THE AESTHETICS OF LUKÁCS: CONTRIBUTIONS TO THE “HARD SCIENCES” CURRICULUM

Patricia Murara Stryhalski*
Gesiele Reis**
Zemilda do Carmo
Weber do Nascimento dos Santos***
Verônica Gesser****

*Graduated in Pedagogy from the University Center of Jaraguá do Sul [Centro Universitário de Jaraguá do Sul] and Complementary course in Pedagogy from Leonardo Da Vinci University Center [Centro Universitário Leonardo Da Vinci]. Specialized in Special Education from the Regional Foundation of Blumenau [Fundação Regional de Blumenau], Master in Education from the University of Vale do Itajaí (Univali - Universidade do Vale do Itajaí) and sandwich PhD in Education from Univali and University of Minho [Universidade do Minho] – Portugal. She is a member of the examining board at the National Institute for Educational Studies and Research Anisio Teixeira [Inep - Instituto Nacional de Estudos e Pesquisas Anísio Teixeira]/Ministry of Education (MEC). Jaraguá do Sul, Santa Catarina, Brazil. Email: murarapatricia@gmail.com

**PhD student and Master in Education from the Graduate Program in Education at Univali. Specialized in Childhood Education and Early Years from the Regional Foundation of Blumenau. Graduated in Pedagogy from Univali. Member of the Research Group "Culture, School and Creating Education", linked to the National Council for Scientific and Technological Development [CNPq - Conselho Nacional de Desenvolvimento Científico e Tecnológico]. Itajaí, Santa Catarina, Brazil. Email: zielly2005@gmail.com

***PhD in Education from Univali, with a PhD Internship at Université du Québec à Montréal – Canada. Master in Education from Univali. Graduated in Pedagogy from Univali. Member of the Research Group "Contexts of Childhood Education". Higher Education teacher (Pedagogy course) at Univali. Trainer and advisor in the Childhood Education field on Regulatory Documents (Political and pedagogical projects and guidelines) and Teaching Practice. Teacher of Childhood Education in the Public School System. Camboriú, Santa Catarina, Brazil. Email: zemilda11@yahoo.com.br

****Post-Doctorate in Education from Barry University – USA. PhD in Education from Florida International University – USA. Master in Education from Pontifical Catholic University of São Paulo [PUC - Pontifícia Universidade Católica de São Paulo]. Leader of the Research Group “Curriculum and Management Policies and Practices”, linked to CNPq. Director of the Education Center at Univali. Professor and Coordinator of the Master’s and PhD Program in Education at Univali. She is a member of Inep’s examining board, actively acting in the Regulatory Acts and Processes of Evaluation of Higher Education in Brazil, both in classroom and distance education. Camboriú, Santa Catarina, Brazil. Orcid: https://orcid.org/0000-0003-2170-064X. Email: gesserv@univali.br

Received for publication on 11.12.2019
Approved on 6.2.2020

Abstract

This article proposes a reflection on Lukács’ Theory of Aesthetic Mirroring and its possible contributions to the curriculum of the so-called hard sciences. To make up the analysis, it presents the data emerging from the research of Murara (2013), whose objective is to characterize how the curricula and teaching practice of such courses have affected the employability of graduates. For the development of this work, the theoretical contributions that explain the aesthetic ideas of Lukács are appropriated, under Frederico (2000), Sales (2009), and Konder (2013).

Keywords: Curriculum. Aesthetic Mirroring. Hard Sciences.
1. Introduction

“Art is, therefore, one of the ways the world, reality, is revealed to the man.”

(VÁZQUEZ, 2010).

The epigraph by Adolfo Sánchez Vázquez introduces this article because of the belief that art is a tool for sensitive knowledge. However, for Lukács, according to Vázquez, art is everyday acquaintance, actual, and integrated awareness. In contemporary reality, the search for efficiency has the power to hide experiences, separating sensitive knowledge from intellect, as if there was a dissociation in the constitution of human beings, as in Descartes’ theory (2009), where rationalism is the vital evident and reliable knowledge. As a result, as pointed out by Duarte Júnior (2010), nowadays, there are still signs of a modern crisis where the senses were anesthetized and even brutalized.

Given this context, strictly pragmatic curricula still affect many education institutions, especially concerning the curriculum of the so-called hard sciences. In this regard, the present investigation moves towards raising awareness to find an answer to the following question: “How to humanize the hard sciences curriculum?” To this end, it proposes to identify categories in the Aesthetics of Lukács, which contribute to human development.

This work appropriates the theoretical contributions that explain the aesthetic ideas of Lukács, under Frederico (2000), Sales (2009), and Konder (2013). Regarding the humanization of the hard sciences curriculum, refers to the research of Murara (2013). Next, it addresses the reflection theory, aiming at conjecturing its possible contributions to the teaching of arts.

2. The evolution of Lukács’ thinking towards the theory of aesthetic mirroring

When György Lukács, a Hungarian thinker, began his studies, classical German philosophy influenced him. Later, Kant and Hegel led him to approach Marxist thought, which he became adept of and developed his studies, which led the critics to conceptualize him as an exponent of the theory of Karl Marx, however, directed towards the analysis of artistic production. As Sales (2009, p. 68) states: “[...] Hungarian George Lukács represents a strong impetus for the studies of aesthetic theory and the sociology of literature”.

Konder (2013) points out that Lukács, even before joining Marxism, had already proved to be a great critic of art. His first two writings on this topic highlight this statement. In 1910, he wrote Soul and Form based on Hegel’s theory; and then in 1914, he published The Theory of the Novel, which was devised in his pre-Marxist stage. In The Theory of the Novel Lukács perceives this literary genre as something characteristic of the modern, as explained by Konder (2013, p. 129):
The modern novel, however, expresses conditions quite different from those of the world where the epic was produced. In the modern world, according to Lukács of 1915, 'being a man is to be lonely'. The individual has become an essentially problematic being: his relations with the world exclude the possibility of this world providing him with clear and authentically human purposes for his action.

Another work by Lukács, which is worthy of attention is the book *History and Class Consciousness*, written in 1922, at a time when the author had already adhered to the theory of Karl Marx. The title of the book already refers to the Marxist features, which from then on will appear with more and more emphasis on his work. “Lukács concluded that the capitalist organization of production had brought the phenomenon of reification to its most extreme consequences” (KONDER, 2013, p. 130). Still referring to reification, Sales (2009) clarifies that Lukács perceived art as something mediating between reified reality and the individual since, in this way, one can reach aesthetic effectiveness.

Again, Sales (2009) argues that to understand Lukács’ journey, it is also necessary to understand the criticism of the reified consciousness, based on the commodity fetishism. The theory of commodity fetishism is what Marx calls a social and psychological phenomenon; it is something essential to the production of commodities, as can be observed:

This theory argues that commodity appears to society as a social relationship that excludes individuals, producers, becoming just a relationship between things. The technical division of labor in capitalist societies would prevent the worker from appropriating the final meaning of their work, thus excluding them from this relationship. In this regard, capitalism would reify and fragment human life and experiences (SALES, 2009, p. 69).

This division of labor means that the worker, due to this fragmentation, does not have access to the final product of their work. “In this regard, capitalism would reify and fragment human life and experiences” (SALES, 2009, p. 69). As a solution, “[...] art, still in its terms, would represent an alternative to this reification of thought” (SALES, 2009, p. 69).

To evaluate artistic production, Lukács uses the theory of “aesthetic mirroring”, which he developed based on his studies of Marxist dialectics. To define this theory, realism emerges as an essential category, “as the criterion for the critic to judge the work of art and also the path for the artist to reveal the truth in his creation” (FREDERICO, 2000, p. 302). An advocate of the realistic method, Lukács believes that art is linked to everyday life.

In order to determine the place of aesthetic behavior in all human activities, Lukács starts from the needs posed by everyday life. As a materialist he was, he studied art – always compared and contrasted with scientific activity – starting from everyday life, as
one of his privileged moments, unlike Hegel, for whom art always appears as a sensitive manifestation of the idea (FREDERICO, 2000, p. 302).

For Konder (2013), art is directly connected to life experiences, which makes the individual identifies with them, and, through them, new human relationships are established. It is the rooting in daily life based on the needs found.

In great works of art, men relive the present and past of humanity, the perspective of its future development, but do not relive them as external facts, whose knowledge may be more or less important, but rather, as something essential to life itself, as an important moment for one's own existence (LUKÁCS, 1982 apud KONDER, 2013, p. 137).

For this reason, Konder (2013) states that art is not neutral, and adds that all good art is in favor of human integrity. In this regard, it is only possible to uphold human integrity with propriety if the artist really knows it, and for that, Lukács says it is necessary to be fully realistic. "Which means you must have been able to reflect deeply upon the real" (KONDER, 2013, p. 137).

3. The theory of aesthetic mirroring

Sales (2009) states that the relationship between art and reality is a matter of reflection: "A reflection that deepens and clarifies, that broadens the perception of the whole world [...]" (SALES, 2009, p. 70). The reflection theory, as Konder (2013) states, is over 2,000 years old. From the perspective of dialectical materialism, it proposes that events and objects are based on a reflection of reality. At first, Lukács rejected the reflection theory as useful for evaluating artistic work. However, later, he revisited it with an overhauled thinking. Based on Lenin’s thought, Lukács finally defines his reflection theory or Theory of Aesthetic Mirroring.

Lenin had already warned that the reflection of the real in the consciousness is not a simple and direct action, that the sensitive representation of external experience corresponds to such reality, but does not coincide with it: ‘the sensitive representation is not the reality existing outside us, but rather, just the image of that reality.’ Lukács adhered to the Leninist theory of knowledge and started to warmly advocate it (KONDER, 2013, p. 138).

In this regard, for Frederico (2000, p. 303), "art and science are developed forms of reflection, of reception, of objective reality in the consciousness of men. They build up slowly during the historical evolution and are constantly distinguished”. Therefore, we can say that aesthetics has its beginning in the reflection of everyday life.
4. The constituent categories: Particularity and typicity; anthropomorphism and deanthropomorphism; immanence and transcendence

When tracing a path in search of the construction of a theory, whose bases would include the definition of a Marxist-based aesthetic, Lukács (1965), in his book “Essays on Literature”, presents historical and dialectical materialism as means of support to analyze artistic production. Through his theory, the author studied the evolution of art, assuming that, as in Marxist theory, there was a milestone when the man begins his transformation from being solely natural to being social. Also, in art, there was an initial mark of self-consciousness, in other words, when man began the production of art, he was aware of what he was doing, and did not use it anymore in an only utilitarian way, as at the beginning of humanity.

Thus, the author, through this assumption, sets apart the way men reflect on daily life given of the aesthetics, concerning the reflections made because of the science. As a result of this analysis, emerge the categories that the author calls particularity and typicality. These two categories would elevate the process of analysis to what the author defines as aesthetic mirroring of everyday life.

The path leading to artistic development must start from here.

And such a question, of course, can only be posed and resolved in close connection with the general principles of dialectical materialism. A basic principle of dialectic materialism sustains that any consciousness-raising of the outside world is nothing but the reflection of reality, which exists independently of consciousness, in ideas, representations, sensations, etc. (LUKÁCS, 1965, p. 15).

Lukács began his studies from other authors who had already taken into account the category he called particularity. In his research, he finds studies by Kant, Schelling, and Hegel on the evolution of this category, but he concludes that they did not go beyond the line of what is known today as the principle of Hegelian philosophy, transcendentalism. Marx (c2013), in works such as The Capital (1867), among others, finds subsidies, since he was the first to understand, from Hegel’s contribution, the particularity as a logical category.

For the creator of Marxist dialectics, particularity, or singularity, turns into universality, and so is the opposite. This process, according to the author, happens constantly in human experience, having broader importance than simple intermediation, and also takes a propelling character of the transformations that a particularity can cause in a given social group, from the moment it ceases to be the cause of one to become the cause of many (LUKÁCS, 1978). The opposite process, taking into account that this is a Marxist dialectics, also occurs. For Santos Neto (2012, p. 152):

Similarly, something that has arisen from a universal complaint can become particular to a group of unique men. As an example of this, and in contrast to Hegel, the capitalist system emerged...
after the union between the bourgeois and other social classes subsumed in feudal society, which have come together in favor of a new social form. Soon afterward, relationships have reversed, and the class owning the means of production established its strength over the workers who, for the most part, needed/need to change the logic to achieve true universality.

For the author of the realistic aesthetics theory, this dialectic has the main function, since the unique, or particular, represents, in this process, the logical expression of the sets of mediation between each particular social being, and the society and historical setting where it is inserted. In this regard, Lukács (1965) presents the thesis that aesthetics is not for man as an inherent object in his process of historical constitution, but rather, as an object of the creation of this human who evolved along with the transformations that he underwent throughout his existence, as well as the transformations that he inferred in nature through his work. It is evident, then, the utilitarian and mystical character of art in prehistory and its evolution to self-conscious art with the development of work and the distance that man takes from his most ancient functions. Again, the example in Santos Neto (2012, p. 152) fits here:

And as evidence of this, we have the abstract forms that are part of the work of art, cases of rhythm, symmetry, and proportion inserted in a larger form somewhat independent of the external world, the ornamentals. Just as an example, rhythm appeared from the moment one perceives, with social class, that exercising a certain activity regularly can bring a much better will to keep practicing it and better results. In the case of sound rhythm, when realizing how pleasant the sound of the beating of tools was, he started drifting away from the work until reaching self-consciousness as an art.

Taking the human daily life as a basis, set up by the action of work, Lukács (1965) presents characteristics of art and science that allow resources of approaching and distancing, and elevate art to conceive a character of peculiarity or particularity in social life. From this analysis, the categories named by the author as anthropomorphism and deanthropomorphism emerge, as well as the categories of immanence and transcendence.

As already specified, in Lukács’ (1965) realistic aesthetics theory, art no longer takes a utilitarian or mystical character, as at the beginning of human history. In this process of art evolution, the author says that it takes a deanthropomorphizing character since it contains in itself the conscious attempt to understand reality. That way, he says, science is or exists in this process by itself, intensely autonomous, for when making art, it is the subject who systematizes the phenomena, who watches them, who analyzes them, to later turn them into art.
Based on this assumption, the author seeks to situate art as part of reality, or the real, a place where only science had the privilege of ascending. Based on his logic, art, just like science, has its feet on what is earthly (what is objective), since it takes place based on natural phenomena on which man infers Marxist dialectics, in other words, social events. However, it is worth noting that there is a line setting them apart: if art, when emerging from social phenomena, does not need to prove something, science, in turn, needs to completely break with anthropomorphism and raise the analysis to the process of deanthropomorphism, in other words, to remove both from the object and the subject any human aesthetics (anthropomorphic) that they contain in themselves, to expedite a real and precise analysis of their intuitions, representations, and conceptual formulations.

Given these two concepts, this study sought to present the categories of immanence and transcendence to better understand the elements making up the theory proposed by Lukács. The author himself defines that immanence is an inevitable requirement of scientific knowledge and artistic form (LUKÁCS, 1982). Thus, for the author, it is clear that the complexes, art, and science, build a founding relationship among them. However, the studies point to the close link between primitive man and transcendence, which, in the author’s analysis, is a product of the early stages of human development.

In short, if on one hand, the expansion of the concepts of science and art led man to the natural process of independence from transcendentality, on the other hand, this same man, through this same process, makes art an example par excellence of human immanence, since art is configured as a social phenomenon, inseparable from the subject, and as a product of man’s social evolution, which is thus constituted through the relationship with labor. This theoretical path, or corpus so far detailed, is configured in Lukács’ Theory of Aesthetic Mirroring, which opens up opportunities and provides possibilities for transforming the hard sciences curriculum into a more humanized curriculum or, in Lukács’ words, an “Anthropomorphized Curriculum”, and this topic will be the focus of discussion following this work.

5. Humanization of the “hard sciences” curriculum

In view of the above, as a way of clarifying and understanding the Theory of Aesthetic Mirroring, the next step is to establish a dialogue between this proposition and the curriculum of the so-called hard sciences. To make up the corpus of analysis, there are emerging data from research conducted in 2013, in the High School courses interconnected with Vocational Education, in an institution of the Autonomous Social Services (“S” System) in the state of Santa Catarina. It is an investigation conducted to characterizing how the curricula and teaching practice of such courses affected the employability of graduates (MURARA, 2013).

One must consider that the curriculum in the “S” System has been permeated by a technical-linear character, which aims the technique-centered teaching, “that is, the
intent of education is directly related to the preparation of individuals to perform specific functions: skilled workforce for the labor market" (RANGHETTI; GESSER, 2011, p. 36). It is this concept of curriculum that permeates vocational education, especially influenced by the principles of scientific administration and modes of production. Ranghetti and Gesser (2011) also take up that Frederick Taylor organized a curriculum paradigm that aimed at preparing people to perform functions in predetermined situations. It is worth mentioning the historical perspective from which this thought originated, which placed the function of education as the acquisition of knowledge based on the scientific method. For it is now understood that the concept of science has been split into two branches, the "hard sciences" (or natural sciences) and the social sciences.

Throughout history, as a result of metaphysical thinking, a culture has been established where the natural sciences have drifted away from the social sciences. The courses appropriating the hard sciences have focused their studies on the objects of knowledge that emerge from an objective matrix, that is, the teaching is based on the technical-linear curriculum, similar to the "S" System's technical courses, the object of study addressed in this work. For example, the Mechanical Manufacturing, Integrated Chemistry, and Production Engineering courses, which are focused on the labor market, emphasizing the technique. The curriculum of these courses, in general, does not present social sciences subjects, which suggests the distance from a more humanized curriculum. The curriculum is relevant to what the student will find in the labor market but does not include a professional who, besides technical training, needs human and aesthetic training.

A culture has been established where the natural sciences have drifted away from the social sciences

These missing subjects in the curriculum are the matrices that would enable students to perceive the existence of other interpretations about reality. They could lead the students to understand the importance, for example, of group, collective, social coexistence, and that this collective coexistence is a condition for the full exercise of citizenship, and not only in and for the labor market. The lack of these subjects affects this market, as well as employability (MURARA, 2013, p. 108).

When investigating how students evaluate the courses from which they are graduated, the research of Murara (2013) finds that, due to the education received through the technical-linear curriculum, graduates have trouble describing the process of this education. Dialogue and ponder on the negative and positive aspects, so that the context in which this event takes place is considered, becomes an unfeasible task for them, which makes them emphasize a substantially technical-numeric conceptualization of the evaluation, translated by the grade, or scale from 0 to 10.

Another situation found in the research concerns the written production of the graduates. In this matter, some students point out that they do not realize the need for the subject of methodology to occupy so much space in the course, and that the curriculum should focus more on technical subjects. Such subjects make the
students excellent professionals regarding the technical part of the work, but with marked difficulties when writing, for example, a project or report. This concept, presented in an extremely “hard” way, is the result of education based on numbers and methods, which once again proves the strong lack of subjects based on social sciences, which mainly include in their content writing and dialogue.

On the other hand, by analyzing data obtained in the research that analyzes the relationship between teacher and student, one can see that the graduates point out the role, influence, and appreciation of the teacher of technical education. These professionals have different characteristics from elementary education teachers, since they usually teach based on the experience of the labor market, and, because of this, have a closer relationship with their students. Teachers are present in students’ conversations before class, during breaks, after class, and, inside the classroom, they exchange experiences as if they were co-workers. “The closeness between teacher and student in vocational education is peculiar. [...] There is a lot of informality” (MURARA, 2013, p. 70).

As mentioned, an interesting piece of data that the research found out was about these professionals’ training. Most Vocational Education teachers are not trained to act as teachers, although they are treated as such. Therefore, they use this closeness to students as a didactic strategy. They have no training that brings the humanization of the curriculum to the students, but they work with their students in an implicit and even unconscious way. These questions make one reflect on how rich it would be for students to include social science subjects in their technical and higher education. It is possible to articulate different points of view, without losing the focus of the proper objective of the course, going beyond the fads permeating the curricula of the so-called hard sciences.

In the face of these aspects, we seek the framework that will lead to the offer of a more complete education for the students. In this regard, Ranghetti and Gesser (2011, p. 18) indicate that: “From a post-modern or post-critical perspective, the curriculum is understood as a cultural, social, and historical artifact”, or:

For the current context, there is an urgent need for a curriculum that develops the capacity of critical thinking, reflection, and reconstruction of the curriculum historical genesis, of the theories, and the practice of the profession, acknowledging that personal and professional choices are always loaded with values. Therefore, both the curriculum and its basics must be historical and critical (RANGHETTI; GESSER, 2011, p. 4).

Based on the concept of the critical curriculum, it is possible to seek, in Lukács, the process of humanization. If a man in his process of anthropomorphism (humanization) was influenced by aesthetics, it is understood that the same can happen with the hard sciences curriculum. Lukács understands that Marxism when referring to the issues of class-divided society and the capitalist mode of production can have positive interferences since it is capable of “[...] broadening
the humanization dimension of human actions and interactions" (KEIM, 2011, p. 302). On this basis, it is understood that when labor market-based training governs the courses, the curriculum can relate to the issue of humanization. Keim (2011, p. 302) addresses that: “This process is the difference between education and training that takes place linked or not to schooling.

KEIM (2011, p. 302) also adds by saying:

Among other reasons, Lukács considered each human being to be responsible for social dynamics, being influenced and encouraged by them to act according to their precepts, and it is up to each one to commit to overcoming what generates misery and marginalization caused by borders and the competitive civilizing context sustaining class differences.

These issues are softened when the course curricula do not have this concern for society. They only prepare for the labor market, which results in what Paulo Freire defines as “banking education” so that the curriculum of the courses is only concerned with filling the gaps in the market.

6. Final considerations

In conclusion, it begins again. Since the initial question of the article is the search for the humanization of the hard sciences curriculum, this work tries to answer this question by understanding the categories of Lukács’ Theory of Aesthetics, which, according to the author, contribute to human development, so that they can be useful for a possible curriculum transformation.

Thus, through the studies of the theory of aesthetic mirroring, it is understood that, with the modern crisis, the human being was divided between cognitive knowledge and sensitive knowledge coming from Cartesian thought, whose signs can still be seen today, for example, with the brutalization of the senses, and consequently, of school curricula.

Consequently, it is possible to humanize the curriculum of the so-called hard sciences, through the integration of knowledge, where teachers and students come to realize that the cognitive is not all that matters, but that their experiences are also of utmost importance for the aesthetics of their professionalism and experience in everyday life.

However, for teachers and students to perceive reality and the world, through their senses as well, it is necessary an aesthetic path for the education, through which they think about art as an instrument within reach of sensitive knowledge. This perception must go further, aiming at leading them to understand that everyday art that highlights realism is a form of knowledge through which the sensibility and the cognitive are integrated and inseparable.
In this regard, anthropomorphism, or humanization, is developed through aesthetics, which means it stands in the autonomy of feeling integrated into the world. But for such an event to occur, it is necessary that the human being be attentive to the external factors with which they experience with full meaning everything possible to be shared and that leads human beings to move towards a collective ideal that ultimately gives the feeling of being an integral part of a global cause.

In Lukács, one finds out that art is one of the possible paths for the human to reflect and capture the real events that surround them. That is why art that is present in everyday life can become an important instrument to elevate man to the state of total integration into his world. Moreover, the case of this particular study suggests that art can lead teachers and students of the technical and higher courses of hard sciences to reflect and capture the real in their school contexts and their daily lives, so that, in the dialectic sense of this theory, they also perceive what the world reveals to them.

Note

1 This article was promoted by the Coordination for the Improvement of Higher Education Personnel [Capes - Coordenação de Aperfeiçoamento de Pessoal de Nível Superior].

References


RANGHETTI, Diva Spezia; GESSER, Verônica. **Currículo escolar:** das concepções histórico-epistemológicas à sua materialização na prática dos contextos escolares. Curitiba: Editora CRV, 2011.

