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# Definition of Architecture

(Rethinking the Vitruvian Triad)

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**ABSTRACT:** This paper seeks to investigate a new definition for architecture by unifying the three Vitruvian principles of *firmitas, utilities,* and *venustas* via a phenomenological approach in the interpretation and analysis of their role in defining architecture. The paper is composed in two main sections. The first section investigates the nature of architecture based on the mentioned principles, where architecture is interpreted and analyzed in terms of its "thingly," "equipmental," and "artistic" characters. While it seems that architecture could be in view of its "thingness" alone, or "equip mentality", or "artless", but each perspective reveals only a dimension of the nature of architecture. Therefore, the second section of this paper focuses on unifying the Vitruvian Triad, attempting to define architecture from the single stance of "architecturality" the sphere from which architecture is seen as a way of disclosing the truth in the desired life of humans in an architecture, thus establishing an integral unity between the principles of the Vitruvian Triad. Thus, the three Vitruvian principles come to unify in architecture which is defined as "the manifestation of truth of human desired life in the work of architecture." This definition also allows us to assume three fundamental principles for architecture, "truth of human desired life", "work of architecture" and "manifestation of truth". These three principles are themselves, in fact, reflections of the three Vitruvian principles.

Keywords: Architecture, Theory of architecture, Thing, Equipment, Art.

# **INTRODUCTION**

Throughout the history of architectural theory, there have been many theoreticians who have attempted to formulate a definition for architecture, by which to determine its ruling principles. One of the oldest, nevertheless enduring, systems of architectural principles was developed by Vitruvius. In his view, architecture had three ruling principles: firmitas, utilitas, and venustas (Stein and Spreckelmeyer, 1999, 10). There on, the Triad has been readdressed in writings of various architects, such as the still popular categorization into form, function, and structure in the opinions of many<sup>1</sup> Although Vitruvius believed that these principles were at work simultaneously in architecture, some believed them to work in parallel, or in an interchangeable way that one could become the prevailing component. The emergence of movements like formalism, functionalism, or structuralism is a direct consequence of such mode of thinking. The key question is how architecture can be defined based on the Triad while also revealing the essential unity of the principles. On this path, one may come to find the common basics in many of architecture's definitions. and thus, help yield a deeper definition of architecture.

# MATERIALS AND METHODS

In this paper, first it is attempted to discuss about architecture based on the three Vitruvian principles in order to determine its position in the essence of architecture. Thus architecture is defined fundamentally in light of the Triad: in view of Thingness, in view of Equipmentality and in view of Artness. This study is mainly based on theoretical literature review in a philosophical ground. Consequently, there is the attempt to formulate a definition for architecture based on unification of the three principles. The main question is, therefore, "how can we reach a definition of architecture based on the unity of the three principles?" This paper is an excerpt from a fundamental research taking up a phenomenological approach, and a methodology of logical analysis and reasoning.

### The Nature of Architecture in Light of the Triad

Vitruvius believed the three principles of firmitas, utilitas, and venustas to be three necessary principles for reaching a desired architecture. The Triad has been present in the definitions presented by numerous other architects and theoreticians, although under alternative terms. Principles such as "firmness, commodity, delight," or "structure, function, form" are other versions proposed based on the Vitruvian Triad. If we focus on the nature of each, it is evident that firmitas implies the physical aspect, or the "thingly" character of architecture; utilitas, the functional or "equipmental" character; and venustas, the beauty, or the "artistic" character of architecture. In this way, the role of each of the principles can be analyzed by bringing the thingly, equipmental, or artistic being of architecture into view. Martin Heidegger's renowned treatise, "The Origin of the Work of Art," can be of great help in this regard. In this essay, in search for the origin of the artwork [kunst-werk], Heidegger finally opens up a way toward the

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Fig.1: A model for showing the Vitruvian triad and its relation to three character of architecture.

truth in the artwork by comparing the mere thing, equipment, and artwork, and observing the truth about each (Heidegger, 1950, 5). With a similar approach, architecture is observed in view of its thingness (firmitas), equipmentality (utilitas), and artness (venustas) so as to be able to arrive at the origin and truth of it, and finally formulate a definition for it. (Fig. 1).

# **Architecture in View of Thingness**

Firmitas (firmness), among other principles, directly addresses the physical aspect of architecture, and deals with the physical properties of architecture as a thing. It can be said that nearly all architects have been concerned with this dimension, and have tried to incorporate it in a way or another in their definitions for architecture. No architecture is realized without it; yet overemphasizing has sometimes highlighted the physical or thingly character of architecture to rise as the prevailing component in its definitions. To know the role of thingness in defining architecture, we shall first observe what a thing is, and then define architecture in view of its thingly character.

What is a thing? In "The Origin of the Work of Art," Heidegger puts things into three categories: the mere thing, equipment, and artwork. The mere thing is that which is not made by man, is of no use and is often natural (Heidegger, 1950, 6-8). Another group of things which can be either natural or man-made has a purpose to serve, and is hence called equipment (Ibid, 14). The third group consists of things that are made, but are not serviceable and do not serve human purposes. These are called artworks, and they are created for expressing a concept or the disclosure or "happening" of truth (Ibid, 20-21).

History of philosophy offers several interpretations of the thing. One of the most common among them is the union of two concepts: substance and accidents. In this notion, a thing is bundled with attributes and properties, and it corresponds to all kinds of things. Greeks call the "underlying thing" which is surrounded by attributes and properties hypokeimenon, and the accidental properties, symbebekota (Rikhtehgaran, 2007, 38-39). The second interpretation considers the thing

as the sense-perceived, or what can be sensed, which is the sensible entity. The Greek word for this is aistheton, which means sensible. Aristotle believed sensible entities to be the same as beings (Ibid, 48-52). The third interpretation defines the thing as the synthesis of matter and form. In this definition, thing is matter whose form is predetermined. Matter comes with form, and form does not exist without matter. This interpretation invokes the viewpoint from which a thing subsists through eidos, or sight. The Greek term means the formal appearance of things. Plato believes the truth of things is eidos, or the eternal essence of beings. But Aristotle asserts that the essene of beings cannot belong to another world. Therefore, eidos is inseparable from things, and can thus be called morphe. Seeing of things as the synthesis of form and matter is signifying of both natural and mere things, and equipments (Ibid, 52-54). In Heidegger's view, the three dominant interpretations of the thing each represent an aspect of the essence of it. The thing is comprised of matter, and is dependent upon its material character. The thing is also a bearer of sensible traits. But what constitutes its thingness is the principle or truth beyond its material or sensibl character. Truth is what makes a thing that which it is, and it is manifested in its physical appearance. The corporeal has properties which significantly influence the physical quality of the thing, yet the truth of it is beyond its material existence.

Thingness of Architecture: Especially in modern times, architecture is mostly recognized in its thingness, to the extent that what is meant by "architecture" is often the "work of architecture." As previously noted, it is certain that architecture is manifested in the work it is not realized without the creation of the work. But the truth of the thingness of architecture is beyond its physical aspect. Its materiality is but the place for the manifestation of its truth. A question arises: what type of thing is an architectural work?

Undoubtedly, it is not a mere thing, as it is built to serve a purpose. It is a useful, man-made thing, and satisfies human needs. It may then be considered equipment, while ultimately it is also a kind of a work of art. It is clear now that it cannot be solely defined regarding its thingness even though emphasis on its thingly character has led to its physical aspect being regarded as its totality, hence causing its truth to be veiled behind.

### Architecture in View of Equipmentality

Utilitas or use, which relates to function, is the second principle Vitruvius has introduced towards a desired architecture. Utilitas or utility means usefulness, and is indicative of architecture's role in satisfying human needs. This concept has also been presented with other terms such as commodity, convenience, or use. From this viewpoint, architecture is an equipmental thing, one of whose main characteristics is fulfilling human needs within an architectural sphere. In order to articulate the functional or equipmental character of architecture, it is necessary first to know what equipment is, what is meant by equipmentality, and how it can be employed in this concern.

What is Equipment? What is Equipmentality? Equipment, prior to being equipment, is a thing, and thus conforms to the general definition of the thing. Equipment is a thing of utility, or of use to humans. Therefore, the determination of its being rests in the need, or the purpose of humans it is made to serve. Needs and its hierarchies have been repeatedly studied by many scholars, many among whom have embarked on categorizing human needs. One of the most renowned hierarchies is that of Abraham Maslow<sup>2</sup>. This and other similar categorizations show that, regardless of order from the most basic and mundane to the most sublime, human needs are to be fulfilled if he is to live desirably.

If we assume Heidegger's approach to define equipment, then it is a thing that resembles the mere thing in that its thingness is manifested in its materiality it is self-contained<sup>3</sup>. But equipment is something more than the mere thing. It is useful, and thus relates to humans. The truth of the equipmental being of equipment does not happen in its materiality or its thingness; however, it is intended to perform the task it is made for. Hence, it is not self-sufficient like the mere thing; rather, it is reliant on another thing<sup>4</sup>. The truth of the equipmental being of equipment is about the task and the purpose it serves humans.

What requires attention here is that while equipment is made to serve a purpose, not all human needs can be fulfilled by means of equipment. Some levels of human needs require more complicated types of equipment or other useful instrument. Therefore, equipmentality can be considered as the shared characteristic between a useful thing and a useful entity, i.e. equipmentality is the characteristic of equipment and all other entities which serve to satisfy human needs.

**Equipmentality of Architecture:** The nature of architecture in view of its equipmentality is of significance since its usefulness has always been man's concern throughout history. A work of architecture is, first of all, a thing, and the truth of its thingness is disclosed in its materiality. Yet, it is not a mere thing, as there is a purpose intended for its making or bringing-into-being. In this regard, architectural work resembles equipment, i.e. it performs a task, and its truth relies, in part, in the task it does. As a result, the work of architecture cannot be taken as being solely equipment, but rather, an equipmental thing. Hence, architecture is equipment whose equipmental truth is disclosed in the architectural work. In fact, illustration of the equipmentality of architecture lies in the answer to this question: how is architecture equipmental in relation to man? At first, it seems as though the work of architecture is only a shelter to protect man against environmental conditions, and provide for his physical comfort. But above meeting these basic human needs, the work of architecture plays a major role in creating the desired life for man. No matter how different this desirability may mean to humans, it is a shared resource that relates to both physical and psychological/spiritual needs of man. The work of architecture provides a space for all kinds of human activity, a place for his dwelling. It corresponds to plenty of needs and aspirations for man to achieve his desired life. Therefore, it is necessary to take account of all human needs and aspirations, from the most basic/physiological to the ultimately sublime, so as to understand the properties of a desired human life. The usefulness of architecture can be thus posited, and its equipmentality defined with regard to every human need, to the highest level of human perfection.

# Architecture in View of Art

The third Vitruvian principle of architecture is venustas, or beauty, which has always concerned the artistic aspect of architecture. From the onset of the history of architectural theory, architecture has been regarded as a type of art, and the architectural work has been treated as an artwork exhibiting characteristics as such. One of these characteristics is beauty, which just about every architect believes an architectural work shall display and by which charm its dwellers. This is the characteristic that makes architectural work an artwork.

Besides aesthetics, another aspect of the artistic being of architecture which has long been the focus of architects, deals with the manifestation and expression of content/meaning in the work. The movement "*l'architecture parlant*" stemmed from this very idea; architecture that speaks of a concept above and beyond its form. In this way, talking about venustas or the concept of beauty in architecture relates closely to the artistic character of architecture. As a result, first the nature of art is discussed in view of its relation to two concepts: beauty and manifestation (expression). Second, architecture is interpreted in terms of its artistic character.

What is Art? Understanding the meaning of art<sup>5</sup>, more than anything else needs finding out the relation of art and artwork. Speaking of art, what is first brought to mind is the artwork, by way of which the subject of art is raised. The first condition the artwork poses is its thingness the thingly character that makes it no different from other things. Yet, it is evident that artwork is a valuable thing it contains something which gives it value. The work of art is a thing, but not a mere thing, for it is made, yet it is not equipment, since its being does not rely on a function.

The Greek equivalent for art, techne, means to manufacture<sup>6</sup>. It primarily signifies man's ability to make or build by hand, thus the artwork is a man-made thing<sup>7</sup>. Since the artwork is more than the mere thing, the truth revealed in it is beyond its thingness, for it signifies the artistic character of the artwork. But what is the truth of art which is revealed in the artwork? **Art and Aesthetics:** To understand the truth of art, one shall study the relation of art and beauty, for beauty has always been known as an attribute of art. The term "aesthetics" was first used by German philosopher Alexander Baumgarten (1714-1762) in the eighteenth century AD. It derives from the Greek word aesthesis, meaning to sense, or all the sensational.

In other words, the term "aesthetics" reduces the concept of beauty to the level of the senses. Before the eighteenth century, however, the branch of aesthetics involved ontological, epistemological, and metaphysical concepts, besides relating to moral qualities such as virtue and goodness as well. The attribute of "fine" used for art in modern arts has been appropriated in the eighteenth century, when first the expression "fine arts" was used (Pazooki, 2005, 16-19). In Persian, the term honar is derived from the Avestan hunara, consisting of hu, meaning good; and nara, meaning human. Therefore, for early Iranians, art correlated with hierarchical levels of being, while also being an indicator of "benevolence". On this ground, the first meaning of honar is virtue (fadhîlah), goodness (husn), and veneration (mahmedat). Honar in the meaning of being-good-man correlates ontologically with human existence. In fact, art signifies a part of human existence which reveals itself only upon coming into being (Rahimzadeh, 2006, 11-14). "Benevolence" is expressed in Islam/Islamic mystical literature with the term husn<sup>8</sup>. It constitutes the keyword of Islamic aesthetics. In mystical texts, husn denotes inclusion of all perfection and venerated qualities. Thus, art in the sense of being-good-artisan and being-good-man has always been originally a companion to the Perfect Man (Ibid, 16).

It can be concluded, then, that husn (beauty or goodness) originally has an ontological relationship to human beings. According to Greeks, any produced being, whether of an act of techne or physis, is beautiful when truth happens in it in the best possible manner. This is why nature has always been one of the most evident examples of beauty. Beauty does not belong to the realm of artworks only, but can happen in all beings. Upon the happening of truth in art, i.e. the disclosure of the being of the artwork in its most befitting way, beauty is revealed.

Art and Expression: The concept of art is also linked to the concept of expression or revelation. As commonly held, artwork is a thing that carries a message, provokes a feeling, or expresses a concept. According to this view which has gained popularity especially after modernism, the artist tries to express a personal or sensational concept in creating the artwork a concept, which without doubt, is considered above the thingness of the artwork. With the intellectual shift following descartes and the distinction in the meaning and position of subject and object in human thinking towards the world and being, the nature of art and the concept to be revealed in it were also rethought. The artist was henceforth regarded as the subject who stands affront the artwork- the object- searching for the concept in the artwork. To the artist, no meaning exists outside what he is going to be feeling. This is in contrast with the pre-modern thinking about a work, which was thought that at the same time as being expressive of another world, does not emphasize on personal feelings

In Islamic aesthetics, the most elemental concept after husn is the concept of manifestation or revelation (tajallî). In Islamic wisdom or Islamic mysticism, beauty is of an ontological nature. Beauty does not relate to the mind, and human is not a measure for beauty. All beings are beautiful, and the discussion on beauty and beautiful is that which concerns being and beings (Pazooki, 2005, 23). In his "Phaedros" (dialogue), Plato asserts that beauty is the shining forth of agathon, from the world of Forms, in manifestation. For Hegel, beauty is the manifestation of the Absolute Spirit- beauty, itself an external truth, is revealed in a special realization of the Absolute Spirit. For Greeks, the terms on (being) and kalon (beautiful) meant the same thing. Heidegger adds on, "Truth is the disclosure of the being of beings." Moreover, there are some other philosophers who have also attested to the concept of disclosure or unconcealment in art, the equivalent to what in Islamic mysticism is referred to as tajallî or dohûr. Therefore, beauty is the revelation of the being of beings, and the revelation of truth (Ibid, 24-25).

Thus it can be said that art has two essential pillars: beauty (husn) and manifestation (tajallî). Beauty is an ontological necessity, since truth happens in everything whose being is manifested. Yet, in the artistic sphere, beauty relates with craftsmanship. Actually, potentially no manifestation is going to happen without an act of craftsmanship. The artist reveals the truth by way of creation. This fact is also true in Islamic thought for the Creation of God. From a mystical viewpoint, creation means revelation; "kalaq Allah," (God Created) means "dahar Allah," or God Revealed. Therefore, it appears that the nature of the artwork lies in the truth that reveals in the work. Artwork is the field in which the being of a thing is revealed in (Ibid, 29).

Ancient Greeks were also of the belief that truth shines forth and reveals in the artwork. They called this coming-into-unconcealment, truth, and the unconcealedment itself, aletheia. The prefix "a" negates the meaning of its root, "lethe," which means covering. Therefore, the meaning of the combination means unconcealedment. Greeks called this unconcealment of beings the truth. In a work of art, the truth sets itself to work, and art is ground for revelation of things. If truth revealed in a work, i.e. the being of a thing came into unconcealment, then truth happens in the work (Rikhtehgaran, 2007, 93).

Accordingly, what reveals by art is not the personal feeling of the artist, but the hidden truth which comes into unconcealment through art. The relation of human to art is that human is the necessary condition for revelation. In other words, truth or unconcealment and that revelation of truth can be explained more thoroughly by taking up a phenomenological attitude. The world is a revelation made for humans, and humans are its necessary condition. Here, revelation is also an interpretation of the word "phenomenon". One can assert that the entire universe in creation is a kind of revelation, which occurs only due to human existence. Without humans, God existed, but in concealment; therefore, God Reveals Himself in the universe for and through the presence of humans (Rikhtehgaran, 2005, 20).

Every artwork, then, opens up a world which is the source of truth. This revelation is the same as the revelation that occurs in nature, or physis. This is why mimetic representation of nature has always been a way to achieve beauty, as in nature, physis always manifests the truth in the best way. Engaging in art, man assumes a godly position and attempts on creation or revelation. Then, through his techne or craftsmanship, opens up a world and reveals the truth, of whose occurrence he himself is a condition.

Artness of Architecture: If we consider the artistic character of architecture according to the popular definition of art, an architectural work would then be an artistic thing carrying within itself a concept or feeling which makes it beautiful. From this view, the architectural work is like a statue whose measure of beauty depends on personal opinion. This definition



Fig. 2: A model for showing the unity of the triad for defining architecture in the view of "architecturality".

is unconnected with the functional character of architecture. This is while it is an equipmental being that relates with humans and their needs. With this assumption, how then, can it be a work of art?

In the essential definition of art, truth reveals in the artwork. Likewise, in an architectural work, there is truth that manifests- the truth of being an architecture-being. Truth does not reveal itself only in the physicality of architecture, but in place. Architecture creates a place for human dwelling, hence the truth of it relates to dwelling and human needs and aspirations for the desired dwelling. Artness of architecture is not about the beauty or "aesthetics" of its physicality, but about husn, happening when the truth reveals in its utmost perfection in the work. Equally, artistic expression does not designate the expression of personal concepts and feelings, but is meant to reveal the truth in the work. Therefore, having an essential relation, beauty and manifestation are both at work in realizing architecture as an art form. It is in this way that venustas becomes an essential concept in describing the artistic character of architecture.

# **RESULTS AND DISCUSSION**

# Unity of the Triad in Defining Architecture

As discussed earlier, the three Vitruvian principles of firmitas, utilitas, and venustas each represent an aspect of architecture, which respectively, correspond to the thingliness, equipmentality, and artness of architecture. While the majority of professionals have a general agreement on the unity of the three principles, there have been numerous instances in which one principle has gained dominance over the other two. This has been the result of adding up the three principles in architecture. This is while the true definition of architecture requires uniting the three principles, in other words, it is only in the sphere of "architecturality" that one can reach a more truthful definition of architecture. It is in this very sphere that thingliness, equipmentality, and artness are unified so that there is no way one could predominate the others (Fig. 2).

As noted above, the thingliness of architecture regards its thingly character, i.e. the architectural work<sup>9</sup>. Therefore, without the work, there would be no realization of architecture. Thingliness of architecture maintains all physical attributes of the architectural work, and thus plays a pivotal role in defining architecture. How a work of architecture is built, what materials it is made of, what its shape and dimensions are, a reall physical attributes whose description portrays part of the nature of architecture. Nevertheless, it is clear that architecture cannot be realized only within its material existence.

Above and beyond being a thing, an architectural work is a useful thing made by man. In this way, the architectural work is an equipmental thing which meets human needs. It is in this sphere that understanding of human, his characteristics, needs and aspirations with regard to a work of architecture is put forward, and such discussion establishes the kind of physicality a work can be realized in. In this way, architecture is a useful/ equipmental entity whose equipmental truth is manifested in its physicality.

Architecture is an art, and its artistic character endows it with a quality beyond equipmentality<sup>10</sup>. In this sphere, the work of architecture opens up a world wherein truth is manifested just like in the artwork. In architecture, there is the presence of "beauty" and "manifestation" both of which have ontological relation to truth. However, the work of architecture cannot be considered solely as an artistic thing, as artworks are characterized by their artistic character which does not consist in being functional, and so the truth manifested within them is above functionality. A work of architecture, specifically though, is of artistic character at the same time as being equipmental.

To define architecture in the single sphere of "architecturality," the three above domains shall be unified. In a work of architecture as a thing, the truth of thingness is manifested; in a work of architecture as equipment, the truth of equipmentality; and in a work of architecture as an artwork, the truth of artness is manifested. Thingness is inherent in equipmentality and artness of architecture.

Equipmentality deals with human needs in the architectural sphere. These needs concern dwelling of man, and fulfilling his aspirations for a desired life. Thus, the truth of the equipmentality of architecture is consisted in fulfilling the needs and aspirations of man towards a desired life. This truth is manifested not in the physicality of architecture alone,



Fig.3: A model for showing the three fundamental principles for defining architecture.

but in the architectural space, where the work creates a place for the fulfillment of human desires. Yet, what transforms architecture into art is the truth beyond its thingness or equipmentality. The artness of architecture does not pertain to its material, shape or physicality, and neither to its function. The manifestation of truth in an architectural work opens up a world enfolding the beauty of the work. For the realization of a truthful architecture, this truth is set into unity with the truth of equipmentality of architecture. The manifest in architecture is concerned with the truth of human desired life. By way of architecture, man is in search for the realization of his desired life- where in the answer to all his needs and aspirations are embodied and perfected in the physicality of architecture. This truth relates to the usefulness of architecture in one way, and to the manifestation of truth in the work- characteristic of an artwork- in another.

What is referred to as "architecture", then, is an entity that makes the truth of human desired life happen in the architectural work. It is in this happening that man can achieve the ultimate purpose of architecture- creation of his desired life. Since architecture is about building, it is techne- in the sense it is also used to make up the term "architecture". Moreover, architecture is about manifestation of truth, the idea which lies in the meaning of the first part of the term "architecture," i.e. from the Greek root arche. The idea applies to the Persian word for architecture (me'marî) as well. Me'mari is an entity that presences building and development by hands of humans, all whose activities relate with life. Therefore, the truth that manifests in a work of architecture is the truth of desired living, that which is the purpose of equipmentality of architecture.

### **Fundamental Principles for Defining Architecture**

As a result of what was discussed, architecture is an entity that manifests the truth of human desired living in the architectural work. Following the Vitruvian principles, then, three fundamental principles can be identified for architecture which are, "truth of human life", work of architecture", and "manifestation of truth." The three of these have an ontological relation, therefore, they cannot be perceived as parallel entities, and so, not any of them could dominate the others (Fig. 3).

#### **Truth of Human Desired Life**

The first fundamental principle of architecture, "truth of human desired life," is equivalent to the principle of utilitas in architecture. It is the truth that opens up a world promising a desired life for humans. This is where architecture connects with human beings as its subject. Architecture is about investigating into the dimensions or hierarchical levels of human life. Architecture is linked both to human deeds, and all that which affect those deeds. Human life stretches on hierarchical levels, and architecture serves to accommodate a desired life in all of its different layers, from physical to psychological, personal to social, cultural to devotional.

### Work of Architecture

The second fundamental principle of architecture, "work of architecture," is equivalent to firmitas. There would certainly be no realization of architecture without the work or the building. But, what does a building want to be, in order to make the truth of human desired life be manifested? Humans attempt on architecture in search for their desired life, and this attempting is realized in the form of building and setting up. Therefore, man's preoccupation in architecture actually aims towards what, how, and out of what should he build. This is in fact where form emerges as an essential element.

### **Manifestation of Truth**

The third fundamental principle of architecture, "manifestation of truth," can be thought of as equivalent to venustas. Architecture is realized only when a work of architecture is created and the truth is manifested within it. Hence, man's attempt on architecture is a way of unconcealing the truth, i.e. revealing it within a domain that we call "work of architecture." A desired life is the primordial desire of all mankind regardless of race or culture; yet its form of manifestation may differ among different societies and cultures across time. Architecture, as a resource all humans share, is the way to objectify this primordial desire, that which connects with being and bringing-into-being upon manifestation or revelation, only to be fulfilled. Architecture makes this happening possible. Architecture fulfills man's desire to achieve his desired life. But truth is not manifested in the physicality of the work of architecture, but through the creation of a domain which we call "space" or "place."

Based on the above discussion, the three fundamentals of architecture can thus be elaborated as: the truth of human desired life is the hidden truth needing to be brought forth or revealed only to be realized. Hence, it is only after humans set up a work of architecture that truth is manifested. Louis Kahn also speaks of "desires" or "inspirations" in his interpretation of architecture. He mentions primordial inspirations such as learning-which has been the "beginning" of emergence of the school. Realization of these primordial inspirations assures the perfect human life. (Norberg-Schulz, 1988, 128). He introduces two essential concepts in architecture as "measurable" and "unmeasurable". He refers to the work of architecture as the measurable, and its origin, as well as its end result, as the unmeasurable. In his opinion, architecture is unmeasurable. It begins with the unmeasurable, goes through measurable means since all that is made follows the laws of nature, which are measurable. And in the end, it expresses the unmeasurable (Scully, 1962, 118). If we compare these ideas with what we have discussed earlier, then the work of architecture would be a measurable entity that is mid-phase between the truth of architecture, i.e. the truth of human desired life, and the manifestation of this truth that is the realization of that desired life.

# CONCLUSION

The three Vitruvian principles denote three aspects of architecture that combine to realize the truth of architecture only if unified into one. Firmitas, utilitas, and venustas actually indicate, respectively, the thingly character, equipmental character, and artistic character of architecture. Jointure of the three principles is not sufficient enough to yield a definition for architecture, as the definitions we have seen formed from the viewpoint of one principle only shed light on one aspect of architecture. This is while these principles shall be unified to form a single definition. It is only in such a sphere that architecture holds at once the three physical, equipmental, and artistic characters, fused together in such a way that are inseparable. Phenomenology is an approach that helps investigate the nature of architecture in the unitary architectural sphere comprised of the three principles. This architectural sphere is the one which helps discover the similarities of many different definitions of architecture, finally reaching at an all-inclusive and comprehensive definition. In defining architecture as an entity that serves to manifest the truth of human desired life, the three Vitruvian principles utilitas, firmitas, and venustas denoting the "truth of human desired life," "work of architecture," and "manifestation of truth" are present all at the same time.

# **ENDNOTS**

<sup>1</sup>The Vitruvian Triad of utilitas, firmitas, and venustas has appeared repeatedly with different titles in writings of many architects and authorities in the field. For instance, Alberti names convenience, firmness, and beauty as the three ruling principles of architecture. Henry Wotton names the three principles of commodity, firmness, and delight for architecture. Pugin reintroduced them as convenience, construction, and propriety (Capon, 1999, p. 25). This legacy has continued since, to the modern version of function, structure, and form. <sup>2</sup> Abraham Harold Maslow (1908-1970), American psychologist who introduced the theory of human's hierarchy of needs in his paper entitled, "A Theory of Human Motivation." According to this theory, human needs differ in type and level of importance. He categorized them from the most basic to the highest level as Physiological, Safety, Love/Belonging, Esteem and finally, Self-actualization.

<sup>3</sup> Heidegger calls this characteristic of the mere thing as "self-containment." The mere thing is self-contained. He also believes equipment to be self-contained, i.e. it rests in itself. That is because equipment lies in its matter and not beyond that boundary. This characteristic also applies to the mere thing. Heidegger uses this term to denote the similarity of the mere thing and equipment, while also to distinguish between equipment and artwork (Rikhtehgaran, 2005, 39).

<sup>4</sup> Heidegger calls this characteristic of the mere thing which does not exist in equipment as "self-sufficiency" (Rikhtehgaran, 2005, 40).

<sup>5</sup> In contemporary Persian, honar is used as the equivalent for "art," which comes from the Italian l'arte, French l'art, Spanish el arte, all of which share the Latin root ars which itself derives from Indo-European ar. These terms all apply to what the contemporary Persian term honar indicates (Rahimzadeh, 2006, 11).

<sup>6</sup> The Greek term techne is derived from the Indo-European root teks. The Latin term texere means to weave, or fabricate, and that's where the English words "text" (script), "texture" (fabric), and tissue (woven) and their derivations come from. This root also appears in tex-on, which is the root for Greek tekton (craftsman) and later "architect" (Rahimzadeh, 2007, 9).

<sup>7</sup> The Greeks believed the highest craft or techne to be poïesis, meaning poetry (not rhetoric). Its root means "to make," and Heidegger refers to it in "The Question Concerning Technology" as production. In the "Symposium," Plato refers to whatever goes through the non-presence into being as poïesis or production. The Greeks actually knew two kinds of poïesis, one that was done by hands of humans or techne, and the other, what was the act of nature or physis (Rahimzadeh, 2007, 9).

<sup>8</sup> In the Qur'an, God calls Himself "ahsan al-kaliqîn" (best of artisans, The Creator) twice (Surah al-Mu'minûn: 14, and Surah as-Sâfât: 125). He has congratulated himself for this in, "hallowed, therefore, is God, the best of artisans".

<sup>9</sup> To be more precise, one shall distinguish between architecture and architectural work. In English usage and in architectural literature most often, both are referred to as "architecture." Yet, there is still difference between the act or doing of architecture, and the end result which is the work of architecture.

<sup>10</sup> Heidegger also distinguishes the artwork from equipment in "The Origin of the Work of Art," where he attempts on discovering a definition for artwork in its pure sense. In his view, things fall into three categories: the mere thing, equipment, and artwork. The main distinction of equipment and artwork is the serviceability of equipment. The equipmental character of equipment lies in its utility. The truth of equipmentality is revealed in the equipment itself, and the piece of equipment presents nothing above that. But the truth that is manifested in the artwork does not imply utility. Hence the spheres of equipmentality and artness have been drawn as quite apart.

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