the most part, the examples provided to illustrate the type 3 image-world relationship in students at the end of primary and secondary education are taken from interviews involving Piet Mondrian's artworks. Faced with a geometric abstraction of this kind, it is very difficult for a student to depict or imagine a concrete reference of reality as transferred to the image, since the latter is totally



devoid of iconicity. On the other hand, the vivid colors of Mondrian's work, red, yellow, blue, white, are easy to identify with moods, feelings, etc., because the semantics or psychology of colors is something highly codified, a cultural convention learned since very early ages. Coupled with this, the interviewer's questions contribute to the artist's *inner world* emerging into the foreground and becoming the main source with which students relate the image (Does the painter paint according to his state of mind at the time? What was she feeling? Was the painter who drew this other image feeling sad? What was that artist feeling? And so on).

### *Image-Artist Relationship*

When the image-artist relationship appears in the art reading, it is because students begin trying to decode the creator's intentions. According to the author, by establishing this relationship, the student opts out the references to concrete reality as well as to the artist's inner world. It is upon the creator's figure where responsibility is now projected for what the artwork may mean, and the student is displayed as a decoder of those meanings the artist wanted to express on its artwork.

Rossi points out that the image-artist relationship is typical in the early stages of adolescence. From that moment on, students start showing a certain awareness for the artist's intellectual existence, hence in the early grades this type of relationship in terms of reading is not available. The author asserts that this new way of thinking becomes possible because from the fifth grade of primary schooling on, the beginning of transition from a concrete thinking to formal thinking is marked. Following Piaget's theory, Rossi gathers that formal operations generate the possibility for differentiating the real plane from the possible plane; hence, in aesthetic reading the student begins considering various possibilities of meaning attribution. Let see an example of a 14-year-old student from the group familiar with arts and with some training in aesthetic reading:

– What does a workpiece might have to be good? – *First of all, let it convey an idea, a reflection. Let it convey to us the painter's idea, what he is thinking at that moment or what he wants to convey to us. Many times the artwork has more value because it depends on the idea it conveys. Many times painters take a painting and that's it! For him it has a meaning, but for thousands of people it has no meaning at all. So what I think is most important in the artwork is the meaning it provides to others* (Rossi, 2003, p. 52).

Rossi does not halt at the interpretation of this fragment, she shows it as an example of the fact that at this level of reading, feelings are no longer attributed to the artist but to the image itself, although the responsibility for what the artwork expresses is focused on the creator. However, there are other extremely significant elements in the adolescent's answer, which we would like to focus on. First, there is an aware-



ness that an artwork, in order to be good, must be a bearer of ideas, must convey a reflection, which allows us to perceive an artistic notion, going beyond the familiar and pleasant things in perceptual terms, in order to give priority to its cognitive dimension.

Another important issue we can identify in the quoted fragment, as well as in several examples presented by the author, is the students' awareness in reference with the artwork shown to them as a challenge of understanding. The artwork states a communicative difficulty not frequent in other more conventional texts, and repeatedly draws their attention to that particular fact. Perhaps it is a recognition of that impotence while framing meanings before an artwork, one of the underlying causes of a tendency to forward sense towards the author's intention. Faced with the difficulty of clearly recognizing a meaning on an artwork, the receiver transfer that responsibility to the artist, because if the artist itself scramble that message, then it is evident that only the true meaning is at hand.

*– Why would the painter do that? – I don't know, he wanted to express something he wanted, like a feeling he felt. But he knows how to interpret what it is, because he did it himself. But we're looking for... You can't describe what he wanted (15 years of age).* The researcher comments on this example: *"As we can see, when students cannot decipher its meaning, they blame the artist, who did not think of readers while making an artwork [...]"* (Rossi, 2003, p. 51).

However, the tendency to shift guilt towards the artist when the meaning cannot be decoded is only an effect, the evidence of a deeper phenomenon, namely: the semiotic complexity of art and the specificity of an aesthetic-artistic understanding process. When the student confesses that it is not possible to interpret what the artist wanted to show, what is evident is that its semiotic scope is not yet enough to dialogue with a kind of a fuzzy and ambiguous text, whose codification is far from being a fully marked convention. The youngster shows signs of being aware that the artwork is a means of communication, with which the artist wanted to express something, but before the impossibility of glimpsing a content and being able to formulate it with precision, he or she solves the semiotic conflict handing down to the artist any interpretative probability.

Another example (14 years of age and on Mondrian's artworks) allows us to appreciate that when the student manages to overcome the semantic ambiguity of the artwork, while he or she is able to articulate an interpretative process, the reproaches towards the artist are not evident.

*– If one had to name this painting, what would be the best? – A title? "The Living Geometry". It looks like a labyrinth, where there are several passages, but there is always something blocking the way. I think it must have represented the labyrinth of life, because life has several passages, but there is always something that blocks them* (Rossi, 2003, p. 52).

The student certainly wonders about the artist's intention, about what he wanted to represent on his artwork, but while he tries to decipher that content, he builds up his own interpretation. The manner in which establishing a correlation between the semantic indetermination of Mondrian's artwork and a notion of life understood as a labyrinth with multiple paths constantly hindered for some reason, can be fully considered as an interpretative process of great ingenuity and creativity. Strictly speaking, it is the student's intention, imagination, knowledge and ability to describe meanings in the face of a very ambiguous aesthetic stimulus, which brings about an interpretation, even when he or she is not aware of it.

The analysis of these examples allows us to conclude that along with the cognitive factors and the social, cultural and educational mediations favoring a familiarization with arts, it is necessary to insert into the study of the aesthetic-artistic understanding development a reflection of a semiotic nature; otherwise, many subtleties of great importance may be ignored.

For example, the theory of literary reception (Rall, 1987; Markiewicz, 2010) has intensely debated the dialectic taking place in the reading process, and therefore in understanding, among the author's intention, the artwork intention and the receiver's intention. The question of intentionality in arts has its origin in the phenomenological aesthetics (Morawski, 2006), and has been recurrent both in hermeneutics and pragmatics (Beuchot, 1997). It was a subject upon which Czech structuralism also reflected deeply, Jan Mukařovský's essay (2009) *Intentionality and Unintentionality in Arts* [1943] being a study in which we can find explicitly a theory of reception in a profiled manner.

There was an epoch-making extensive essay by Umberto Eco (1992). *Intentio lectoris: Apuntes sobre la semiótica de la recepción* (Notes on Semiotics Reception), in which the author makes important distinctions between the author's intention, its work and that of the reader resulting in various types of interpretation: one semantic and another critical, establishing a difference between the operation of interpreting a text and making a semantic use of itself.

We think that an articulation between the analytical approach on the intentional dialectics taking place along the process of interpreting arts, and the own cognitive factors of each age that make their influence upon the intentions projected by the subject, while trying to understand a complex visual text, would open other enriching possibilities of data qualitative reading.

### *Image-Reader Relationship*

For the students start considering their role as interpreters of an artwork, it is necessary, according to the Maria H. W. Rossi's findings, that they possess a cognitive ability allowing them to reflect upon themselves. This ability is related to the fourth Piagetian stage, the for-

mal thinking, which develops from adolescence onwards. The author comments:

Formal operations provide the ability to reflect on one's own thinking processes. In the field of aesthetic reading this means acquiring awareness of its interpretative activity. When this happens, the student opts out his belief that he can provide a meaning to an image, simply by looking at what is seen objectively, deciphering the artist's intentions (Freeman and Parsons, 1999), and begins to take an active role in the construction of meanings upon its image (Rossi, 2003, p. 54).

In other words, it seems that the development of the so-called formal operations necessarily leads to the qualitative leap onto the image-reader relationship. If this were the case, all adult subjects with the cognitive capacity of formal thinking would have no problem in interpreting an artwork. Nevertheless, the reality shown by other researches indicates the opposite<sup>3</sup>. At times, the model presented by Maria H. W. Rossi seems to establish a quite direct correlation between the stages of Piagetian cognitive development and the levels of development found while reading artworks. However, the very evidence provided by the empirical data collected in the interviews makes her feel cautious:

In short, the adolescent, who possesses the skills of formal thinking, theoretically, is aware of its role as a reader of works and images.

The awareness of being a reader, whose subjectivity is active in the attribution of meaning, is possible along adolescence, but does not necessarily arise in all students. Nor do they all demonstrate the abilities of abstract thinking (Rossi, 2003, p. 56).

The basic question of the dimension to which cognitive factors are determinant, and to what extent the cultural mediations making possible the cognitive development itself allowing an increasingly complex understanding of arts, is extremely difficult to probe. Because it is shown, in a contingent manner, on each subject and it demands to be understood within the specific frames of the individual history of development.

Let's review the following example, one of the most sophisticated of Rossi's to illustrate the type of reading in which an image-reader relationship is evident. This is how a 14-year-old adolescent expresses herself:

*– They say it depends on how one looks at it, Monalisa has her own mood there. That is it: I can go there... If I am happy, I will see her smiling like me. Then I will go there sadly, and I will see her sad. It will depend a lot on the person who will see the artwork. – Does depend it, then, on how the viewer is feeling? – Yes, it does. – Doesn't it depend only on what the painter thought? – It does not just depend on him, because everyone has an idea. Everyone thinks one thing.*

*Since I saw the favela (Segall), other people saw a brothel. And the author may even have passed on another idea, besides the misery and the brothel. – But what he “wanted to go through” does not matter? – It does, but people can look at it from another angle. I came here and looked at this sad woman (Sherman) and at least that is what she gives to me. However, someone can come and, I do not know, think about love, and see her happy. Nevertheless, I see sadness; by the way she looks, by the pose she takes, by this crumpled paper in her hand... (Rossi, 2003, p. 56).*

The young girl's expression stated at the beginning, “they say”, is a clear evidence that the ideas she expresses about arts are learned, they do not stem directly from the possibilities of formal thinking. What underlies regarding the thesis the student shows to possess is a cultural mediation, namely: that the sort of perception one has about the artwork depends largely on the person's state of mind observing it. These are judgments about arts and the kind of relationship established between the artwork and the viewer, which the young woman learned about either in her intimate family and social environment or along the aesthetic education at school, etc. These ideas acquired from a cultural environment brings into the subject the *internalization* of a specific reading logic for art turned into an internal psychic function. Once the individual grasps this communicative logic, he internalizes it and begins to operate with this intellectual ability, an analytical tool to apply for the rest of the artistic challenges on its way. In this regard, the Vygotsky's theory (1995; 2007; 2008) on the internalization of higher psychic functions allows analyzing the way in which a subject, facing the challenge of dialoguing with an artwork, puts into action semiotic mechanisms that have served as a mediation in her own cognitive development<sup>4</sup>.

Segall's work made her refer it as a “favela”, but he naturally accepts that other colleagues have seen a brothel, while at the same time he considers the possibility that the painter has wanted to convey a different way to those two interpretative variants. She shows the same hermeneutical awareness of Cindy Sherman's picture. She feels sadness in the character of this artwork, but values the possibility that another person, if she is thinking about love, may find her happy. In addition, 14-year-old Gabriela also shows that she owns a semiotic competence, fundamental to the understanding of arts: she feels sadness around the woman on the picture, but is able to argue that perception based on concrete recognizable denotative marks in the visual text. (How the character looks, the posture in which he finds himself, the role he holds in the hand). From these denotative marks, she extracts a connoted meaning: sadness as an interpretative hypothesis that condenses the emotional meaning that the artwork conveys to her.

In the first chapter of her book, Rossi warns that the notion of cognitive development phases or stages stemming from Piaget's thesis has undergone a severe critical review in recent decades. With the insertion

and appreciation of the context variable, as well as the great importance of mediation of symbolic systems (verbal language in the first instance), Piaget's thesis of the *universal mind* evolving from stage to stage on a regular basis and *almost* in an inevitable manner, loses a part of its epistemological burden (Gardner, 1997; Rosas; Sebastián, 2008).

In relation to Michael Parsons, the author points out that he has also been challenging the notion of phases or stages used in his book (Parsons, 1992)<sup>5</sup>. Parsons would have moderated his psychological perspective, also moving away from the orthodox Piagetian viewpoint and moving more towards a social-cultural constructivism. Rossi says (2003, p. 22): "The contextualist theory of Vygotsky and his followers seems to her to be the most appropriate for grasping aesthetic understanding. In this approach, the systems of interpretation and meanings themselves are inventions of culture".

I would like to underline the thesis expressed in the last sentence of Rossi's comments: *the systems of interpretation and meanings themselves are inventions of culture*. Many of the interview fragments that Maria H. W. Rossi presents in her book as examples demonstrate this. We only regret that the researcher did not make a greater use of this theoretical perspective to interpret her empirical data. In her proposed three-level classification of aesthetic thinking, the last two stages of cognitive development of Piaget's theory are always placed as the root cause of qualitative leaps into more complex forms of reading and understanding arts.

### **Longitudinal Study on the Development of Aesthetic-Visual Comprehension**

In a number of articles (Rossi, 2005; 2013; 2015) Maria H. W. Rossi presents the results of another study also undertaken in the city of Caxias do Sul, from 1997 through 2004. It dealt with a longitudinal experimental research in which Rossi and her assistants worked with a group of students during the entire primary schooling, eight grades at that time. The major goal was to know about the development process of students' aesthetic-visual comprehension, while they were exposed to systematic activities of reading and aesthetic debates during all those years at school. The group's development evaluation taking part in the experiment contrasted with a *control group* with the same characteristics in terms of age and sociocultural factors; but which had not been involved in the same art consuming activities. The comparison between the two groups was in place once a year, showing to the *control group* the same artworks displayed for the *experimental group*.

The acquired results allowed Rossi to probe and observe with a greater clearness what her doctoral research had already allowed her to conclude: that systematic exposure to artistic consumption is a determining factor in the development of interpretative skills, fundamental for art understanding.

Although there is an evident correlation between age and the stage, what most favors the aesthetic development is the exhibition and the frequency of the arts. The research showed that the students of the experimental group reached a degree of sophistication in their aesthetic understanding that was not expected for their age and education.

Therefore, we dare to assert that students who experience visual aesthetic reading activities during primary school achieve a more sophisticated aesthetic understanding appropriate for the art world than an adult with a university education, even in Human Sciences, and present a higher level of criticism, reasoning, and verbal fluency than students without this experience (Rossi, 2005, p. 67).

Another of Rossi's significant conclusions is that there is absolutely no need for a formalist methodology to teach how to read works of art, nor an introduction of Art History contents from the initial grades. Therefore, when students end their formal schooling, they are able to interact with arts and understand them in an enriching and meaningful way, primarily for their own life experience. Another significant aspect is that students' ideas, questions and judgments must be listened to, respected and taken into account on the part of teachers. Based on this understanding, it is possible to favor the development of art understanding. Rossi recommends that art educators should show flexibility before the plurality of senses children render to artworks. They should accept their answers as valid. Moreover, from their own arguments is that they should be motivated to explain the reasons for their comments. By proceeding through this methodology in the experiment, it was possible to verify how the students felt stimulated to participate in the debates about the artworks, which was one of the factors that favored the development of aesthetic-artistic understanding (Rossi, 2005).

The comparison between *the experimental group* and *the control group* showed significant differences in the way they proceeded in reading artworks. As the author concludes, as a general trend, students who did not participate at the didactic experiment continued to manifest a type of realistic and ingenuous reading (image-world relationship), while the experimental group showed signs of evolving towards an increasingly sophisticated reading and closer to the world of arts.

Research shows that a monthly class of aesthetic reading can provide the development of a sophisticated aesthetic understanding by the end of elementary school. The differences between group readings are significant, and it is consistent to attribute the richness of the experimental group's aesthetic thinking to routine activities of aesthetic discussion versus images experienced throughout the research (Rossi, 2013, p. 12).

In her experimental longitudinal study, Rossi sustained many of the featured elements of reading levels, revealed and defined in her doctoral research. At the initial grades, students generally tend to establish

a relationship between what they see on the image and what they know about the world, preferring those scenes that are more familiar to them. Interpretation proceeds by identifying the referential sense, the literal meaning of the concrete things found on the image, which is what the author had called narrative reading. In the evaluation of the artworks, the criteria used by students are the colors, the subject, the artist's mastery and the realism of the representation. Rossi concludes that in the initial grades the verified aesthetic belongs to Level I regarding her classification.

However, in the experimental group a considerable development of aesthetic thinking began to take place. They began to accept art works in black and white, so the notion of color gave way to its protagonism. They start to reject photographic realism, so that images that are very similar to reality, when associated with photography, cease to be creative. Originality, understood as creativity, assumes the leading role as an artistic evaluation notion, which Rossi (2005) points out already as a characteristic for Level II according to her classification. In addition, it begins to appear a recognition of the artist's intention, related to the artwork as a means for the expression of feelings and ideas, which matches Level III.

At the end of third grade, at the age of nine, students' aesthetic thinking is more sophisticated than that of the majority of the adult population. In addition, parents and teachers perceive that students write and interpret the Portuguese language better, and essays are more complex and creative. Verbal expression is more fluent and vocabulary is broader, more appropriate and more sophisticated. Criticism has increased, even in home dialogues, and children are able to welcome and consider the views of their mates, exposing their ideas to all (Rossi, 2005, p. 59).

What the author points out in relation to improvements in writing and interpretation of the Portuguese language, a greater fluency in verbal expression and an increased vocabulary, development of critical and dialogue skills, and so on, could be considered as a *transfer* of skills managed through art teaching into other disciplines or activities. However, the basis on which such evidence of a possible transfer is attained are the perceptions of parents and teachers, not through rigorous checks in the framework of experimental research<sup>6</sup>.

From the intermediate grades (4th, 5th and 6th), between the ages of 9 and 10, the elaboration of metaphorical meanings begins to appear inasmuch as students manage to go beyond the framework of the literal sense. It is a mere shown concrete recognition (a denotative plane we would say in semiotic terms) which rises itself towards the articulation of more subjective and encompassing meanings (connotation plane). The author registers that in the control group this qualitative leap in reading appears only at the age of 11.

From the 5th grade on, most of the students in the experimental group identify the artist's autonomy as responsible for the characteris-



tics and quality of the artwork, ceasing to establish a direct relationship between their state of mind and what the image shows. The demand for the photographic realism of Level I also disappears; the artwork expressiveness is valued beyond the subject content, which the author considers to be a feature for Level III. Once this reading level is at hand, students show awareness of their role in interpretation, that they provide a meaning to the artwork among other possible ones.

Rossi concludes that at the end of the primary schooling, students in *the experimental group* leave no doubt that they are capable of articulating multiple points of view, and they show awareness that one of the communicative features of arts is that there is no single valid interpretation for an artwork. They cease, therefore, to be simple deciphers of the artist's intention, to strive for a personal interpretation, which we can now define as a competent hermeneutic consciousness. At the age of 10, students who took part in the experiment were far ahead of those in the control group:

Most of the children in the experimental group, at the age of ten, present an aesthetic thinking similar to that of 14-year-old students in the control group. That is to say, while in these the belief that the artist transfers his state of mind to the artwork predominates, in the students of the experimental group it is already in decline, to give way to a more sophisticated thinking from the aesthetic and cognitive points of view, which is the recognition of the autonomy of the author to get rid of the determinants of the world (physical or psychological) to create an artwork (Rossi, 2005, p. 61).

In other words, if in the *experimental group* from the age of 9, students begin showing signs of being able to enter, in an active way, into the metaphorical game that arts propose, whereas those in the *control group* delay until the age of 11, and if the majority of the students of the *experimental group* at the age of 10 already show an aesthetic thinking similar to that of 14-year-old students in the *control group*, what Maria H. W. Rossi reveals then is a *zone of proximal development* for art comprehension. However, the author does not make use of this Vygotsky's concept (1995; 2008), nor does she focus her analysis upon that theoretical perspective. It is rather a conclusion she comes to, but in the general frameworks of the cognitive theory of aesthetic development, that constitutes the epistemological basis of her research.

## Closing Remarks

We consider that the Maria H. W. Rossi's study is not only a contribution of a great significance for the art-education field in Brazil, but also for the whole Latin American region. The author has the merit of having contextualized in Brazil the studies of aesthetic comprehension development within the frame of cognitive psychology. In undertaking her empirical research, Rossi focused upon a number of problems related to art education that can only count on answers through em-

irical studies on a qualitative nature basis. Therefore, her theoretical contributions and answers to some of these questions bring about a basic debate to continue strengthening the teaching conceptions that pay a special attention to the reading/comprehension of artworks at a school context. Both the empirical information raised by her research and the theoretical reflection paving the way to the qualitative analysis of these data, are a contribution of a great importance for art-education research.

Another of her contributions is to provide confirmed evidence allowing questioning the formalist approach to art reading. Submitting students to a rigid reading methodology, guided by a pre-established questionnaire that emphasize the perception of lines, colors, volumes, background-figure relationships may lead to the habit that the meaning of the artwork is something objective, clearly identifiable, and consequently ends up blocking any possibility for students to work with the sense of images from their experiences and specific interests. The same could be said about the excessive handling in primary schooling of historiographical and biographical contents or Art History categories such as style, movements, genres, systems of representation, etc. These are contents and concepts that have a practical character for experts, but for a child or inexperienced spectator are shown as full abstractions devoid of real meaning. In the latter, Rossi arrives at a meeting point with the essential postulates of Abigail Housen's approach.

Another aspect to highlight is that Maria H. W. Rossi introduced a sample of artworks that goes beyond traditional and modern art, entering the field of postmodern aesthetics and procedures that go beyond the traditional means of visual representation. Such is the case of transvestism and the visual simulation of Cindy Sherman's photography, Anish Kapoor's installation *environment*, as well as Diana Domingues' interactive multimedia and multi-sensory installation. More controversial is the introduction of an advertising figure. For example, the sample of artworks used by Parsons (1992), in his reference studio, does not go beyond the avant-garde of the 1930s nor painting as an artistic means. Picasso was the most contemporary thing he showed to the subjects he interviewed for 10 years in the mid-eighties. Bringing postmodern creative procedures into school context remains a challenge, and Rossi's research provides important clues as to how students relate to such contemporary artistic practices.

Having worked with a sample divided into two groups, one with a certain familiarity with arts and not the other, allowed the researcher to establish certain differentiating notions regarding the influence that context has and the cultural mediations on the development of interpretative skills. This early evidence observed in her doctoral research was confirmed in the longitudinal experimental study, in which the author can follow step by step how the systematic exposure to the consumption of arts made its influence, in a determining manner, in the development of intellectual skills, expanding even more the interpretative and art comprehension possibilities for students.

As for the methodology used to collect empirical information, Rossi started out from a semi-structured interview method close to that of Parsons. This model usually generates a higher level of interaction between the interviewer and the student, making the latter feeling more relaxed and thus establishing a relationship of complicity. However, to the same extent, the interviewer may ask more questions, and may end up conditioning or directing the answers of the subjects towards certain topics of theoretical interest, thus contaminating the information. There are also certain sorts of questions that lead the subject to express a valuable judgment on some aspect of the artwork, guided for him and not chosen by him. An opposite model would be that used by Abigail Housen; a sort of unconditioned interview that lets flow, as a monologue, the subject's consciousness in its interpretative process. This researcher only asks two questions: where are you looking at or what are you looking at, limiting the interviewer itself to intervene again to ask, do you want to add something else? (Housen, 1999).

On the other hand, this kind of research could be greatly enriched through the interdisciplinary exchange with other theoretical perspectives such as the aesthetics of semiotic and hermeneutic-based reception, as well as the constructivism of tradition that refers to Vygotsky, who places special emphasis upon the semiotic mediation process as the engine driving the cognitive development. A triangulation among the North American tradition that has developed empirical studies on the development of aesthetic thinking, the analytical approach of the artistic reception theory, and the historical and cultural perspective of Vygotsky, would make possible a qualitative reading of the data in a much more comprehensive and sensitive manner ahead of subtleties that always escape from any approach.

Moreover, of course, Maria H. W. Rossi's great contribution is to have reached the synthesis of a classifying proposal of three levels of aesthetic thinking, based on the theoretical reading of empirical data collected in the social, cultural and school environment in Brazilian region. This model is an outstanding reference for future research, either to ratify it or to set up points of divergence.

Received on April 3<sup>rd</sup>, 2019  
Approved on June 4<sup>th</sup>, 2019

## Notes

- 1 Other researchers who have implemented similar studies in Brazil are Teresinha Sueli Franz (2003), Maristela Sanches Rodrigues (2008), Rachel de Sousa Vianna (2009), José Sousa Ferreira da Silva (2017).
- 2 The works used were as follows: Allegory of Spring (1482) by Sandro Botticelli; Guernica (1937) by Pablo Picasso; Broadway Boogie Woogie (1942) by Piet Mondrian; Rua de Erradias (1956) by Lasar Segall; S/T no. 96 (1981) by Cindy Sherman; É um Homem, S/T Part II (1989-90) by Anish Kapoor; Trans-e: My

Body, My Blood (1998) by Diana Domingues; and an advertising image taken from Revista Claudia (nr. 9, year 36, 1997). The first two works were used only in some of the interviews. Cindy Sherman's work is a photograph, Kapoor's a photographic documentation of an installation, and Diana Domingues' an interactive electronic installation, which could be experienced by the students in the exhibition room. Paintings and pictures appeared in A3 format.

- 3 This is one of the Abigail Housen's conclusions (1999) after three decades of empirical research: *Studies of the aesthetic reaction of children, teachers, museum professionals and hundreds of adults show that the amount of time spent contemplating and reflecting on art is the only factor of crucial importance in predicting a given aesthetic level of development.*
- 4 In Russia, the Activity Theory by Leontiev based on the historical-cultural approach of Vygotski, has had positive results in experimental studies on the perception and understanding of art (Leontiev, 2011).
- 5 Parsons (2011) would end up abandoning the linear development model to adopt the thesis that in both the creation and understanding of art, various skills can be acquired at the same time and at different levels. See also Fróis (1999).
- 6 On the report *Art for Art's Sake?* about the complex issue of causal *transfer of skills*, the authors reach the following general conclusion: "[...]. The transfer of learning is extremely difficult to prove and has a long and controversial history in the field of psychology [...]. Most studies of arts transfer have not been based on explicit teaching in terms of transfer, in which students are asked to try to apply skills developed in art class, in non-artistic areas" (Winner; Goldstein; Vincent-Lancrin, 2014, p. 43).

## References

- BARBOSA, Ana Mae. **A Imagem no Ensino da Arte: anos 1980 e novos tempos.** São Paulo: Perspectiva, 2010.
- BEUCHOT, Mauricio. **Tratado de Hermenéutica Analógica.** México: UNAM, 1997.
- ECO, Umberto. Intentio Lectoris: apuntes sobre la semiótica de la recepción. In: ECO, Umberto. **Los Límites de la Interpretación.** Barcelona: Editorial Lumen, 1992. P. 21-46.
- FRANZ, Teresinha Sueli. **Educação para uma Compreensão Crítica da Arte.** Florianópolis: Letras Contemporâneas, 2003.
- FREEMAN, Norman; SANGER, Daniela. Commonsense Aesthetics of Rural Children. **Visual Arts Research**, New York, v. 21, n. 2, p. 1-10, 1995.
- FRÓIS, João Pedro. Entrevista com Michael Parsons. **Noesis**, Lisboa, v. 52, p. 31-34, out./dez. 1999.
- GARDNER, Howard. **Educación Artística y Desarrollo Humano.** Barcelona: Ediciones Paidós, 1994.
- GARDNER, Howard. **Arte, Mente y Cerebro: una aproximación cognitiva a la creatividad.** Buenos Aires: Ediciones Paidós, 1997.
- HOUSEN, Abigail. **The Eye of the Beholder: measuring the aesthetic development.** 1983. 666 f. (Ed. D. Thesis) – Harvard Graduate School of Education, Cambridge, 1983.

- HOUSEN, Abigail. El ojo del Observador: investigación, teoría y práctica. In: AESTHETIC AND ART EDUCATION: A TRANSDISCIPLINARY APPROACH, 1991, Lisboa. **Proceedings...** Lisboa: 27-29 Sept. 1999. P. 1-28.
- LEONTIEV, Dmitry A. Funções da Arte e Educação Estética. In: FRÓIS, João Pedro (Org.). **Educação Estética e Artística: abordagens transdisciplinares**. Lisboa: Fundação Calouste Gulbenkian, 2011. P. 129-147.
- MARKIEWICZ, Henryk. La Recepción y el Receptor en las Investigaciones Literarias. In: MARKIEWICZ, Henryk. **Los Estudios Literarios: conceptos, problemas, dilemas**. La Habana: Criterios, 2010. P. 44-74.
- MORAWSKI, Stefan. Las Principales Corrientes de la Estética del Siglo XX. In: NAVARRO, Desiderio. **Stefan Morawski: de la estética a la filosofía de la cultura**. La Habana: Criterios, 2006. P. 23-149.
- MUKAŘOVSKÝ, Jan. La Intencionalidad y la no Intencionalidad en el Arte. In: VOLEK, Emil; JANDOVÁ, Jarmila. **Estética, Función y Valor: estética y semiótica del arte de Jan Mukařovský**. Bogotá: Plaza & Janés Editores, 2000. P. 415-456.
- PARSONS, Michael. **Compreender a Arte**. Uma Abordagem à Experiência Estética do Ponto de Vista do Desenvolvimento Cognitivo. Lisboa: Editorial Presença, 1992.
- PARSONS, Michael. Dos Repertórios às Ferramentas: ideias como ferramentas para a compreensão das obras de arte. In: FRÓIS, João Pedro (Org.). **Educação Estética e Artística: abordagens transdisciplinares**. Lisboa: Fundação Calouste Gulbenkian, 2011. p. 171-191.
- PIAGET, Jean. **La Equilibración de las Estructuras Cognitivas: problema central del desarrollo**. Siglo XXI Editores, 1998.
- PIAGET, Jean. **La Psicología de la Inteligencia**. Barcelona: Editorial Crítica, 1999.
- PIAGET, Jean. **La Representación del Mundo en el Niño**. Madrid: Ediciones Morata, 2001.
- RALL, Dietrich (Org.). **En Busca del Texto: teoría de la recepción literaria**. México: UNAM, 1987.
- RODRIGUES, Maristela Sanches. **Desenvolvimento Estético: entre as expectativas do professor e as possibilidades dos alunos**. 2008. 252 f. Dissertação (Mestrado em Artes) – Instituto de Artes da Universidade Estadual Paulista, Universidade Estadual Paulista, São Paulo, 2008.
- ROSAS, Ricardo; SEBASTIÁN, Christian. **Piaget, Vigotsky y Maturana: constructivismo a tres voces**. Buenos Aires: Aique Grupo Editor, 2008.
- ROSSI, Maria Helena Wagner. **Leitura Estético-Visual na Educação Fundamental**. 2000. 243 f. Tese (Doutorado em Educação) – Faculdade de Educação, Universidade Federal do Rio Grande do Sul, Porto Alegre, 2000.
- ROSSI, Maria Helena Wagner. **Imagens que Falam: leitura da arte na escola**. Porto Alegre: Mediação, 2003.
- ROSSI, Maria Helena Wagner. A Estética no Ensino das Artes Visuais. **Educação & Realidade**, Porto Alegre, v. 30, n. 2, p. 49-69, jul./dez. 2005.
- ROSSI, Maria Helena Wagner. O Desenvolvimento do Pensamento Estético-Visual na Escola. In: CONGRESSO NACIONAL DA FEDERAÇÃO DOS ARTE-EDUCADORES DO BRASIL – CONFAEB: ARTE/EDUCAÇÃO NO PÓS-MUNDO, 23., 2013, Porto de Galinhas. **Anais...** Porto de Galinhas: 2013. P. 1-12.

ROSSI, Maria Helena Wagner. Leitura Visual e Educação Estética de Crianças. **Revista GEARTE**, Porto Alegre, v. 2, n. 2, p. 213-229, ago. 2015.

SILVA, José Sousa Ferreira da. **Avaliação do Estado de Desenvolvimento Estético e a Programação de Ensino de Leitura de Imagem com uso de Relação de Equivalência**. 2017. 172 f. Tese (Doutorado em Psicologia da Educação) – Programa de Estudos Pós-Graduados em Psicologia da Educação, Pontifícia Universidade Católica de São Paulo, São Paulo, 2017.

VIANNA, Rachel de Sousa. **Ensinar e Aprender a ver**. 2009. 301 f. Tese (Doutorado em Educação) – Faculdade de Educação, Universidade de São Paulo, São Paulo, 2009.

VYGOTSKY, Lev Semyonovich. **Pensamiento y Lenguaje: teoría del desarrollo cultural de las funciones psíquicas**. Buenos Aires: Ediciones Fausto, 1995.

VYGOTSKY, Lev Semyonovich. **El Instrumento y el Signo en el Desarrollo del Niño**. Madrid: Fundación Infancia y Aprendizaje, 2007.

VYGOTSKY, Lev Semyonovich. **El Desarrollo de los Procesos Psicológicos Superiores**. Barcelona: Editorial Crítica, 2008.

WINNER, Ellen; GOLDSTEIN, Thalia; VINCENT-LANCRIN, Stéfhan. **¿El Arte por el Arte?: la influencia de la educación artística**. México: Instituto Politécnico Nacional, 2014.

**Hamlet Fernández Díaz** holds a doctorate in Art Sciences from the University of Havana, Cuba. Professor at the Faculty of Arts and Letters of the University of Havana. This paper is the result of postdoctoral studies performed through the Postgraduate Educational Program at the University of Uberaba, MG, Brazil. Funding agencies: CAPES; FAPEMIG  
ORCID: <http://orcid.org/0000-0001-6864-6359>  
E-mail: [hamletfdez84@gmail.com](mailto:hamletfdez84@gmail.com)

This is an open-access article distributed under the terms of the Creative Commons Attribution License 4.0 International. Available at: <<http://creativecommons.org/licenses/by/4.0>>.