

# Proceedings of the 2<sup>nd</sup> International Conference of the Journal Scuola Democratica REINVENTING EDUCATION

**VOLUME III** 

# Pandemic and Post-Pandemic Space and Time

ASSOCIAZIONE "PER SCUOLA DEMOCRATICA"



# Proceedings of the 2nd International Conference of the Journal Scuola Democratica REINVENTING EDUCATION

VOLUME III
Pandemic and PostPandemic Space and
Time

Via Francesco Satolli, 30 – 00165 - Rome, Italy

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Title Proceedings of the Second International Conference of the Journal "Scuola Democratica" – Reinventing Education VOLUME III Pandemic and Post-Pandemic Space and Time

This volume contains papers presented in the 2nd International Conference of the Journal "Scuola Democratica" which took place online on 2-5 June 2021. The Conference was devoted to the needs and prospects of Reinventing Education.

The challenges posed by the contemporary world have long required a rethinking of educational concepts, policies and practices. The question about education 'for what' as well as 'how' and 'for whom' has become unavoidable and yet it largely

remained elusive due to a tenacious attachment to the ideas and routines of the past which are now far off the radical transformations required of educational systems.

Scenarios, reflections and practices fostering the possibility of change towards the reinvention of the educational field as a driver of more general and global changes have been centerstage topics at the Conference. Multidisciplinary approach from experts from different disciplinary communities, including sociology, pedagogy, psychology, economics, architecture, political science has brought together researchers, decision makers and educators from all around the world to investigate constraints and opportunities for reinventing education.

The Conference has been an opportunity to present and discuss empirical and theoretical works from a variety of disciplines and fields covering education and thus promoting a trans- and inter-disciplinary discussion on urgent topics; to foster debates among experts and professionals; to diffuse research findings all over international scientific networks and practitioners' mainstreams; to launch further strategies and networking alliances on local, national and international scale; to provide a new space for debate and evidences to educational policies. In this framework, more than 800 participants, including academics, educators, university students, had the opportunity to engage in a productive and fruitful dialogue based on research, analyses and critics, most of which have been published in this volume in their full version.

### Pandemic and Post-Pandemic Space and Time A Premise

Papers in this third volume deals with the Covid-19 pandemic which is having an enormous impact on education systems worldwide. Policy makers, teachers, school managers, parents and students have been called to the reinvent their way of 'doing school'. At the same time, the governance of the education system and schools' organizations have been exposed to unprecedented tensions.

Within a short period of time, radical changes had to be introduced, simultaneously, at various levels of the school system. At national and regional level, there has been the need to rethink the way in which teachers are recruited, engaged and managed. National assessment and evaluation systems have been suspended or redefined in their uses by school actors The ways through which institutes were managed and organized had to be rethought, passing in a very short time through an on and off of dematerialization and hyper-normativity of time and space. Within schools, managers and teachers have been called to redefine the role of digital technologies in their didactic, as well as in their relationships with families and students. In some cases, these set of changes led to experience novel and unexpected daily proximities, in other prevailed a context characterized by distance and unsatisfactory relationships. Managers and teachers have been asked to re-invent their professionality to rethink their organizational, didactic and relational competences. Students and families, on their side, have been called to rebuild and reimagine new way of being at school, re-inventing the spaces and time of schooling and the way in which they relate among each other and with teachers.

The pandemic emergency has been a lens revealing intersections and structural tensions among various level and actors of the education system, but also allowing opportunities of changes thanks to the exogenous shock. At the same time, it must be considered that the emergency is interacting on pre-existing inequalities and contradictions. The pandemic clearly revealed the deep disparities of educational opportunities associated to students' life and housing conditions, beyond their access and uses of technological devices. Remote teaching and the enactment of an 'emergency didactic' has exacerbated learning difficulties for underprivileged students (children facing material deprivation, students with migratory background, students with special needs or disable, etc.). The interaction between the pandemic and pre-existing inequalities created different contextual conditions for actors' agency, orienting

toward different directions the pandemic's transformational potential.

Higher education systems have been affected too: in constant evolution due to constant transformations of society and changed functions of knowledge, universities have undergone a structural change along with pandemic times. Simultaneously, the growing relevance of knowledge for the economic development of the capitalistic system has profoundly affected higher education systems, characterized by the neo-liberal approach which his subject of increasing critical analysis.

However, Higher education systems are starting to be affected by other somewhat inevitable changing processes due to the evolution of knowledge and the consequent forms of its transmission. These forms have to be necessarily new both because of the availability of new instruments and the increased need to develop interpretative models of a constant and often unpredictable change. In this juncture the university might assume a renewed central role. At Higher Education System level, the growing use of digital instruments is envisaged in order to cope with the rising of the management rates of the training offer as well as to answer to the growing differentiation of user categories. A feasible consequence could be the increasing of the already pressure for the differentiation among the universities, with the related social implications.

At individual university level, it is foreseeable the demand for university involvement in tackling the problems of society and the economy will increase. And this at global, national and local level. From an organizational point of view the most significant feature is represented by the accumulation of traditional and new tasks that do not seem to be possible to manage. Whatever form the higher education systems will come to take, it remains that a central point to be clarified concerns the management of change. It will be the market that will impose its rules and the universities will organize themselves individually within the invisible enclosures that will guide their policies (with predictable growing social and territorial differences), or instead the State will choose incentive policies to direct its training system. It remains that in a condition of uncertainty and constant change the university's roles multiply and become – at least potentially - more and more central. It can therefore be argued that the university is not only called upon to respond to the demands of society but by elaborating answers and solutions to the problems it progressively affects the functioning of society.

We are fully aware that each educational experience produces specific results and definitions of teaching-learning practices. The well-established model of the magister teacher, based on a one-to-many transmission of knowledge, is complemented by new configurations of teaching-learning practices. There are

teaching practices that cultivate the ambition to combine the technological innovation with the psychological and pedagogical issues. Educational technologies, such as the Interactive Whiteboard, incorporate a new grammar and pragmatic in which the emphasis is placed on the involvement and the participation of the student, as well as on a "reverse teaching", compared to the traditional one. The diffusion of online educational platforms, based on algorithmic architectures and data-driven approaches, also draws attention to a personalized way of learning and a datafication of teaching. Digital technologies are therefore stimulating a series of transformations in the socio-material order of the class affecting the spatial and temporal configuration of teaching. At the same time, they are embedded in the complexity of the educational contexts that rework their practical and symbolic value.

In the European framework of strengthening the relations between the labour market and education, we also witness the implementation of teaching practices associated with the idea of knowledge as an economic and social investment. Recently, a large field of critical investigation has highlighted how teaching aimed at improving the employment prospects of students is deeply affecting public values in education. At the same time, different points of view in the educational field claim to postpone the transmission of skills related to the labour market to broader educational objectives of social inclusion and civic participation.

The new proxemics imposed by the current pandemic challenge traditional spatial configuration, from the arrangement of desks to the mobile use of chairs, from the forms of communication in virtual environments to the interaction in the classroom. Therefore, this is to register the need to re-elaborate the ecology of the educational practices, starting from the socio-material space of learning.

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# The Aesthetic Thinking. Reconnecting the Subject with the Reality, the Society and the Cosmos

#### Stefano Polenta

Università degli Studi di Macerata, stefano.polenta@unimc.it

ABSTRACT: In this paper, we will argue that the basic form of thought is the aesthetical form because it permits us to give meaning to our basic experience of reality. The basic human experience evolves aesthetically into a further 'mentalized' experience because a complex web of presymbolic operations (resonances, rhythms, transmodal interactions) and feedback is activated between the subject and the reality. This allows the experience of more sophisticated plots, as far as to reach the abstraction of thought. Indeed «knowledge is a product of art», as Dewey observes (1925, 273). The cognitive dimension of art, however, must not outshine its faculty to be in contact with the primordial meaning of being alive. Thanks to art we understand that «beauty is a grand fact in the universe» (Whitehead, 1938, 173). Starting from the «elementary contents of human life», from which it must never detach from, on pain of insignificance, art makes humans «aware of what it means to be alive. There is no other final end for this life» (Arnheim, 1954, 417). The current sociocultural context, however, does not allow us to see art as a foundational experience of the human-world-society relationship and reduces it to a type of self-expression. In the post-modern era we don't believe that life can create organic forms' with their own spiritual content and internal purpose, on which the romantic idea of art as a 'living form' (Schiller, 1906, 76) was based. This paper is intended to reconsider valid this perspective applying the epistemology of complexity and showing its educational implications.

KEYWORDS: Basic experience, Internal purpose, Creativity, Complex systems

#### 1. The problem

Which contribution can the aesthetic experience offer to the comprehension of reality, society and ourselves? And which contribution in the education field? On the one hand, art seems to play an important and pervasive role in today's society. On the other, its main functions seem to be the means of the subject's emotional expression in a subjectivist perspective or his/her possibility to experience moments of relaxation or excitement.

In both cases, the aesthetic experience is confined to a world apart that runs parallel to life experience, to the day's toil, to the true innovation, whereas science deals with them. It is indeed science that is connected with the world, while art seems to have a role of entertainment.

On many university campuses, those who study the humanities are often made to feel like second-class citizens. Einstein or Shakespeare, we seem to believe, but not both in the same room. This split is a fracture down the middle of our integrated humanity (Kauffman, 2008, 7).

Is it possible that art will once again take on a significant cultural and social value equal to that of science?

What is its role in education? Applying the epistemology of complexity as an explanatory and integrative basis of different disciplinary perspectives, in this paper we will try to overcome the distance between art and reality by arguing that artwork is not a mere surface on which the projections of the subject pour. Art is a living system, with an internal purpose that generates a profoundly transformative aesthetic experience by entering into complex isomorphic relationships with our mind.

## 2. The artwork as a 'living organism': from the deteleologization of nature to its rehabilitation in complexity epistemology

#### 2.1. Deteleologization of nature

The difficulty in the present world to think about the transformative potential of art depends on the 'deteleologization' of nature that took place since early modernity. Nature has been reduced to a passive matter capable of receiving any extrinsic determination (Spaeman, 2005). Whitehead (1925, 25-26) also points out that, since 1600 a new concept of reality has developed within the 'scientific materialism' for which there is only raw matter that is subject to forces which organize it from the exterior.

There is no implicit order in nature. The scent of the rose, the song of the nightingale, the brilliance of the sun, examples made by Whitehead (80), do not really belong to the experience, they are the result of our projections. Therefore they exist only in our mind, they are 'secondary qualities', as Locke defined them. The only qualities that really exist are the 'primary' ones: size, shape, motion, number, and solidity. So, Whitehead (ivi) observes: «The poets are entirely mistaken. [...] Nature is a dull affair, soundless, scentless, colourless; merely the hurrying of material, endlessly, meaninglessly».

At the same time that matter was dematerialized, the mind was dementalized (Bertalanffy, 1967, 96). If the human being is an aggregate of elements governed by laws, it is difficult to understand how he can develop intentionality, meanings, consciousness, 'qualia', which are the property of the entire living organism. All aspects of our life, including

education, lose their qualitative nature and are transformed into mere procedures that can be reconstructed in a technical-scientific way.

The artwork undergoes this reductionism in a particular way: once the concept of internal purpose disappears, the work of art is nothing more than an aggregate of parts deprived of any qualitative aspect.

#### 2.2. Art as the creativity of nature: Goethe

The approach is quite different if we conceive the piece of art as in Goethe: as an expression of the infinite creativity of nature, of which the artist is part. Apparently, the artist part himself/herself from nature to complete his/her own path of individuation, but instead, he/she continues to take part in the universal life and through the productions of the genius, is able to express his/her creativity.

Goethe's pantheism makes him believe in a consonance between the inside and the outside: nature and feelings are found in a primeval unity. The forces that move the poet inwardly and those living outward must be congener forces, belonging to the same world. According to this perspective, knowledge is never just something external and objective, it means participating in the universal life, and that's why there is no knowledge if not through fondness, affinity, congenericity (see Pareyson, 2003).

Knowing is not separated from feeling and creating.

Every rift has been overcome: artist and nature are part of the same reality. Artworks prolong nature, «they *are* the earth in one of its operations» (Dewey 1934, 3).

Another central concept of Goethe's thinking is that creativity is the secret plot that holds the parts together in that living whole that is the organism. Indeed «the corpse is not the whole animal», says Mephistopheles in *Faust*, because it lacks the fundamental element: life (Goethe, 2014, 49).

#### 2.3. Kant's compromise

Kant was perfectly aware that the idea of nature, if interpreted according to the causal-mechanistic perspective outlined in the first Critique – which validate an idea of nature as a cause-effect play that has no purpose –, was incompatible with the idea of finalism outlined in the second Critique. In the second Critique, however, finalism concerns only the moral life of humans and not the whole reality, while in the third Critique Kant tried to find finalism in nature consistent with the aspiration to finalism that is present in the human mind.

According to Kant «thing exists as a natural purpose if it is both cause and effect of itself» (1987, 371). How can such causality be explained? Kant gives the example of the tree (ibidem), which is different from a man-made thing, such as a watch (374). In fact, a watch does not organize itself, it is unable to produce other watches or replace its missing parts as it is produced by an external cause (the man who made it). When something is endowed with a natural aim, like the tree, there is a co-

production between parts and the whole because within an organism end and means are intimately linked: «everything is a purpose and reciprocally also a means» (376).

The reflective judgement is not a determinative judgement (in the sense of the first Critique), but rather stems from an analysis on the objects in search for the category of purpose (which therefore must be found, it is not given) (373). There are two types of reflective judgement: the aesthetic judgement, with which man seeks beauty in things, and the teleological judgement, with which man seeks a purpose in the object, in the nature.

#### 3. Artwork as complex system

#### 3.1. Artwork and complex system: similarities

The problem of finding a generative principle that cannot be reduced to a mechanism has given trouble to philosophers and, today, to the scholars of epistemology of complexity.

A system, in very general terms, is a network of relationships (an organization) that mutually binds elements. Unlike what would happen in a non-complex system, such as a local telephone exchange, where signals pass linearly from one node to another, in a complex system runs a particular form of causality called 'non-linear' (or 'circular' or 'non local') which puts all the parts in relation to each other producing 'a whole that is more than the sum of the parts'. The category of the 'whole' is an 'emergent property' of the system (Anderson, 1972), a characteristic that does not belong to the individual parts but to the whole system. Another way of looking at this is to say that the system is self-organized. The whole acts on the parts that cease to be mere mutually extrinsic parts and become 'parts of their whole' (Wertheimer, 1923). As we have seen already in Kant, in a natural organism with an internal end there is a co-implication between means and ends.

Let's think of how in a artwork each element is necessary and functional to the final result according to a logic that is not merely additive but organic. Furthermore the entire work 'retroacts' on the parts by guiding them in the direction of the final result. It follows that the same note, the same stroke of colour, the same word or even a sequence of words will have different meanings if placed in different artworks. «The creation of art [...] is not exterior composition by addition of elements [...]: a living body is not composed of scattered limbs [...] it is a small world in which all the elements hold each other and each other cooperate» (Pirandello, 1960, 134; 217-18). In a work of art, all the parts work according to the final result and this, retroactively, operates the selection and organization of materials.

#### 3.2. Co-evolution, processuality, historicity

Another salient feature of complex systems, especially living ones, is their constant interaction with the environment. While having organizational autonomy, they are 'open' (Bertalanffy, 1968; Maturana, Varela, 1980) co-evolving with the environment. The irreversibility of these interactions defines a path (Prigogine, 1979): complex systems have a history. The artwork becomes dense and valuable thanks to the challenges that the author must face to forge the *medium* according to his own intentions. «There can be no movement toward a consummating close unless there is a progressive massing of values, a cumulative effect» (Dewey, 1934, 137).

Pareyson recalls the metaphor of the artwork as a development from the germ to the organism, which dates back to Aristotle. He underlines that the epigenesis of the artwork is not guided by a mechanical necessity: the germ does not act with the elements in a rigid and predetermined way but, as in any living organism, it follows a creative path that is unpredictable a priori. So unpredictable that only when the work is finished, looking back, the artist understands that, in the uncertainty of his attempts, «every successful operation appears to him, once, as the only one that could have been done. However, to know it, he had to do it, and only by doing it he comes to know it» (1966, 23). The internal purpose that moved the work of the artist has taken on a 'living form'. For Pirandello the artwork is born when an image is installed in the artist's mind (no one knows why!) and when it creates the right movements to be expressed. The image can wander for its author, as happened in the *Six Characters in Search of an Author*.

#### 3.3. Density, articulation, stratification

A system can then be considered internally articulated and stratified.

Regarding the first aspect, there is not a connection among all of the elements, which would prove to be fragile and uneconomic, but there are intersections and hubs responsible for the connection between macroareas (Licata, 2011, 90). A complex system is often in turn formed by complex subsystems too, such as our organism.

By stratification, on the other hand, we mean that a system has different qualitative levels that generate many 'fields' reverberating in all parts of the system, and vice versa, according to the logic of a 'stratified determinism' (Weiss, 1969). The artistic form is not only a surface but, as a living system, it has a density, a stratification, an articulation.

#### 3.4. Artistic communication as isomorphism

Both our mind and the artwork, as complex systems, can enter into isomorphic correspondence. As Bertalannfy (1967, 100-101) points out, we can find structural similarities or isomorphisms among different systems. Thus, a biological system and the mind can be structurally considered the same thing. Gestalt psychology had already realized that

isomorphisms are triggered between the brain as a biological object and the mind. For example, the perception of a circle finds its parallel in a circular field of excitation, geometrically analogous, contained in the brain. But Bertalanffy observes (ibidem) that the geometric isomorphism outlined by Gestalt psychology (an idea postulated when a systems theory was not yet available) is rather naive.

Therefore, between structurally similar systems, correspondences can be triggered between the salient properties of one system and those of another. Weiss (1970, 162) uses the term 'specificity' to refer to «a sort of resonance between two systems attuned to each other by corresponding properties».

We can assume that the aesthetic experience is the result of this flow of resonances that allows us to 'empathize' with the structure of the work. To use simpler words, it is as if our mind was in tune with the structure of artwork by making a 'mapping' of it and recreating the structure of the work in its own phenomenological experience, and thus, becoming similar to it. We 'embodies' the structure of the artwork. On this matter, the applications of the discovery of mirror neurons to the artistic field are interesting. They reconsider the controversial theme of empathy and show us, with elegance and simplicity, how the 'intentionality' of the artwork can 'resonate' with our mind thanks to the activation of mirror neurons (Gallese, Freedberg, 2007).

#### 4. The renewed centrality of art in Dewey and its educational value

In the writings dedicated to art, Dewey reaffirms the idea of art as a development from the embryo to the complete organism. This development, despite being the result of an interaction with the environment, is governed by an internal purpose. Infact a artwork, to be such, cannot obey external needs (functionality, practicality, the need to excite, to shock, etc.) but must find in itself the reasons for its development up to its completed form. This is why «this esternality may [...] be regarded as a definition of the non-esthetic» (Dewey, 1934, 198). The artwork only obeys itself.

For Dewey – in whom Hegel's anti-dualist lesson remains alive – art does not concern only the subject, but the subject and the object in their transaction (1949). Dewey defines this constant relationship between man and the environment as experience. While having to submit to the constraints of reality, the man is a 'vital centre' of the universe (1929a, 419), an active pole that struggles to regain balance in the face of the challenges to which reality subjects him. Art marks precisely those moments in which harmony with nature is regained. They are 'celebrative' moments because they indicate that, after all, «there must be, in spite of all indifference and hostility of nature to human interests, some congruity of nature with man» (Dewey, 1934, 185). But they are also 'incremental' moments, because – according to a 'continuist' and

'cumulative' logic that recalls the immanent development of the Hegelian spirit – any reconquest of harmony is never a mere return to the previous stage but a reaching of new and more extended balances, of an enlarged vitality.

For Dewey, therefore, "experience [...] is art in germ" (1934, 19). It truly becomes aesthetic when it allows the artist to achieve a new balance and bring an expansion of vitality. When used to achieve a broader vision, mental activity such as feeling the mysterious rhythms of nature or being moved by the sociability of animals, is already an aesthetic experience. We will pick up this topic later.

Furthermore, since Dewey starts from the unity of subject and object, the creative expansion that characterizes art does not only concern man but, in some way, also nature itself: man, thanks to his own capacity for creative imagination, develops the potentiality of things by placing them in new relational orders (1929a, 381). So, Dewey affirms, with an almost romantic spirit, that "the belief, and the effort of thought and struggle which it inspires are also the doing of the universe, and they in some way, however slight, carry the universe forward" (420).

In Dewey there is a revival of the Goethian idea of man as a successor of the creativity of nature. «Art thus represents the event nature of as well as the culminating climax of experience» (IX). «Art is nature that thinks», we could say. Art already contains the 'thinking' because it gives the opportunity to experience the ineffable primary qualities of which the world is made. Even «knowledge is a product of art» (382) because it permits us to get in contact with these qualities and develop their potential by including them in new relationships, leading to 'new' experiences.

In the educational field, for Dewey, the attainment of a purpose should never be separated from aesthetic appreciation. Dewey notes, for example, that children will love literature if they enjoy it aesthetically, otherwise they will develop the ability to read in its narrowest meaning as the ability to recognize, pronounce and combine words together. They won't however develop the behaviours that will direct the use of this same capacity in one or another direction. (1929b, 59-64). For Dewey, in fact, the aesthetic experience is 'final', it is not 'instrumental' for further purposes. Means and ends for Dewey must not be seen as separate, on the contrary: it could even be said that ends are but totally realized means (ibidem). The separation between means and ends leads, on the one hand, to 'emptying' the ends and, on the other hand, to the inability to fully understand the means itself and to conceive new means to achieve qualitatively different goals. Therefore, without the 'internal purpose' included in every aesthetic-imaginative experience, even the 'purpose' for which something has been learned would not be able to be understood specifically, it would not have further developments or be applied to specific cases.

It is the imagination that allows us to source from an intimate understanding of a situation in all its dimensions, and to create symbols and then translate them into specific meanings related to a more restricted activity. Last but not least, the aesthetic imagination allows us to achieve a meaningful life, which is the ultimate goal of education (1916, 271-277): to live fully.

#### 5. Aesthetics as a primary form of learning in Bion

The ability to connect things into a new orders of relations that Dewey attributed to the human mind – and which finds its original expression in aesthetic experience – is also found in Bion's psychoanalytic thought for whom knowledge is relational, it is a form of 'bond'. Relationships need to be established, this is the job of the human mind. From relationships emerge the symbol (from the Greek *symbállein*, 'to put together') which is a form of bonding. The first form of thought is the oneiric one, which will then be followed by the abstractions of thought (1962). For Bion we dream even when we are awake because dreaming already involve a symbolization of emotional experience. Even the aesthetic imagination is one of the earliest forms of organization of experience.

#### 5.1. False learning

In order for a symbol to emerge it is necessary to rely on the range of the imagination and wait for it to coagulate into rational conjectures. We must wait for when «a pattern begin to emerge» (Bion, 1980, 11). To allow the imagination to run its course it is necessary what Bion (1970) defines – with Keats – 'negative capability', or willingness not to saturate the unknown with the known, the capability «of being in uncertainties, mysteries, doubts, without any irritable reaching after fact and reason» (Keats, 1899, 277). Vice versa the inability to tolerate the unknown, placing the control of the known before it, leads to a 'negative capability' (Keats) that dry out all experiences. Things are 'thought' but not 'known'.

Fromm (2008) similarly distinguishes a learning according to the having mode and a learning according to the being mode. In the first case with content does not become part of [student's] own individual system of thought, enriching and widening it. Instead, they transform the words they hear into fixed clusters of thought, or whole theories, which they store up. The students and the content of the lectures remain strangers to each other» (24). There is acquisition, but not transformation, because the deep core of the personality is not involved in the learning process and it is limited to collect information or 'structures of thought'. The student's in the being mode of relatedness to the world

receive and they respond in an active, productive way. What they listen to stimulates their own thinking processes. New questions, new ideas, new perspectives arise in their minds. Their listening is an alive process. [...] They do not simply acquire knowledge that they can take home and

memorize. Each student has been affected and has changed: each is different after the lecture than he or she was before it (25).

#### 6. Aesthetic dimensions of the relationship in the Infant Research

The aesthetic qualities of the basic relational experience brings to mind the relational density between child and caregiver described by Infant Research with the use of 'dynamic-aesthetic', terms that emphasize the role of 'rhythmicity' (Sander, 2008), of 'harmonious coordination' (Sander, 2008) and of 'interactive dances' (Stern, 1985) between caregiver and child, and emphasizing also the role of 'forms of vitality' (Stern, 2010) or of 'heightened affective moments' (Beebe, Lachmann, 1994).

In the earliest and most fundamental relational experiences, the 'how' of the 'what' counts more. As in a work of art, in which 'style' is priority over 'content', the 'form' of the relationship is the index of underlying dynamic-qualitative processes, of a harmony existing between the different forces in game. Good interaction is visibly aesthetic.

#### Conclusions

The aesthetic experience is the first and fundamental form of relationship with the world. The primary qualities present in reality are, with aesthetic experience, recognized, accepted and developed in further qualitative experiences. Art, as Goethe thought, is a continuation of the creativity of nature. Man's 'thinking' is part of this process. Art invites us to recognize that thought is defective, if not false, if it does not recognize itself as indebted to the primary qualities present in nature, if it places itself in a position of domination rather than respect and relationship, if it refuses to develop them according to their internal purpose, if it is not animated by authentic creativity. The sense of displacement produced in us by certain works of contemporary art derives from the lack of recognition of this link. The conception of aesthetic appreciation in terms of the projection of the subject's emotions on an 'artistic' object hides the primordial relationality of art and casts a nihilistic shadow on the aesthetic experience. Aesthetics marks every authentically evolutionary relationship, as can be clearly seen in the musicality of the first care relationships highlighted by Infant Research.

If aesthetics is a form of relationship then everything is aesthetic: «the fire-engine rushing by; the machines excavating enormous holes in the earth; [...] The tense grace of the ball-player infects the onlooking crowd; [...] the delight of the housewifein tending her plants» (1934, 5). Mental experience itself is aesthetic when it is an expression of such a form of respect. Being aware is already an aesthetic experience. Keats wondered, in this regard, about his lack of existential understanding:

I am however young writing at random – straining at particles of light in the midst of a great darkness – without knowing the bearing of any one assertion of any one opinion [...] May there not be superior being amused with any graceful, though instinctive attitude my mind may fall into? [...] our reasonings may take the same tone – though erroneous they may be fine – This is the very thing in which consists poetry» (363).

The «aesthetic significance», suggests Whitehead, with which we conclude, gives us «the sense of external reality» allowing us to understand that at the basis of specific qualitative experiences there is a more basic experience: «the large-scale feeling as to the totality» (1938, 150). It precedes any qualitative discrimination. Is the experience of a «vague grasp of reality» (ibidem), the sensation that there is «something that matters» (159) out there. «The primary glimmering of consciousness» (ibidem) comes from that.

This understanding is aesthetic.

For example, take the subtle beauty of a flower in some isolated glade of a primeval forest. No animal has ever had the subtlety of experience to enjoy its full beauty. And yet this beauty is a grand fact in the universe. [...] then our sense of the value of the details for the totality dawns upon our consciousness. This is the intuition of holiness, the intuition of the sacred, which is at the foundation of all religion (164).

Also for Dewey the aesthetic experience allows us to touch the primordial meaning of being alive and it is for this reason that art is related to the religious (Dewey, 1934, 28-32).

There is always a vague 'beyond'» (Whitehead, 1938, 7) and art allows us to grasp it. This is the reason for what «we must grasp the topic in the rough, before we smooth it out and shape it [...] One function of great literature [is] to evoke a vivid feeling of what lies beyond words» (ibidem). Aesthetic significance is that which gives us the «sense of external reality (165).

Even if this primordial qualitative experience remains in the background, it should not be hidden, as happens in epochs of decadence: it constitutes «a drive towards some ideal, to be realized within that period» (164).

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