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EMERGENCE AND PARADOX CAMOUFLAGE IN CONTEMPORARY ARCHITECTURE. THEORY OF EMERGENT THREE-DIMENSIONAL SYSTEMS

Emergence (Latin *emergere* – to emerge) is a philosophical notion which says that a higher degree of being is formed by the emerging qualities of lower degrees of being. Deeper layers of consciousness take part in the emergence of novelty. Synergetic interaction in the synectics of a creative process intensifies the creative symbiosis of various layers. Synergy is one of the forms of emergence which is a common way of creating cities and architecture.

Keywords: emergence, space, aesthetics

*The formal negation of order is also
a form of order.*
Roland Barthes

Dispositioni – discorso

Today's architecture defines our contemporariness. Architecture has always been a spatial expression of the time of its formation. Yesterday, today and tomorrow, architects built, build and will build their theories, ideas and works. The ideas of architecture have always been created for the given *original present*. The thesis of today's theory of architecture as *an art of space* (*Raumkunst*) is the idea of integrating technological means with the objectives of aesthetics and social ethics. This thesis includes the past, the present and the future of architecture. Whether the spatial expression of an architectonic idea or the idea itself is adequate – synonymous with the expression of time is a question which concerns the theory of architecture, the development of an idea over the span of centuries. Speaking of the development of architectural ideas, we can say that *originality* has always been the most important category of the aesthetics of architecture. The historical originality of every epoch is an aesthetical category expressed by the originality of creators in a given epoch. Significant works of architecture have always been unique and outstanding provided they communicate the idea of time – they are *Signature Architecture* standing out above the mediocrity of a given period without any ideas. The present has always depended on the future, therefore the past and the future will always build the future. There is no future without the present or the past. It is the basis for the thesis about the continuous development of architecture. The genuine creator of architecture never dissociates himself from his predecessors' forms. The contradiction of architecture in a given era in relation to previous epochs is the expression of the constant movement and historical changeability of time and architecture. Even though Einstein said that *time is just what we*

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read on the clock, we know that everything develops and evolves in life and art as well.

Architettura contemporanea

Today's architecture – in the larger part of its contemporary spatial expression – results from our present, the development of our economic, technological and social being. A question about the contemporariness of our architecture is bound up with the last decade of the 20th century and the first decade of the 21st century. With the breakdown of retroactive postmodernism, powerful drive at overcoming all the rules related to the reappearance of the past in arts appeared. The birth of a generative design for the future was much easier thanks to the progress of the computerization of an entire economic, technical and aesthetical complex connected with the technological progress of time. The rules of the analogue world were transformed into digital rules. The technology of analogue design still belongs to the craft of classical *Techne*. The Euclidean axiomatic postulate of *two parallel lines converging in infiniteness* was removed from geometry and replaced with "hyperbolic geometry" and "elliptic geometry". The theory of double helix (*Doppelhelix*) became the genetic basis for the new alphabet of the geometry of polymorphic forms. It may be exemplified by the architecture of "Urban Planet" at Expo 2010 in Shanghai. At AA School of London, by means of digital technology, Zaha Hadid introduced peripheral vision between a game and an allusion, a style and a quote, new identity where cryptography (masking an aesthetic message – paradox camouflage) plays an important role. The high concept – a digital animation spectacle – changed contemporary architecture from analogue to digital. Today's architecture is mostly created by major computer programs. Hence the unification of the paranoid park of generative architectural design. These days, an architect is a scientist who dislikes the role of a romantic genius concentrated on him and dissociating himself from his predecessors' impact. He is the author of research papers who perceives the technological space of his architecture in a modern way.

Argomenti contemporaneamente

The architecture of the first decades of the 21st century will be characterized by a constant contradiction inside a philosophical and emergent spatial system, between *emergent order and generative computer design* in an architectural space. Emergence is a new system of philosophical thinking which tells us that higher levels of being are formed by new qualities which emerge from lower forms of being. In the context of fine arts, emergency asks us about the position of an author – a creator, the role of emergent systems in the pursuit of transcendentality in undefined planes of layers which give disposable character to creative shaping. Emergency enables us to notice things in the discourse of emergent spatial systems from the perspective of the fundamental notion of universality. Thinking emergently, we return to the sources of our subconscious and the roots of our consciousness. The notion of emergence is crucial for the explanation of such aspects as *creativity and novelty* – relations between a concept and its dynamics which raise an architectonic design onto a higher level of objectivity. Emergency as a phenomenon of high intellectual complexity generally defines the appearance of a new, unexpected quality related to a change in the conditions (*Zustandsänderung*) formed of features integrating aesthetic elements in the hidden and unexpected layers of our consciousness. This problem is illustrated by an old myth of transcendent emergency discovered by Goethe (the fall upwards – *der Fall nach oben*). Thus, emergence lifts some secret elements of the sense-making units of aesthetic sensations (*Sinneinheiten* – Edith Stein).

The element of *synergy* plays the generative role in this process. Synergy means the interaction of various design units for the solution of a problem in the synectics of a creative process. Synergetic interaction intensifies the symbiosis of various forms of being in the layers of the subconscious. A form is built by deeper layers of consciousness (romantic version – the dark versus the daylight). Synergy is one of the forms of emergence in the process of the formation of an emergent architectonic space.

Dialettica contemporanea

The notion of emergence tells us that "a whole is something more than the sum of all its parts". This complexity of identity, where every detail is subordinate to the central perspective, together with doubt (a flock of flying birds), forms *emergent order*. So, the form of emergence is expressed by the synergy of aesthetic activities. The problem of its origin is "something more" – this synergetic intensification explains the idea of emergent order. There is "something more" in synergy which produces elements of the highly-organized forms of complexity. In the early Renaissance (13th century), Fibonacci explained emergent order (*Fibonacci sequence*). It was distinguished by the fact that the sum of the second power of two consecutive numbers always made a *Fibonacci number* (e.g. $2\times2 + 3\times3 = 13$). Fibonacci sequence begins with 0 and 1; every further number is the sum of two preceding numbers (0, 1, 1, 2, 3, 5, 8, 13, 21 etc.). Kepler discovered that the quotient of consecutive Fibonacci numbers made the *golden division* whose proportions are perceived aesthetically (e.g. 21 /13 = 1.618). Thus, the ratio between the neighbouring members in the Fibonacci sequence is the aesthetic ideal which makes the aesthetic principle of the construction of nature (it mathematically describes the structure of every thing, e.g. a sunflower). The sequence of Fibonacci numbers, which includes the principle of symmetry, is logical and aesthetical, and it discovers the principle of the construction of things in the surrounding nature – it is emergency for an aesthetical theory where logics, nature and aesthetics unite into an inseparable whole. At the first stage of the development of research on emergency, *the system theory (Systemtheorie)* appeared in the previous century and defined a system as an ability to build the identification of changeable elements. The system theory gave birth to the organization theory (*Organisationtheorie*) whose starting point is orientation – it explains and defines every phenomenon through its internally related things and their attitude to the surroundings (inside/outside exchange). We describe the external surroundings with the notion of environment. The terminological shift from "whole-part" to "system-environment" emphasizes the paradigmatic exchange of notions. The general system theory tells us about the origin of order as an organized structure which counteracts entropy – the formation of the so-called islands of "negative entropy" where elements of aesthetic information increase instead of decreasing (the problem of reductionism). Emergent order is born when a relationship between the inside and the outside takes over the ability to create *order out of order* (Roland Barthes) by input and output in the form of a model of open systems. In order to build the internal organization at the cost of the order of the surroundings by gathering materials and information from the surroundings-environment-context (input) and to give disorder to the environment (output), *order out of disorder* – distortion or damage done to order (inside-outside deconstruction) – appeared in the 1980s. These days, distortions and deformations of architectonic forms express a pseudo-liberation psychological system entitled *Free choice stimulates free imagination*. World companies promote the slogan *We realize every form*. This possibility of choice without any economic or constructional limitations is

the starting point for architecture today. They forgot that only limited choice in the organization of aesthetic elements and creative discipline enables us to find a way to grand architecture. In his cult book entitled *Infinite Jest*, David Foster Wallace wrote: *Somebody once told you to forget what is chosen. Somebody once told you to forget that choice is the most important thing. So, you are searching in the dark*. In his philosophical lectures, Friedrich Schiller wrote: *Freedom is the sensibility of understanding a necessity*. In a quest for the significance of architecture, the creator's most important assignment is to define his limits of choice. The currency of our architecture is closely related to the euphoria of discovery and interest in the development of new *digital* production *(Techne)*. Old architecture's lover was its *gravity*; new architecture's lover is its *lightness*. Deliverance of architecture from gravity, from the pressure of its materiality means deliverance of architectural space. The psychological idea of the paradox intention of the gliding lightness of forms comes from futurism. In his manifesto, Marinetti wrote: *Space is our enemy who should be put to death by fastness and acceleration*. Today, this futuristic vision seems current again. It is exemplified by the Japanese office SANAA. Its founder is Kazujo Sejima, the first female architect to act as the Secretary of this year's Biennial of Architecture in Vienna (architects of New Museum New York, Design School in Essen and Pavilion Kensington Garden in London). The pavilion has got poetic expression derived from material freedom. Visual transparency produces an illusion of a form dispersed in the fog of the blurring effect and gliding over the park. Technical modernism uses tools and materials to an unheard-of extent of their durability, experiments and attempts to find out how far a form can be extended. It produces the aesthetics of double material strategy – the hyperpresentation of a form, and formal disorientation – deliverance from its rela-

tionships of meanings. This phenomenon of *technical modernism* – productive aesthetic destabilization of the sense of a form as proof of "new dynamics" is expected to show that everything can be movable and changeable – a static space and its dynamic structure. It may be exemplified by the museums of Mercedes and Porsche in Stuttgart and of BMW in Munich. The supermodernists of contemporary architecture propagate the philosophical theory of *spatial inclination*. New freedom from architectural principles does not know such notions as a wall and a floor, top and bottom anymore. Instead of the ground under the feet – inclined ramps, the sensation of a gliding space and aesthetic bewilderment with unstableness. The theory of dynamic life on an inclination – a new entity and movement in space without balance is the conceptual factor of inclination – volumetrically gliding and non-tectonically melting forms. The masked lie of liquidated gravity gives contemporary architecture the form of an art demonstrating the mask of a theatrical excess in the economic capitals of the world. This paradox of sensible senselessness – constructive falseness takes on the dimension of aesthetic sense as a carrier of material technical limitlessness.

Synaesthesia

The theory of emergent spatial systems is also caused by an immanent need for the further development of philosophical and scientific research in the field of the aesthetics of architecture. This *metafisica schiarita* – enlightening philosophy of emergency generates some hidden aesthetic forms and – by integrating extended computer programs – takes part in the creation of *generative designs*. Computer programs serve as transformers between reality and unreality. Hence architecture as a product of a generative technical process whose creative element is the philosophical and computer fiction of *the second reality* (future mimetic teleputers). For an architect,

to work in two spiritual states means to think in the categories of reality and fictional reality – in programs simulating another consciousness. Philosophers called this problem science fiction. Creative inspiration for this kind of dualism in thinking leads us to new analogies, while new analogies discover new forms. Cognitive psychology tells us that a creative idea of *novelty* always means the invention of a new analogy. Our emotions and experiences are the key to new analogies. Our subtle and complex states make music which accompanies our lives. Our feelings are as individual as musical phrases which lead to the transcription of a musical form by concentrating internal layers of emergences. It could be exemplified by James Cameron's digital film "Avatar". The fantastic virtual world where elements of reality are mixed with elements of fictional unreality: Pandora's paradox camouflage where layers of the future are laid on layers of the present and analogies of the past in the shape of flying dragons from Luc Signorelli's frescos in the San Brizio chapel at the Orvieto cathedral. Focus on a proper level leads to intellectual transcription and the structure and logic of a form. The contemporary terminology of emergence is also related to the virtual structure of cyber-space. Our memory is integrated in our consciousness surrounded by external reality. Contrary to external reality, we are aware of our internal, imaginary *fictional reality*. This emergence as well as synergy are parts of today's aesthetic research in the pursuit of new architectural trends through the prism of the fiction of *probable reality* in connection with selective aesthetic information on two realities of a creative process. By *intertextual mix*, the alienation of aesthetic elements, the changeable context of time and details, compositional distillates of new reality are formed, while generative computer design, the enigmatic alienation of computable identities, the changeable context of time and place may give birth to new emergent order. A generative architectonic design grows from the emergent order of spatial systems whose quality is revealed in hidden – masked layers of the sense-being of aesthetic elements with the help of the technique of *paradox camouflage*. Can this secret sense in things be the camouflage of the emergence of deeper layers of our aesthetical consciousness?

Paradox camouflage

In the past, the essence of beauty as the aesthetic aspect of life was a search for the ideal whose immanent truth was manifested by the beauty of good and truth (ethical and aesthetical values). The present is a wide space which reaches deeply into the past and the future, so confrontations with the past are also confrontations with the future. At present, life and art are fiction; there is no real borderline between art and reality. We all believe that we live in fictions, that art is reality and that reality is art (hence the crisis of arts). When reality became fiction (Andre Breton), in the era of apparent rationalism, the idea of paradox camouflage – the idea of masking (symbolism and then surrealism) was formed. Tearing a mask off the façade, we get closer to the truth but – in order to discover it – we must traverse all possible fictions. Fiction is the antithesis of our external reality. Art is the sense of fiction, fiction is the sense of art. A fictitious imitation of reality arouses an enigmatic illusion of a game which often results in forms resembling dummies. Illusionists are the masters of imitation and deception (complex of mimicry – similarity). Camouflage as fake identity is the unusual beauty of aesthetic schizophrenia in arts, while an appearance of similarity is a psychogram of associations that an appearance may be consciousness. Questions arise: could T. Adorno's negative dialectics be revolutionary? Is the formal negation of order turning into new, emergent order? Our image of ourselves is camouflage already. Roland Rumsfeld is the creator of this thesis: *As we*

know, there are things we know, and we know that there are things we do not know; there are also things we know but we don't know that we know them. We could suppose that emergence and camouflage are contrary aesthetic positions. Elements of paradox camouflage may grow from emergent systems just like we may discover elements of emergent spatial systems in the paradox of a mask. It may be exemplified by the emergent space of the Office of the Chancellor Axel Schultes in Berlin; Old People's Home "Bird Song" designed by the author in Wermelskirchen; and Villa Olajossy designed by Dariusz Kozłowski in Lublin. Spatial camouflage in these designs uses the paradox of spatial juxtaposition – opening and closing an enigmatic spatial structure. The designs are camouflaging sculptures with a functional aspect where the aesthetic principle seems to be beyond the function. Kozłowski's paradox is historically compatible with Krakow's symbolism which tells us that time is the everlasting present as a synaesthesia of art and architecture. The research theory defines emergence as art, a multilayer event whose complexity is not synonymous with sense. To understand complexity, one must free oneself from the notion of sense. *Punctus contra punctum* – a counterpoint in *The Art of the Fugue*, Bach's last work, manifests his mastery, his principle of making intermingled structures of the highest brightness audible and transform a sensual experience into audible beauty. Bach's Latin titles speak of the construction of the canon of the fugue: *Canon per Argumentationem in Contrario Motu*. Higher emergent complexity results from continuous repeatable reversion of intervals in his music. Similarly, when we listen to Richard Wagner's music, we can comprehend its multilayer emergence in an abstractly liberated form. Here, emergence is a movable model of comprehension open to new recognitions in the potential of free thinking and feeling to discover the fictions of *probable reality* and overcome the habit of our external real rectangular reality through synergetic and synaesthetic experience.

Il futuro dei futures – intertext

These days, the theory and practice of the technique of generative design are getting nearer and nearer by the parametrical modelling of the complex geometries of self-controlling systems of computer programs, like in a designing and executing process. Algorithmic processes are factors of the development of emergent spatial systems. Discovery and invention are the vectors of emergence – thinking and acting in new forms of the organization of communication which bind and connect us across continents and change our space and us in this space. Everything created and exhibited today expresses a generative art responding to the world's mainstream. The culture of the present, "an entity and an event", the culture of now and here have become the most important phenomenon in modernism today. We discover the dimension of the tension of art as new identification of *the media truth* in demonstrative aesthetic operations of the global strategy. Architecture is an act of communication and a part of the expression of media systems. The theory of culture came up with a thesis that our culture is saying goodbye to the sensibility of modernism. The Internet commenced a new epoch of the information society. Browsers fulfil the functions of libraries. The model of a social communication network leads to the formation of the virtual World University. The flows of information through the cybersphere form a river of digital structure with a stream of words, sentences, sounds and images. Not space but time and its acceleration will make the principle of the elementary order of things. In an information society, the Net will take over functional systems, while very quick computing machines will be the basis for social forms in a game for the next generations. The philosopher Niklas Luhmann

worked out *the theory of the seeming objective*. Nietzsche's thesis "The end justifies the means" just tells us that the end exists so as to justify one's decision by the choice of the means. However, there are *seeming objectives* besides *sacred objectives*. A medially constructed official objective is an unofficial means of an official means for the realization of this objective. As a result, the system objective-means-camouflage, a programme of ethical and aesthetical deception means moral alienation from the surrounding environment. In this manner, the principles of choice themselves determine a decision (perversion of official media morality). A lack of values leads to the exploitation of seeming media and ethical objectives in an information society. The choice of seeming freedom turns into cultural anarchy, while negative dialectic – into cultural masked alienation. Architecture and the art of living are complex equations in numerous unknowns. Today, we must abandon the illusion that there are always some simple answers to complex worlds. In the economic capital cities of the world, contemporary architecture is becoming a medium for investors who treat capital and profit as a collective right to the social and aesthetic truth. In the role of capital deliverers, international investors feel like Florentine patrons in the first modern period of the Renaissance. Politics has lost many functions steering cultural life which is proven by the critical state of world culture. The World Wide Web propagates the right to gratuitous information in the category of *human rights*. This right is becoming a new product launched on the world market according to the principle of *information and culture for everyone*. The new aesthetics of intertext is born: spiritual property is getting transformed. Copying spiritual property from the Internet produces the right to free intertextual space and leads straight to intertextual aesthetics. It means quiet expropriation of an author from his copyright and the devaluation of creative contents. Many contemporary authors use an intertextual creative technique (hybrids of texts and aesthetic forms). Intertextuality uses transformation. In the past, the right to transform in art made sense if the transformation led to something really new. For 500 years between the Renaissance and classical modernism, people believed in the theory of genius as a creator's peculiar ethos. Since the beginning of the 21st century, this theory of art has been falling down. Art has become authorial – an author without the competence of a creator creates in accordance with the intertextual principle which in consequence will lead to the death of the author. They say that every style which uses intertext has got its anti-style, therefore every idea is the spatial expression of every possible formable idea (the style of intertextual aesthetics). Every *pop artist* accepts various identities and designs changeable authenticity of intertextual possibilities. Authenticity, however, is deconstructed by identity. In the future, everyone thinks, can and creates the same. Self-controlling machines are already replacing an author and a producer. At the beginning of our century, architectural design was degraded to a service – the same will happen to painting, sculpture and literature. Artists' assignment is to provide services to the society without any copyrights. All the publications on the Internet will be free of charge in the global library of knowledge and science. American universities are developing a new method of teaching – service learning. It acts as a bridge between aesthetic theory and social practice, as an agent in the transfer of the community spirit and develops the social responsibility of aesthetic education as the third mission of the universities in teaching and in theoretical research. Recalling Donald Rumsfeld's thesis, we have the impression that he studied at the Harvard of Schopenhauer who claimed, *Our objective is not to see what no-one have seen before but to look*

above what everyone can see, to think about what nobody has given a thought to. We could conclude that thoughts have got an emergent strength and are capable of reforming things.

The broad theme of emergence and the theory of emergent spatial systems connected with generative design is the result of some ruminations related to my latest experiences in practical architectural activity. It seems that they stand a chance of being an inspiration for the work of every young architect.

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BIBLIOGRAPHY

Corsmeier J., *Generativer Entwurf*, Build 4/2009.
Duerschke J. G., *The End of Art and the Art of the End,* Architektura No. 13/2007, Cracow University of Technology Press.
Esposito E., *Die Verbindlichkeit des Vorübergehenden. Paradoxien der Mode,* Suhrkamp, Frankfurt a. M. 2004.
Esposito E., *Die Fiktion der wahrscheinlichen Realität*, Suhrkamp, Frankfurt a. M. 2007.
Esposito E., *Il futuro dei futures*, ETS, Pisa 2009.
Hänsel-Hohenhausen, *Cogito ergo credo.* Essay, Frankfurter Verlag-August von Goethe, Frankfurt a. M. 2008.
Jeanmaire A., *Der creative Funke*, Ars Momentum, Zürich 2002.
Luhmann N., *Umweltlage, Sprache und Eigenständigkeit*, Politische Soziologie, Suhrkamp, Frankfurt a. M. 2010.