

Graziella Magherini

Rereading Art

Introduction to the conference for the tenth anniversary of the I.A.A.P.

Pienza- Montepulciano (Siena- Italy) June 18-20 2010

Antonio Paolucci wrote in 2003: "One day they will speak of the Library of the Uffizi as a cutting-edge laboratory, as an important forum in the history of interdisciplinary cultural enterprises between the last years of the 20th and first years of the 21st century. They will speak of academic specializations (history of art, psychology and psychoanalysis) that seek each other out, collaborate and sometimes clash, creating sparks and short circuits. And they will say that these ground-breaking studies, carried out with the requisite maverick spirit in diverse and autonomous scholarly fields, came into being in the great hall of the Library of the Uffizi."

In the year 2000 in Florence the Associazione Arte e Psicologia was founded as a group for interdisciplinary research comprising art historians, psychologists and psychoanalysts and enjoying the hospitality of one of the richest and most glorious libraries of Western Civilization, the 17th-century Library of the Uffizi: the Salone Magliabechiano became the customary setting for the lectures, meetings, book presentations and conferences conceived and organized by the Association itself.

The Association was founded to explore the nature of artistic creation and of the fruition of works of art; the relationship between psychology and the visual arts; and the prospect of grounding criticism of art in the joint efforts of psychologists with art historians and critics. Later, interests were broadened to include music, literature and other areas that lend themselves to this sort of connection. Before long, from Florence the Association spread to various parts of Italy, as sections were formed in Bologna, Turin, Genoa and Rome, and abroad (New York, and - soon to be announced - Rosario, Argentina, and Paris), where the number of invitations to participate in cultural activities, studies and research attest to the respect we have won. This success led to its transformation, in 2007, into an international association, under the name of International Association for Art and Psychology, and the institution of an International Scientific Committee. Already in 2006 it had become an association for cultural volunteer work, combining its scientific passion with an active commitment.

The Association's activities have been numerous and significant:

- Activities of Study groups
- Lecture series
- Meetings and Conferences
- School outreach programs
- Volunteer work: members who volunteer their services do much of the association's organizational and editorial work, and help welcome and assist visitors to the Library of the Uffizi.
- Publishing: series of books published by Nicomp LE, Florence; quarterly Newsletter
- Cultural itineraries

The point of departure for our studies and discussions has always been the writings of Freud, whose discoveries – as we know – owe a great deal to the influence of the visual arts and of literature. The Greek tragedians, Shakespeare, Goethe, Egyptian art, Greek art, and the Italian Renaissance touched Freud's mind very deeply – and were even taken to be indicative of some of the fundamental laws that regulate our deep psychic life. Freud's numerous travels in Italy and his encounter with the Italian Renaissance revolutionized his way of approaching and perceiving works of art, and works of art became powerful gauges of internal events, a favored vehicle for the fertilization of the Ego by the unconscious.

The rapport created with a work of art is fraught with psychological resonances, and can set in motion mental activities of varying relevance and intensity. It is within this field of enquiry that the Stendhal Syndrome was discovered and described in Florence (Magherini, 1989; 2007): a series of experiences studied clinically, but which can be considered the tip of the iceberg of a widespread phenomenon, being linked to the operation of our mind when, with a sensitive disposition, we approach a work of art and have a profound aesthetic experience.

Contributions to exploring the ties of art to psychology have come from psychoanalysts, psychologists of various schools (cognitive in particular), art historians and critics, men and women of letters, musicologists and scientists (especially neuroscientists). Our experience in these ten years of activity seems to indicate that nowadays, besides these specialists, a broad segment of the population seems to be interested in the interaction of art and psychology, in the relationship

between emotion and the experience of art, and in the importance of the arts to personal growth both in therapy and in the promotion of well-being.

This collaboration has led to the emergence of three broad areas of research:

Psychology and the visual arts

Psychoanalysis and literature

Music and psychology

Our work in these areas has sparked new interests in the closely connected fields of education and art therapy. The studies from our work groups appearing under the headings *Growing with Music*, *Growing with Books*, and *Growing with the Figurative Arts* have had noteworthy results, and our sections have further broadened the scope of their interest to include the theatre, motion pictures and photography. Finally a series of investigative studies takes the point of view of museum visitors: *Meet me at the Museum*, and *Listening to the Public*.

The section *Psychoanalysis and literature - Listening to the text*, was inaugurated in February of 2006, its goal to focus the attention of psychoanalysts and of men and women of letters on the same literary text in order to show the real potential of a joint study performed with such different analytical tools. Here, however, we strive to avoid the two powerful temptations of psychobiography and of the so-called psychoanalysis of the text. Our approach is, rather, to focus our attention on that particular relationship the writer creates with language, expressing himself through 'figures' – altering, that is, the transparency of the distinction between signifier and significance – whether in terms of rhyme or of grammar, of the relationship with realia or of the order of its discourse, and so on for all forms of expression. Thus, in the words of Starobinski (1964), who in turn paraphrases Freud the poet's function is that of "a mediator between the murkiness of drives and the clarity of systematic and rational knowledge."

This survey of our thoughts would be incomplete, bereft of an essential aspect of the relationship between psychology and art, without the section devoted to *Music and psychology*. Antonio Di Benedetto (2000) writes, "Musical form for S. Langer is a non-consummated symbol, that is one not limited to the representation of something else but ever open, alluding to an indefinite number of objects. "All art," writes Di Benedetto, "is the creation of forms symbolic of human feelings. But music in particular reflects the ineffable forms of feeling, the dynamic structure of our affective

life." Musical forms "mirror the morphology and the dynamism of the affects." "If sound can broaden the compass of our vision, allow us to perceive the invisible, then musical symbols are to be considered those best suited to expanding our perceptive capabilities. Such symbols have no precise external points of reference. They allude, rather, to objects that are indefinite, vague, distant, as though they prepared the psyche for an understanding that dispenses with the concreteness, the tangibility, the corporality, of an object. They set the mind to representing the invisible" (ibid.)

The interdisciplinary work of these ten years and the contemporary psychological/psychoanalytical, critical/historical and biological trajectory described by this interdisciplinary approach equip us to offer some thoughts, which fall under the following headings:

1. Does sensitivity to art exist as a specific and innate human competence?
2. The development of sensitivity to art and the 'play' of the external world and the internal world.
3. The anatomy and physiology of the creation and fruition of art.
4. Variability and invariability in the creation and fruition of art.
5. The interrelationship between artistic languages and scientific languages.

1. Does sensitivity to art exist as a specific and innate human competence?

We may reasonably grant that the first aesthetic experience coincides with the child's sensorial encounter with the external world: the mother's face, her breasts and her voice constitute the predominant and richest provider of sensations. The external world is primarily beautiful just as the primary object is beautiful (Meltzer, 1988). But at the same time the child experiences a cognitive dilemma: will it be as beautiful inside as it is outside? These experiences will recur throughout life in a variety of situations but reactivating the same experiences.

The cognitivists (Argenton, 1993) speak of aesthetic emotion as a characteristic mode of response to any sort of stimulus, event, object or person considered subjectively to be beautiful or ugly, attractive or unpleasant. The paradigmatic occasions triggering the manifestation of this mode of response are afforded by the variegated world of the arts, and the trigger lies in a mental disposition that leads to that world. "Aesthetic emotion represents the peak intensity in an attitude that pervades our day-to-day interaction with the natural and artificial environments, with its ongoing evaluation of

the portions of reality we deal with as beautiful, pleasant, unpleasant, interesting, boring or ugly" (Argenton, 1993). Many researchers, then, posit the existence in children of an innate aesthetic awareness, which is directed both toward surrounding objects (persons, landscapes, etc.) and toward works of art.

Freedberg (1989), on the other hand, holds that reactions before a work of art fall under the larger heading of the relations between persons and images of any sort, from those furthest from art to those of greatest masterpieces of art. Freedberg's *The Power of Images* (cit.) begins by explaining that his is a book on the relations between images and persons, analysed in their historical dimension. It deliberately encompasses all images, without confining itself to those considered artistic. In the conception developed by Freedberg what is considered is an approach to images common to each of us: an elementary level of reaction that cuts across the divisions of history, society and other contexts. It is precisely at this level – which has to do with our psychological, biological and neurological condition as members of the same human species – that our cognition of images is similar to that of all men and all women. Artistic sensibility would thus arise from the much broader relations between persons and images. Freedberg writes that to understand our reactions to 'high' art we need the generic and specific evidence furnished by our reactions to 'low' images: the history of art is thus subsumed under the history of images.

Within the enormously vast realm of the relations between mankind and images, however, I believe that in the course of the many thousands of years of human development context has determined an innate artistic competence, out of which the individual, as he grows and throughout his life, develops an artistic sensitivity.

2. The development of sensitivity to art and the 'play' of the external and internal worlds

The development of artistic – and more generally aesthetic – sensitivity, from birth and on the basis of a specific innate competence, unfolds through a twofold mechanism or, better, at two levels of interrelationships: a) interaction between genes, neural connections, and the environment; and b) "the leaping-dolphin swim between the external world and the internal world" (Fornari, 1979).

a) The interaction between genes, neural connections, and the environment

Insel (in Kandel, cit.) writes: "There is no doubt that genes and the proteins they produce determine neural connections, and experiences ... alter the expression of genes," just as – we add as an illustration – the energy introduced with feeding influences a child's expression of the growth hormone and the other factors for growth: the genes that induce growth are under the constant influence of environmental factors which modify its effects.

b) The leaping-dolphin swim

The second – and exquisitely psychoanalytical – point attributes to art a twofold status, as Fornari (1979) writes: "one diurnal, lexical, operative; the other nocturnal, deep, affective. As an activity, art moves from night into the light of day, then returns to night in a leaping-dolphin swim between the external world and the internal world, a continuous succession of heads and tails in which each face hides when the other appears. This dolphin swim plays on the structure of the unconscious and can be linked to the experience of other scenes identifiable within the world of childhood, tapping into both explicit memory (connected with the Freudian unconscious: the repressed) and implicit memory (preverbal and pre-symbolic). In the field of the neurosciences one now speaks of declarative, or explicit, memory and procedural, or implicit, memory; the latter referring to unconscious processes of various sorts, from the "formation of new patterns of motor (and perhaps cognitive) activity" to the perception of various affective signals, of emotions; each of these types of unconscious process has a precise biological substratum in an area of the brain (striated body, amygdala, etc.) (see Kandel, 2007). In the implicit memory are deposited the experiences (including the traumas) of the last phases of prenatal life and the early relational life of the immediate postnatal period, which are not yet symbolized but preverbal, pre-symbolic. "The work of the poet and of the artist (like that of dreams)," writes Mancina, "would serve to give symbolic expression to the non-repressed unconscious of that poet or that artist. And with this the non-repressed unconscious of reader and viewer identifies" (Mancina, 2004). In the thinking of numerous authors (see Magherini, 2007), even strong emotional experiences that belong to the artist's unconscious would be projected into his works of art without undergoing transformation into symbols.

3. The anatomy and physiology of the creation and fruition of art

These two levels of interrelationships require an anatomical substratum: neurons, with their genes – noted above – and their networks, the structures necessary for the exercise of explicit and implicit memory. It also necessitates that these structures be able to perform complex operations. We need anatomy and physiology in the apt phrase of Zeki (2003), to whom we owe neuro-aesthetics. We are all aware of the breakthrough in the ‘physiology of the fruition of art’ represented by the ‘mirroring’ effected by means of a class of nerve cell within the cerebral cortex discovered by the group directed by Rizzolatti (see Rizzolatti and Sinigaglia, 2006); cells whose operation is not self-referential but tied to millions of other neurons with specific functions. These mirror neurons are capable of formulating at the same time a representation of one’s own acts and a representation of others’ acts. Their mirroring is not confined to actions but also, according to some evidence, represents emotions, affects, sensations and, therefore, empathy (Gallese, 2003; Freedberg and Gallese, 2007). Mirroring would appear to be a physiological prerequisite to the fruition of art.

The anatomy and the physiological mechanisms of the creation and fruition of art are, in all likelihood, common to all the individuals belonging to a given culture in a given historical period, and evolved over a great span of time.

4. Variability and invariability in the creation and fruition of art.

A great many non-biological, that is historical and cultural, factors play a part in the physiology of making and experiencing art. An important and well-known field of research in this area is that developed out of Warburg’s notion of the *Pathosformel* (see Didi-Huberman, 2002). Such ‘pathos formulae’ are gestures, movements or images that express strong emotions and have been handed down from remote times. In a depiction these emotionally charged gestures reactivate the theme of time – present time, past time made present. Symbols and visual formulae from Classical Antiquity, after a period of dormancy, arise once more, freighted with their old powers, almost with a life of their own.

In analysing a work of art historians distinguish these time-honored expressive formulae, with their particular emotional force, from the stylistic, cultural and historical features of the time and place inhabited by the artist, as well as the features of the artist’s personality and the particular circumstances that led to the creation of that work. This is the ‘creative’ side. In that process, then, there are invariant

elements tied to history and culture (the historical depth of the cultural context) and variable elements related to artist's personality, his personal history and the circumstances under which the work was executed.

On the 'receptive' side, we find an invariance in the factors noted above as conditioning the creation of the work, and which do not vary from viewer to viewer; and variables in the personality of the viewer, his personal history and the context in which his experience takes place (time, place and circumstances). Each of these variables may, and generally does, acquire an importance and meaning that differs from viewer to viewer.

Across the vast spectrum of variability observed in creation as well as fruition, a crucial role is often played by the 'selected fact' (see Magherini, 2002; 2004; 2006; 2007). "The term selected fact, as applied to a work of art and its fruition, designates both a function of the mind of the observer and a specific characteristic or quality of that work that, for that person and at that particular moment, becomes a powerful mental catalyst. From within the fabric of elements that compose the work one emerges that makes itself the focus of the observer's attention and thus becomes an organizing factor that, at that moment, endows that work of art with a powerful emotional significance and at the same time illuminates certain aspects of the person's life, aspects that are suddenly related to each other and organized in a new way (Magherini, 2007)."

5. The interrelationship between artistic languages and scientific languages

I would like to add, as I near the end of my remarks, some thoughts on the interesting interrelationship between the distinct idioms of artistic and scientific expression, which has now been recognized. Just to explain the mention I shall make of an observation by the physicist Toraldo di Francia (1999) and the scholar of logic Maria Luisa Dalla Chiara, let us remember that the ties of the visual arts to philosophy were already discussed in Classical Antiquity and, with great enthusiasm, in the Renaissance, as Sergio Givone notes in his discussion of the aesthetics of Leon Battista Alberti and of Ficino. Givone writes: "... Alberti affirms that beauty is harmony, that is 'a fitting together' of the parts 'in such a way that nothing can be added to or subtracted from it, or changed, without making it worse,' and he does not hesitate to declare that such perfection is inscribed in every living creature, and in the human body in particular." These words echo the approach that guided the

development of Greek art, the profoundly Hellenic conception of beauty as *symmetria*; an ideal that found its definitive (figural) expression in the "Spear-bearer" or Doryphorus of Polycleitus, also known as the Canon, from the mathematical system of anatomical proportions detailed in the sculptor's (lost) book on the statue. Givone continues: "... Alberti's aesthetic is an empirical aesthetic, entirely focused on the observation of reality; but of reality he seeks the essence, the spiritual principle that governs it; and from this perspective his cannot be set against, but must, on the contrary, be likened to, the aesthetic of the Accademia platonica, and thus to the unmistakably mystical and speculative aesthetic of Ficino."

Many centuries later, the cubists saw objects – and the human figure – as the superimposition of various images (corresponding to different points of observation). Dalla Chiara and Toraldo (1999) point out the consonance of that vision with that of the philosopher and mathematician Russell, for whom an object is the set of all its aspects or views, and write: "... we would stress that Russell's definition by abstraction ... was much less abstract than one might think at first. In fact, in just those years the cubists (Braque, Picasso) were beginning to realize this, sometimes representing their subjects by simultaneously showing various points of view, that is by superimposition."

Interesting observations also come from Lamberto Maffei's discussion (2007) of the painting of Jackson Pollock "...One might think that the works of Pollock are entirely chaotic with paint distributed randomly. Recently a physicist has amused himself by analysing those works, especially those of the last ten years, applying fractal statistics, and found that these are not at all chaotic but incorporate rhythms and structures that recur in an orderly way within the picture. ... If one observes the film in which Pollock paints a canvas laid out on the floor, one notices that the painter moves around it in an ordered, rhythmic way, as though executing the steps of some painter's dance of creation."

Another example of the interrelationship between scientific languages and artistic languages is the selected fact, which I spoke of in relation to the problems of the aesthetic fruition. The selected fact was, in fact, drawn from the mathematician Poincaré, first to explain certain psychoanalytical situations (Bion, 1963) and, more recently, to explain certain situations related to the impact of art (Magherini, 1989; 2007). In his book *Science et Méthode*, published in 1906, Poincaré had observed

that mathematicians, in developing a new formula and faced with set of facts that were apparently unconnected and extraneous, may be attracted by a single observation to which all the others facts seem related, thus allowing him to arrive at a configuration, a fully coherent set.

Dalla Chiara, Ferrari and Negri (2009) write: "...the discovery of structural similitudes in the semantics of the theories of physics and the semantics of artistic languages seems interesting as a source of understanding and could contribute to the creation of meaningful 'loci of interaction' between research in the sciences and in the humanities." They find a similitude between structural elements of quantum physics and elements of the fruition of art, noting that in the enjoyment of art it may occur that "the meaning of the whole determines the meaning of the parts and not vice versa." A meaning of the whole may be discovered through a selected fact, which, again, makes unconnected elements come together to form an integral and meaningful whole.

The comparative analysis of artistic languages and scientific languages, the structural similitudes between different disciplines, alongside the discoveries of the neurosciences, in particular the theory of mirroring, may shed light on some aspects of contemporary art. Mirroring could, in fact, have something to do with what the artist barely touches upon or includes in his work as an "intention."

As a concluding thought, we may observe that many disciplines – from philosophy to psychology and psychoanalysis, from the history of art to genetics, to neuro-aesthetics and the neurosciences – are now investigating the fascinating phenomenon of the creation and enjoyment of art. Some of these fields are concerned with identifying the anatomical loci - cortical or sub-cortical - through which information from the sight, hearing or reading of works of art passes. Particular attention is paid to how the emotions of the viewer and of the artist are linked to the nervous system. These studies in the anatomy and physiology of the creation and fruition of art belong to the fields of neuro-aesthetics and of the neurosciences, and their goal is to derive laws common to all subjects within the human species.

Alongside the prodigious developments of neurological and genetic research, progress continues to be made in historical, psychological and psychoanalytical studies as well. This research includes studies of: the power of images in general and of artistic images; the relationship in psychological and psychoanalytical terms between the artist and the viewer in the various forms of art from the visual arts to literature and

music. It also includes the experience from the fields of aesthetic education and art therapy; reflections on relationship between artistic languages and scientific languages; and those studies that can help us to better understand contemporary art. All of these culturally diverse efforts tend nowadays to converge on a common set of objectives, one of which is to distinguish the invariants from the variables. Invariance and variability in the phenomenon of the creation-fruiting of art, first given particular emphasis by psychoanalysis, is now part of the neuroscientific agenda (Gallese, 2007); this after demonstrating the existence of a enormous number of neuronal connections which are formed un each of us in the course of our lives on the basis of our own experiences. This, in turn, constitutes the basis, as Boncinelli and Giorello (2007) write, of individuality and, ultimately, individual liberty.

This very fertile sort of integration of such a wealth of findings from such diverse sources may prove to be enormously important in broadening our knowledge to encompass other fields, from the operation of our sensory systems to that of the central nervous system, from the relationship between the internal world and the external world in the experience of art to the promotion of health and the growth of personality in a modern educational system, and even to a heightened awareness of the biological basis of the individuality and the peculiarity of every individual and the recognition of the irrepressible spirit of human freedom.

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