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A Novel and Modern Comprehensive Theory to Create an Anthropocentric Architecture Based on Laws of Chaos (Part V): Learning in the System

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ABSTRACT

It's as if the child we have conceived is now born to interact hereinafter with the world and the people in it. In the Chaos Chapter, we explained how natural systems learn. Since chaotic system are flexible and able to adapt to the super-systems and are also able to self-organize and optimize, they are capable of surviving and even promoting through the process of negative feedback and change in generative information by being placed in different conditions and dealing with turbulences. How to confront the conditions and decide is recorded in the memory of the system and would lead to next mutations and irreversibility of the system.

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1. Introduction

If the architect can be created in the form of a chaotic system, it would possess the characteristic of learning. Therefore, by realizing the seventh stage, a dynamic and infinite world would be completed like the Iranian star in a finite circle. The result of learning in this system would be the interaction of the system components, an increase in the capabilities of the mind of the architect, promotion of the level of cognition and awareness of the audience, cultural enhancement and eventually reform in the super-systems of human societies, which shall be described in the following:

A system of architecture consisting of the architect's mind, the architectural space and the minds of the audience attempts to learn in the context of the environmental system on different scales. As we mentioned, in examining the behavior of the system, what is focused on is the mental patterns of the audience of the building [1–23]. All the architect strives to achieve is to send his/her message to the audience through forming this mental pattern. The architect initiates the creation of the building with a mental pattern and embodies that. After the building comes to existence, the moment we attempt to think about or judge a building, our only reference would be our mental pattern which depending on the amount of behavioral facilitation, biological comfort we feel in it and our perceptual-cognitive level is more or less distant from its physical reality and the mental pattern of its creator but it's our only source of reference [24–34].

These patterns, created based on the chaotic basin of attraction, because they are open systems, are perpetually ready to change, evolve, feed on the turbulences of the environment in order to promote themselves and confronting unexpected factors and generally, learn. As long as the work is forming in the mind of the architect, as was discussed in the pattern-formation section, there is a chance to evolve and learn in it as new data or fancy enters. Different methods of creativity teach us how to enrich trivial mental patterns through different interpretations of them as a result of learning and turn them into genuine architectural fancies. It is also possible to optimize and transform the mental pattern of the architect during the execution of the building. However, it's after the construction of this body and architectural space that it affects the minds of people and even the mind of the creator him/herself and of course, it develops in the mental patterns of the audience and leads to learning [35–56].

We can consider interpretation as the feeding of the architectural pattern on the mental patterns of people whose visual effect would become clear over time. One of the clear impacts of learning in the pattern is the development of distinct architectural styles from one another. The interpretation of other minds of an architectural pattern appears on the face of the next styles and thus, the pattern grows like a living entity. For instance, consider neo-Gothic style which was developed from Gothic style. At first, this style might have started out as an imitation of the past but when new interpretation of the old pattern emerged, it was separated from Gothic and shaped into a distinct pattern itself [57–73].

As was discussed in regards to formation of the pattern, a mental pattern of an *object* is completed over time due to learning of the mental system. The brain acts completely selective in formation and even recognition of the pattern and its general tendency is towards gathering of information form whole to parts. This is a matter of high importance in regards to pattern formation of architectural building. An architectural building does not form a complete pattern in the mind of the audience the first and second time around. As we said, the

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artistic architect must be able to design and control the fancy in a way that its pattern is formed over a long period. In other words, its novelty and information must be extended to the highest point possible and yet, the mind of the audience should not get tired of continuing this path and completing the pattern. After the construction, the building attempts to form unique patterns in the mind of the audience based on their mental background and the degree of its effect on the people beyond the control of the architect would be different for everyone depending on their need, type of behavior, the cognitive-perceptual level and the mental power and experiences. These differences are the cause for the development of various patterns of the work. In other words, after the architect, it is the mind of the audience which leads to the growth and flourish of the initial pattern of the architectural work [74–84].

Since the mind, in recognition of a new phenomenon, more than anything tends to recognize it in the form of its existing mental patterns, the experiencing of architectural works plays a significant role in the judgment. Since architectural critics refer to their mental patterns in order to evaluate the buildings, their comments might even be far from the intentions of the designer and this is one of the other effects which the mind of the audience leaves on the architectural system. As Hugh Pearman, one of the architectural critics who were very impressed by Kahn, after visiting his mosque in Bangladesh, believed Alghadir Mosque in Tehran, designed by Jahangir Mazloum, to be completely modelled after Kahn's mosque especially in brickwork. Such a statement about a building in a country which is the pioneer of the invention of brick and various kinds of brickwork with the presence of tower tombs which were probably the subject of fancy finding of the Iranian architect seems rather inaccurate. However, such statements clearly show how the building pattern affects the mind of the audience considering the default patterns and the importance of chronological transposition of the architectural experience in interpretation and cognition of buildings. Thus, even if a building is a copy of another building, if the audience experiences it first, his/her basic mental pattern would be formed based on the perception of the imitated building and even the original building would be recognized through recognition of this pattern and it's inevitable and beyond the control of awareness which can be very misleading. Just as the mental pattern of the great building of Persepolis might be formed first from an imperfect imitation of it and later the person achieve perception of the original building through recognition of that pattern and thus, the cognitive value of the building is reduced for him. Therefore, it is imperative that the architects acquire such high level of awareness and cognition that when they try to model older building, they add to it and guide the interpretation of the audience [85–89].

All the attention of the architect must be focused on the matter of how s/he affects his/her audience and how is this affect developed. All the stages of designing which were explained from the beginning of this chapter were in regards to human perception and cognition and meeting true needs of humans. How to select the fancy for the design, adjustment of the balance between cognition and surprise in order to provide pleasure, companionship of nature, attention to details on all different scales, self-similarity, fluctuation around the balance, visual openness, change and motion, designing the edges and corners, light and color, emphasis on signs and symbols, creation and destruction of information through Gestalt principles, perceptual stability, decrease and increase of information and defining misleading and virtual information and imaginary patterns and building memories and forgetfulness are all measures taken for the creation of different types of simultaneous and of a context for different interpretations of the work by any perceptual-cognitive level in order to encourage the interaction of the audience with the work and to try to bring them together with the architectural space so that the architecture is realized as an chaotic system. Change in mental patterns and interpretations of the audience guarantee the dynamism and livelihood of this system [81–91].

Creating possibilities for the creation of different interpretations for different individuals is one of the ways to develop learning in the system. What brings the mind to the level of thinking is recognition of unity in multiplicity. By multifaceted response to various aspects of function, climate, structure, aesthetics, culture, etc., the architect can answer all by a single volume and thus establish unity among multitude. Thus, the possibilities of the system increase. In the face of such an achievement, every time the mind takes note of an aspect and different translations and interpretations are made possible. Also, using vagueness and ambiguity, the factor of randomness, symbols, and providing a chance to choose by designing accesses, functions, paths, and various options, the architect can increase the system's capacity of learning and varies the cognition of the building from mind to mind or at each instance of visitation. Of course, except in certain case, it should be notes that creating vagueness and varying patterns in the generality of the building is not recommended due to the undermining effect on the determinacy, but it is emphasized in sub-systems to increase unpredictability. Multiple or multipurpose details which might have multiple functions or are variable can have diverse pattern formations depending on the audience. So, the architectural building can cause various interpretations in a single audience and different interpretations in several audiences. Therefore, along with creation of infinite information, learning in the mental patterns of the people of the society is enhanced. The creator of the work and other architects are also not immune to this struggle. Their mental patterns also grow more fertile and dynamic under the influence of the architecture and they are encouraged to create new works with different interpretations. This is how the work builds its world and becomes the source of many effects [90–93].

2. Results and Discussion

At the highest stage, an architect who enjoys a high place of cognition and awareness will be able to enter his/her audience to the realm of awareness in the presence of the building and bring worldliness to their worlds. At this point, s/he will be a true artist. This is the highest degree of learning in the system which would lead to the transformation of attitudes, return to humanity and revival of culture and art. The eventual purpose of describing the seven stages of architecture is to achieve spatial quality instead of making forms. A quality which I call the sense of presence and now expect to have found a mutual language with the reader to describe it. This is the summit of architecture which we achieved a while back and now, we are rapidly falling from it. Valuable architecture invokes the sense of presence in the experiencer of the space and encourages him/her to discover him/herself and free him/herself from the outside world.

Art is the product of the creativity of the architect to elevate the thought and awareness of the society. The mind of the powerful architect is an apparatus for converting information in circulation to new generative information

which is able to translate a system to another system. The ideal of the artist is to reveal that general principle which flows fractally through the depths of all the systems of the universe. Music is the most celestial of the arts. That genuine quality which affects the human's experience of a valuable movie is not the result of visual perception but the sum of the narrative, the scene and of course, the music. If the music is removed from sad, exciting, or emotional scenes, the images won't leave that profound an effect on you. Music is like a tune which is revealed from the world above through the artist and an instrument not so complicated. There was a time when the architect, too, was not so degraded and was expected to illustrate heaven on earth just like the music of hope. Architecture is not a skill but an art with the task of translating the juice of existence in a new form material which can promote and collect spatial behavior, processes of motivation, emotion, perception, cognition and the unconscious oh humans. Meanwhile, the more the work of art can maintain the audience in its presence and invoke their awareness, the higher is its rank. To this end, using these seven stages, you must be able to create a human space not a form!

To create any work of art, there is an intention which equals thinking about the environmental systems and the secret of universe and there is the matter of subject which must be adopted in accordance with that art. It might be possible to name anything the subject of painting or sculpture and give it time to settle into the work of art. But, what can we name as the subject of the art of architecture besides habitation of human and giving him a chance to gain a new experience of the universe? This point puts the art of architecture at the top. It doesn't matter that later this subject is dealt with; this will never reduce its value but is a necessity for its creation.

Heidegger believed that the force of a work of art becomes clear where it can create its own semantic structure or world. By creating this world, the work examines new ways of being, bonds different ways of the being of people, things, works, and the sacred matter together. The work of art can build a new structure among the components and thus, precede the rational word.

We have gotten used to the universe and the world around us. The task of art is to cast this habit away. Art, while feeding on our routines and habits, shows us an alien world and presents the possibilities of existence to us in a new way. The world, this wide horizon of meanings, is dissolved in the technological destiny of modern times. Even tools and craft are dissolved in the world. The only unconventional thing is art, the thing with the power to reveal the truth through this distance and distinction from the world and allows things to be dependent of their function and be themselves. The structure of works of art, thus, forces humans to think, reveals the world to resemble an incident. Brings it out of obscurity and makes things opaque. So, remember if your work didn't force people to think or didn't invoke their awareness, it's not art.

The work is a product of the mind. The work allows its creator to appear in the position of creator and thus affect it. Precedent to them both, there is the art itself which is the source of the work of art and the artist. The art becomes is actualized in the work and the artist gains existence in the work and the work displays the structure of the incident, the universe, and the artist and lets the audience in its life. The art is known through the examination of the work and the work is clarified by the knowledge of the essence of the art. Heidegger Heidegger distinguished between three things in his book *The Origin of the Work of Art*: the first is merely a thing (*object*) and stands outside me, over there. The second what is used and I build it. And the third is the work of art and the teachings of this text seek to create it.

Building the world and formation are the two main characteristics of expression. When Heidegger talked about the world of the work of art, he linked three words together: inhabiting, home-building, and thinking. He himself said this was the true meaning of life in this world. It is also the meaning of living in the world of the work of art. The world of the work of art is itself the inhabiting, home-building, and thinking. The work of art is the allegory of world and earth. It is the relation between the two. It's the world finding worldliness; a world which becomes our familiar home. The work of art has as much worldly credit as that. Expression of the work of art is also formed with the world of the work of art.

In the analysis of Trakl's Winter Evening, Heidegger wrote that the description of snowfall seen out of the window is not important. The important thing is the existential aspect of the call. We need to let go of his description. What matters is how it calls to us, invites us and things alike to enter his world, the world of his poem. He reconciles the work of art, the world, the things and us. Here the poet, the world and the reader get closer to each other through the call of the language and not through describing things. Heidegger said that poetry is beyond any sign and sound, it is the fundamental built of the inhabitation of humans in the world. Poetry is the elimination of the distance between anything and the world and to this effect; it is the inhabitation of anything.

Heidegger talked about inhabitation whereas Jung considered the house the symbol of human himself. Of what quality this house whose construction is left to the architect should be? Heidegger said when you enter a carpentry workshop and pick up the hammer and get to work, existence is meaningless. The hammer is an object, a tool in your hand. Existence comes in play when suddenly you start thinking what is it in my hand? How am I holding it? What do I mean? Etc. That's when the hammer gains existence and I worldliness. That's why the stones, plants, and animals do not have a world but just a habitat, because they don't think. And by thinking, here we mean the degree of awareness and cogitation about one's thought because animals and plants also possess cogitation and natural intelligence of the chaotic systems. But if human does not think about his habitat, he sinks lower than them. So, the house should be a space of thinking.

The artist is the greatest of the thinkers. When the artist draws the designs of a plant, s/he detaches it completely from its routine context, reflects on its intricacies and gives it existence in whole different context. The visitor of this picture is not aware of the real conditions of this abstracted (isolated) plant. The ivies begin their new life and are born into a different world! The observers attribute infinite interpretations and conceptions to this work, all of which stem from the novel presence of the ivies not their routine functions and that is the revelation of a new truth. The subject is thought.

Human achievements are in fact, accumulation of natural meanings in a new way in relation to human intentions. Thus, natural meanings are extracted from their natural context and are combined as elements of a language to form a new and interlaced meaning which describes both the

nature and the role of human within a unity. These achievements bring the world together and thus reveal the truth.

We need to pay attention to the routine function, abstraction from which is the task of art. As we mentioned in the discussion of art, in architecture, the function, which the art of architecture rids the building of, is not the usage of the building but its routine and mundane function, which has paled due to habit and that is the true life and the worldliness of human! Our daily life and existence has dissolves in the habits and routineness and we have neglected this gift. In these smog-ridden cities with daily concerns, we no longer possess worldliness because we don't think and are neglectful of the quality of our life and space. Today, we have habitats like the stones and plants not a world opened to us. The mission of the architect is to call and direct us towards thinking and existence! A true home meeting the artistic quality of architecture is able to free our lives from this forgetfulness of existence and in fact, detach us from its routine function. Such a work of art bestows new existence on life and casts light on it in a way that the individual tests being/existing in that place.

True architecture is a work which doesn't focus on futile composition and formation, but rather on keeping the audience here and now to present them with the soul of the place and transmitting a profound notion. The most basic human need is meaningful experience. A work not able to invoke emotion or a cognitive level in human cannot keep him in its presence and thus, is not art but merely a thing.

However, thousands of years ago, true Iranian artists surpassed even Heidegger and extended the value of the work of art in transmission of notions to the attendance of love in addition to the realm of thought; which is where pure awareness occurs. Through thinking, perception of the sense of presence, illumination, and discovery of the language of unconscious, Iranian artist strived to, as the medium of grace, express in his/her work whatever s/he perceived from the visible and the invisible worlds in a way that its visible and hidden words interact with their true audience and observers forever as a sacred matter.

Artists of ancient Iran had so become one with the truth that their achievements were truly a gift from the heavens which appeared in any context differently, the unity of whose essence, the truth, was apparent despite their diversity. Poetry and literature, architecture and music, dancing and singing and basically all true and original arts of this land were all different realizations of a universal truth which as artists put it, were united with their beloved and became colorful.

Now, after reading this book, you'll know why these spaces are pleasant and memorable. The alleys and houses and gardens of Yazd and Kashan have an identity as perfect s humanity. When you visit them, they won't turn their faces like the arrogant modern buildings saying we are what we are or do not stare at you with their dry, gray and vacant eyes like the dead. They rather come running to welcome you like happy, innocent children or elegant, hospitable beauties. From the beginning of the alley, in the entrance corridors, in the garden and yard, in the three-door and five-door rooms, behind any window you open, even in their ruins, it is as if they are trying, to their last graceful breath, to chase away the painful memories with their touch and celebrate your valuable and humane presence and they have a message for every look which must be attended to with humble posture and whose notions must be reflected on and the mental patterns of existence must be relearned. It's as if here, the rush of lie is tamed to praise every moment of it.

It can be said with certainty that creating the sense of presence in the moment has been one the fundamental goals of the past architecture of Iran and the Iranian architect was the most skillful artist in this endeavor. In Iranian beliefs, the artist filled the place of a person devoted to the truth of objects beyond appearance and effects. In addition to craftsmanship, s/he was also a pious and a seeker. The entity invented by this artist would be highest expression of God. His/her work mysteriously and symbolically would be considered as a journey to the spiritual homes and stages.

The shapes of this art are the result of spiritual exploration and excursion of the countries and peoples. The comments and thoughts of the artists of this country have been the ways to perceive the world through the development and expansion of the aspect of mysticism and intuition performed in pursuit of the cognition of the secret of existence and are revealed to those who are seekers of this way themselves. The grand purpose of introvert art of Iran which considers heart as the inside, reaching which is not possible unless we go up the hierarchy, be united with the truth and being one with the universe and this introversion was never meant as isolation and focus on the mind in the way observed in the art of Far East.

The inspiring Iranian space prepares the ether, mixes matter with light, crystallizes the nature, and attends to stunning details on different scales and speaks the language of symbols layer by layer in such a way that forces humans to think in its presence and if they still resist, it will address their unconscious and soul and this way, forms their humanity and worldliness and becomes the origin source of the work and more clearly stated, architecture becomes the elevated art.

In the art of architecture of Iran, despite the presence of determined volumes, there has always been internal complexities which is a result of the complex design of architecture in formation of mental patterns and the call to the human unconscious and not the physical complexity because the artistic architect has composed his/her work like a sonnet for the audience not merely a statuesque building built with no regard to the people. The complexity of the architecture of the past wells from the complexity of mind and soul of the architect, the mind of a thinker who is able to solve the problem and an enamored soul who has been united with his/her beloved. In practice, this complexity leads to the creation of a fabric which appears simple but is so interwoven inside that modern architects, masters of computer software, cannot visualize their connections in three dimensions, their accesses and details, including Muqarnases and even more importantly, they cannot find out what spirit lives in this body which is not present in modern works. The architecture of the past was in fact, chaotic: an intertwined and steady system with an adorned and determined face which was replete with events and inspirations. A system which you can never fully recognize by analyzing its components like you can do with modern architecture. You'll rather have to treat it like a living creature and perceive it by reflecting on its nature and behavior of its essentially integral part, i.e. human, in its spaces.

In the viewpoint of Iranian artist, a place is where to be and to become, co-placement and co-dynamism occurs. Thus, Iranian symbols (which are the origins of universal symbolization), the design of complex details, fluidity, unity in multiplicity, embodiment of the paradise, transparency, natural lighting, creation of visual connection between

different parts of the building, creation of a view, bright lights and colors, complex and contrasting designs and bowl makings and mirror works were all calculated measures which were seen in different types of Iranian buildings before and after Islam and their purpose was to keep the audience in the defined space and preventing the mind from wandering elsewhere, because all there is to be is embodied in this moment in this place! And how wonderful that that moment is eternalized and after it passed, wherever we go in today's life, we desire to sweeten our moments with recalling that enchanting memories of presence in the company of the master.

It's interesting that it is through this mythical solution that Iranian space goes beyond time and space, because it has in store new and interesting information for any audience at any moment which keeps them in its presence at the moment and not its presence but the true presence which it has become one with and calls the audience to also become one with this transcendent state. In such a place, the mind goes beyond thought and enters the realm of love and pure awareness. As if you are in the fractal area between sleep and wakefulness.

By designing different types of spaces, the Iranian architect very cleverly provided human with the chance to experience and perceive his house from different angles and heights. The old houses of this land which is truly the Mother Nature are brought to life by the soil of the same place where they rise from and then they embrace their owners like children to care for. When you climb up the old houses in Kashan, Kerman, Yazd, Khuzestan, Sistan and Baluchestan, etc. and experience its existence from every cavity, porch, roof, yard, platform and terrace, you feel like to have returned to your childhood, when your mother kindly let you climb up her body, sit on her shoulders, hide in her side and play with her side what a familiar feeling!

The variable light of day casts infinite lights and shades inside from beyond the colored windows, the play of the reflection of water which both determines its face and adds to its transformation, or any breeze and the unpredictable dance of the fishes inside and the leaves of the trees in the garden which turn a different color every day, keeps the mind creative and rich forever. Our ancestors lived all nights of the summer in open space and spent hours entertaining themselves with natural patterns. Besides the light of celestial objects, for years, the light of lanterns and torches transformed the spaces at night. The vibration of fire transforms dispersion of light faster than sunlight (per unit of time), makes the shadows dance and fives surfaces depth. Even today, using fireplace is a common practice and whenever a poetic gathering takes place, even the most ordinary people turn off the lamps and light up candles. The livelihood and motion of the candle flame invokes our emotions and changes our perception. All the objects gain another identity and immerse in the fantasy and vagueness, fertilize their imagination and feel perception.

Inside, the ceilings were adorned by mirrors and stars since the times of Mithraistic caves. The lines, illustrations, designs, and plaster works done by hand, no pair identical to each other, and elaborate Muqarnases near the skylights opening to the world above, separately and together created entertaining designs forever. The handmade Iranian carpets and rugs with their heavenly designs and natural colors, indigenous materials and natural fibers, were all in the position to nurture the mind fertilize creativity and eventually elevate the soul.

Showing human in space is one of the important measures which emphasize his presence in the moment. So, mirrors which are now removed from our architecture had a key place on the ceiling and walls. Mirrors strongly enhance the sense of being in the space. Objectively show the person that s/he is present in the space and exactly how s/he is present there and relates to it. Use mirrors in abundance in design and reflection of light and don't let any mirror ever crack or break because then the existence before it would fall apart!

Iranian architect truly paid due homage to mirrors. With the high regard mirror has in the mystical notions, it has found its true place in architecture of Iran when it is used in the mirror works of sacred places in their domes and becomes the full face of unity in multiplicity. Creation of infinite information which takes a new shape at different times and in different pieces and gains such presence and so turns the material space post-material that it takes your breath away and destroys any information outside this space. Your face breaks into a thousand pieces in the mirror work of the bowl of the dome and it's as if it fills the space. Wherever you look, you are there and not there. Here is where human and space truly becomes one and you shall be present in all the space; beauty and the sense of uniqueness whose perception is only possible in the presence of space. It looks like an ethereal object from another world whose reflection shall not appear on any picture and movie.

3. Conclusions, Perspectives, Strategies, Useful Suggestions and Future Studies

Dependence on initial conditions is an important characteristic of chaos which brings diversity and evolution to the nature. Dependence on initial conditions allows for the influence of environment and the entrance of random factors from environmental variables and creates an evolution of the types and a wide diversity of beautiful shapes of natural fractals. For instance, if we consider the type of tree a chaotic system, we'll see how it has become so varied in different conditions, different climate and in juxtaposition to other chaotic systems with the help of negative feedback and feeding on various environmental turbulences that it has been able to scatter fractally over different climates in the form of different types and survive in any condition in strange forms and evolve from one generation to another as a result of learning and retention of previous information. This system is not only alive but clearly intelligent and creative in a way that in attempts to solve the problem on special occasion and never ceases to live. The architectural system should also be able to learn as a live system to be able to affect the minds of people and the culture of its country in the long run.

The mind and soul of the artist is also dependent on the slightest turbulences and changes in the environment due to belonging to the natural systems. It is able to create a complex system from the most trivial phenomena of life and attract the attention of the world to it. Truly, s/he is that small colorful butterfly who flapped its wings and raised storms in the history, such that has transformed even the super-systems of environment and culture and the level of cognition and awareness of the generations after it. S/he has the ability to optimize in order to search for the best way to express his/her thoughts. While s/he accepts the reality and the conditions of environmental systems as the watering and determined conditions of the creation of the work, s/he attempts to unpredictably create new information, break the molds of calcification and destroy old information within the human mind. Truly, the artist is the prophet of chaos.

Art begins with modeling of the universe or as one might say; its expressions in the way described in the discussion of pattern formation and are then abstracted from it. In other words, it is created by feeding on the known environmental systems and then it attempts to develop in the form of a new system through learning and becomes itself the creator of new information and the source of various interpretations, just like the natural world. The work of art designs a new world. While its roots are in the soil of this world, it becomes the source of its own space and the origin of new possibilities and laws. That's why the work of art forms a new reality. Creation is the truth speaking the words. Creation goes beyond the artist and also his/her work's world and its effect would increase over time.

Humans give the meanings concrete presence by making buildings and bring the buildings together to symbolize the shape of his life as a whole. What the architectures bring together differ depending on their task and position. Architecture is in fact, the interpretation of the local spirit according to the values and needs of the society. Meanings which are brought together by means of the location build the spirit of the place. The task of architecture is to penetrate the world and cultivate its meanings in the work.

Thus, architecture encompasses/possesses the work. Architecture becomes the source of new and live information by converting information in circulation to generative information. The richer it is, the greater it will affect others. Architects spread their effect by imitating and modelling the architectural buildings and people develop it in the society by accepting and adjusting their mental patterns and spatial behavior. A work of architecture is like a drop of ink in a small pool of water: once dropped, it will scatter through the water over time and affects the entire environment. The work of architecture spreads over time and triggers learning in larger systems of the society, culture and art, and will not only evolve the architectural system but also the environmental systems through butterfly effect. Thus, creation of a person, like the flapping of the wings of a small butterfly, triggers a storm of large scale over time which is able to affect the whole system of architecture and culture of the country.

If the intellectual background of a society is sound and aware, even an adverse effect, over time, would also lead to the growth of thought and culture because it becomes subject to criticism and punishment and if the society is sick and incapable, the disruptive effect would rapidly bring it to the verge of destruction.

It is emphasized that to realize the suitably chaotic architecture it is essential that as the designer, you should strive to gain high degrees of awareness and cognition to create the art and then, implement the seven mentioned stages simultaneously and perfectly with awareness to reach an effect worthy of human institution with noble and power notions to revive the culture and thought. Otherwise, any worthless work would also spread due to the chaotic nature of human society according to butterfly effect and would lead to wrong learning in the system and you would be responsible for it. Aye, the architect and the architecture strongly affect the society. From now on, when you flip through the magazines in search of an idea or replace imitation with creativity, beware that you are a means for the spread of its effect on others in your country. If you are aware and rich with knowledge and culture, the comments and effects of others can lead to the proper growth and development and spread of your work. Otherwise, you will only be the tool to realize someone else's wishes. If your succeed in creating a work of art, i.e. a work which forces others to think, then rest assured that you have taken a major step towards reformation and growth of the culture whose pervasive effect might be discovered years later.

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Short Biography and Outlook

Architect Sanaz Eftekharzadeh was born in 1975 is an independent researcher and the CEO of Iranian Association of Sustainable Building-City founded in 2014 in Tehran where she can focus on her research interests such as vastu Shastra, sustainability, Chaos, Cognitive science, Transactional Analysis, Semiotics, Persian literature, Aryan culture, archeology, ancient Iranian Mythology and patterns in art and architecture and finds the ways to apply the achievements in practical architecture.

She has got her M.S. of architecture from Shahid Beheshti University/ Architecture and Urban Planning faculty with excellent grade in defense. The subject of her thesis was applying of Chaos theory in architecture, focusing on cognitive science for defining a design methodology entitled: "Towards a Chaotic Architecture".

This theory presents a new definition and then new methodology for creating architecture. It considers architecture a system of distinctive minds of the architect and the audience and the architectural building itself, which is a subset of diverse environment, then chaos, as the agent defining the rules of the mind's function and the nature and the connector of different branches of science and art, has redefined it as the best system for the human's physical / psychological/ cultural needs which can be named anthropocentric architecture. The achievements of the thesis has been developed in 17 years expanding on different scopes of cognitive science and updated outcomes of chaos theory to present the characteristics of the anthropocentric architecture in 7 stages . The book was published in Persian as: "from chaos of perception to cognition of architecture / a new theory to create an anthropocentric architecture based on laws of chaos" in 2014. In the same year the book has become the finalist of the international award of book of the year of 2014 and awarded as he book of the season in Iran. It also was the winner of the Dr. Mozayani national book award of 2014.

Sanaz Eftekharzadeh has participated at more than 30 national and international conferences and forums, T.V. interviews and academic seminars as the lecturer and architecture theorist and analyst and has presented more than 60 papers and articles in national and international journals.

In 2017 she received the title of "The Architect of the year" of Iran for the best architectural criticisms based on her unique theory. Before that she had been selected as the Best researcher of the year of 2010 by the ministry of habitation, roads and urban development of Iran.

She has been the editor-in-chief of Architecture and Construction Seasonal from 2006 till 2010.