

We are IntechOpen, the world's leading publisher of Open Access books Built by scientists, for scientists

4,800

Open access books available

122,000

International authors and editors

135M

Downloads

Our authors are among the

154

Countries delivered to

TOP 1%

most cited scientists

12.2%

Contributors from top 500 universities



WEB OF SCIENCE™

Selection of our books indexed in the Book Citation Index
in Web of Science™ Core Collection (BKCI)

Interested in publishing with us?
Contact book.department@intechopen.com

Numbers displayed above are based on latest data collected.

For more information visit www.intechopen.com



The Problematic Perception of Beauty in the Artistic Field

Raquel Cascales

Additional information is available at the end of the chapter

<http://dx.doi.org/10.5772/intechopen.68945>

Abstract

Scientific discoveries of neuroscience are apparently explaining all the mysteries of the human brain. In particular, great advances have been made in the field of the perception of beauty. However, historical-philosophical revision, such as the one I carry out in this chapter, can shed light on the limits that this approach can have. To this end, I begin by reviewing the psychologization of beauty that has been carried out by David Hume since the origins of modernity. From this premise, I question the laws of art enunciated by one of the most prominent researches on neuroaesthetics, Vilayanur S. Ramachandran, by contrasting his conclusions in the light of the philosophy of art of Arthur Danto, who calls into question that the value of what is purely perceptive might be enough to understand art. He also rejects any identification of art with beauty, just as he is contrary to any general statement of the laws of art. With this contraposition, I try to show that the question of beauty in art goes far beyond mere visual perception.

Keywords: neuroaesthetics, beauty, philosophy of art, V.S. Ramachandran, A.C. Danto

1. Introduction

The excessive specialization of contemporary science usually tends to disregard the contributions of other sciences and, in some cases, to obviate the historical and theoretical concepts it works with. Nowadays, as regard to the consideration of the perception of beauty, attention has increasingly focused on neuroscientific studies. Although the findings in this area are providing very interesting results, I consider it important to show the development of the philosophical ideas underlying these approaches.

In this sense, I wish to begin by setting forth some historical issues related to the concept of beauty. In the first place, it should be noted that the perception of beauty underwent a psychological conversion in modernity, especially with the empiricist aesthetics of David Hume. This change resulted in a relativization of the concept of beauty, which neuroaesthetics is still trying to address at present. Thus, secondly, and for this reason, I will analyze the main contributions of neuroaesthetics and its defense of objectivity, especially developed by V.S. Ramachandran. Finally, I will confront Ramachandran's position on artistic beauty with that of the philosopher Arthur Danto in order to problematize the question about whether beauty and art can be identified completely.

2. The psychological conversion of the perception of beauty in modernity

Aesthetic reflection, the question of beauty, art and its connection with knowledge, has been present since antiquity. This is shown in the thought and the influence by authors such as Plato or Aristotle. However, we must be cautious when attempting to bring to current discussions the concerns about beauty as found in *Dialogues* or the Aristotelian description of art as *techné*, since the problems of present-day aesthetics have started in the Modern Age, since aesthetics became a discipline of its own.

The philosophers of antiquity considered that beauty was a property of the real objects, not only of the artistic ones, and therefore could be known in an objective way. The medieval philosophers continued to consider that the perception of beauty was objective and, in addition, human beings could discover the creator of such beauty through the contemplation of natural beauty. But all these conceptions changed completely in the modern era.

In the first half of the eighteenth century, aesthetics did not escape the influence of the rationalist scheme of Wolff and Leibniz and focused on the need to establish a science of perfect sensory knowledge. This is the context in which we find Baumgarten, the initiator of this study as a science. In his work *Aesthetica* (1750/1758), he gave the name of aesthetics to the philosophical science that studies beauty and art. Baumgarten conceives aesthetics as the "science of sensible knowledge" [1]. That is to say, it is based on the gnoseological criterion of the perfection in the specific realm of sensibility. But since he considers this capacity to be inferior to the rational, he also believes it has an inferior gnoseological value. Therefore, Baumgarten collects various aesthetic approaches and systematizes sensitive knowledge. With this, he led modern aesthetics to the terrain of subjectivation through the path of empiricism.

Empiricism is the fundamental trend in British philosophy since the influence of John Locke. Empiricism is characterized, among other things, as the rejection of the existence of innate ideas and the assertion that all our knowledge necessarily arises from sensible experience, that is, it has its origin in the senses. Within empiricist aesthetics, we find several figures, among which the most prominent is Anthony Ashley Cooper, Earl of Shaftesbury. This author considers that the human being possesses a moral and aesthetic nature that has its organ in feeling. Both the emphasis on empiricism and moral sentimentality will greatly influence Francis Hutcheson and David Hume, especially in the investigation and development of aesthetic "taste."

David Hume (1711–1776) was the empiricist philosopher who would have the greatest impact on the psychologization of beauty. There are several principles that stand out in his empiricist philosophy. In the first place, he affirms that all our ideas come from sensible impressions. In the second place, he makes a critique of the idea of cause that has greatly influenced contemporary theories of science. For Hume, the causal relation means that one phenomenon follows another but not that one is the cause of the other: the only thing we can affirm is that it has always happened this way. On the other hand, he makes a very strong criticism of inductive reasoning. He considers that induction is never complete and thus the foundations of universal laws must be established on a principle other than induction.

Hence, one of the essential theories of Hume's philosophy is that our ideas are associated according to principles, which in turn establish links between them. Ideas are naturally connected according to three laws: resemblance, contiguity and cause-effect relationship [2]. These three laws of association will have a decisive influence on the psychologization of perception. Many of the approaches of the later English psychologists will depart from these premises.

Before proceeding, it is worth making a pause to check the impact of this understanding of perception on the concept of beauty. To do this, we must turn to the fourth of Hume's *Four Dissertations*, published in 1757. In "Of the Standard of Taste" [3], the English philosopher sets forth his consideration of how beauty is perceived. He affirms that beauty is not a quality of the things themselves but only exists in the mind that contemplates them. Beauty is neither a transcendental or innate idea nor a sensory impression that seems to correspond with it. From this point of view, it seems that we can only identify a pleasant feeling, which we can assume that is caused by something beautiful but not that we have known something beautiful as such.

Beauty, then, is defined in relation to the subject since it is a property that lies in the beholder. That is to say, the feeling of pleasure provoked by beauty in the subject is the only thing that justifies our speaking of it. Taste takes place in the conformity between the object and the faculties of the mind. Research on how the feeling of pleasure is produced in the subject leads one to consider that there must be an organ capable of perceiving beauty. Both the organ and its aesthetic sense were called "taste." The experiences of taste would be immediate and spontaneous and would not be directly related to reason but rather to the realm of sensibility. From this point of view, an object is said to be beautiful because certain properties of the object stimulate our sensibility and make us feel its beauty.

In this sense, Hume discards the metaphysics of the beautiful but does not invalidate an empirical science of the aesthetic phenomenon. In fact, he believes that there must be rules in the arts that allow us to judge them. These rules cannot be established a priori but can only be established empirically. Thus, Hume states five conditions that are required to be able to make an aesthetic judgment adequately: (1) delicacy of taste; (2) practice of judging; (3) assiduous comparison of works; (4) being free of prejudices; and (5) good sense that avoids the influence of prejudices [3]. However, despite all his attempts, Hume fails to establish universality for aesthetic taste using the principles of his philosophy and the rules just mentioned.

In summary, we can say that the empiricist approach led to the consideration that beauty could only be perceived by the senses, thus reducing it to a matter of mere intellectual pleasure, which in turn provoked a relativistic consideration of beauty. This analysis had a great impact, first of all, among philosophers who reflected on beauty, especially Immanuel Kant. Later, both the enlightened and the romantic spirits, with their interest in the historical, progressively moved the reflection on beauty from a universal concept to concrete artistic work. However, while the post-Hegelian line focuses on studies on the history of art, the Anglo-Saxon world continues the research on the possibilities of perception and knowledge. At this point, it is important to mention the work of the art historian Ernst Gombrich, who investigated much about the laws of perception to develop his artistic theories, as can be seen in studies such as *The Image of the Eye: Further Studies in the Psychology of Pictorial Representation* [4].

In particular, it can be said that the legacy of Hume influenced English empiricist writers who were nourishing the associationist psychology, especially [5]. The Humean stance on how ideas combine in our minds influenced them decisively. Associationism will be taken up in particular by James Mill and John Stuart Mill, who laid the foundations of empirical and experimental psychology. The psychic processes, according to these authors, come one after the other, following certain laws of connection. Such laws could be quantified and described, which is why they consider that mental states can be measured to some extent. On one hand, these theories will influence the psychology of the Gestalt, centered on the laws of association and, on the other, they will influence neuroscience. Therefore, it is not surprising that when the techniques of brain and neurological analysis have been developed, the question of beauty has been formulated again.

3. The pursuit of objective beauty in neuroaesthetics

There is no doubt that neuroscience has made great advances in the knowledge of the brain. Much of the success of its research is due to the interdisciplinary approach that scientists have decided to take when it comes to studying the functions of the brain. In the 1960s, several lines of research converged, culminating in the publication of *The Neurosciences: A Study Program* (1966). This work was the result of 4 weeks of lectures organized by Fran O. Schmitt, which addressed a wide range of aspects of interest, constituting what later on would be known as neuroscience [6].

Almost 30 years passed before a researcher decided to focus his neuroscience research on the aesthetic perception [7]. In 1999, Semir Zeki published his investigations on art and the brain in individual articles [8, 9]. In addition to opening a new field of research, he coined the term neuroaesthetics and laid its foundations. In these articles, Zeki made a parallelism between the functioning of neurons and that of artists, especially with regard to the visual grasping of the world. According to Zeki, the work of artists shows externally the inner workings of the brain. The neuronal work breaks down visual information into color, luminosity, and motion, and then reconstructs the figure. In the same way, artists decompose the information received

and then translate it into their works. For this reason, it can be said that "the function of art is therefore an extension of the function of the brain - the seeking of knowledge in an ever changing world" [8].

Zeki's contributions on the neuronal behavior were well received and the comparison with art seemed to open new lines of investigation. In 2003, Semir Zeki and Hideaki Kawabata performed a relevant research on how the brain perceives beauty [10]. In this case, they were no longer doing a comparison with the artist, but they were trying to see how something more complex, beauty, is perceived. The researchers used functional magnetic resonance imaging (fMRI) to perform the study and find out if there were specific areas of the brain that were activated in the subjects when they appreciated paintings that they had considered beautiful. At first, in order to grasp the concept of beauty for each person, they offered them a large number of pictorial works that the subjects had to classify as beautiful, neutral or ugly. Subsequently, the process was repeated by analyzing it with functional magnetic resonance techniques.

Through this technique, they verified that the vision of a picture (classified as beautiful or not) does not activate the visual area of the whole brain but only specialized areas for the process and perception of that particular category of stimulus (such as portrait or landscape). This demonstration implicitly implies that at the basis of aesthetic judgments lies a functional specialization. Thus, what Kawabata and Zeki mean is that to be judged as beautiful, the painting must be processed by an area specialized in that particular type of work. Predictably, they also found that the judgment of paintings as beautiful (or not) is correlated with specific brain structures, mainly with the orbitofrontal cortex and motor cortex. The results of this research showed that although it is not possible to determine what beauty consists of in neuronal terms, we can know the zones of activation or increase of the neuronal activity when perceiving beauty:

"We cannot be said to have been able to determine what constitutes beauty in neural terms. Instead, the more meaningful question for both would currently seem to be the Kantian question outlined in the INTRODUCTION, namely what are the conditions implied by the existence of the phenomenon of beauty (or its absence) and of consciousness (or its absence) and what are the presuppositions that give validity to our esthetic judgments. In esthetics, the answer to both questions must be an activation of the brain's reward system with a certain intensity" (1704) [10].

The work of Professor Zeki has stimulated many neurologists to perform different investigations on the functions of the brain and the perception of beauty or art. Among the researchers who have had the most success in this line, V. Ramachandran stands out although he approaches it from a substantially different point of view. While up to now art was seen as a phenomenon that helped to explain the mechanisms of the brain, Ramachandran believes that art is a phenomenon that can actually be explained by the brain.

In fact, Ramachandran goes a step further and tries to explain, from neuroscience, what art is and which are the biological functions it has had in human beings from the evolutionary point of view. It is worth pausing here to see how the Indian professor starts from questioning how beauty is generated and which brain mechanisms are involved in the appreciation of beauty but then goes to stipulate universal laws of art.

In "The Science of Art" (1999), Ramachandran tries to explain that the task of art is not to faithfully reproduce reality but to transform it [11]. The question is to determine which transformations are effective and why. In this sense, Ramachandran focuses on determining the mechanisms that artists use to recreate reality and make it pleasing to the viewer. People usually consider that the creations of the artists are the result of their free creativity but what if in fact they are the product of cerebral mechanisms and fruit of the evolution? For Ramachandran, our taste for certain forms responds to evolutionary questions. He thinks that we value those forms positively because they have been useful for us throughout evolution. If the premise is true, it should be possible to establish universal rules of art. These rules, in turn, would explain the pleasant stimulation we find in art and why we value beauty.

In this sense, Ramachandran dares to propose eight universal laws of art: the peak shift principle, the isolating a single module, the contrast extraction, the perceptual grouping, the symmetry, the perceptual problem solving, the visual metaphors and the generic viewpoint. In later works, the order changes and adds some more laws (grouping, peak shift, contrast, isolation, peekaboo or perceptual problem solving, abhorrence of coincidences, orderliness, symmetry and metaphor) [12]. However, the explanation of the laws does not change substantially. A detailed explanation of these principles will enable us to better understand the current approaches to neuroaesthetics.

First, the peak shift principle refers to the exaggerations or intensifications of certain parts of the work of art, made with the purpose of getting our attention. Based on ethology, Ramachandran considers that just as exaggeratedly large peaks attract the attention of birds, artists also exaggerate different parts of their works so that we focus attention on them. Another way artists get our attention is the modular isolation (isolating a single module). Since our brain cannot concentrate on all parts at the same time, isolating an element helps to focus the brain's attention. This would also explain why in art, sometimes, sketches work better than sharply defined images that require too much attention. For example, cartoonists or landscapers highlight particular features of what they see and remove irrelevant ones. The viewers' attention is drawn toward the important information and, as a result, there is an amplification of the limbic system activation and reinforcement. Also related to the attention is the law of contrast (contrast extraction), which refers to a sudden change of one of the elements: light, color, structure, etc. The contrast reinforces attention because the greater the contrast in the parts of the whole work, the greater is the appreciation of the elements. Naturally, this law also has an evolutionary explanation. According to Ramachandran, when we were hominids, we needed to distinguish the fruits at a great distance, and the ones that are best distinguished are those that cause a greater contrast between the trees. Therefore, the persistence of this law is due to a question of survival.

Indeed, the question of survival for the species and thus the evolutionary question is one of the key elements in understanding Ramachandran's theory. In this line, therefore, the law of grouping (perceptual grouping) can be explained. When we are confronted with some fragmented representation, the brain has to regroup the parts and make a single definite figure. The brain finds pleasure every time it performs this operation. The perceptive regrouping, an instinctive brain process that was generated when we were hunters in the jungle, is a method widely used in the different arts.

Clearer still is the case of the law of symmetry. Symmetry, in the first place, would have allowed us, always in an evolutionary key, to distinguish the parts of a person and establish their importance very quickly. Secondly, lack of symmetry is usually due to malformations or illnesses, so it indicates the poor health of the person. This information would have been of great help for the reproduction and survival of the species. Although today is not a necessary condition for pairing, we still find greater pleasure in what is symmetrical.

In respect to the other laws, the question of evolution, although present, is not so explicit. In both the perceptual “problem solving” and in the generic viewpoint, Ramachandran places the emphasis on the aesthetic question of perception. In this sense, the perceptual “problem solving” refers to the fact that we find more attractive what we have to reveal or discover than what is presented to us explicitly. Although it seems paradoxical, we are attracted by that which is hidden because concealment is considered as an enigma and stimulates our brain to solve it, since it finds pleasure in its resolution.

The same is true for the law of metaphors or visual games. As in the previous law, here the brain finds greater pleasure when it finds relationships between different elements and it rewards whatever is useful for our survival. Finally, generic viewpoint alludes to the fact that the human eye has little regard for visual coincidences; it finds repetition irrelevant since it has already stored such information. It explains our aversion to coincidences or, in other words, our preference for the unique point of view.

These are the eight laws that according to Ramachandran and Hirstein are behind the artistic practice and the aesthetic pleasure. Although they themselves affirm that they form only a framework of understanding and recognize that they do not explain the essence of art, they do not have any qualms about affirming that these laws are always present in art:

“We recognize, of course, that much of art is idiosyncratic, ineffable and defies analysis but would argue that whatever component of art is lawful —however small— emerges either from exploiting these principles or from a playful and deliberate violation of them” (34) [11].

Ramachandran has continued to investigate visual perception and brain activity, and his research has been of great interest to neuroaesthetics. However, it must also be noted that some of his reflections have been strongly criticized among his colleagues, since they suppose a reductionism of both aesthetic and artistic consideration. Although he tried to answer to those critiques [13] he has not yet given a good account of all of them.

From the point of view of neuroaesthetics, as well as from aesthetics in general, you may find objections to these approaches. Firstly, I consider that these laws are reductionist from the neuroscientific point of view since they present the artistic task as a simple consequence of the evolutionary process of the species. This interpretation tends to support all its claims on adaptive terms in a way that is not falsifiable since one could always see in each new artistic feature an issue of adaptation. In this way, it runs the risk of nullifying freedom and creativity, insofar as everything would respond to innate traits that we do not control when performing an action or judging it. It should also be noted that it does not take into account the role of culture.

Although the brain has not changed much in its structure since the Upper Paleolithic, we do not know whether the mind is simply the functional translation of the structure of the brain. It could

be that the functioning of the mind is much more versatile, and the technological and cultural development might have influenced in it. In this area, the work of Frederick Turner occupies a prominent place. In spite of sustaining an evolutionary vision, he includes the influence of culture. He understands the evolution of our sense of beauty as a “nonlinear feedback between cultural and biological determinants” (103) [14]. That is, we have an aesthetic sense designed to perceive the beauty of objects that derives meaning from a flow of both biological patrons and cultural systems that deal with forms of order such as poetic meter or visual patterns.

Nonetheless, several neuroscientists have criticized evolutionary adaptation. For example, Stephen Jay Gould criticizes adaptationism for being “panglossian” [15]. Other more recent studies in neurology show the dysfunctionality of some of the starting points of Ramachandran’s investigations, such as the theory “one area one skill” to analyze the brain. Against this, they explain that sight is not in one area and smell in another, but everything is interconnected. Everything influences everything and, therefore, it is not enough to analyze the visual part to account for the whole [16, 17].

Secondly, Ramachandran’s consideration of beauty can be called reductionist, which is illuminating to understand the process of psychologization of beauty mentioned above. Theories like those of Ramachandran consider that the characterization of beauty depends on the internal impact provoked in the subject. That is, beauty has been identified with the mere feeling of pleasure caused in the brain by some objects. In contrast with the approaches of the beginning of modernity, these theories speak no longer of the intellectual powers in general, but they have taken a step further: we now have greater scientific knowledge that allows us to determine the zones in the brain in which the feeling of aesthetic pleasure occurs. It is true that we can now determine which areas of the brain are activated when beauty is perceived and even the pleasure those areas can experience but that does not tell us what beauty is. It explains how our brain works in the face of specific stimuli, but does not even fully explain why we find pleasure in them.

The two previous premises result in a reductionist assimilation of art and beauty. Although Ramachandran understands “pretty” in a positive way, he generally does not take into account the important distinctions between beautiful, pretty or sublime. Nor does he note that “pretty,” in the sense of pleasant, was a term that artists, like Picasso (who he mentions), wanted to get rid of. Precisely, they wanted to get rid of it to show that art is much more than a mere pretext for complacency, an attitude which they considered merely bourgeois. Due to this reduction, he is also unable to explain the beauty of what is ugly or how the existence of art that is not beautiful is possible or how we can like artworks such as Goya’s black paintings. Moreover, since Ramachandran’s analysis focuses on visual perception, his conclusions are only useful for visual arts. From this point of view, it is not possible to justify the fact that we can enjoy the representation of evil and consider good literary works such as *Les Fleurs du mal* by Baudelaire or *On Murder Considered as one of the Fine Arts* of Thomas de Quincey. In the same way, this reductionism can say very little of the pleasure found in sad music [18].

Finally, the enunciation of these eight laws assumes that all art is based on them, which would allow us to speak of conditions to determine what art is as well as objective parameters for artistic beauty, as Hume already tried. Although these objectives are not in the scope of the

Indian teacher, the truth is that from his theses, we can deduct the possibility of distinguishing the characteristics of art and, more specifically, of beautiful art. However, I consider that although neuroscientific discoveries provide important insight into how the brain perceives beauty, the enunciation of the eight laws is reductionist and problematic. The consideration of what art is and its relation with beauty is much more complicated than neuroaesthetics can claim today. Therefore, in the last section of this chapter, I would like to compare Ramachandran's statements with those of one of the most important philosophers of art, Arthur Danto.

4. Beauty beyond artistic beauty

Beauty has always been an important issue for both artists and philosophers but not always in the same way. Beauty for philosophers is especially interesting since it is a particular case that combines the sensitive with the intellectual, and as such it has led to ask how knowledge works. It is not surprising, then, that in the modern age, when the philosophical questioning focuses on the conditions of the possibility of knowledge, aesthetic reflection becomes a foreground. The aesthetic reflection since Hegel's *Aesthetic Lessons* will begin to focus on art and will leave behind the beauty.

Also artists throughout the twentieth century tried to disassociate themselves from beauty as it was understood at that time and established academic laws. Already during impressionism, many artists were beginning to break with the mimetic representation form of the reality. It was especially Marcel Duchamp who represented a key point in this story as he tried to unlink aesthetics with art through the ready-mades. The objects that make up the ready-mades are simple, quotidian, industrial and without notable aesthetic characteristics. They were so far from what had been produced until then that they were considered, if not anti-artistic, at least, anti-aesthetic works. The ready-mades are defunctionalized real objects that went so far as to raise the question of their status as works of art. In fact, the focalization on the object could have given rise to a revalorization of objective beauty. But instead, it gave way to a rejection of beauty because beauty was not anymore understood, like in the ancient times, as a property of the being but as a bourgeoisie and Renaissance imposition on art. In this line of anti-aesthetic rupture, Andy Warhol took a step further the day he proposed his work *Brillo Box*; the boxes looked identical to boxes of Brillo detergent found in the supermarket. This work, as will be seen, is crucial to understanding Danto's philosophy of art.

The philosophy of art of Arthur C. Danto is relevant in this point since he begins confronting the theories that defended that art could be distinguished at the perceptive level. His approach was novel since he opposed the widespread beliefs of Neowittgensteinians such as Morris Weitz, Maurice Mandelbaum or Monroe Beardsley. These authors found in Wittgenstein's theory of "family resemblances" a sufficient method to account for art without having to establish a closed definition of art [19]. Just as in families there are traits that allow us to identify a group of people as members of the same family, it is the same case with art. These authors, therefore, considered visual perception as the absolute criterion of discernment between art and that which is not art.

On the contrary, for Danto, this criterion was not valid enough since it was based on an inductive analysis that offered no more than a generalization about the kinds of works we can call "art" but without providing any comprehension [20]. One of the key reasons why Danto rejects the perceptualist conception is due to his philosophy of the mind. It is a philosophy that shares the principles of the modular theory of the mind. This theory conceives that the mind has several modules independent of each other, whose function is not susceptible of being affected by previous knowledge, beliefs, concepts or desires. From this perspective, it follows the search for a new concept that is not linked to the perceptive and that can dismantle the theory that relates art to "family resemblances." Danto's proposal was based, thus, on affirming that perception is not enough to distinguish between what art is and what it is not, rather it is necessary to take into account the "theory of art" in which a particular work has been done and in which it is interpreted.

From this theory, the American philosopher states that there is nothing at the level of perception that allows us to distinguish between two seemingly equal objects as in the case of his paradigmatic example: the *Brillo Box* (1964). This work of Andy Warhol invalidates the theory of mere perception, as would be Ramachandran's, since these boxes are indiscernible from the daily objects that they imitate. Danto considers that Warhol's work manifests the essence of art by putting us in the position of having to distinguish it from reality. The difference between art and reality is considered by Danto as the essence of art.

The *Brillo Boxes* lead art toward self-consciousness when posing, by purely artistic means, the question of the nature of art. The question raised by the *Brillo Box* is not why this is a work of art but why this is and the one in the supermarket is not. The very way of posing the question seems to suggest that the essence of art lies in being different from reality. In this way, it can be seen how the discovery of the essence causes a change in art. Art has changed and, along with it, our understanding of what art is must also change, accepting that works of art can have any sort of appearance now and yet maintain the same essence.

The definition of art he wants to establish, therefore, has to account for this distinction. This leads Danto to present a non-perceptive criterion that allows explaining the ontological differences between works of art and mere objects. In this line, Danto argues that "to see something as art requires something the eye cannot decry -an atmosphere of artistic theory, a knowledge of the history of art: an artworld" (580) [21]. Later, in *The Transfiguration on the Commonplace*, he seeks to determine the essential criteria of art. This leads to a definition of art in terms of sufficient conditions. The two sufficient conditions that all work must fulfill to be considered art are being about something (aboutness) and embodying a meaning (embodiment) [20]. Such simple statements could be confused with some of the earlier laws; however, especially the second condition refers to the historical condition of each work, which must be taken into account when judging it. Now, what role does beauty play in the philosophy of art of this author?

Both in *Beyond the Brillo Box* and in *The Abuse of Beauty*, Danto develops an analysis on beauty in the artistic field. In this work, he examines his reflection on art and questions why he did not include beauty in his definition of art. The American philosopher replies that beauty was not part of its definition because it is not part of the essence of art. If it were, it could not be

said of so many works that, despite not being beautiful, are, without a doubt, works of art. It must be said that Danto does not distance himself from beauty in itself, but he does disagree with a long-held conception which ultimately leads to the understanding of art as a high and separate form of life. This conception implies that there can only be art when it is said to be beautiful. However, it is a mistake to believe that artistic value is the same as beauty and that the perception of artistic value is the aesthetic perception of beauty [22].

However, the separation between art and beauty is not something that Danto proposes but something already done by the artists themselves, such as not only Duchamp, of course, but also all those he calls "intractable avant-garde," who showed that beauty was not consubstantial to the concept of art. These artists wanted to make clear that something can be good art without being beautiful. This clarification could not have been revealed before Romanticism but rather in our day. This clarification allowed to banish aesthetics from the definition of art, although it took time to be accepted in many areas, including art.

The consideration that beauty is not an essential part of the definition of art does not mean that beauty can no longer be part of art anymore. What we are considering here is that beauty cannot be identified as the essential property of art. In no way art excludes beauty, just as it cannot set aside philosophical reflection. Danto himself affirms that "even if beauty proved far less central to the visual arts than had been taken for granted in the philosophical tradition, that did not entail that it was not central to human life. (...) [The beauty is] one of the values that defines what a fully human life means" (14–15) [23].

However, although Danto could not consider beauty as a necessary condition, he does say that it can become relevant when interpreting some works. Hence, he establishes a distinction between external and internal beauty. Danto says that the former refers to the external appearance of the work, which is commonly required to judge the work as "beautiful" or "pretty." Evidently Danto could not accept this consideration of beauty—a perceptual quality—as a necessary and sufficient condition of art. That is why he turns to internal beauty which, on the other hand, is about that type of beauty which is linked to the content of the work, forming a constituent part of its meaning. Danto also calls this second type "artistic beauty," since he considers that this type of beauty is found exclusively in art. By artistic beauty, he means the coherence between the idea and its sensible expression in the artwork. In his own words:

"What it leads to is an understanding of how aesthetics beauty plays a role in the meaning of the work to which it belongs. One can say that in such a case, the beauty is born of the spirit because the meaning of the work is internally related to its aesthetic qualities. The beauty is part of the experience of the art. But the experience is richer by far than the 'retinal shudder' Duchamp impugned" (97) [23].

In the last book he published, *What is art*, Danto continues to defend the importance of the internal beauty of art, that is, the content that resides in it. Hence, it may say that "much of contemporary art is hardly aesthetic at all, but it has in its stead the power of meaning and the possibility of truth, and depends upon the interpretation that brings these into play" [24]. After these words, we can see a way of conceiving the type of art that demands that the viewer strives to unravel the content and not just to look at it. This is what allows you to understand the work.

Danto's emphasis on this last point made some authors think that it was precisely the aesthetic qualities that could serve to complete his definition of art. He had argued that there were two necessary conditions that every work must fulfill, but he had failed to establish sufficient conditions. Could aesthetic qualities be the answer? I personally consider that if Danto did not explain them, it was because he felt that those conditions were, to a certain extent, included in the necessary conditions. That is, the aesthetic qualities would be framed within the second condition of possibility: the embodiment. This point is important because it leads us out from the subjective aesthetic perception and forces us to take into account the concrete work, in its fullness and united to its historicity. All these do not give us a scientific and purely objective vision of what art or beauty is, but it puts the necessary counterpoint to consider that in order to reach a unified view of reality we must go beyond subjective perception.

Danto's theory of how we perceive art and distinguish it from ordinary objects, as well as his refusal to identify art and beauty, seems to me a perfect counterpoint to maintaining a dialogue with current neuroaesthetic theories. This dialogue can, in turn, illuminate the problematic result of the perception of beauty in the artistic field.

5. Conclusions

After all this, it is worthwhile reviewing the main ideas and conclude this exposition. In the first section, I have developed the psychological conversion of beauty in modernity. Through Hume's philosophy, we have seen how beauty goes from being considered an attribute of real things to be a property of the intellectual faculty of taste. By means of this analysis, we have seen how beauty was considered as an objective attribute before modernity, while in modern times the weight is placed on what beauty causes in the subject. The development of the faculty of taste can thus be seen as an anticipation of neuroaesthetic analysis. In turn, it can also be seen that neuroaesthetics begin from many hypotheses that were initiated in modernity.

The psychological view continues to develop for several centuries until the emergence of neuroscience. Neuroaesthetic research is enormously valuable in understanding more about how we capture something as complex as beauty. However, on more than one occasion neuroscientists draw conclusions about beauty in art that go beyond their field of study by not taking into account issues of historical or philosophical order. This is the case especially of the theses of Ramachandran that fall in several reductionisms. It can be said that his theses are reductionist because of six important reasons: (1) he argues that the fact that beautiful art exists is due to a merely evolutionist question, since it served for human survival; (2) he identifies the power to determine how beauty is perceived with knowing what beauty is; (3) he reduces beauty to what is merely "nice" or pleasurable; (4) he identifies beauty only with art, leaving out the perception of beauty in nature; (5) he reduces art and artistic practice to an issue that can be explained as psychophysiological; and (6) despite not having sufficient evidence to determine what beauty or art is, he risks to enact laws about art that claim to have universal reach.

Just as beauty is not reduced to its expression in the art world, neither must art necessarily be identified with beauty. Although the mechanisms through which we perceive beauty can be

determined, this does not mean that we know what beauty in art is nor what beauty is or what art is. The analysis of Arthur Danto's philosophy of art and the artistic examples of Marcel Duchamp and Andy Warhol have shown how beauty is not an essential property of art. That is to say, there can be art that is not beautiful without invalidating its status of art. In turn, the analysis of the problem of "indiscernibles" reveals how mere visual perception is not enough to distinguish a work of art.

In this sense, we have seen how the perception of beauty is not a matter of examining the external properties of the work but rather we must know how to capture the internal properties, where a much deeper beauty is found. This internal "beauty" has to do with the meaning that the artist wants to express and how he has configured the work in such a way to express that meaning. That is, beauty is in the inside and thus sensible perception is not enough to capture the beauty of art, but the intellectual and emotional parts of the person must be involved too.

Acknowledgements

I would like to thank the researchers of the Chair of Aesthetics and Contemporary Art of the University of Navarra for their help in the preparation of this chapter, especially to Rosa Fernández Urtasun. My acknowledgment also to the Mind and Brain team of the Institute of Culture and Society of the University of Navarra, especially to Jose Ignacio Murillo, Carlos Blanco and Nathaniel Barrett, who have helped me to deepen the advances and problems posed by neuroaesthetics.

Author details

Raquel Cascales

Address all correspondence to: rcascales@unav.es

Universidad de Navarra, Pamplona, Espana

References

- [1] Baumgarten AG. *Aesthetica*. Hildesheim: G. Olms; 1961
- [2] Hume D. *Treatise of Human Nature*. Oxford: Oxford University Press; 2014
- [3] Hume D. Of the standard of taste. In: Hume D, editor. *Four Dissertations*. Bristol: Thoemmes Press; 1995. pp. 203-240
- [4] Gombrich E. *The Image and the Eye. Further Studies in the Psychology of Pictorial Representation*. London: Phaidon; 2012
- [5] Hergenhahn BR, Henley T. *An Introduction to the History of Psychology*. Belmont: Wadsworth Thomson Learning; 2014

- [6] Blanco C. *Historia de la neurociencia. El conocimiento del cerebro y la mente desde una perspectiva interdisciplinaria*. Madrid: Biblioteca Nueva; 2014
- [7] Chatterjee A. Neuroaesthetics: A coming of age story. *Journal of Cognitive Neuroscience*. 2011;**23**(1):53-62
- [8] Zeki S. Art and the brain. *Journal of Consciousness Studies*. 1999;**6**:76-96
- [9] Zeki S. *Inner Vision: An Exploration of Art and the Brain*. Oxford: Oxford University Press; 1999
- [10] Kawabata H, Zeki S. Neural correlates of beauty. *Journal of Neurophysiology*. 2004;**91**(4): 1699-1705
- [11] Ramachandran VS, Hirstein W. The science of art: A neurological theory of aesthetic experience. *Journal of Consciousness Studies*. 1999;**6**:15-51
- [12] Ramachandran VS. The artful brain: Universal laws. In: Ramachandran VS, editor. *The Tell-Tale Brain. Unlocking the Mystery of Human Nature*. London: William Heinemann; 2011. pp. 218-244
- [13] Ramachandran VS. Sharpening up “the science of art”. An interview with Anthony Freeman. *Journal of Consciousness Studies*. 2001;**8**(1):9-29
- [14] Turner F. An evolutionary/chaotic theory of beauty and meaning. *Journal of Social and Evolutionary Systems*. 1996;**19**(2):103-124
- [15] Gould J. *The Structure of Evolutionary Theory*. Cambridge: Harvard University Press; 2002
- [16] Solso RL. *The Psychology of Art and the Evolution of the Conscious Brain*. Cambridge: MIT Press; 2003
- [17] Rose FC. *Neurology of the Arts: Painting, Music and Literature*. London: Imperial College Press; 2004
- [18] Brattico E, Brattico P, Jacobsen T. The origins of the aesthetic enjoyment of music. A review of the literature. *Musicae Scientiae*. 2009;**13**:15
- [19] Wittgenstein L. *Philosophical Investigation*. Cambridge: Cambridge University Press; 2010
- [20] Danto AC. *The Transfiguration of the Commonplace*. Cambridge: Harvard University Press; 1981
- [21] Danto AC. The artworld. *The Journal of Philosophy*. 1964;**61**(19):571-584
- [22] Danto AC. *Beyond the Brillo Box: The Visual Arts in Post-historical Perspective*. Berkeley: University of California Press; 1998
- [23] Danto AC. *The Abuse of Beauty: Aesthetics and the Concept of Art*. Chicago: Open Court; 2003
- [24] Danto AC. *What Art Is*. New Haven: Yale University Press; 2013