

# Juhani Pallasmaa ‘TALKS’ with Students

Aurosa Alison – Juhani Pallasmaa

## Presentation

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In 1958, Le Corbusier had a lengthy conversation with architecture students, during which he discussed some fundamental points about the design process in architecture and the importance of experience (Le Corbusier, 1958). Rather than focusing on practical technicalities, he talked about topics that he felt were important for understanding people’s predisposition towards architecture, including the concept of disorder, the construction of dwellings, the nature of architecture, and the research workshop. Le Corbusier emphasized the importance of the architect’s personal involvement in the spatial and technical aspects of a project, and argued that without this experiential and aesthetic engagement with the natural, biological, and social elements of reality, an architect cannot truly design.

Michaël Labbé (2021) recently devoted a fascinating book to Le Corbusier’s peculiar conception of architecture, *La Philosophie architecturale de Le Corbusier. Construire des normes*. Labbé examines the relationship between beauty and utility in Le Corbusier’s architectural theory, and how he understood beauty as “a plastic emotion”. For Le Corbusier, spatial perception was not just a matter of reason, but also involved an aesthetic engagement. He believed that “architecture must touch”, and that this emotional experience could reveal the nuances of the atmospheric, phenomenological, and neo-phenomenological world that architecture has always evoked. Le Corbusier was not only a pioneer of an entire architectural movement – the Modern Movement – but also offered a *modus pensandi* and *operandi* for architecture, emphasising the crucial role played therein by aesthetic elements. The way he approached the students, through questioning and conversation, remains highly relevant today. It involves democratizing the learning process by exploring foundational themes in a collaborative way.

Inspired by the model of intellectual exchange demonstrated in this conversation, I also wanted my students to have the opportunity to engage with a leading figure like Juhani Pallasmaa. In the 1990s, Pallasmaa began to examine the role of perception in the spatial contexts of architectural and urban design, and he drew upon a wide range of authors and thinkers from diverse cultural backgrounds who shared an understanding of the concept of “experience”. Among his primary philosophical references were Bachelard, Benjamin, Böhme, Casey, Dewey, Griffero, Husserl, Merleau-Ponty, Schelling, Serres, and Wittgenstein. He also frequently referenced scholars in the fields of embodied cognition and neuroscience, such as Gallese and Mallgrave. This array of theoretical references makes Pallasmaa’s work a crucial point of reference for re-contextualizing architectural theory and recognizing the centrality of aesthetic and experiential sensation in design.

In this conversation with Pallasmaa, I have selected twelve significant questions from a public debate that took place on May 13, 2022, in Helsinki and on Zoom, involving more than two hundred students, researchers, and professors. I especially wanted to involve students from the Politecnico di Milano (DaStu) and the Department of Architecture (DiArc) of Federico II University in Naples. Together with Professors Gioconda Cafiero (Federico II, Naples), Antonio De Carvalho (Politecnico di Milano) and Gennaro Postiglione (Politecnico di Milano) we decided to open the meeting to students of all grades from bachelor, to master and PhD. The covered topics are diverse and numerous. The questions explore the theme of experience from different angles and perspectives.

The first set of questions in this conversation (1, 2, 3, 4) explore the relationship between sound and visual elements in architecture, and how Pallasmaa critiques the concept of ocularcentrism. In *The Eyes of the Skin*, Pallasmaa discusses various models of experience from a non-visual perspective, and argues that all the senses are necessary for a complete understanding of reality. In the chapter *The Body in the Centre*, he references Merleau-Ponty and emphasizes the importance of using the whole body as the primary receptor of space. These first four questions address issues related to ocularcentrism and the role of the other senses in experiencing architecture, as well as the critical topic of disability and how it can be addressed in design.

The second set of questions (5, 6) in this conversation deals with the issue of historicisation of time, or the centrality of ‘time’ in both architecture and cultural heritage theory.

The third set (7, 8, 9, 10) explores the concept of habitus by examining the relationship between public and private space, the image of the home as a reference point for both architecture and philosophy, the idea of the ‘primordial dwelling’ of animals, and the concept of clothing as an existential and bodily embodiment of space.

Finally, the fourth and final set of questions (11, 12) discusses the themes of silence and atmosphere, which bring the conversation to a close and leave room for considering new visions of the future of architecture.

Juhani Pallasmaa is a leading figure in the field of architectural theory due to his ability to integrate neuroscience, literature, philosophy, and mathematics in his work. His comprehensive approach to design and emphasis on the experiential aspect of architecture are highly relevant and influential. This conversation provided students with the opportunity to hear from a theorist who considers himself 'a reader', yet is widely respected for his insights on aesthetics, perception, and sensibility in architecture. By sharing this conversation with a wider audience, we hope to offer others the same valuable opportunity to learn from Pallasmaa's insights.

## Preface: The World, the Self and Design

Juhani Pallasmaa

The twelve questions I received touch on several seminal issues in the crucial understanding of architecture today. This understanding calls for the recognition of the grand systems of the world, but unavoidably, also for the recognition of ourselves as biological, cultural and mental beings. The questions are focused on the bodily, sensory, experiential and mental issues in the craft of building. The questions also indicate that there is currently a shift from the technical, intellectual, formal and aesthetic projections of architecture to its human, experiential, emotive, mental and biological dimensions. We tend to think of our buildings as sheer material and utilitarian artefacts, but we also structure our understanding of the world and our consciousness through our constructions. The buildings, roads and bridges which we build are also mental structures. They express our understanding of the world and we understand the world through our own constructions. This interweaving of our internal and external worlds makes it difficult to see and judge its relevance.

Architecture, as all art, is fundamentally relational and mediating; it is not about itself, but about human existence, our relations with the world, our own institutions, as well as with each other. We also experience and understand time through our own historicity; architecture materializes time and duration. Architecture and man-made landscapes also express our understanding of ideals, beauty and ethics. As a consequence of this unavoidable mirroring of our inner worlds in our constructed world, our mental worlds are in an essential dialogical interaction and they constitute a continuum from our private mental lives to our shared external lifeworld.

Today, architecture is facing its most severe situation since the beginning of the modern world. The traditionally essential and respected craft of architecture, which has projected mental worlds into the physical world, is losing its sense of self and cultural authority. I am using the word 'craft' to convey that architects of the industrialized world need to maintain their bodily and tactile contact with the processes of making. In our time, architecture is turning from an autonomous art into a technical and economic service.

Instead of structuring and providing hierarchies in our lifeworld, architecture has been directed to the service of estheticized investment and speculative construction.

Now that we are beginning to understand that our choices, priorities, and actions are causing catastrophes in climate as well as the natural world, also architectural thinking needs to be sensitized to the processes, principles and values of the natural world. The philosopher of biophilic thinking, Edward O. Wilson, the world's leading myrmecologist, points out our human ignorance as the cause of our global problems: "All our problems arise from the fact that we do not understand who we are, and we cannot agree on who we want to become".

## Conversation

### I – Ocularcentrism and Visions: Through the other Senses

1) *"A space is understood and appreciated through its echo as much as its visual shape". During the design process, sketchings or 3D programs help us visualise architecture. How could we design the audible component of space as we do with the visual one and incorporate it within the already existing sounds? And how could we combine the two (the audio and the visual)? (Architectural Design Studio, Polimi – Group 1 Sveva, Matteo, Gloria)*

Juhani Pallasmaa: I wrote about ocularcentrism (Pallasmaa, 2009) as the character of Modern culture, but I have increasingly recognised the role of all the other senses. Aristotle named our five senses. Some recent studies determine that we have over 30 senses. The understanding of sensory and communicative capacity is changing dramatically. Researchers have, for instance, recently revealed the chemical 'language' or communication of trees, and trees and fungi. We have also discovered areas in human communication that are not verbal. It was already established in psychological studies in the 1960s that 80% of human communication is non-verbal and unconscious. Therefore, a zoom contact, like the one we are having right here, diminishes our communication to the flattened visual image and sound, which is unreal. I am always dead-tired after a zoom lecture or conference, because the communication is so weak, as 80% has been eliminated.

However, the question concerned the role of sound. Aristotle classified the hierarchy of the senses from vision down to touch. Besides, the sense of vision has been culturally strengthened throughout human history, particularly through reading and book-printing since the middle of the 16<sup>th</sup> century, and nowadays with the digital instruments that we all have in front of us. The world becomes increasingly visual, and I would also say that our visual reality becomes increasingly focused. We are increasingly living in a world of focused vision. I have been writing quite a lot about the importance of peripheral and unfocused sensing. My current way of thinking is that our most important sense in architecture is our *existential* sense. We experience

architecture through our existence rather than any one of the senses alone. In that existential sense all the five Aristotelian senses and maybe two or three dozen other systems of sensing - like our intestinal processes. What we do not know yet, is the meaning of our sense of being, the sense of self, which is the sensory ground that relates us with the world and architecture. I would also add here that the other senses are somehow hiding also in vision; we see textures, weight, temperature, moisture, etc. The sensations hidden in or communicated by vision, can be critical to the quality of a sensation or place. One of the biggest problems in contemporary architecture is that we have lost the secret touch of visions in our architecture, because architecture has become purely visual and ocularcentric. This sensory reduction also concerns sound. Sound is, of course, part of the holistic experience, and there is a lot of coordination and interaction between vision, hearing, and touch. As I was working on the concert hall of the Korundi Art Center in Rovaniemi, the capital of Lapland, I became very aware of the significance of visual phenomena for the acoustic feeling; I used the notion of 'visual acoustics' of the materials, details and colours, and discussed these properties beyond hearing with the conductor and the musicians. The concert hall is now valued as the best recording hall in our country.

*2) Given that your book focuses on the way we experience architecture through the senses and raises the question of which sense is most important for architecture, we wanted to ask about the opposite perspective. As we read your book, it was natural for us to think about people with disabilities, such as blindness or deafness. In an era when inclusivity is increasingly emphasized in the media and society as a whole, how do you think the relationship between architecture and the senses can be understood? And more dramatically, can the connection between architecture and the senses be completely severed? (Architectural Design Studio, Polimi – Group 1 Sveva, Matteo, Gloria)*

Juhani Pallasmaa: I had an intense, emotional, and educating experience about disabilities thirty years ago, when I was commissioned to design a new building for the Association of the Blinds in Helsinki. (*Tervetuloa Näkövammaisten liittoon!*, no date). I was naive enough to go to the project presentation without really preparing for the fact that the ten members of the Board were without vision; the chairman was the only one with normal vision. I came to the meeting with my drawings and model, and only then realized that none of these persons with the exception of the chairman couldn't see the project. I explained the project as well as I could from the point of view of a blind person. At the end of my presentation, the blind board members of the Association of the Blinds all supported my project.

In contrast, the chairperson who had eyesight objected to it and said, for instance, that there were too many corners. The blind members defended my design. These reflecting walls were exactly what they needed to orient in the spaces. Another educating example took place at a dinner in the home of Glenn Murcutt, the Australian architect. One of the guests, a French artist, who had no eyesight told me, that he had come to Australia from Germany,

where he had directed a ballet. And he also said that he was on his way to Greenland. Alone, without eyesight? I said, “excuse me, I understood that you have no eyesight”. He answered assuredly: “No, I see with my whole body”. I now think that is how a fine architect needs to sense through her/his whole body; this means sensing through one’s existential sense. In my childhood farm background, in the poverty of the wartime, I learned how to imagine absent things. You just imagine wonderful things. I think that one can train one’s imagination to this. This is an existential situation to relate yourself with architecture.

*3) Would the world be different today if ocularcentrism had not been so central since the Greeks? Do you think it was inevitable for them to believe in ocularcentrism? And if the Greeks had believed in the equality of all the senses from the outset, do you think ocularcentrism would have inevitably emerged at some point in history? (Architectural Design Studio, Polimi – Group 1 Sveva, Matteo, Gloria).*

Juhani Pallasmaa: I taught architecture for two and a half years in Ethiopia in the early 70’s. And early on, during the first weeks of my stay in Addis Ababa, I began to suspect that my students saw the world differently than I, that their eyes or system of vision, do not function the same way mine do. And I started to make experiments and became more and more confident of my observations. Soon after my experiments I spotted a book, published at that time by a group of scientists led by M.J. Hershkovits, with the title *The Influence of Culture on Visual Perception* (Segall, Campbell and Hershkovits, 1966). The point of the book was that seeing is culturally conditioned, and it is learned, which shocked me, as I had believed that we are born with our sensory abilities. We tend to believe that, seeing is something automatic. No, certain aspects are learned, and the very fundamental things in seeing have to be learned before the age of seven, because after that, this neural window closes. I even think nowadays that to some degree, different vocations or professions tend to have their specialized sensory worlds. Architects have one kind of a world, poets another one, filmmakers yet another one, etcetera. As I started to buy books as a student, I classified my books into two categories: architecture books and other books. But very early, I realised that the category of other book was much more important for me, because in those books architecture was described as a living thing, or as an environment where people lived in, whereas architecture books were most often formally oriented. I often advise my students to read literature, watch films and visit art museums and exhibitions because they tend to massage your entire neural system and improve your capacity to sense.

*4) In his essay Cezanne’s Doubt, Maurice Merleau-Ponty argues that Cezanne’s focus on light leads him to a transcendental state in which his subjective perception of light becomes almost objective, resulting in the discovery of the optical behaviour of light. In architectural practice, what techniques (that are meaningful to architects) allow one to transcend the layers of obscure reality and reveal the truths of nature? (Architectural Design Studio, Polimi – Group 4: Jabrail, Ian, Andrei)*

Juhani Pallasmaa: Merleau-Ponty affirmed that Paul Cézanne's paintings make us understand how the world 'touches' us, and in my view, the task of architecture is exactly the same. The existential mission of architecture is here, and also the reverse, how we touch the world. Architecture has a mediating task; it mediates between us and countless aspects of the world, culture, places and time. I believe that the modern architectural theory, art theory, and common appreciation are wrong in focusing on the inner qualities of the artistic work, architectural aesthetics, conceptual structures, etc. Architecture and art are relational things. Their meaning and value I come from, their capacities to relate us with something else, associate us with the continuum of time, divinities, and connect us with ageless myths. For me the notion 'transcendental' implies a capacity of seeing into the essences of things. It is an ability see the deep essence and meaning of things.

## II – Time, Identity and Cultural Heritage

5) *In your books, you often discuss the concept of 'time' as it relates to architecture and the built environment. However, physics has shown us that 'time' does not exist as a fundamental aspect of the universe, but rather as a subjective experience shaped by our emotions and the events of our lives. Given this, how can architecture measure time? (Luca Esposito, PhD Student, DiArc, Federico II, Naples)*

Juhani Pallasmaa: This is a fundamental question. I have recently written couple of essays (2014, 2015)<sup>1</sup> on the relationship between space and time. In modernity, this topic was formulated by Sigfried Giedion, especially in his book *Space, Time and Architecture: The Growth of a New Tradition* (Giedion, 1941), in which he quoted physicists and particularly Hermann Minkowski, the famous mathematician. He supported the fusion of space-time. Minkowski argued that time and space as separate concepts will disappear from consciousness; they must be combined. I have myself believed this modernist dogma for fifty years, yet, in the last ten years, I have become doubtful about it. It is not very helpful to completely forget the differences between the scientific conceptual attitude, poetic artistic image, and emotional feeling. Or, between observation and dreaming, sensing and imagining. I would say, that in the lived world - which all the arts, including architecture, reflect - time and space are separate entities. We also deal with them separately in our design work. Karsten Harries, Professor of Philosophy and Art at Yale University, and a good friend of mine, has argued that we live in space and time. He uses a theatrical expression: the 'terror of time'. I understand that he's referring to our homelessness in time and frightening endlessness of time. Time must be tamed to human understanding and dimension in the same way as space. Architecture and cities, the entire human artefactual world, deal with this taming of time to human cultural experience. So, I would say, that time is a central issue in our profession, but differently from the sciences. Also, in human history, everything meaningful has to be based on tradition. We can

<sup>1</sup> Pallasmaa is referring to his lectures about Silence and Light at the Finnish Embassy in Washington in 2014 and at the American Academy in Rome in 2015.

only continue a tradition; an artistic revolution implies a re-channelling of the stream and force of tradition. The idea of inventing culture is just naive.

6) *What role does proprioception play in understanding cultural heritage, particularly in relation to archaeological sites? Does physical presence contribute to the interpretation of the time gap between the past and present? (Master's degree student, Giovanni Gallero, Heritage, Naples)*

Juhani Pallasmaa: Time is concrete, materialized and concretized for us exactly through physical phenomena and physical objects. Time and physical processes petrify and store human life and culture. Most importantly, human constructions, cities, and architecture concretize and materialize the course of time, which is difficult or impossible for us to grasp otherwise. As I think of the centuries after Renaissance, for instance, I immediately think of the human inventions and works of art, that concretize the advance of time for me. That is the reason why also architecture is so important: because it is constructed history and constructed time. We live in the continuum of time because of the passing of time is concretized in our culture. That makes us experience thousands of years and I also want to say that for me, the understanding of time as a one-way causality, is mistaken. I believe that this is entirely wrong, particularly in the poetic and artistic world.

When Aldo van Eyck was named professor at Delft University, the Rector asked him to give his inaugural lecture on Giotto's influence on Cézanne. He refused and gave the lecture on Cézanne's influence on Giotto. I think this is very important that in the world of ideas and art, time goes in two directions. One of my finest friends was the legendary Finnish designer and artist Tapio Wirkkala. He confessed to me couple of times, that his most significant teacher was Piero Della Francesca; Piero died 423 years before Tapio was born, but this fact did not prevent the unusual teacher-student relationship.

### III – Habitus

7) *Luis Barragan argued that architects worldwide have placed too much importance on large windows and spaces open to the outside, which can cause a loss of a sense of intimate life and force us to live more public lives. In the modern era, where open spaces are often in trend, how would you balance the need for intimacy with the desire for transparency? (Architectural Design Studio, Polimi – Group 3: Kamelia, Rachele, Giulia)*

Juhani Pallasmaa: In a way, those tendencies are exclusive. The human eye and the human mind were not meant to function in bright light. Biologically we are twilight animals of the African savanna. Humans did not hunt in the daytime as there were no animals to hunt in bright daylight. Animals begin to move when the evening falls. Early humans lied down and slept underneath trees in the shadows or in a cave, and only as the twilight period of the evening came, they started to hunt. In evolutionary terms our eye is specialised for that twilight vision. Twilight vision also activates our peripheral perceptions. As you visit an old historical house or even a public building, what makes you feel most pleasure is usually the semi-darkness, or the rhythmic changes in



illumination. Rhythmic variation between brighter and less bright spaces, and particularly the nesting of different places in an unevenly illuminated space. I am just writing a lecture on Alvar Aalto's light, and I call his light 'atmospheric and tactile light'. This light creates specific atmospheres and places, and it sensitises our tactile sense. I feel that the argument by Barragan, which comes from his acceptance speech of the Pritzker Prize, is correct and significant. The huge windows and even the high illumination levels in offices, go strongly against our biological being. This is one example of how biology has a role in today's design. It is essential that Alvar Aalto in the late 30s said: "I have a feeling that architecture is related to biology". Now, 80 years later, I would echo Alvar Aalto and say that we have too little understanding and interest to understand our evolutionary past. But the next step, I think, in understanding architecture is to see it in the long story of human evolution. As some of you might know, I have studied animal architecture and building behaviour, which reveal new things or biological facts that are contrary to our shared beliefs.

*8) Our homes reflect our individual selves. We use (or don't use) the space in ways that suit us, and it is shaped by our experiences, knowledge, and perception. We believe that everyone has their own way of experiencing architecture, of touching, tasting it, or of feeling attracted to or repulsed by certain aspects of it. In your opinion, is there a way to standardize human perception, or do you think this is simply impossible? (Architectural Design Studio, Polimi, Group 3 Kamelia, Rachele, Giulia).*

Juhani Pallasmaa: I think it is impossible simply because we understand and feel as human individuals, as unique individuals. Of course, we need to try to understand the generality of these things, otherwise we do not know anything meaningful about them. But I feel that it is crucially important to understand the specificity and uniqueness of each individual experience. And particularly to understand that architecture exists exactly in the experience, not in the house out there, a building or even a cathedral. The material structure is not architecture. It becomes architecture only after someone has experienced it. This is what the British Romantic poet John Keats wrote in the early 19<sup>th</sup> century: "Nothing is real until it has been experienced". Here is again an essential aspect about teaching architecture. In my view, we teach architecture too intellectually and conceptually. We must bring students next to architecture and have them feel architecture and understand it through their own bodies and minds. When you look at a picture of a painting by Claude Monet in a book you are not looking at a real Monet. The students must be taken to the museum to see real works. After they have seen the real Monet, even the picture makes sense, because that reminds them of certain true aspects of the work. I think this also applies to architecture. It could and should be analysed intellectually, only after the experience, not analysing first and then experiencing, because the encounter has already been spoiled and misguided by intellectualized explanation.

*9) Our senses allow us to experience many things, including architecture. If we were to design architecture solely based on the comfort of our senses, without*

*considering functionality, what might the resulting buildings look like? Would they resemble nests or caves, and would we live in them like animals? (Architectural Design Studio, Polimi – Group 3: Kamelia, Rachelle, Giulia)*

Juhani Pallasmaa: As I said earlier, I have studied animal construction for almost 50 years. The animal constructions are not naive and fairytale-like, as usually thought. They are highly functional, and often much better in terms of performing a specific purpose than our constructions. So also, our concepts of utility and functionality need to be broadened and critically considered. The purpose of relating us with the world, is part of the definition of architecture. Architecture is not just a place to keep the rain away, it's also to relate us with the frightening vastness and anonymity of space and the immensity of time. We feel protected when confined by architecture, so architecture is not only to keep the dangerous animals away. It is also to guide our understanding, emotions, beliefs and emotions, and architectural spaces are connected to our primordial feelings in space. Sigmund Freud wrote *The Interpretation of Dreams* in 1900, and it became almost symbolic to the Modern Century. But our time has almost completely forgotten Freud and Jung and their profound teachings that our human mind is very complex. It has so many layers that our day-consciousness by which we operate in our work and home is just a little fragment of what we are, and our architecture needs to recognise the vastness of human consciousness and deal with dreams and fears in addition to intelligence.

*10) Clothes and dwellings are extensions of the human body. Clothes are a second skin, while dwellings are a third skin. These are inherently physical dimensions. What other physical or abstract extensions of the human body shall an architect consider while designing? (Architectural Design Studio, Polimi – Group 4 Jabrail, Ian, Andrei)*

Juhani Pallasmaa: I agree with this analogy of nested worlds. We are in the middle of becoming instruments or systems by which we are related to the world and one to the other. This expanding artificial structure can relate us to the extremely small and the extremely large. We would not have any chance to have an opinion about the cosmos and universe if we wouldn't have this capacity to relate us from one scale to the other. The problem with today's architecture is that it has become too much its own project. Architecture is too self-centred today, enclosed within its own aesthetics, and that is why it has lost its cultural and human capacity to be in dialogue with life. There is another issue behind this and that is what my German philosopher friend Gernot Böhme wrote about as Aesthetics Capitalism (Böhme, 2017). His idea is that in the Marxist theory production is motivated by need, but in the consumer society, the actual need has already disappeared. To keep the production system going, or even expanding, all the time, capitalist society needs to invent new modes of need, one of which is aesthetic desire, as fashion. First there were two annual seasons in fashion, then there were four, now, I believe, there are eight. This is a very remarkable issue, which also we architects need to know. We are turning into consumers of our own lives.

#### IV – Atmospheres

11) *In your book *The Thinking Hand*, you argue that “architecture must defend us against excessive exposure, excessive noise, and excessive communication” and that “the task of architecture is to preserve and design silence”. Given the changes to our way of living brought about by the pandemic, and the increased ability to work and study from home, do you believe it is possible to pursue the goal of ‘designing silence’ and defending ‘natural slowness’ while also reevaluating the peripheries and small towns? (Architectural Design Studio, Polimi – Group 12: Natal, Uzi, and Zisan)*

Juhani Pallasmaa: I have given several lectures and written a couple of essays on light and silence connecting the two areas because of specific illumination, for instance, in a mediaeval structure. Also the illumination emphasizes silence and we begin to hear the silence. For me, silence is a meditative, healthy and natural condition for human beings. But in our current culture, we often seem to believe the reverse, that we need noise, a lot of noise. Our culture is a noisy one. Also much of the popular music culture is about noise rather than silence. One of my favourite composers is Arvo Pärt, the Estonian composer, whose work is about silence. I don’t want to romanticize these things, I am rather speaking on a biological ground.

12) *In your book *The Eyes of the Skin*, you frequently discuss the concept of ‘atmosphere’ and its importance in the experience of architecture, despite the significant emphasis placed on form in architectural theory. I have often noticed that I am unconsciously drawn to the atmosphere of certain places and only later realize the small details that contribute to my enjoyment of the space. Do you believe that such atmospheric elements can be planned during the early stages of a project, or is this something more primal and instinctive that cannot be intellectualised and simply emerges as a result of a well-crafted work? (Architectural Design Studio, Polimi, Group 12: Natal, Uzi, and Zisan)*

Juhani Pallasmaa: Atmospheres are experiences of total sensory situations. All real-life situations are multi-sensory atmospheric situations. Isolated components exist only in laboratory conditions. We can experience situations where some dimensions of our consciousness or sensory world have been eliminated and those feel un-natural, and will quickly begin to cause mental or even physical problems. As I said earlier, we need varying levels of twilight, darkness and daylight in various degrees and rhythms. Everything in life is needed in different rhythms. There is not a single spatial quality that would be sufficient all the time without variation. And the most crucial variation is the circadian rhythm of natural illumination. Architecture should enhance circadian rhythms, whereas much of modern architecture goes violently against this need for variety, and tries to make everything evenly illuminated. That is not what we biologically need. It is time that we architects begin to understand ourselves as biological beings.

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