Architecture as Experience, Thessaloniki

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**ARCHITECTURE AS EXPERIENCE**

**- existential meaning in architecture**

Modern architectural theory, education and practice have regarded architecture as visually composed and aestheticised spaces, material structures and forms, and have primarily studied their historical, functional, technical and formal characteristics. These analyses have focused on architecture as physical objects and spaces and their geometric and compositional and symbolizing qualities, as well as the representation of these properties in drawings and conceptual schemes. As architecture does not possess a comprehensive theory of its own, the approach and method of research have usually been borrowed from other disciplines in accordance with changing interests and fashions. Often the applicability of the chosen theoretical and intellectualized framework has been highly questionable in the specific embodied reality of architecture, as for instance, in the case of the linguistic and de-constructionist theories.

ARCHITECTURE AND SCIENTIFIC CRITERIA

Although I am frequently introduced as a theoretician, I dare to question the feasibility of a comprehensive theory of architecture, due to the inherent internal complexities, contradictions and irreconcilabilities of this phenomenon. Through their relative artistic autonomy and focus, the fine arts are fundamentally less complex and contradictory in their ontological grounding than architecture. The inherent internal complexity of architectural projects was pointed out by my countryman Alvar Aalto in his inaugural lecture as member of the Academy of Finland in 1955. ”Whatever our task , whether large or small […] In every case, opposites must be reconciled […] Almost every formal assignment involves dozens, often hundreds, sometimes thousands of conflicting elements that can be forced into functional harmony only by an act of will. This harmony cannot be achieved by any other means than art. The final value of individual technical and mechanical elements can only be assessed afterwards. A harmonious result cannot be achieved with mathematics, statistics, or probability calculus”1. Aalto’s declaration, sixty years ago, of the supremacy of art over science, was a courageous statement concidering the fact that some of the most authoritative thinkers in Finland were in the audience; the world-famous mathematician Rolf Nevanlinna and George Henrik von Wright, the philosopher, who succeeded Ludwig Wittgenstein as professor of philosophy at the University of Cambridge, just to mention two. Aalto’s view of the integrating power of art has recently been supported by Vittorio Gallese, one of the discoverers of the mirror neurons, thirty years ago: ”From a certain point of view, art is more powerful than science. With much less expensive tools and with greater power of synthesis, artistic intuitions show us who we are, probably in a much more exhaustive way with respect to the objectifying approach of the natural sciences. Being human squares with the ability to ask ourselves who we are. Since the beginning of mankind, artistic creativity has expressed such ability in its purest and highest form”.2 This is the view of a contemporary humanist scientist.

The inherently unscientific nature of architecture arises from the fact that its practice fuses facts and dreams, knowledge and beliefs, rationality and emotion, technology and artistic expression, intelligence and intuition, as well as the temporal dimensions of past, present and future. Besides, it is simultaneously the means and the end; a means to achieve its utilitarian and practical purposes, and an end as an artistic manifestation, that mediates experiential, cultural, mental and emotional qualities and values. In short, architecture is conceptually too ”impure” or ”messy” as a phenomenon of human activity to be logically structured within a single theory. A theory of architecture sounds to me as impossible, and ultimately as useless, as a theory of life would be. As a consequence of its complexity, architecture is bound to arise from an iterative and embodied action, that fuses rationality and feeling, analysis and synthesis, knowledge and intuition, empathy and imagination, rather than from an inclusive theory and fully rationalised processes. There are surely theory-based and rational aspects and phases in the design process, but in its entirety the process is iteratively synthetic. Architectural design as a creative process in general is guided by a subjective and mostly subconscious ”self-piloting” action, and an immersive embodied identification with the concrete task, that fuses aspects of the multifarious irreconcilable categories, rather than an application of a theory-based rational, methodical and predictable procedure. Let me repeat, the design process is not a rational path, as it consists of countless and repeated deviations, dead-ends, new beginnings, hesitations, temporary certainties, and a gradual emergence of an acceptable goal as the result of the process itself. The structure and potential essence of the design task is gradually revealed as the design response emerges; questions and answers are formulated simultaneously in architectural and artistic creativity, and both are subject to the unpredictabilities of the creative process. Due to the essential existential content of architecture, its design cannot be a smooth rational problem-solving process. Like poetry, all buildings that move us, are usually closer to personal confessions than problem-solving. Also the most inspiring architectural texts are often personal and poetic evocations rathet than results of scientific research or proofs.

THE POETIC AND PHENOMENOLOGICAL APPROACH

The phenomenon of architecture has also been approached through subjective and personal encounters in poetic, aphoristic or essayistic ways, as in the writings of many of the leading architects from Frank Lloyd Wright and Le Corbusier to Alvar Aalto and Louis Kahn and further to Steven Holl and Peter Zumthor. In these writings, architecture is approached in a poetic and metaphorical manner, without any ambitions or qualifications as scientific research. These writings usually arise from personal experiences, observations and beliefs and they approach architecture as a poetic encounter and a projection of life, and their ambition is to be experientially true. I must personally confess, that these personal, and often confessional accounts, have valorized the holistic, existential and poetic essence of architecture to me more than the theoretical or empirical studies that claim to satisfy the criteria of science.

Historically there are three categories of seaking meaning in human existence: religion (or myth), art and science, and these endeavours are fundamentally incomparable with each other. The first is based on faith, the second on rational knowledge and the third on existential and emotive experiences. The poetic, experiential and existential core of art and architecture has to be confronted, lived and felt rather than understood and formalized intellectually. There are certainly numerous aspects in construction, in its performance, structural reality, formal and dimensional properties, as well as distinct psychological impacts, that can be, and are being, studied ”scientifically”, but the experiential mental and existential meaning of the entity can only be encountered and internalized.

During the past few decades, an experiential approach, based on phenomenological encounters and first person experiences of buildings and settings, has gained ground. This thinking is initially based on the philosophies of Edmund Husserl, Martin Heidegger, Maurice Merleau-Ponty, Gaston Bachelard and many other philosophical thinkers. The phenomenological approach, which acknowledges the significant role of embodiment was introduced into the architectural context by such writers as Steen Eileer Rasmussen, Christian Norberg-Schulz, Charles Moore, David Seamon, Robert Mugerauer, and Karsten Harries, for instance. I also believe, that the book *Questions of Perception* of 1994 by Steven Holl, Alberto Pérez-Gómez and myself, helped to spread this manner of thinking especially in schools of architecture internationally.

THE MEANING OF EXPERIENCE

The poetic and existential dimension of architecture is a mental quality, and this artistic and mental essence of architecture emerges in the individual encounter with and experience of the work. In the beginning of his seminal book *Art As Experience* of 1934John Dewey, the visionary American pragmatist philosopher argues: ”In common conception, the work of art is often identified with the building, book, painting, or statue in its existence apart from human experience. Since the actual work of art is what the product does with and in experience, the result is not favorable to understanding. […] When artistic objects are separated from both conditions of origin and operation in experience, a wall is built around them that renders almost opaque their general significance, with which esthetic theory deals.”3 Here the philosopher connects the condition of making a piece of art and its later encounter by someone else, as in both cases the mental and experiential reality dominates and the work exists ”nakedly” as a human experience. The philosopher suggests that the difficulties in understanding artistic phenomena arise from the tradition of studying them as objects outside of human consciousness and experience. Dewey writes further: ”By common consent, the Parthenon is a great work of art. Yet, it has esthetic standing only as the work becomes an experience for a human being […] Art is always the product in experience of an interaction of human beings with their environment. Architecture is a notable instance of the reciprocity of the results in this interaction [… The reshaping of subsequent experience by architectural works is more direct and more extensive than in the case of any other art [… They not only influence the future, but they record and convey the past ”.4 Here Dewey even assigns an actively conditioning role to architecture in relation to the nature of experience itself as well as to our understanding of the passing of time and history. I have formulated this view with the argument that architecture creates frames and horizons for perception, experience and understanding of the human condition, and consequently, instead of being the end product, it has essentially a mediating role. The true meaning is always beyond the material essence of the building.

The significance of experience has been grasped in other art forms, such as theater, cinema and music, but it has not been understood in relation to such material and utilitarian objects as buildings and larger environments. That is why I have taught architecture through examples and ideas in other art forms.

Couple of years ago, Professor Robert Mc Carter and I chose the above mentioned quote from Dewey concerning the Parthenon as an art work as the motto of our book which we had entitled *Architecture as Experience* to honor the philosopher’s seminal book. We ended up arguing two years about the title with the publisher, who finally used his contractual right and titled the book *Understanding Architecture* 5, which is, of course, a totally different subject matter and not in the interest of our book at all. Besides, this title sounds rather pretentious. This is a concrete example of the stubborn refusal, even today, of the experiential and mental dimension of architecture, and the continued emphases on rationality and intellectualization, ”understanding” over experience.

TIME IN ARCHITECTURAL EXPERIENCE

The significance of the time dimension and temporal experience has not usually been sufficiently acknowledged in studies of architecture as it has been as the art of articulating space. Karsten Harries’ statement on the mental meaning of time in architecture is significant: ”Architecture is not only about domesticating space, it is also a deep defense against the terror of time. The language of beauty is essentially the language of timeless reality”.6 The expression ”the terror of time” is truly thoughtprovoking.

Since Sigfried Giedion’s *Space, Time and Architecture* (1941) the art of building has been theorized in terms of the space-time continuum as defined in modern physics, but the dimension of time has also its independent mental role in our experience of life, the world and architecture. We have a deep existential need to feel rooted in the continuum of time as much as in space. We dwell in both space and time, and both dimensions are articulated and ”domesticated” for human purposes by architecture.

In the early years of modernity, the founding theoretical writings, such as Giedion’s canonical history of modern architecture, applied the Einsteinian space-time concept in art and architecture. Giedion quotes Herman Minkowski’s statement of 1908: ”Henceforth, space alone or time alone is doomed to fade into a mere shadow: only a kind of union of both will preserve their existence” 7. I have doubted this fusion of space and time into a unit in the arts and architecture, and am now convinced that it has been a mistake. The fusion serves the purposes of the notion of motion in the science of physics, but not in human mental phenomena. In lived human world time maintains its separateness as a fundamental experiential and mental reality, the reality of time. Karsten Harries statement above emphasizes the independent significance of time.

ENCOUNTERING ARCHITECTURE

The experiential approach focuses on the embodied and emotive encounter of the architectural reality and the experiencing person and mind, and in accordance with Dewey’s view, this actualizes the architectural dimension. The phenomenological method attempts to approach phenomena without preconceptions, and to identify with sensitivity and openness the emergence of emotion and meaning in this unique personal encounter. This experiential meaning is not a cerebral ”understanding”, as it arises from the necounter directly and spontaneously. Colin St John Wilson gives a convincing description of this rise of meaning. ”It is as if I am being manipulated by some subliminal code, not to be translated into words, which acts directly on the nervous system and imagination, at once as though they were one thing. It is my belief that the code acts so directly and vividly upon us because it is strangely familiar; it is in fact the first language we ever learned, long before words, and which is now recalled to us through, which alone holds the key to revive it”. 8Beyond its constitution in experience, architecture mediates between the outer world and the inner realm of the self, projecting frames of perception and ”understanding”. This interchange is necessarily an exchange: as I enter a space, the space enters me and changes me, my experience, and my self-understanding. In fact, today’s neuroscience maintains that our experiences actually change our brain and neural system. Mediation is essential in all art, and Maurice Merleau-Ponty states firmly: ”We come to see not the work of art, but the world according to the work”9. The philosopher’s view rejects the regrettably common understanding of art and architecture as artistic self-expressions. One of the greatest realistic painters of last century, Balthus (Count Balthasar Klossowski de Rola) makes a strong comment against artistic self-expressions: ”Artists usually speak about expressing themselves in their work – nothing like that has ever occured to me […] If a work only expresses the person who created it, it wasn’t worth doing […] Expressing the world, understanding it, that is what seems interesting to me […] Great painting has to have universal meaning. This is sadly no longer so today and this is why I want to give painting back its lost universality and anonymity, because the more anonymous painting is, the more real it is ” 10 This is an essential point: the meaning of art and architecture is outside of the work itself, and it always reaches beyond itself. A fundamental starting point in the experiential approach to art and architecture is the fusion or continuum of the physical and the mental, the outer and the inner realms, without categoric boundaries. Rainer Maria Rilke used the beautiful notion *Weltinnenraum* 11. In the endlessness of the universe, architecture frames our *Weltinnenraum*, our place, interior and domicile in both space and time, infinity and eternity. Merleau-Ponty tells us enigmatically: ”The world is wholly inside, and I am wholly outside of myself”12. This seems to point at the chiasmatic intertwining of the outer and the inner realms, the material and the mental, a kind of a Moebius strip, which has two sides but only one surface.

INTUITING ARCHITECTURE

Profound architects have always intuitively understood, that buildings structure, re-orient and attune our mental realities. They have also been capable of imagining the experiential and emotive reactions of the other. The fact that artists have intuited mental and neural phenomena, often decades before psychology or neuroscience has identified them, is the subject matter of Jonah Lehrer’s thoughtprovoking book *Proust was a Neuroscientist* 13. In his pioneering book *Survival through Design* (1954), published more than six decades ago, Richard Neutra acknowledges the biological and neurological realities, and makes a suggestion that is surprising for its time: ”Our time is characterized by a systematic rise of the biological sciences and is turning away from oversimplified and mechanistic views of the 18th and 19th centuries, without belittling in any way the temporary good such views may have once delivered. An important result of this new way of regarding this business of living may be to bare and raise appropriate working principles and criteria for design.”14 Later he even professed: ”Today design may exert a far-reaching influence on the nervous make-up of generations”15 . Thanks to electronic instruments such as the fMRI scanner, today, 65 years later we know that this is the case. Also Alvar Aalto intuited the biological ground of architecture in his statement: ”I would like to add my personal, emotional view, that architecture and its details are in some way all part of biology”16 The direct impact of settings on the human nervous system and brain has been proven by research in today’s neuroscience. ”While the brain controls our behaviour and genes control the blueprint for the design and structure of the brain, the environment can modulate the function of the genes, and, ultimately, the structure of the brain. Changes in the environments change the brain, and therefore they change our behaviour. In planning the environments in which we live, architectural design changes our brain and our behavior”.17 This statement by Fred Gage, neuroscientist, leads to the most crucial realization: when designing physical reality, we are, in fact, also designing experiential and mental realities, and external structures condition and alter internal structures. We architects unknowingly operate with neurons and neural connections. This realization heightens the human responsibility in the architect’s work. I myself used to see buildings as aestheticised objects, but for three decades now, architectural images have been primarily mental images, or experiences of the human condition and mind. I have also gradually understood the significance of the designer’s empathic capacity, the gift to simulate and empathize with the experience of ”the little man”, to use Alvar Aalto’s notion. 18

This interface between the material and the mental worlds is so fundamental that philosophers and neuroscientists, such as Alva Noë, increasingly see this continuum to constitute the human consciousness; our consciousness is not located in the brain, as it is out there, in the relation between our brain and the world. John Dewey argued thoughtprovokingly: ”the mind is a verb”19 I wish to argue that architecture is also a verb, as its true essence is always an invitation to action and specific guidance or choreography of that action. It is this verb-like tendency towards active search and exploration that unites architecture and the human mind. Architecture is always also a promise, a pledge, and an offer of human order, predictability and security, both physical and mental.

VISION AND THE EXISTENTIAL SENSE

Until recently, architecture has primarily been seen as a visual art form experienced and judged by vision. This view is expressed most notably by Le Corbusier in his credo: ”Architecture is the masterly, correct and magnificent play of masses brought together in light”20. He also spoke of ”the eye of truth” 21 The hegemony of vision has been pointed out by a number of contemporary thinkers, such as David Michael Levin and Martin Jay. I have also written extensively on the often forceful dominance of vision in the western industrial and consumerist culture 22, and argued that the directional sense of vision makes us observers and outsiders, whereas the omni-directional, embracing senses of hearing, touch, smell, and even taste, turn us into insiders and participants. We can also suspect that, the unfocused, peripheral vision is more important than focused vision for the experience of being in space, or the sense of participation and belonging. Already Walter Benjamin made the surprising argument that architecture along with cinema is primarily a tactile art form.23 Merleau-Ponty, finally, brought all the senses together in his understanding of sensory perception: ”My perception is [therefore] not a sum of visual, tactile, and audible givens: I perceive in a total way with my whole being: I grasp a unique structure of the things, a unique way of being, which speaks to all my senses at once”24. Yes, we sense by means of our very existence.

After having investigated the phenomenon of architecture for sixty years as an architect, writer and teacher, I have no hesitation in argueing today that our most important sense in architectural experience is not vision, but the extended haptic sense, the existential sense, our sense of bodily being and self. Architecture addresses primarily the experience of our embodied sense of being, of our experience of being in the world, rather than merely vision or any other of the five Aristotelian senses in separation. In Merleau-Ponty’s statement above, his expression ”I perceive with my whole being” seems to suggest such an embodied and unified existential experience.

It is becoming evident that we encounter and judge environments and architecture through our most synthetic sense, our sense of being and self. Merleau-Ponty’s notion of ”the flesh of the world” 25 makes this view understandable. ”Our own body is in the world as the heart is in the organism: it keeps the visible spectacle constantly alive, it breaths life into it and sustains it inwardly, and with it forms a system”26 We exist in this flesh of the world and grasp our existence through being part of that very flesh. Merleau-Ponty suggests poetically that Paul Cézanne’s paintings ”make us feel how the world touches us”27. I wish to add that architecture goes even a step further, as it enables us to dwell in the flesh of the world itself, not only sensing and touching it. Architecture gives us our domicile in this existential flesh, both physically and mentally.

Architecture also activates and strengthens our sense of self, as its experience is always individual, contextual and unique. Art and architecture seem to be always addressing each one of us individually. This is a consequence of John Dewey’s suggestions that the work of art is always an individual creation in experience. Besides, if I am unable to project meaning into my encounter with a place, space or building, there is really no architecture, just the physical setting. This is an absolute ”non-place”, to use the notion of Edward Relph. 28

EXPERIENCE IN LITERATURE AND ARTS

The imaginative experience of spaces and events experienced when reading a novel is a most impressive example of the capacity of our imaginative minds. While reading, we keep constructing objects, rooms, houses, cities and entire continents. And even more miraculously, we create the flesh, the reality sense, in which these events are embedded. We architects should study how great writers make us not only enter literary realities, but construct them in our imaginations. We need to learn to see, imagine and feel drawings as experienced and lived, but that calls for a capacity of imagination elevated to second power.Paul Cézanne argued that there are no lines in nature, only edges and boundaries, This inherent tactility is also true of architecture; all ”lines” in buildings are essentially haptic, not visual. As Jean-Paul Sartre argues, when I am reading Dostojevsky´s *Crime and Punishment,* I project my own sense of frustrated waiting on the character of Raskolnikov.29 The emotions in the artistic experience are our own emotions.

The capacity of literature to evoke and mediate experiences of spaces, places and situations, has been recently studied by Elaine Scarry: ”In order to achieve the ´vivacity’ of the material world, the verbal arts must somehow also imitate its ’persistence’ and, most crucially, its quality of ’givenness’. It seems almost certainly the case that it is the ’instructional´character of the verbal arts that fulfils this mimetic requirement for givenness”30 When I feel deep and moving melancholy in Michelangelo’s Laurentian Library, it is my own sense of *melacholia* that I am confronting, released and amplified by the embodied gestural language of the great architect. I can even say that I feel through the muscles of Michelangelo, as his buildings, shapes and profiles secretly gesture as if they were parts of a human body. The great gift of art is that we can momentarily experience and feel the world and ourselves as articulated through the sensitivity of a great artist. We can see with the eyes of Piero della Francesca, feel with the muscles of Michelangelo, hear with the ears Bach and feel through the heart of Rilke. This is the great gift of art to humanity.

PERCEPTION, EXPERCIENCE AND IMAGINATION

Perceptions are not experiences, as they are mere registrations of stimuli without contextualization, judgement and meaning. Sense perceptions interact with memory and imagination to constitute a full integrated experience with distinct connections and meanings. In architectural design work, the most demanding and valuable skill is to intuite or simulate the experience of the physically non-existent entity. Paul Valéry makes the following confession in his dialogue ”Eupalinos, or the Architect”, possibly the most beautyful literary work on architeture: ”He gave a like care to all the sensitive points oif the building. You woiuld have thought that it was his own body he was tending… But these devices were as nothing compared to those which he employed when he elaborated the emotions and vibrations of the soulof the future beholder of his work.” 31 ”My temple must move men as they are moved by their beloved” 32 , the poet adds later.

Again, intuiting the experience of a single form or object is relatively easy, whereas imagining the entire atmosphere or feeling of a wide and complex spatial entity calls for extraordinary imaginative skills. The imaginative and intuited experience calls for the capacity of empathy. The notion of empathy was introduced in the aesthetic theories of late 19th century, but it has been bypassed during the entire modern era. However, along with the current interest in experience, also the interest in empathy is now emerging, and in my view, it should be taught in architecture schools. It is not enough to imagine your own feelings , as you need to imagine the experience and feeling of the other.

It has taken so long to realize how we actually experience the world and architecture as a part of it, because we have been misguided by the view of our five separate senses, as defined by Aristotle 2350 years ago. We can point an organic, physiological organ for each one of our five classical senses, whereas we cannot point an organ for our atmospheric experience, existential sense, or sense of self, as they all arise from a synthetic understanding of being in the world. Even the blind and the deaf are able to experience their full embodied existence, which denies the irreplaceable value of vision and hearing. Steinerian philosophy categorizes twelve senses 33 , and one of them is the ego sense, the sense of self. The Steinerian thinking also identifies a life sense, and a self-movement sense, and , in my view, these three non-Aristotelian senses together constitute the existential sense through which architecture is primarily experienced. Besides, the received understanding of the functioning of the senses seems too simplistic and in the light of recent studies, often entirely wrong, but discussing this subject would take me too far from the focus of my lecture. The cardinal mistake is the prevailing understanding of our experience of the world as a picture. It suffices here to just mention that philosopher Alva Noë presents the dramatic question ”*Is the Visual World a Grand Illusion?”* in the very title of a book he has edited34. This is a shocking question for us architects to think about, but I must agree with the philosopher; the visual world is an illusion..

RELATIONAL PHENOMENA AND UNDERSTANDING ENTITIES

This gradual expansion of our understanding of the senses, their functioning and interactions, and the consequent changes in our understanding of experience, remind me of the problem of localizing human consciousness. In his book *Out of Our Heads*: *Why You Are Not Your Brains, and Other Lessons from the Biology of Consciousness* 35, Alva Noë argues that scientists have not succeeded in localizing human consciousness, because they have been searching its location in a wrong place – inside the brain. In the philosopher’s view – and I believe he is right – consciousness cannot be localized at all, because it is not a thing, but a relational phenomenon emerging between the human mind and the world.

I suggest that artistic experience is similarly a relational phenomenon between the poetic object and the experiencing mind. Atmospheric experience is a ”difficult” phenomenon, because it is a relational experience, not a definable , nameable or measurable object or ”thing”; It is a ”quasi-thing ” as Tonino Griffero suggests in his recent learned book *Quasi-Things: The Paradigm of Atmospheres”*36*.* It also arises from relations and interactions of numerous irreconcilable factors, such as scale, materiality, tactility, illumination, temperature, humidity, sound, color, smell etc., which together constitute the ”atmosphere”, or actually, our experience of it. We must confess now that all artistic and poetic experiences are similarly relational experiences, and their essences, meanings and emotive characteristics arise from a dynamic interaction of numerous factors and qualities with the human neural system and consciousness, to constitute an experience. The poetic and artistic experience also always activates our deepest collective and biological memories. Our experiences resonate with our personal and human histories.

An interest in the phenomena of atmospheres, ambiences, feelings, moods, and attunements, as well as in the understanding of the real multi-sensory and simultaneous nature of perception is emerging. This new interest in experience is shifting research from form and formal structures to emotive and dynamic experiences and mental processes, and from form to processes of becoming. It is evident that when the focus shifts from the physical reality and form to the mental reality and emotion, also the methodology of the study is bound to change. In the study of the experiential essence of art and architecture, relevant philosophical approaches, as well as an understanding and intuiting of perceptual and mental phenomena, memory, imagination and emotion are called for. In order to understand human experience, we must shift from the quasi-scientific processes of measuring to the courage and desire to live and confront architecture directly through our very act of living.

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The lecture is illustrated by a Powerpoint containing 66 images