

Intuitive Dynamics: The Inscription of Time in MnG House

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Abstract

For a decade, the architectural work of an architect Pornchai Boonsom has been based on an exploration in ‘time’ and ‘dynamic movement’ of interactive forces in the context of Postmodernism and Consumerism in Thailand. His MnG House in Bangkok, completed in 2002, is a reflection of a new thinking in science, particularly an experiment on Henri Bergson’s philosophical concepts of the evolution of time and dynamic process of intuition.

In the early twentieth century, Bergson proposed what became the great breakthrough against the classical biology of Charles Darwin – the theory of evolution. He introduced a new notion of time as a ceaseless flow or flux – not a discrete unit. This concept has changed the way we understand life and universe, and the way we spatially conceive and perceive architecture through a linear time. Bergson’s another concept of intuition psychologically explains how we understand the reality of the world as a continual flow of life.

Pornchai Boonsom’s MnG House reflects the Bergsonian worldview both in architectural geometry and spatial expression. The house could be defined as ‘the inscription or the writing of time’ through architectural productions: an exemplar work manifesting a continual change of form without a beginning or an end.

บทคัดย่อ

นับเป็นเวลาหนึ่งทศวรรษที่ผลงานทางสถาปัตยกรรมของสถาปนิก พรชัย บุญสม ได้สำรวจในประเด็นเรื่อง ‘เวลา’ และ ‘การเคลื่อนไหวเชิงพลวัต’ ของแรงปฏิกิริยาทั้งหลายภายในบริบทของโพสต์โมเดิร์นและทุนนิยมในประเทศไทย บ้านพักอาศัย MnG ในกรุงเทพฯ ซึ่งสร้างเสร็จเมื่อปี พ.ศ. 2545 เป็นภาพสะท้อนของแนวความคิดใหม่ในวิทยาศาสตร์ โดยเฉพาะอย่างยิ่ง มโนทัศน์เชิงปรัชญาของ อองรี แบร์จซอง (Henri Bergson) ในเรื่องวิวัฒนาการของเวลา และกระบวนการเชิงพลวัตของญาณทัศน์ (dynamic process of intuition)

ในช่วงต้นของคริสต์ศตวรรษที่ 20 แบร์จซอง ได้เสนอสิ่งซึ่งได้กลายมาเป็นการก้าวผ่านครั้งยิ่งใหญ่ซึ่งต่อต้านทฤษฎีวิวัฒนาการของ ชาร์ลส์ ดาร์วิน (Charles Darwin) เขาเสนอความคิดใหม่ในเรื่องของเวลาในฐานะที่เป็นกระแสที่เลื่อนไหลไม่สิ้นสุด ไม่ใช่หน่วยย่อยที่แยกจากกันได้ มโนทัศน์นี้ได้เปลี่ยนแปลงหนทางที่มนุษย์ทำความเข้าใจต่อชีวิตและเอกภพ และเปลี่ยนแปลงหนทางที่เราคิดและรับรู้สถาปัตยกรรมผ่านเวลาในเชิงเส้น มโนทัศน์ของแบร์จซองในเรื่องญาณทัศน์ ยังช่วยอธิบายให้เราเข้าใจความจริงแท้ของโลกในเชิงจิตวิทยาว่าเป็นกลุ่มกระแสของชีวิตที่เลื่อนไหลไม่สิ้นสุดอีกด้วย

บ้านพักอาศัย MnG ของสถาปนิก พรชัย บุญสม สะท้อนถึงโลกทัศน์ของเบรจซง ทั้งในระบบเรขาคณิตทางสถาปัตยกรรม และการแสดงออกทางปริภูมิ อาจนิยามบ้านพักอาศัยหลังนี้ได้ว่าเป็น ‘จารึกหรือบันทึกถึงเวลา’ ผ่านทางรูปลักษณ์ทางสถาปัตยกรรม และถือเป็นผลงานอันโดดเด่นในการแสดงออกถึงการเปลี่ยนแปลงอย่างต่อเนื่องของรูปทรง โดยปราศจากจุดเริ่มต้นและจุดสิ้นสุดที่ชัดเจน

Keywords (คำสำคัญ)

Duration (ช่วงเวลา)

Dynamics (พลวัต)

Evolution (วิวัฒนาการ)

Intellect (ปัญญา)

Intuition (ญาณทัศน์)

Time (เวลา)

Introduction: The Groundbreaking In Architecture

“... It is obvious, actually, that monuments inspire socially acceptable behavior, and often a very real fear. The storming of the Bastille is symbolic of this state of affairs...” [1]

Georges Bataille

Architecture, as Georges Bataille stated, is conceived as the expression of the very being of societies. It is a record of hierarchical relationships and interconnections of societies evolving through time. Bataille’s notion of architecture is based on the assumption that architecture is not only a manifestation of social values – the pyramid and the labyrinth as metaphors for social structuration, but it also has the authority to control and prohibit the existing social orders. The Church and the State, for example, address their authorities through the form of cathedrals and palaces [2].

Modernist architects in the early twentieth century clearly defined a common position of their visions as an obligation to propose alternative ideas to the existing social orders, and negated the heterogeneity of morphological urban fabrics through methodologies of reduction and simplification [3]. The social orders were hierarchically restructured as a solution to some social, political, and economic problems. In 1960s, the discourse of complexity began to supersede the Modernist thought, and took several forms of exploration in the name of Postmodern architecture. The repetition of sameness and the simplicity of building form as the essence of Modern architecture were rejected. In the late 1980s, architecture became a manifestation of the underlying, complex organization hidden in the very true nature of cities. It has evolved far beyond the old, limited notion of Bataille’s

architecture. The new architectural movement emerged and associated with another mode of repetition – a repetition of difference.

The realization in the work of an architect Pornchai Boonsom expresses a coherent methodology to a new level of complexity that has pervaded through the entire discourse of American architecture during the 1980s. Boonsom is one of the Thai creative figures, whose work attempts to integrate formal strategies that cross a boundary between sculpture and architecture. His academic background at Southern California Institute of Architecture (SCI – ARC) and University of Michigan and working experience with several world-renowned architects, such as Peter Eisenman, Hodgetts and Fung, Morphosis and Neil M Denari, have provided him a strong formal basis under the mainstream of Deconstructivism. After moving back to Thailand, Boonsom began to establish his small practice in Bangkok. He experiments on original prototypes of architecture that re-identify the architectural identity within the large chaotic, and dispersed context of Bangkok. His work varies from pieces of sculpture, a wall-art installation, a cloth-display booth to a larger scale such as residential buildings. All of them deny the historical styles, shifting their structuralist base of meanings of form to the poststructuralist system of floating signs.

MnG House was built in 2002, and located in a residential area in Bangkok for a three-member family. It shows Boonsom’s interest in ‘space,’ ‘time’ and ‘geometry’ – the main themes that resonate through most of his design projects (Figure 1). Its complex form functions as a critique of a crisis to the metropolis without form and self-identity. What are interesting in the house are a theoretical relationship to the concept of time and memory and an expression of what Boonsom calls ‘intuitive dynamics’ in the spatial formation of reality.



Figure 1 MnG House, Bangkok, Thailand

Time and Memory

“The more we study the nature of time, the more we shall comprehend that duration means invention, the creation of forms, the continual elaboration of the absolutely new.” [4]

Henri Bergson

Henri Bergson, the leading French philosopher of the early twentieth century, developed his philosophy as a revolution to the authority of Greek and especially to that of Plato, and a new understanding of the nature of the universe. His famous theory of evolution is an answer to the imperfection of Darwin’s classical theory of evolution and natural selection [5]. Bergson formulated his new organism theory to explain the evolution of the universe: the universe is no longer conceived as a deterministic, mechanical process but a ‘continuous flow’ without a beginning or an end. The evolution is the movement of flow [6]. He established the concept of ‘*élan vital*,’ a vital force behind any changes or evolution, as the principle of his theory. The evolution of the universe for him is the creation

and expression of such vital force or impulse, whose function is continually to change and to evolve [7].

The history of Western philosophy has shown its main interest in an attempt to understand the reality of the world, particularly the ‘existence’ and nature of ‘time.’ Like the flow of evolution, Bergson believed that reality was always changing, and it was a dynamic relation between an idea and existing reality. And to understand the reality, Bergson developed the psychological distinction between ‘intuition’ and ‘intellect’: both of them could be combined to produce a knowledge of reality. ‘Intellect’ is seen as a power to see things as separate one from another or matters as distinct things in space [8]. However, Bergson believed that such reality of matter did not exist, only an endless stream of becoming appeared. What the intellect gives us, therefore, is an illusory image of the reality because the reality is always changing. ‘Intuition,’ on the contrary, is a kind of instinct that assists us to understand things not as matters but continuous, and indivisible flow [9]. Bergson believed that scientific principles were intellect and metaphysical principles were intuitive.

The distinction between the intellect and the intuition could be made by reconsidering the classical theory of time, since time is an essential characteristic of life and mind. In classical science, time was considered to be an independent entity free from the motion of objects such as Isaac Newton's the Three Laws of Motion. This abstract, absolute and homogeneous characteristic of time flows without any relations to anything external, and could be perceived only when an object is in a state of motion. After the invention of Albert Einstein's Theory of Relativity, the notion of space – time as a continuum outside of subject experience became a reality. Time is seen as a fourth temporal dimension, existing outside the three-dimensional world of material things.

In 1911, Bergson proposed two concepts of time in his book **Creative Evolution**, both were disparate from the classical or narrative time. The first one, which he called 'mathematical time,' is the time that exists itself outside the material reality or the external world. It is the time that we find in relation to the change between two successive states of any material things. If the time is accelerated, the material will rapidly reach the final state but its material reality will remain constant and unaffected. Time, in this definition, has no affect on the reality of the material, and is not a part of the material world [10]. It is simply a relation between material things. This concept of time thus does not reflect the flow of real time because it is divisible into units or intervals.

The second type of time, which he called 'the time of duration,' is what Bergson defined as 'e'lan vital.' Duration is the time that we could see in the change of reality of a living being and the time of a constant flow or continuous progress of the past to the future. Unlike the mathematical time,

this particular kind of time is continuous, heterogeneous and indivisible. For Bergson, all living beings and events belong to the stream of duration, and change without ceasing. This concept of duration, which is embedded in the reality, is an essence of life because it shows a change or an evolution in kinds [11].

The mathematical time embodies or suggests a change or difference in degree, which has no effect on the material things. Bergson explained that human mind could understand this particular kind of time through the intellect: the intellect analyzes time as consisting of intervals or moments. However, this perception of time through the intellect, according to Bergson, gives us a false reality by substituting stability for mobility. The continuous flow of time is disrupted into a series of static moments. In contrast, the time of duration implies a change or difference in quality – not quantity – of the material things as seen in the evolution of the universe. It involves an interchange between the past and the present, leading to the 'dynamic' state rather than a series of static ones. For Bergson, human mind could be conscious of this duration through the intuition since it gives us the reality of nature and meaning as an indivisible whole, not as an aggregate [12]. Bergson's philosophy assists us to understand the reality, such as the evolution of the universe and animal life, as a dynamic process.

Traditionally, we as a subject experience the space of architecture in chronological sequences. Time in architecture is the time of a subject's perception of events in space, and is constrained by space or the movement of subject in and around space. This long-lasting concept of time has made architecture as a three-dimensional fixed, immobilized object – a frozen music. Architecture

became a collection of frozen frames through which time passes, and could be animated by the movement of body. Therefore, the time of the object or architecture and the time of the subject were tied together. This relationship between space and time is relevant to what Bergson called 'Cinematographic.' Bergson explained that mathematics conceived change as a cinematography, constituting a series of static snapshot photographs of space, but failed to represent the true change because the flow of change or motion is cut into moments and points, appearing in a false view of reality of motion [13]. Although the Modern architecture moved further a relationship between space-time through the transparency of glass which allows the subject's perception of interior and exterior simultaneously, the question of inventing new ways to present time in architecture remained unsolved. In the contemporary world of virtual space-time of the internet, Henri Bergson's two different ideas of time have opened up new possibilities to experiment on architectural space, time and geometry. To embed or inscribe time in architecture, to distinguish the time of architecture from that of subject, and to animate architecture will be a new territory for architects to explore.

The parallels between contemporary architecture and Bergson's theory of time are multiple. Some architects, led by Peter Eisenman and Greg Lynn, rely on new digital technologies and time-based computer softwares, which assist them to generate complex, curving forms and geometries through the non-linear movement of time in order to achieve the dynamic quality of forms. One of the Bergsonian approaches could be seen in Pornchai Boonsom's design strategy in MnG House. The design process of the house, however, does not begin with digital-driven direction, but emerges from

intuitive process. Boonsom described the program of the house as follows: *"This project is a home office located on 480 sq. meters site. The building is 14 meters or 3 and a half floor high with a total area of 600 sq. meters – consisting of office spaces, a reception room, a dining room, a multi-purpose room, a family room, a maid room, a prayer room, a store room, four bedrooms with attached bathrooms and a parking area [14]."* The plans of the MnG House show a system of complex geometry that steps out of the generic box (Figure 2).

Boonsom initially developed this residence from an assemblage of cubic volumes. Each cubic form is treated as a dynamic organic object, influenced by some invisible forces from external factors, internally unfolding itself in complexity to merge with the others. The architectural outcome in white-painted concrete structure is a very intriguing and impressive exploration among the surrounding context of typical urban villages. The house establishes a new domestic typology, whose physical appearance gives a sense of dynamics with no exact beginning of form to be read by any perceivers, and implies a motion of time [15] (Figure 3).

The factor of time and the notion of accidental are inscribed into this formal complexification. When a subject enters the house, the time of the subject's experience of it will be detached from the time of the object or the house. In other words, the internal time of architecture – duration – is separated from the time of its experience. The time of duration could be perceived firstly through the rational and ordered system growing out of the Cartesian gridded space of the house, and exceeding its structural limitation and traditional iconography of the house. Secondly, it could be seen in the collision of architectural forms, which leave their

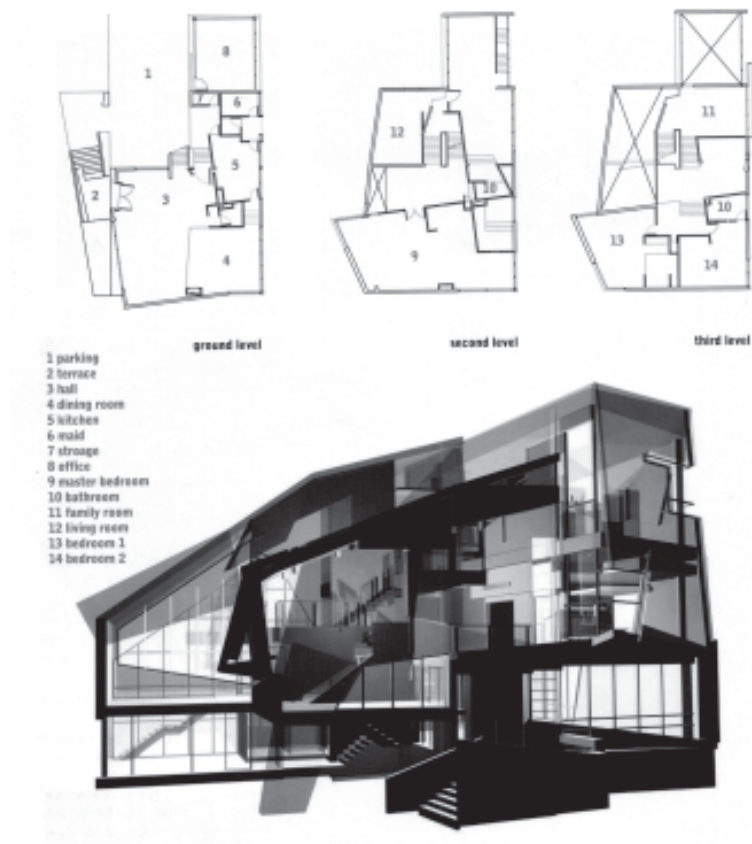


Figure 2 Plans and a 3D-computer-generated section of the house showing complex geometry

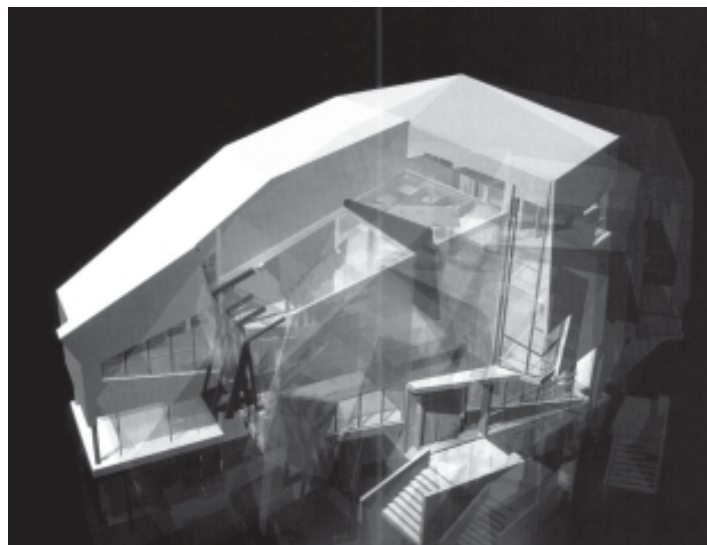


Figure 3 A 3D-computer-generated image of the house



Figure 4 The trace of morphological transformation of forms and elements of the house

traces of dynamic movement inside the space – not a sum of stoppages of movement. This collision, however, is not predictable and static, but organic and evolving. The embedded time of duration creates ‘a repetition of difference’ and ‘a continuity of heterogeneity’ of architectural forms and elements that seem to continually evolve over time without an end of transformation (Figure 4). And it is not possible for the perceivers to simply trace back to the origin of the house’s geometry.

According to Bergson, the very basis of conscious existence is memory, which is the prolongation of the past into the present. Every movement leaves traces that continue to affect all subsequent physical or mental processes. He explained that the past collects in the fibers of the body as it does in the mind, and determines the way we walk and dance as well as the way we think. This theory of memory is bound up with his theory of duration – a succession of state, each of which shows what come after and contains what precedes it. Therefore, the past is the present memory of the past [16].

In MnG House, an elaboration of this Bergsonian idea is manifested in the complexity of the house’s forms, the continuous fold from floor to wall to ceiling of a sculptural element placed behind the main entrance (Figure 5), and a series of fragmented window frames on the front facade (Figure 6), as well as the dynamic movement of the central stair (Figure 7). Those time-embedded forms and elements imply the memory of the past – the movement existed during the design stage. When the subject perceives them – the past – they will survive in the memory, and have both a physical control and psychological effect on the subject’s movement – the present – inside the house; the past and the present are presented along with the perception.

The reading of the structural elements of this building also becomes blurred or multiple. Boonsom subverts the structuralist system of meaning – a fixed, stable relationship between signified and signifier, to a poststructuralist condition. The extraction of the fixed meaning is attempted by imposing a new signifier onto each



Figure 5 The sculptural element at the main entrance



Figure 6 The fragmented continuation of window frames expressing 'a repetition of difference'



Figure 7 The complex movement of the main stair



Figure 8 The new signifiers that require a new translation

single element, giving each one a newly free-floating meaning and interpretation – a new relationship between a signifier and other signifiers. The resulting appearance could no longer be read simply as a fixed meaning, depending on the subject's own mental process of perception and translation (Figure 8).

Intuition

"The philosopher must go further than the scientist. Making a clean sweep of everything that is only an imaginative symbol, he will see the material world melt back into a simple flux, a continuity of flowing, a becoming [17]."

Henri Bergson

In Western Philosophy, the theory of time which is a flux or flow – not a sum of discrete units is found to be connected to the theory that human consciousness is a stream of thought. Henri Bergson, in his book *An Introduction to Metaphysics*, distinguished two ways of knowing in order to explain the fluid nature of time. The first one, which is 'relative knowledge,' is the knowledge gained by moving around an object or by knowing it through symbols or words. Bergson believed that this 'relative' gave us a false experience of the true nature of that object. The second one, which is 'absolute knowledge,' is an understanding of the real nature from within. It is achieved by experiencing an object by 'intuition [18].'

Intuition, as mentioned earlier, is an instinct that we become directly conscious of the duration in which we participate, and is involved with the mental process of creation. Bergson attempts to make an analogy of this process to the work of an artist. He asks us to artistically imagine something

which is unimaginable, conceive of an action or movement of that unimaginable image, and then effect a limitation of attention to an aspect of that action or movement which is impossible. And by this intuition, artists are enabled to enter into the ceaseless flow of the changing reality of our living experience as they place their vision on the canvas to grasp the meaning of the subject in paintings [19].

The process of 'Intuitive Dynamics,' in which Pornchai Boonsom has been interested for a long period, allows him to work consistently with the innerscape of the mind along with the eternal flow of time. The intuitive dynamics, following Bergson's idea, is a theoretical, performative machine that he pursues for the understanding of a flux of ceaseless change and the meaning of form, emerged from the creative forces in mind. The process unfolds to us the very true nature of existence or the reality in time.

MnG House illustrates this intuitive process as the architect said: *"Design involves movement and replacement which is a reaction called Motion in 4 dimensions. This involves the movement between man and architecture which is a kind of media. Information from one point of time to another must be continuously identified. In addition, the study of learning and understanding principles is divided into intelligence and self-consciousness. Both are basic to design as long as the search for 'Intuitive Dynamic' knowledge is explored to find the meaning of form and dynamics through several design approaches. Descartes, a philosopher, has acknowledged the experience and conscious parts through the control of that particular part in terms of architecture, because intuition emerges from free imagination and different understanding. Acknowledgement of 'Intuitive Dynamics' provides a wide range of meanings... [20]"*

The masterful integration of forms of the



Figure 9 The dynamic movement of forms at the sub-entrance



Figure 10 The light well inside the house with a specific placement of architectural elements

MnG House neither represents the formal elements found in the typology of the village house, nor implies a static form of a figure on a ground. All elements, both exterior and interior, express an interaction of invisibly dynamic forces, resulting in an architecture of hyper-reality, which was formerly unimaginable, and unfolding the intuitive process through the motion of forms (Figure 9). The house is no longer spatially experienced as a series of static frames placed in a succession as in Modern architecture, but a perpetual flow of movement and indeterminate space without a beginning or an end.

The process of intuitive dynamics not only provides the groundwork for understanding the reality of the world as a dynamic movement, but also reestablishes a concrete human scale – a physical presence that inspires interaction and contact between subject and object. This is manifested in the specific placement of ceiling and light well below a human average height on the fourth floor so that the users can reach and touch them (Figure 10). Another element that exemplifies this

is the angled folding of floor slab in the master bedroom that encourages a more physical interaction between the body and the space. The space, time and geometry of the house create a phenomenological relationship of sensorial experiences, and provoke a new way of understanding the complex organization of the built matters.

Pornchai Boonsom's MnG House intriguingly exemplifies how to invent and inscribe the time of architecture as distinguishing from the traditional time of perceiving architecture. The house could be defined as 'the inscription of time or the writing of time.' His contribution to architectural discourse reflects the Bergsonian worldview through animate and dynamic qualities of the architecture. The house is no longer experienced as a series of immobile frames of perception, which reflects the false reality of nature. It becomes a new way of understanding the true nature of existence, a dynamic interface with the world, and an instrument of interaction between subject and object in the continuous flow of time.

References

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- [2] Ballantyne, A. (2005). *Georges Bataille. Architecture theory: A reader in philosophy and culture*. New York: Continuum, 15–16.
- [3] Charles Jenks distinguished the movements in architecture between 1920–1970 in six main traditions – the Idealist, the Logical, the Self-conscious, the Intuitive, the Activist and the Unselfconscious. Each of them shared the social ground to the others. See Jenks, C. (1985). *Modern movements in architecture*. London: Penguin Books, 29–94.
- [4] Bergson, H. *Creative evolution*. New York: Dover Publications, 11.
- [5] The classical theory of evolution believed that the principle of evolution was a result of adaptation to environment and chance survival. These courses of evolution were regarded as a process of mechanical lines, which failed to answer the abrupt variations in some species, such as mutations or metamorphoses, and the question why the evolution did not stop but still complicated itself to a higher level of efficiency. See Joad, C.E.M. (1957). *Outline of Bergson's philosophy. Guide to philosophy*. New York: Dover Publications, 544.
- [6] *Ibid.*, 542.
- [7] *Ibid.*, 545.
- [8] Bergson gave an example of a flock of sheep to explain about this 'intellect.' When we look at these sheep, what we notice firstly is that they all look alike. But we are able to enumerate them because each sheep is spatially separated from the others. 'Intellect' is thus a power to see things as separate one from or juxtaposed to another in spatial location.
- [9] See Bergson, 136–175.
- [10] See Joad, 548.
- [11] See Bergson, 1–97.
- [12] C.E.M. Joad gave an example about this by referring to the difference between a symphony and an aggregate of notes. The symphony should be thought of as more than the sum of its notes or as an aggregate, but a whole which can not be analyzed into its constituent parts. In this aesthetic point of view, we could appreciate the symphony as an individual whole by intuition to grasp its real nature.
- [13] Othavorn, N. (2002, August). *Via Intuition: Interviewed with Pornchai Boonsom*. Art 4D, 85, 78. Bangkok: Corporation 4D.
- [14] The MnG House denies a classical typology of the house, established by Henri Lefebvre in *The Production of Space*. Lefebvre defined a house as a mechanical device, which is integrated into a machine-like order of streets and cities on a larger scale. His notion provided us the understanding of the house as a passageway of a large number of inter-coordinated mechanistic materials and social orders. A house, therefore, is seen as an isolated, static object, sharing the machinic essence of the classical science. In this sense, the MnG House deconstructs Lefebvre's notion, giving a new relationship of a house as a dynamic, organic object to the context of the city.
- [15] Russel, B. (1995). *History of western philosophy*. London: Routledge, 763.
- [16] See Bergson, 11.

- [17] See Bergson, 369.
- [18] Kern, S. [1996]. The culture of time and space 1880–1918. Massachusetta: Harvard University Press, 25.
- [19] Ibid., 25.
- [20] See Art 4D, 85, 79.

Figure Credits

- Figure 1–4 Narong Othavorn. (2002, August). Via Intuition: Interviewed with Pornchai Boonsom. Art 4D, 85, 73–76. Bangkok: Corporation 4D.
- Figure 5–10 Photographed by Author