

The cognitive impact on emotion in the artistic formation process

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ABSTRACT

In a complex educational process, artistic training plays a particularly important role and one of the reasons is that the artistic event is a cognitive process of connection in order to obtain various emotional states imposed by the character of the works or the typology of art. Artistic training can be translated, as a finality, into the achievement of art creators, art interpreters, or artistic public. Every artistic act will create and emulate specific emotions determined by the chosen artistic field.

KEYWORDS

Music, Arts, Emotion, Cognition, Education

INTRODUCTION- COGNITIVE EDUCATION

In the century we live in, competitive advantage, related to any field of activity, will be achieved by preparing a highly skilled human capital. The high threshold of the human capital base will be established only through quality education and at the same time through broad or inclusive education. Education is of overwhelming importance because development is not just about economic growth, it is the addition of a baggage of moral values that will make living possible under the sign of respect and coexistence in diversity.

Establishing the educational importance appears in two different views as consistency and by analyzing differently the importance of the knowledge accumulated through education. On the one hand there are those who see intelligence as an abstract reason for improving knowledge and who find personal satisfaction in its accumulation, and on the other are those who want to make their knowledge a guide to social and intellectual life. This problem attempts to relate education to intellectual development. It is a modest approach, and answers are far from definitive or conclusive. We can not talk about intellectual development as something that once existed, it is exclusive, static or final. Rather, we can say that this type of intellectual development can be transformed into cognitive education, a phenomenon of information accumulation and processing that begins in early childhood and continues throughout life.

COGNITION VERSUS EMOTION

The brain builds the cognitive and perceptual concepts, but also the emotional ones. The question arises: How does cognition regulate emotions? But this fundamental question generates new ones: how do emotions interact with other areas of cognition and how do they influence them? Or is affect a form of cognition? Without claiming that we can answer these questions clearly, we will, in the following, formulate some opinions on this topic.

In the educational process, emotions can be a catalyst or an impediment to learning. Though society generally believes that it is based on a rational brain, information often belongs to an emotional brain, in which sentiments acquire a first priority. A student / student who is distraught, distressed, or who has accumulated multiple emotional frustrations will not be able to learn, remember, and will not be able to correctly remember content information during the evaluation.

During the courses, mere exposure to content information (lesson, text, etc.) does not guarantee that the accumulation of knowledge will reach the emotional threshold of “personal importance” for the student, where coding information for permanent storage of memory is considered justified. What encodes students depends on the element of maximum emotional impact that draws their attention at that time. Although we often wonder why our students sometimes forget the content of the lesson, the biggest problem is whether the information has ever been coded to be memorized. For this purpose, an important distinction must be made between hearing and remembrance, since they will only learn what they are interested in and will only remember what they will understand.

Due to the fact that within the cognitive process, an important role is played by memory we need to specify the following:

1. The stronger the emotions of an experience are, the more powerful the memory is.
2. The emotionally important neural networks are enriched with neurologic-nutrients, which favours memory formation and information retention.
3. Learning experiences become memorable when social-emotional events are part of the learning process, which is why learning through cooperation is a powerful memory enhancer in schools.

The perception of emotion and cognition as independent entities to one another had a long history. Even if the interaction between the two was implicit, emotion was seen as a contamination of cognition, leading to erroneous thinking or less optimized decisions. A completely different approach and view brought about a new perspective, i.e. construction is not only distinct or opposing forces, but affection and knowledge appear as intertwined and influence the condition which is seen more as functional than dysfunctional. It has been shown and demonstrated that affection provides valuable information in the cognitive process, information that can lead to greater accuracy of decision, just as cognitive processes directly influence emotion control.

The ability to control emotion is important first of all for human adaptation. Numerous studies that have attempted to discover cognitive processes that influence emotions have primarily focused on controlling attention and cognitive change in the meaning of stimuli that produce emotion. These two forms of emotion regulation depend on interactions between neural systems that generate cognitive processes and the results of these studies demonstrate a functional link with the cognitive control of emotions and generated new points of view or research in connection with cognition - emotion.

Researchers of cognitive psychology have had a major source of ideas quoting Piaget about intellectual development. The analysis between cognition and affections was destroyed by statements that argue: "There is no model of intellectual behaviour that does not involve affective factors as motivation ... the two aspects, affective and cognitive, are inseparable and irreducible at the same time." (Piaget and Inhelder, 2005, p.158). He is the first psychologist who eliminates the dichotomy between cognition and emotion and offers research topics claiming that emotion involves cognition and cognition involves emotion.

Since this work focuses on the interaction between emotional effect and cognitive functions, it is important to briefly mention another important line of studies that investigated cognitive-emotional interactions, namely, *cognitive emotional regulation* supported at Columbia University by Kevin N. Ochsner and James J. Gross (Ochsner and Gross - 2005). They have researched the "cognitive reevaluation" strategy, which involves rethinking the meaning of stimuli or emotionally charged events in terms that change their emotional impact. Physiologically, reevaluation seems to depend on interactions between the brain regions that are frequently involved in cognitive processes and tonsil control was involved in the emotional reaction. Although much of the work on cognitive regulation of emotion was based on a relatively strict separation between cognition and emotion, which in this context is regarded as engaged in the war for behavioural control, this framework is probably too simplistic. As the authors themselves suggested, a more complex approach is required involving the development of an integrated framework to specify which combinations of subsystems at the neuronal level are involved in the emotional response, because individuals possess different levels and types of control over their emotions, highly dependent on momentum stimuli.

As individuals, we constantly perceive large amounts of information every minute, but we do not try or perhaps fail to remember many of them. It is important that we can not remember the information we did not encode for storing in memory. Once the elements that make up an experience are classified according to their special and specific features, they will be analyzed in detail by the different circles of the region, where a comparative search for identifiable resemblance to those previously encountered is carried out. Elements of the new information will be stored in the neural circuits distributed throughout the cerebral cortex, and the stronger the network linking the associated parts will be the more resistant to fatigue.

By linking this information to the musical artistic field, we can exemplify the following situation: when we are first exposed to a song, we establish new neural connections - sound, emotional impact, audience, similar, etc., everything to represent this new sensory experience. However, at a second hearing, a different neurological experience is triggered, in which the established connections are reactivated as recognition. We now recall the song, we can utter the recognized lyrics now, we can reproduce those lyrics later in the absence of music, or we can even hum some musical pieces from that song. All new learning pathways are built from existing circuits and are accompanied by changes in brain physiology as a result of experience. Although academic language describes learning as an acquisition of knowledge, new information becomes integrated into the existing data complex, rather than being purchased and stored in isolation.

Arts education is never singular. Curriculum integration improves content retention when the subject benefits from multiple integrated connections. The importance of inter-curricular integration in the arts allows pupils / students to experience and diversify, finding new approaches to old techniques, and providing connections not only between the fields of art but in all areas of everyday life. This approach is vital to the diversity of everyday life of students, but it is also important for them to easily detect the transferable skills they learn in the study of arts, skills that are used in many other areas of study or in social life.

The arts are vital to all the communities on this earth. Whether we are active participants or just viewers, each of us plays a role in creating, changing and renewing the cultural elements that surround us. A culture-aware education and an active involvement in it, formal or informal, is the key to a more optimistic or even idealistic approach to life and will certainly lead to the discovery of the positive side and to a more indulgent appreciation of all elements or phenomena which surround us.

ARTISTIC EMOTION

Due to the connection of the arts with the perception and sensorial element "sensory knowledge", a name given by Alexander Baumgarten to aesthetics, made the arts become its central area of research and knowledge. Although it may seem that the sensorial is the most important criterion of knowledge and classification, the perception of works of art is not just a momentary impact. Memory, imagination, emotion and reason each play an important role. Consequently, since its appearance, the field of aesthetics has referred to the functioning of fundamental psychological and cognitive processes.

Baumgarten understood early that arts constitute a distinctive and significant area of "sensory knowledge," in which emotion appears to be an important factor. Aesthetics, or "science of perception," as he himself called it, represents the core concern of another renowned philosopher, Immanuel Kant, who in turn attempted to clarify the idea that the value of a work of art depends on the way in which the aesthetic idea is presented and the ideas of the artist are essentially

mimetic, depending entirely on the objective reality of the moment. Over time many philosophers and aestheticians have debated the problem of the intrinsic connection between knowledge, sensory and the creation or perception of the work of art.

If we analyze the role of emotions in art with regard to the subconscious mechanism that appears as an integral factor in both artistic creation and man's response to art, we find that emotions involve a psychological phenomenon that Ayn Rand in his book *The romantic manifesto* calls it a *sense of life*. A sense of life is, in his view, a pre-conceptual equivalent of metaphysics, an emotional and subconscious evaluation of man and existence: "Art is a selective re-creation of reality based on the metaphysical judgments of the artist." (Rand - 1971)

The *artist's sense of life* is the one which controls and integrates his/her work, guiding the innumerable choices he/she has to make, from choosing subjects to the most subtle details of style; as the sense of life of the spectators or readers will be responsible, when facing a work of art, of a complex but automatic reaction of acceptance and approval, or otherwise of rejection and condemnation. This whole sense of life that appears involved in coding or decoding an artwork focuses on a life experience based on previously acquired knowledge. Each formal or informal experience will have a footprint within the cognitive process that will direct or manage the artistic emotion that will form the basis of the artwork's creation or reception.

The psycho-epistemological process of communication between an artist and a viewer, listener or reader goes as follows: the artist begins with a broad abstraction that must materialize, bring into reality by means of appropriate details; the spectator perceives the details, integrates them and understands the abstraction from which they came, thus closing the circle. Speaking metaphorically, the creative process resembles a process of deduction; the viewing process resembles an induction process. This does not mean that the artist makes communication a primary purpose. In essence, the primary purpose of the artist is to bring in reality his vision of man and existence. It is not easy work, all the more so as to be brought into reality, it must be translated into objective and concrete terms in order to be transmissible.

Art is social communication and, for the most part, it is expressed in forms that resist time and travel beyond the immediate state. In this way, the emotions expressed in art can be considered as extensions of the epe or individual expressions.

In the arts, music is a privileged place. For the researcher Oliver Sacks, man is a musical excellence: "not in what way he knows metaphorically, but in a best way: in the human brain, the area involved in everything that matters with music - from composition and interpretation to listening and rhythmic movement –it is larger than the language area "(Sacks, 2009, p.28). Artistic music emotion can get countless valences. From the excitement of the creator during the production of the musical work to the emotion transmitted to the ordinary audience and through the excitement of the performer, we find a series of diverse experiences that ultimately

represent the perception of the artwork. We are talking about an indispensable triad in the musical art:

CREATOR--- INTERPRET---RECEPTOR

The artist does not falsify reality but styles it. It selects those aspects of existence that they consider metaphysically significant - and by their isolation and accentuation, or by omitting the insignificant and accidental, they present their conception of existence. Their concepts are ideas that integrate the facts and the metaphysical evaluation of the facts. Their selection is artistic assessment: everything that is included in a work of art - from a musical theme, to a brush or a metaphor - all acquire metaphysical significance by simply being sufficiently important to be included or used by the creator of an artistic work.

This whole process also involves a connection, a perfect symbiosis between the emotional affection of the creative artist and the cognitive connections that are involved in the formation of the work of art.

Creator of art, whether composer, playwright, sculptor, painter, etc. represents, within the complex artistic process, the first link, but the second link, represented by the interpreter, constitutes the element of study in personal labour during the singing course. We have previously stated that emotions and cognition are decision factors in shaping the work of art, but we can not exclude these mediators from the interpretative or artistic re-creation process.

If we try to associate the attribute of the performer with the music interpreter, then obviously the chorister is next to the orchestra or soloist (vocal or instrumentalist) in the category of those who in one way or another express themselves through the art of sounds, in other words: are those who interpret the musical creation. A more detailed classification of this category of "interpreters" can bring two subcategories, namely: vocal interpreters and instrumental performers.

The subcategory that is the subject of daily personal work is that of voice interpreters. However, we can not describe and analyze the interpreters, apart from fitting in the general context of the musicians' guild.

The singer, as an artist, is actually a double interpreter. From the point of view of the semiotic approach, the first phase is associated with the decipherment of a previously known system of graphic signs (musical notes), the second phase representing the musical rendering of sounds, which is perceived by the general public in the stage act. By scheming the previous words we get the following figure:

COMPOSER ---- symbols ---- INTERPRETER ---- sounds ---- PUBLIC

The artistic act must be understood as a re-creation of the text approached, a sensitive, living fulfilment of it. The intermediary between the composer and the public is, therefore, the artist-interpreter who performs the "sensible form" of the score, with its richness of signs and meanings, transforming an abstract "cryptogram" into a form of artistic communication (concert). The following quote appears in perfect harmony with what we are saying: "It is necessary, as such, for the presence of a person who understands, on the one hand, the interpretation of those signs, and on the other hand, to have the intellectual and musical ability to interpret and reproduce the content suggested by the author in a musical and emotional sense. He/she therefore returns in a new form the abstract content of the score, transforming its cryptic aspect into sound evolutions, through the obvious exertion of a process of re-creation. This person is the performer." (Cornel Groza, 2006, p.55)

Although called *primordial* creation, compositional creation is only a recording of the musical work through the notes, being only a temporary stage in its artistic existence. However, in the context of musical creation, the sphere of visual graphic representation is greatly impoverished by artistic value if it is not transposed into the acoustic sphere. The graphic representation will only be aesthetically appreciated by a musician, by imagining the graphic signs associated with the music, with the real sounds. Obviously, a score can be read but, unlike reading some dramas or a dramatic work, reading the notes is an act accessible to a small number of people, the musicians. Russian composer and musicologist Boris Asafiev said that the real existence of music as art resides in sound and not in graphic musical symbols. The aesthetic need of the musical performance of the musical work will make the indestructible link between creation and interpretation.

In regard to the transposition into the acoustic sphere of the musical work, the phenomenon of interpretation and the need for a performer are imminent. By its dual nature, the interpreter belongs at the same time to a "public" receiver of the artistic creation and to a category of creators. He will be the intermediate element between the act of the composer's creation and the musical audience, being also a re-creator of the artwork. The same interpreter has the difficult task of comprehending the emotional states proposed by the composer, therefore: "The act of interpretation is extremely complex: trying to represent someone as a creator in all the complexity of his personality requires maximum awareness and accountability. The phenomenology of the re-creation act is generated - but also governed - by the professional scale and seriousness of the performers, whether soloists or conductors ... " (Cornel Groza, 2006, p. 72)

Music is one of the scenic arts. The song, soloist or choral, fitting to this type of art, can not be conceived outside of a public display. That is why, in fact, it is a signal, a scenic act, belonging, without question, to the semiology of artistic communication.

Speaking about visual arts, we find that emotion is strictly related to the transmission of the artistic message to the public, but in music, the emotion is

doubled by the representation of the artistic act directly to the public by recreating and enlivening elements previously conceived by another artist. Music helps us to discover creative intentions, to recognize a series of artistic emotions, to learn to express different states, and last but not least, gives us the opportunity to reveal our own feelings in the artistic representation. This process of interpretation, however, acquires many subjective valences determined by the cognitive processes that control the emotional states of the moment, so that the performance of the same work will have major differentiations not only from individual to individual but also in multiple interpretations of the same artist.

In order to transmit emotion through music, in contrast to the musical narrative process, it is necessary to take interpretive decisions that will lead to the sound shaping that best communicates the feelings we want to project outwardly. Taking these decisions will take time in the study but, perhaps more important, will require knowledge. The deeper the knowledge in the specific field, the stronger the emotion transmitted will be.

Although emotional processes are similar and valid for the entire human race, emotional responses are dependent on momentary circumstances. Their own internal or external stimuli will cause various reactions related to the same artistic phenomenon. In this context, the reception of a work of art by the public will produce on each individual an impact that will be closely related to the moment's emotional state. We must point out that not only the momentary impact creates a complex artistic image. A special role in the artistic reception is the knowledge of the artistic phenomenon in which the public is involved. Referring to the musical context, we can talk about the listener, the music lover, or the musician in the audience. If a musical work can awaken certain feelings when it comes to a mere novice listener in music, the mere knowledge of musical fragments, the association with other known works or some data about the author can render a superior level of perception of the work. It is obvious that in the case of the musician, knowledge of specific musical elements, theory, harmony, counterpoint or music history will lead to a more profound reception of the artistic act. A symbiosis between the performer's ability to transmit messages and their perception by the receiving public, able to understand the artistic act, leads to transcendence in the inner layers of music.

Let's not forget that any work of art is addressed to the public, mainly to the artistic public. The audience is, in fact, the passive, art-loving social segment, and who by art can be enthralled, activated. Reaching the act of creation will undoubtedly depend on the knowledge and experience of the public in the artistic field and, last but not least, on the degree of knowledge of the language of that art. Lives, emotions, feelings will be felt even more intensely as anchoring in the field of art will be stronger. Also, the reception of the artwork will be deeper, as the aesthetic sense of the public will be more developed. We want the artistic public to become more and more numerous, but this will only be achieved when music, art in general, will have a favoured place in the hierarchy of immediate human priorities.

Regardless of the branch of work chosen, people who have studied an artistic field have a series of skills that are directly transferable for each type of work. These abilities are at the heart of what we learn through music, painting, sculpture, acting or dance, that is, in the creative arts. Trust, creative thinking, improvisation, collaboration, vision, imagination, opening up to the new are hurting some of the benefits of artistic education, but the list can continue because the benefits are abundant. An arts education is based on the belief that, although we learn conventions, rules and artistic theories, we also learn to create, experience, overcome the limits of the conventional, and promote an environment where success is determined by the desire for self-improvement. Arts are a look beyond itself. It is important to receive art, see or listen, but the most important thing is to feel the art, to get to the emotion created by it.

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