

Alberto Argenton and Giuseppe Basile (2003), Restoration and the Psychology of Art: An Occasion to Test out Cesare Brandi's "theory of Restoration" in G. Basile (ed.), *Restoration of Scrovegni Chapel. Surveys, project, results*, Skira, Ginevra-Milano, 2003, 544-558.

The purpose of this essay is to illustrate the nature and principal aspects that characterise the relationship, both theoretical and practical, existing between the complex subject of restoration and the research tradition, mainly in the *Gestalt* field, dealing with the psychology of the perception of the visual arts, that is part of the wider and more general field of the study of the psychology of art.

We will try to show how this relationship, at a theoretical level, contains pertinent links of a conceptual type and also common problematic questions, while at a practical level, it leads to useful exchanges and reciprocal comparison. We will exemplify this by means of several elements regarding the restoration of the Scrovegni Chapel frescoed by Giotto. While limiting treatment to the visual arts, painting in particular, our main reference, as far restoration is concerned, will be the works of Cesare Brandi¹ and, for the psychology of art, the works of Rudolf Arnheim².

The concept of restoration and the artistic phenomenon

In his *Theory of Restoration*, Brandi (1977) shows how restoration of a work of art cannot be understood fully, only in the light of a common, generic conception of restoration. It is not merely an operation intended to restore efficiency and functionality to a product of human activity. The peculiar character of a work of art, as "a special product of human activity", must be the basis of the concept for restoring that work of art, one whose peculiarity lies in the psychological process it activates in those who relate to it. "It can be clearly seen [...] that the special product of human activity known as a work or art is such due to a singular act of recognition that occurs in the consciousness. This recognition is exceptional in two ways – because it must be realized each time by a single individual, and because there is no other way of motivating it, other than the awareness that a human being produced it. The human product given this recognition is there in front of our eyes but it can be generically classified among the products of human activity. For this reason, the fact that it is recognised by the consciousness as a work or art excludes it from the commonality of other products. Certainly the peculiar characteristic of the work of art is that we do not question its essence or the creative process that produced it. However, since it becomes part of the world, we question its particular existence in the world of each individual. This peculiarity does not depend on philosophical premises as a starting point but, whatever they are, it must immediately declare that art is accepted as a product of human spirituality". And later on: "Once this point is clear, it will not be surprising that the following corollary derives from it: any

behaviour towards a work of art, including its restoration, depends on the eventual recognition or not of the work of art as a work of art” (*Ibid.*, pp. 4-5).

These few lines, in which Brandi declares the axiom on which his restoration theory is based, indicate the basic processes that characterize the occurrence of the artistic phenomenon, from a psychological point of view. But that is not all – he also indicates, from the same point of view, how the behaviour of the restorer can be considered a particular type of “aesthetic behaviour”.

Most recent psychological theories demonstrate how the construct of “art” is conceptually based, and how the artistic phenomenon arises, exists as a phenomenal experience which can be investigated by virtue of the interaction between three variables – the artist, the work, the user – whose relationships – artist/work and work/user – respectively produce two types of behaviour conventionally known as “artistic behaviour” and “aesthetic behaviour”. Artistic behaviour is the sum of the cognitive and executive processes³ that allow the artist to conceive and realize the work. Aesthetic behaviour is the sum of the cognitive and executive processes that allow the user to perceive and understand the work, thus sanctioning its artistry (A. Argenton, 1996).

In terms of what we want to emphasize here, this model of interpretation implies that a preponderant role is played by the user in order to make the artistic phenomenon occur. In fact, the role played by the user carries the same, if not greater, weight than that of the person who conceives and realizes the work of art. This phenomenon occurs when (and only when) an individual or group of individuals recognizes and attributes artistic properties to a product created by others. This means the phenomenon occurs every time a product activates aesthetic behaviour⁴.

If we compare the concepts of the theoretical model summarized above with the contents of the passage by Brandi previously cited, and if we replace the humanist and philosophical terms he used with their corresponding psychological terms, we find precise agreement regarding what is meant by “art” or, with reference to its concrete examples, what is meant by “works of art”.

Once it is agreed that art consists of “a product of human spirituality” or, as is assumed by psychology, of the “ability of perceptual objects [...] to represent [...] relevant aspects of the dynamics of human experience” (R. Arnheim, 1982a, p. 251), we can identify the peculiar character of the work or art in the cognitive processes activated and defined, as a body, by Brandi as “a singular recognition that occurs in the consciousness” – a recognition that occurs in the consciousness when it is confronted by an object generically classifiable as one of the products of human activity, identifying it, however, as a work of art and therefore excluding it “in a definite manner from the commonality of other products”. This occurs independently of our conceptions of the “essence” of the work of art or of the creative processes that produced it and also independently of our philosophical assumptions regarding it⁵.

This recognition, this “grasping of the form of the artwork” (A. Argenton, 1996) generates the aesthetic behaviour, to whatever end it is directed, to whatever outcome it effects or whatever effect it produces, as Brandi sustains in his corollary: “any behaviour towards a work of art, including restoration work, depends on the

recognition or not of the work of art as a work of art". Restoration is therefore a particular type of aesthetic behaviour, with all the characteristics of delicacy, complexity and responsibility it entails, but also, as we have already seen, a particular example of how the artistic phenomenon occurs and is perpetuated every time "there occurs in the consciousness" the "singular recognition" – "doubly singular, because it must be performed each time by a single individual, and also because it can only be motivated by the recognition that the individual gives it."

In the terminology of psychological theory and in agreement with Brandi's position, the work of art possesses, in its "structural skeleton" and in its "form", those "expressive" values that make it an "objective percept" (R. Arnheim, 1974; 1986a) and that universally characterize the phenomenal experience of "recognition of the work of art as a work of art" – that is, on the basis of the principles and laws of the functioning of perception, in our case visual (independent of past experience, of our previous knowledge). This "singular recognition that occurs in the consciousness", whose result is the "judgement of artistry" (C. Brandi, 1977, p. 5) is therefore not, as one might think, some sort of transcendent or metaphysical "illumination" or an empathetic act, but the result of the cognitive activity of someone – the user – who views an object⁶ – the work – and who perceives the artistry of the work "coercively" (as it is called in psychology), obviously as long as the motivation and attitude are oriented in that direction. Studies carried out during the 20th century regarding the functioning of visual perception in general⁷ and especially studies conducted in the sphere of the visual arts by Arnheim, constitute a substantial patrimony of knowledge that bears witness to the universality of this function⁸.

Having said that, let us see how the restoration operation occurs – an operation that "finds its premises and its conditions in the act of recognition". "From that recognition, consideration will not only be given to the material which the work consists of, but also the bipolarity with which the work offers itself to the consciousness. As a product of human activity, the work of art poses a double aspect: the aesthetic aspect, which corresponds to the basic fact of the artistry by which the work is a work of art; and the historical aspect which presents it as a human product realized at a certain time and in a certain place and located in a particular time and place. [...] Placing the restoration in direct relationship with the recognition of the work of art as such, allows us now to define it: *Restoration constitutes the methodological moment of recognition of the work of art, in its physical consistency and in its dual aesthetic and historical polarity, in view of its transmission to the future*" (*Ibid.*, p. 6).

Regarding this extract and its concluding definition containing the fundamental theoretical, methodological and functional elements of restoration, it should first be emphasized that, in reference to the variables that as a whole constitute the "work of art" object, another clear-cut conceptual correspondence exists between the theory of restoration and the psychology of art. In this last sphere, the "work of art" object is considered as the result of its "form" (R. Arnheim, 1974), which contains within itself, indivisibly connected with each other, both its material consistence, objectively identifiable and quantifiable, the physical consistence that is, both its "perceived

structure”, the “visible pattern” (R. Arnheim, 1982a), which means “the aesthetic aspect”, and also the historical, contingent and contextual elements, past and present, that comprise it (A. Argenton, 1996), in other words the “historical aspect”.

Physical consistency, the aesthetic aspect and the phenomenological method

It is evident that for restorers to carry out their work, “the physical consistency acquires primary importance”, since “*only the material of the work of art is restored*” (C. Brandi, 1977, pp. 6, 7), while the psychologist, for the purposes of his investigation, considers the material to be less significant. In any case, for both, it is the “aesthetic aspect” the work manifests, as well as the “historical” aspect, that determines the nature and validity respectively of the operation and investigation. Regarding this and also the methodology to adopt, there emerges another clear concordance between what is proposed by Brandi and what is used in psychological research regarding art: a methodology of a phenomenological type.

While it is axiomatic that the material of the work of art must be the only object of the restoration, it is also fundamental that the material itself, considered as “the element that serves as an epiphany of the image”, must be defined and analysed “in a phenomenological manner”. “If [...] only the material of the work of art is restored, as is postulated in the first axiom, the material, since it represents contemporaneously the time and place of the restoration operation, requires a definition that cannot be borrowed from the natural sciences, but obtained by phenomenological means. Under this aspect, the material is intended as ‘the element that serves as the epiphany of the image’” (C. Brandi, 1963, c. 324).

The phenomenological approach to be adopted regarding the material is, inevitably, also that held regarding the “aesthetics of the work” which, as we have seen, sanctions its artistry: “We can [...] state that the work of art, as discussed in relation to restoration, is the work of art *that is found in the world*. That is, however its presence is depicted, as form or as pure reality or as knowledge or as unreality, it is the extent to which it realizes *a presence in the human consciousness* that it can be considered for restoration. [...] In the relationship existing between the consciousness that accepts and recognizes the work or art as such, and the actual work, there is a relationship which justifies the need for conservation of the physical means by which the image is transmitted. That is what we have condensed in the principle that only the material of the work of art is restored. It will appear more explicit, after this new deduction, that such a principle (though it opens the way to debate on the existence of the work of art) in reality stops at a strictly phenomenological enunciation – in other words, it sidelines the definition of what art is. It does not want to meddle in extracting the essence of art, it even admits how unimaginable and temporary the various proposed solutions can be and only admits that there is a given object in the exterior world that cannot be reduced in terms of usefulness, although it was made by man. This object is fashioned of a certain material which, like all material, is subject to change and deterioration. These

changes can be halted and the deterioration arrested. We must try to do this” (C. Brandi, 1994, p. 12).

Regarding treatment of lacunae, Brandi reiterates the need to apply the phenomenological method and the characteristics of which it must consist: “it is clear that we intend to apply [...] to the work of art a phenomenological treatment, that is we subject it to a special *epoché*. We will limit ourselves to considering the work of art only in so far as it is the object of experience of the *world of life*, to use an expression of Husserl. We will not return the work of art to a generic objectivity but, without delving into its essence, we will accept it as it enters the field of our perception and therefore of our experience” (C. Brandi, 1977, p. 72).

Also, regarding the psychology of art, despite the fundamental difference of intention, the principal methodological path (though not the only one) that can be taken is the phenomenological one, since its pre-eminent object of study – “the work of art *that is found in the world*” and which, through its form, “the epiphany of the image”, “realizes a *presence in the human consciousness*” – is not fully comprehensible from a quantitative point of view, since it contains a number of variables that are too broad to be experimentally controlled. Likewise, it is impossible to reproduce or simulate in a laboratory the situation in which the artistic phenomenon was manifested or occurred. Even though there exists – since psychology freed itself of philosophy and became an autonomous scientific discipline – a line of research known as “experimental aesthetics”⁹, which only uses the scientific method for investigating the world of art.

Arnheim, in a few words and with his vast knowledge deriving from many years of study, clearly states both the necessity of using the phenomenological method to explore and become aware of this world and also the weakness of the results obtained by experimental aesthetics: “I must say that [...] when we speak of the psychology of art as a science, it seems more profitable not to refer so much to experimentation in the strict sense, but to aim at reaching objective proof through exact measurement. More suitable for our purpose is the type of psychology that, while equally scientific, relies on description, demonstration and informal interpretation when dealing with the complexity of the human mind. Studies in experimental aesthetics were obliged to limit themselves to questions of quantity, size or intensity in order to utilize measurements and statistics. However, as soon as they want to go on from simple shapes or mere combinations of colours to an analysis of actual works of art, they find themselves confronted with a definite choice: either they have to be content with investigating particular dimensions or they must abandon the rigours of experimental verification. In my book, *Art and Visual Perception*, I used experiments dealing with perception of shape, colour, space and movement, but when it was necessary to apply these discoveries to works of art, I gladly abandoned the criteria of proof by measurement and put my trust in what I hoped my readers could see with their own eyes” (R. Arnheim, 1982b, pp. 13-14).

The phenomenological method under discussion here, which Brandi also treated, has no extemporaneous or non-systematic character¹⁰. It is based on rigorous principles, first among them that of not falling into the so-called “stimulus error” or

the “experience error”, that is to say, describing the object, fact or data observed on the basis of what you know or presume to know about them, or attributing to them properties that instead pertain to your phenomenal experience¹¹, instead of letting the objects “speak” for themselves, consequently maintaining a “natural” and “spontaneous” attitude as an observer.

“Psychology is a science concerned with immediate data. Therefore, when confronted with its object, psychology requires an approach that [...] can be described in a few words – words that are not new since they can be found in Hamann, Lichtenberg, Goethe, Schopenhauer and Klages [...]. Naturally, for these writers, this approach is required of artists in particular, and it is only required of scientists in the philosophical sphere of phenomenology (except for Goethe). It can be expressed as follows: simply accept the ‘immediate data’ as it is, even if it appears to be unexpected, illogical or senseless and even if it contradicts unchallenged convictions or very familiar habits of thought. Let things speak for themselves, without being led astray by what is known or what we have learned from ‘the obvious’, from implicit knowledge, from the demands of logic, from linguistic stereotypes or from the inadequacy of language. Approach nature with respect and love and, if necessary, reserve doubt and distrust for the premises and concepts traditionally used to understand the world of information” (W. Metzger, 1971, p. 15).

Likewise, having made the required transpositions, Brandi deals with the material of the work of art and observes the double characterization: “the material as the epiphany of the image provides the key to the division that had been obscured and that is now defined as *structure* and *aspect*”, corresponding, respectively, in psychological terms to physical data and phenomenal data. He then goes on to caution us regarding the “many harmful, destructive errors” that can arise by not giving the correct weight to the two functional characteristics the material possesses, if they conflict with each other. In that case, the “conflict, as when the aesthetic aspect contrasts with the historical aspect, can only be resolved by the pre-eminence of the aspect on the structure” (C. Brandi, 1977, p. 10). The examples of the “harmful and destructive” errors that Brandi cites all contain indications sustaining and illustrating the adoption of a rigorous methodology of a phenomenological type and are mostly examples of errors of stimulus and errors of experience.

An example of an error of stimulus, for example, is “to consider marble not yet quarried as identical to that which has become a statue. The marble not yet quarried possesses only its physical constitution, while the marble of the statue has undergone the radical transformation of becoming the vehicle of an image – it has been transformed, in historical terms, by the work of human beings. An unbridgeable discontinuity has taken place between its existence as a natural calcium compound and its becoming an image. Therefore, as an image, it became divided into aspect and structure and posed its structure as subordinate to the aspect” (*Ibid.*, p. 11).

An example of an error of experience is “to misinterpret the nature of the material that generates, or in any case, determines the style (a concept that is dear to positivists like Semper and Taine). It is clear that a sophism of this type derives from the lack of distinction between the structure and the aspect, and between the

assimilation of the material as a vehicle of the form, and the form itself. The aspect the material assumes in the work of art came to be defined as a function of the structure” (*Ibidem*).

Finally, there is another case of error of stimulus – one with a phenomenological reference to what psychologists calls the characteristics of the “phenomenal field”¹² which obviously play an important role in how restorers behave. “Another erroneous conception of a work of art is to consider it as being limited to the material consistency of the object. At first, this seems to be a concept that is difficult to disprove but, to refute it, we only have to consider that the material allows the expression of the image, and that the image does not limit its space to the material transformed into an image – other intermediate elements between the work and the observer act as physical means of transmitting the image. First of all, there is the quality of the atmosphere and the light. A clear atmosphere and dazzling sunlight can give a certain quality to the image perceived, no less than the bronze or marble or other material. Therefore it is incorrect to say that the Parthenon could only have been built of Pentelic marble, since no less than the marble, the quality of the image also depends on the atmosphere and the light. This leads to the important conclusion that a work of art should not be removed from its original place except when there are higher motives for preserving it” (*Ibid.*, p. 12).

Potential unity of a work of art and the Gestalt theory

Leading on from how the material of a work of art is considered from a phenomenological point of view, Brandi’s theoretical treatment deals with illustrating the unity of the artwork in the light of what is known as the second “principle of restoration”: “*Restoration must be aimed at re-establishing the potential unity of the work of art, as long as this can be done without committing an artistic or historical falsehood, and without cancelling the traces of the work’s passage through time*” (*Ibid.*, p. 9).

In illustrating the concept of unity in a work of art, Brandi’s line of reasoning coincides with what *Gestalt* psychologists consider to be the foundation of their theory, and which forms the basis for the psychological interpretation and understanding of a work of art.

Brandi writes: “one starts by excluding the idea that the realised unity of a work of art can be considered as the organic and functional unity which distinguishes the physical world, ranging from the nucleus of the atom to the human body. And in this sense, it would also be sufficient to define the unity of a work of art as unity that is qualitative and not quantitative. However this would not serve to clearly separate the unity of a work of art from organic and functional unity, since the phenomenon of life is not quantitative but qualitative. Initially we have no choice but to attribute the quality of unity to the work of art, or more precisely, the *unity* that refers to the *whole* and not the unity that is achieved by the *sum* of its parts. In fact, if a work of art is not conceived as a *whole*, it would have to be considered as a sum of different elements,

in other words it would be made up of separate parts. This would lead to a geometric concept of a work of art similar to the geometric concept of beauty, and for this reason, it would be open to the same criticism that Plotinus had formulated for beauty¹³. This states that if a work is made up of parts each of which is itself a work of art, then we are forced to conclude that either those parts are not so independent as we would like them to be, and that their partition has a purely rhythmical function, or that they lose their individual value in the context in which they appear, and are absorbed by the work that contains them. Therefore, either the work that contains them is a collection and not a unified work of art, or the single works of art lose their individuality to some extent in that context, so that each of them becomes a separate work of art. This special force of attraction that a work exercises over its parts – when it is actually made up of separate elements – is already the implicit negation of the fact that the work is made up of parts” (*Ibid.*, pp. 13-14).

The cases that Brandi cites as proof of the above are drawn from the fields of painting and architecture: “Take the example of a work of art that is actually made up of parts which, taken individually, have no particular aesthetic qualities other than a generic hedonism due to the beauty of the material, the precision of the form, and so on. For example, a mosaic in the field of painting, or bricks and stones in architecture. Without going too deeply into the question – which is collateral here for us – of the value of the rhythm that might be sought after or exploited by the artist in the fragmentation of the materials he uses to create the image, there remains the fact that the pieces of a mosaic or the stones of a building, if they were to be freed from the formal concatenation that the artist has given them, would return to being inert and would not retain any meaningful trace of the unity the artist had given them. It is rather like reading words in a dictionary – those same words that a poet has woven into a poem. Once released from the poem, the words become groups of semantic sounds, nothing more. Therefore, the pieces of a mosaic or the stones of a building constitute the most eloquent demonstration of the fact that it is impossible to consider a work of art as the sum of its parts, but rather it has to be viewed as a unified whole” (*Ibid.*, p. 14).

As already mentioned, the concept of unity, viewed as a “whole” and not as a “sum”, is the same as the root of the *Gestalt* theory and is expressed in the word *Gestalt* itself, signifying a “structural totality”, a “whole”, with its own “form” whose nature is not perceived by examining the parts of which it is composed. This concept – broadly expressed in the saying “the whole is not the same as the sum of its parts” – has an evident and exemplary application in the arts.

In the *Introduction* to his book *Art and visual perception*, Arnheim sets out by stating that he belongs to the *Gestalt* school, and then goes on to say: “The principles of my psychological thinking [...] derive from *Gestalt* theory”, after which he explains the meaning of the term, its theoretical implications, and its relevance to the sphere of art.

“The word *Gestalt*, the common German noun for shape or form, has been applied since the beginning of our century to a body of scientific principles that were derived mainly from experiments in sensory perception. It is generally admitted that the

foundations of our present knowledge of visual perception were laid in the laboratories of the *Gestalt* psychologists, and my own development has been shaped by the theoretical and practical work of this school. More specifically, from its beginnings *Gestalt* psychology had a kinship to art. Art pervades the writings of Max Wertheimer, Wolfgang Köhler, and Kurt Koffka. Here and there the arts are explicitly mentioned, but what counts more is that the spirit underlying the reasoning of these men make artist feel at home. Indeed, something like an artistic vision of reality was needed to remind scientists that most natural phenomena are not described adequately if they are analysed piece by piece. That a whole cannot be attained by the accretion of isolated parts was not something the artist had to be told. For centuries scientists had been able to say valuable things about reality by describing networks of mechanical relations; but at no time could a work of art have been made or understood by a mind unable to conceive the integrated structure of a whole. In the essay that gave *Gestalt* theory its name, Christian von Ehrenfels pointed out that if each of twelve observers listened to one of the twelve tones of a melody, the sum of their experiences would not correspond to the experience of someone listening to the whole melody. Much of the later experimentation of the *Gestalt* theorists was designed to show that the appearance of any element depends on its place and function in an overall pattern” (R. Arnheim, 1974, p. 26).

While Brandi started from the aesthetic-philosophical point of view dealing with the general principles of restoration, Arnheim approached the question from the psychological angle, by analysing works in terms of visual perception and cognition. They both agreed that a work of art is comprehended as an “aesthetic unity” since it is a structured whole. As a result of this assumption and on the basis of their own phenomenological concept of knowledge, they also concurred that the typical processes of perception which enable us to comprehend the essence of a work of art must be of an intuitive, immediate and spontaneous nature, rather than being logical, causal and functional.

The reception of a work of art

In the same way that Arnheim makes a distinction between “intuition” and “intellect” (as we shall see shortly), Brandi closely examines the concept of “unity” in a work, posing the problem whether such unity is on the same level as the “organic and functional unity on which our experience is based”, or whether it is generated, and therefore has to be received and understood, through another type of comprehension experience, in psychological terms, by means of a different cognitive process.

“At the root of all our experience, of our daily contact with the world, there is [...] the need to acknowledge the links between existing things, and to reduce to a minimum or eliminate useless things, in other words those things whose links to our existence are either unknown or absent. Clearly, such existential links are a function of knowledge and represent the starting point for scientific thought. Using a process of scientific reasoning, we establish laws and are therefore able to make previsions.

Hence, when we see a sheep's head on the butcher's slab, there is no doubt in our minds that the sheep had four legs when it was alive" (C. Brandi, 1977, p. 15).

This cognitive procedure is a characteristic of logical, causal and functional reasoning (or "paradigmatic thought", in the words of another great psychologist, J.S. Bruner, 1986), and is considered by Arnheim to belong to the sphere of the "intellect".

"In our direct experience we are better acquainted with the intellect, for the good reason that intellectual operations tend to consist of chains of logical inferences whose links are often observable in the light of consciousness and clearly distinguishable from one another. The steps of a mathematical proof are an obvious example. Intellectual skill is clearly teachable. Its services can be obtained somewhat like those of a machine; in fact, intellectual operations of high complexity are carried out nowadays by digital computers" (R. Arnheim, 1986b, pp. 29-30).

In the attempt to capture the essence and the unity of a work of art, logical inference or any other type of intellectual operation do not meet the aim: "[...] in the image that the work of art formulates, our world of experience seems to be reduced only to a cognitive function within the figurative aspects of the image – any postulation of organic integrity vanishes. *The image is really and truly only what it appears to be.* The process of phenomenological reduction which serves to investigate what exists, becomes (in aesthetics) the axiom that itself defines the essence of the image. Therefore, the image of a person in a painting, of whom only one arm can be seen, only has a single arm. Nor can that person be regarded as mutilated because of this, since in actual fact the person does not have any arms – 'the arm that can be seen in the painting' is not an arm, but only a semantic function with respect to the figurative context which the image evokes. The supposition of the *other* arm (the one not shown in the painting) no longer pertains to the observation of the work of art, but to the inverse operation of that which created the work of art. In other words, the regression of the work of art to a mere reproduction of natural objects, where the object depicted (in this case a living person) should have another arm" (C. Brandi, 1977, p. 15).

Therefore, the cognitive procedure to be used when dealing with a work of art, in other words when "contemplating" it (which should clearly not be viewed in the transcendental or passive sense but in the sense of active exploration and attentive observation¹⁴) is that of perception, of "seeing" (G. Kanizsa, 1991), of "intuition" (R. Arnheim, 1986b). In fact, "although everyone in principle might be convinced of the contrary – that when looking at a painting of a person where only one arm can be seen, they instinctively reproduce internally the organic unity of a person with two arms – vice versa the intuitive and spontaneous reception of a work of art takes place exactly as we have described it, limiting the cognitive substance of the image, in other words the semantic value, to what the image provides and nothing more" (C. Brandi, 1977, pp. 15-16).

The "spontaneous and intuitive reception", in Brandi's words, is what Arnheim calls "intuition" and which he defines as "a particular property of perception, namely its ability to apprehend directly", or spontaneously, "the effect of

an interaction taking place in a field or *Gestalt* situation” And art is the field that “offers us the experience of watching intuition at work” (R. Arnheim, 1986b, pp. 28, 32). Considered as a process, “intuition is much less easily understood [than intellect] because we know it mostly by its achievements, whereas its mode of operation tends to elude awareness. It is like a gift from nowhere and therefore has sometimes been attributed to be superhuman inspiration or, more recently, to inborn instinct. For Plato intuition was the highest level of human wisdom, since it afforded a direct view of the transcendental essences to which all the things of our experience owe their presence. Again in our own century the direct vision of essences (*Wesensschau*) was proclaimed by the phenomenologists of the Husserl School as the royal road to truth” (*Ibid.*, p. 30).

In spite of the fact that intuition is less comprehensible, since it acts in different ways to logical and linear thought and since it is based on the activity of the senses, this cognitive ability lends itself to investigation and interpretation: “It is high time to rescue intuition from its mysterious aura of ‘poetical’ inspiration and to assign it to a precise psychological phenomenon that is badly in need of a name. [...] Intuition is a cognitive capacity reserved to the activity of the senses because it operates by means of field processes, and only sensory perception can supply knowledge through field processes. Consider ordinary vision as an example. Vision starts physiologically with optical stimuli projected upon the many millions of retinal receptors. Those many dot-sized recordings have to be organized in a unified image, which ultimately consists of visual objects of various shape, size, and color, differentially located in different space. The rules that control such organisation have been extensively studied by *Gestalt* psychologists, with the principal finding that vision operates as a field process, meaning that the place and function of each component is determined by the structure as a whole. Within this overall structure, which extends across space and time, all components depend upon one another, so that, for example, the color we perceive a certain object to be depends on the colours of its neighbors. By intuition, then, I mean the field or *Gestalt* aspect of perception” (*Ibid.*, p. 31).

The reception of a work of art viewed as a whole, with the aim of establishing its artistic nature and of capturing its essence, takes place (as Brandi states categorically) “exactly as we have described it” by means of intuition and contemplation of what the image shows, through which its meaning becomes apparent.

To support this statement, Brandi cites “indirect proofs”: “Imagine a person who is suddenly confronted by a truncated human hand or worse still a human head. In spite of the sense of horror, there will never be a moment’s doubt in the person’s mind that the pieces belong to a human body. But an isolated hand or head in a sculptured form will not arouse the least sense of horror (assuming it does not represent human remains) nor will it suggest even the faintest idea that it has been hacked off a human body. So much so that sculptors use special techniques to show whether an isolated hand has been deliberately and artificially detached from a human body, or whether it has actually been truncated. The traditional representations of St. John the Baptist and St. Dionigi are cases in point. All this goes to show that

the organic-functional unity of existential reality lies in the logical functions of the intellect, while the figurative unity of a work of art is one and the same thing as the intuitive perception of the image as a work of art” (C. Brandi, 1977, p. 16).

Unity in a work of art and intuition, as cognitive procedure for gathering essence and meaning, are therefore the two aspects (one structural, the other process-based) which establish for restorers the boundaries they cannot go beyond, and at the same time the possible and legitimate extension of their activities. Likewise, for art psychologists, these two aspects (unity and intuition) constitute the reference parameters enabling them to investigate the work of art, for their own reasons, in a rigorous and scientific manner. With the obvious difference, however, that restorers are faced with a work of art whose unity may not only be compromised by several physical and temporal factors, but may also be shattered in pieces or, again, may be incomplete due to lacunas and missing parts.

The problem of lacunas and the relationship between figure and ground

The problem of lacunas mainly concerns “the observer of a work of art, or rather it is specifically a problem of understanding what the original work of art was like, without current restoration work or with only minimum restoration” (C. Brandi, 1963, c. 327). Brandi shows that he is well acquainted with the basic principles of perceptual organisation, and refers specifically to *Gestalt* psychology to back up and explain the answer – “excogitated intuition” (C. Brandi, 1977, p. 20) – which he puts forward for the problem.

“In a work of art, a lacuna is a break in the figurative tissue. But, contrary to what is generally believed, the most serious aspect for a work of art is not so much what is missing, but rather what has been needlessly inserted. The fact is that lacunas will have their own shape and colour unrelated to the figurative scheme of the image represented by the work. In other words, the lacuna intrudes as an extraneous feature. Now, the studies and experiences of *Gestalt-psychologie* help us to interpret the sense of a lacuna, and to find ways of neutralising it. Even with its random shape, the lacuna stands out as a figure against the background, the painting that is. In the spontaneous organisation of our perception, together with the need for symmetry and the search for the simplest shapes (faculties we constantly use to interpret instantly the complexity of an image), there exists a formal relationship between the figure and the background. (*Ibid.*, p. 18).

In addition to the figure-ground relationship, Brandi refers here to the main principles which govern the functioning of perception: that of “*Prägnanz*” (the need for symmetry) and that of “simplicity” (the search for the simplest shapes), showing that he fully understands their importance within the framework of the *Gestalt* theory. The “*Prägnanz*” principle is “the tendency to make perceptual structure as clear-cut as possible”, while the “simplicity principle” “asserts that the perceptual forces constituting” the visual field “will organize themselves in the simplest, most regular,

most symmetrical pattern available under the circumstances¹⁵ (A. Arnheim, 1974, pp. 73, 75).

Getting back to the problem of lacunas, the “formal relationship between the figure and the ground” is “set out and developed in painting according to the space chosen for the image, but when there is a lacuna in the work, this unforeseen shape becomes a ‘figure’ against the painting as a ground. Therefore, a sort of ‘devaluation’ of the image takes place (in addition to the mutilation of the painting) whereby what was intended to be the main figure in the work tends to recede into the ground” (C. Brandi, 1977, pp. 18, 19).

Psychologists dealing with perception have no difficulty in understanding this phenomenon and the problems that it creates for restorers. The relationship of figure-ground is, shall we say, the first and most basic perceptual operation that we undertake when viewing something, and is related to our ability to perceive three-dimensional objects and the depth of the visual field¹⁶. As far as we are concerned here, we can say that a figure constitutes itself in the visual field by means of a multitude of factors, which balance one another out, or which contrast with one another¹⁷, and that it is definable only in terms of the ground that produces it. As E. Rubin (1915) notes, there can be no figure without a ground. In short, the characteristics of the figure are that it has shape, density, outline and a definite extension, standing out or emerging. On the other hand, the characteristics of the ground are generally speaking quite the opposite – it is amorphous, undifferentiated, rarefied, stretching out behind the figure.

In the case of lacunas, considered in the broadest sense, we are faced by a true perceptual disturbance caused by the fact that the “figurative tissue” of the work is interrupted by random and irregular shapes – but well-defined in figurative, quantitative and dimensional terms, as well as by their intensity and quality of colour. These shapes take on the role of a figure in the painting by standing out, and acquiring outline and density, with the result that they overpower the work’s main figures, making them recede into the ground.

In order to eliminate the disturbance caused by lacunas, restorers initially attempted “to devise a methodology that avoided integration based on imaginary reconstruction” by employing the “empirical solution of the *neutral colour*”. This, however, turned out to be an “honest but inadequate” method since “the presence of a neutral colour has an influence on the painting’s overall colour scheme. The proximity of the real colours to the neutral colour reduces their intensity and accentuates the intrusive presence of the lacuna” (C. Brandi, 1977, p. 19). This is because the “neutrality” – or the phenomenal appearance – of a colour is never absolute but always depends on the other colours around it. “The identity of a color does not reside in the color itself but is established by relation. We are aware of this mutual transfiguration, which makes every color dependent on the support of all the others, just as the stones of an arch hold one another in place. But whereas the stones counterbalance one another’s weight physically, the web of interacting colors is created only by the eye, and this subjectivity – quite different from the sturdy

objectivity of shapes – gives them the quality of apparitions”¹⁸ (R. Arnheim, 1974, p. 294).

The approach adopted by Brandi is in agreement with the general principles of the functioning of vision, based on the simultaneous comparison of the stimuli which make up the perceived pattern, through their combination and their interaction¹⁹.

Brandi’s answer was “to give the lacuna a colouring which, instead of harmonising with or not contrasting with the colours of the painting, stands out forcibly by its hue, and brightness”. This makes it possible “to perceive or deduce the continuation of the painting behind the lacuna”, in other words making it recede into the background. “Wherever the pattern of the colours makes it possible,” it is sufficient “to apply the principle of a different level to the lacuna so that it is no longer a figure set against the painting as a ground, but becomes the ground on which the painting is the figure. In this sense, even the random shape of the lacuna no longer has a marked effect on the paint tissue and, since it does not recede into the ground, it becomes a part of the material-structure, with its own aspect. Therefore, more often than not, it is enough to give prominence to the wood or canvas support in order to achieve a clean and pleasing effect, mainly because this removes the ambiguity of the forcible intrusion of the lacuna as a figure. In a way, even the colour of the lacuna, receding to the level of ground, does not contribute directly to the overall chromatic effect of the painted surface. This solution, ‘excogitated’ by intuition, is backed up and explained by *Gestalt-psychologie* since it makes use of a mechanism of spontaneous perception” (C. Brandi, 1977, pp. 19-20).

On the other hand, the effectiveness of Brandi’s approach to the problem of lacunas – facilitating a better understanding and appreciation of the potential original unity of the work of art – can be considered a confirmation of the *Gestalt* theory relating to the spontaneous (but closely regulated) functioning of visual perception, thereby constituting a sort of “ecological” proof²⁰.

In conclusion, we can say that the conceptual convergences in terms of methods and applications which we have illustrated here, together with basic aspects of the theory of restoration and the psychology of art, are fairly well exemplified (albeit partially) by the restoration work carried out in the Scrovegni Chapel.

NOTES

¹ In particular, the *summa* consisting of the papers collected under the title of *Teoria del Restauro*, edited by Licia Borrelli Vlad, Joselita Raspi Serra and Giovanni Urbani, first published in 1963 and republished in 1977 in the same form by Einaudi as part of the new edition of complete works of Cesare Brandi. The articles had previously appeared singly in the ICR Bulletin starting from the first issue in 1950, but most of the reasoning behind the main concepts dated from earlier periods.

² We immediately see how Cesare Brandi knew both the fundamental, more noted text of Arnheim, *Art and Visual Perception*, and also the principal theoretical lines of the *Gestalt* school of psychology, of which Arnheim is an important exponent, especially regarding artistic studies. See, for example, Brandi (1960; 1961; 1977).

³ The expression “cognitive processes” refers to the cognitive activity in its entirety, that is to say those processes of a motivational, intellectual and emotional type which, interacting with each other, characterize the mental functioning of human beings. By “executive processes” is meant the executive activity, that is the series of processes, movements and actions that happen at the sensory-motor level, that are cognitively coordinated and that refer to all human actions, becoming specific in relation to the executive field in which the activity is carried out (A. Argenton, 1996).

⁴ “Although it is true that in most cases, when a person intentionally and knowingly implements active artistic behaviour, and at the same time aesthetic behaviour, the result of his action must be known and recognized by others in order for the phenomenon to be happened. Otherwise (and this is possible) it is an unfulfilled or solipsistic act and therefore not knowable” (A. Argenton, 1996, p. 180).

⁵ Regarding this, Brandi (1977, p. 4) states: “Therefore I do not believe it is necessary to begin with an idealistic concept, because even by setting itself to its opposite pole, to a pragmatic starting point, there is still the essential element that the work of art be recognized as a work of art.”

⁶ “The human product that we recognize is found there, before our eyes” (C. Brandi, 1977, p 4).

⁷ The literature on the subject is enormous. To cite a few classic examples, regarding the *Gestalt* school, which more than any other supplied contributions to this field, see R. Arnheim (1969); G. Kanizsa (1980); K. Koffka (1935); W. Metzger (1963). There are also numerous manuals; to cite one in Italian that is quite recent and exhaustive, even though there is no mention of aesthetic perception, see F. Purghé *et al.* (1999).

⁸ As for the interpretation of how these functions take place at a neuro-physiological level, the hypothesis has been put forward (but not demonstrated experimentally) of

the principle of structural isomorphism, which postulates the existence of structural correspondence between the activity of the excitatory fields of the cerebral cortex and perceived experience, that is between the physiological activity of the brain and the perception of the stimulus.

⁹ The founder of “experimental aesthetics” was G. T. Fechner (1876) and among his most representative exponents is, first of all, D. E. Berlyne (1971; 1974) promoter of a renewal of this sector of investigation, I. L. Child (1969), H. J. Eysenck (1981), R. Francès (1979), M. Lindauer (1981), D. O’Hare (1981). Substantially and generically, beyond the heuristic limits, the results of this type of research confirm the existence of intrinsic, auto-remunerative motivations of biological origin that are the basis of aesthetic behaviour. They show a natural tendency of human beings to have aesthetic preferences based on the formal or structural characteristics of the stimulus. For some of these characteristics, they indicate a certain constancy and universality of judgement, independently of variables such as the sex, age and cultural background of the person.

¹⁰ “It must be stated [...] that when we speak [...] of phenomenological method, we are definitely not alluding to that allusive, metaphorical, indefinite manner of interpreting psychological concepts that is typical of so-called phenomenological psychology (and psychiatry), and which has a mainly clinical sphere of reference. The phenomenological method we are referring to is that widely used by the school of *Gestalt* psychology, and is still used, especially in the field of psychology of perception and psychology of thought, by a broad tradition of experimental phenomenology based on this method. [...] Substantially, we can define the phenomenological method as the method that always uses phenomenological data as a dependent variable” (R. Luccio, 1994, p. 66).

¹¹ An example of a stimulus error would be our experience when confronted with a well-known visual illusion, such as Muller-Lyer’s “arrows”. Having previously measured the two arrows, we would say that we see two segments of equal length, as they actually are physically. But this contradicts our perception, which makes us “coercively” see them as having different lengths. An example of an error of experience would be when we say, after being exposed for a long time to a low temperature, that a room “is very warm”, while it is actually only slightly warmer. We incorrectly evaluate physical data because of predicates of sensory perception.

¹² A “phenomenological field” is defined by the overall perceptions of the observer and by the physical parameters of the condition surrounding the stimuli that give rise to them (R. Luccio, 1994).

¹³ For Plotinus’ criticism of the geometric concept of beauty, deriving from Aristotle, and how the concept of beauty in art should be understood in philosophical terms, see

C. Brandi (1992, pp. 58-59). On the subject of the psychology of art, see A. Argenton (1996; 1997; 1999).

¹⁴ On the subject of the term “contemplation”, see the very similar views expressed by R. Arnheim (1966, pp. 355-366).

¹⁵ As pointed out by Arnheim (1974, p. 73), *Gestalt* psychologists themselves have not sufficiently clarified the difference between *Prägnanz* principle and simplicity principle. This often leads to misunderstandings (on this subject, see R. Arnheim, 1986c). In any event, it is the latter that is most important in the field of aesthetic perception, while the former plays a vital role in the general workings of perception.

¹⁶ These are clearly the reasons why the phenomenon has been, and still is being, investigated in depth. The first expert to deal with it systematically was the Danish psychologist Edgar Rubin (1915), and there are many publications on the subject. For a more detailed study, see for example K. Koffka (1935) or G. Kanizsa (1980).

¹⁷ In considering “these factors, we must keep in mind that even the simplest example contains more than one of them, and that the percept derived from the pooled contributions of all of them. Edgar Rubin identified a number of such factors. He found, for example, that the surrounded surface tends to be seen as figure, the surrounding, unbounded one as ground. If we perceive the stars as sparkling in front of the dark sky, they conform to the Rubin’s rule. If we see them as pinholes, the sky becomes the figure and the bright heavens assumed to exist beyond become the ground” (R. Arnheim, 1974, p. 193).

¹⁸ The perception of colour constitutes a vast field of research. On this subject, and of interest here, see J. Albers (1971) and L. De Grandis (1984), in addition to chapter 7 of *Art and visual perception* (R. Arnheim, 1974).

¹⁹ This principle has been convincingly demonstrated experimentally by research in many fields. For example, experiments regarding perceptual constancy, or colour contrast and assimilation. See F. Purghé *et al* (1999).

²⁰ The concept of “ecological validity” refers to studying human behaviour in “real-life situations which are culturally significant” and consequently deals with “ecologically significant variables, rather than those that are easily manipulated” (U. Neisser, 1976, pp. 26, 31), created artificially in the laboratory.

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