



Spiritual Energy of Islamic House in Forming Cotemporary House

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A B S T R A C T

The pace of daily life and its requirements are getting higher and are led by technology with its direct effects on the health of the individual. There is no doubt that its benefits are endless but its negative effects on the health of the user have become clear, to reduce the negative energy accompanying it to the lowest level by facing another positive energy that is superior to restore the balance first, and overcome it to be the dominant feature of space, the house is the most important place where individuals spend most of their time, which imposes on the designer not be specialized not only to the forms and relations but beyond to form the modern house itself with power to reset the balance of life in general. The house based on Islamic foundations is featured with great energy that has been reflected as positive energy on the residents which is necessitated studying to use in the formation of modern houses with energy. The problem of research was (a knowledge gap about the energy sources in the house according to the Islamic perspective and employment it in the contemporary house). The research aims to study the house in accordance with the Islamic perspective and its relation to energy and determine the elements of its composition and organization through a theoretical framework for the process of energy composition of the Islamic house and the revealing what is verified in contemporary production, the study concluded to depending on forming the house with energy since the beginning of the design process as one of the constants and at different horizontal and vertical levels of housing units because of their effectiveness in promoting the positive energy of the resident.

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1. INTRODUCTION

The energy takes different forms, interacting with the surrounding environment. Everything that exists in the universe is the energy that man lives on. The need arises for the study from the many negativities that have been produced by contemporary local practice and the designers' understanding

the importance of forming with energy and the Islamic house that features positive energy and the attempt to invest it and use it with visions in line with the privacy of the present, and based on the overall changes in design at the main time by bypassing a significant set of design standards and its response to the needs of the modernized nature of the reality of today created a set of problems in the house unit where it is not the place where the resident feels calm and rebalanced and re-energized with energy necessary to complete his life as it was previously filled with positive energy, the designers realized the importance of returning to such treatments that revive the human values of the traditional house and the associated perceptions, the determination of the most important indicators of energy in the house in accordance with the Islamic perspective and submit it in a framework that can be compared to the current situation of practice and how to benefit from it, is the basis of the research vision. The problem of research was the existence of a knowledge gap about the energy sources in the house according to the Islamic perspective and its usage in the modern house. The aim of the research is to investigate the energy reservoirs in the housing unit according to the Islamic perspective and to define its elements and methods of formation and organizing it by constructing a theoretical framework for the process of forming with the energy of the Islamic house. A hypothesis is the form of the modern house achieves some of the methods of formation with energy represented by the horizontal levels rather than the vertical levels.

2. THE CONCEPT OF ENERGY

Energy defined in physics as the ability to perform a function or work [1], which is not lost but transformed from one form to another. It is an engine of all the activities that require developing it to increase its capacity [2]. Energy is the amount of power or ability to do something; either visible or potential and sensing it depends on the apprehension and any capacity of performing work, useful for human beings can consider energy [3]. The energy in architecture is the ability to cause an act or effect. The universe is the presence of energy. Each body affects the other as a result of its formation. This effect deals with higher levels of energy than direct human perception. Some geometric shapes have energy fields that radiate around them and energy is radiated through it, we can find forms that organize the energy and its relation to humans that raise their energy, and therefore his performance [4], energy refers to all that is related to mass and motion. It is either potential or kinetic according to the status of balanced forces, and it reflected in the designs and architectural configurations of shapes and blocks. The potential energy is represented in the formation of the orthogonal lines and surfaces that become an expression of structural stability and architectural formations, while kinetic energy is represented by curved lines and surfaces used in different forms and configurations of architecture [5]. The study defines the power in construction as the ability to raise the performance in architectural spaces in a method that regulates its relationship with the user depending on radiating spaces about the potential and kinetic architectural forms.

3. POWER PATTERNS

I. The energy of religious places

The Holy Places simulates the strength of nature to create an atmosphere that achieves spiritual elevation. The location of the Kaaba in the land is determined by God Almighty to the prophet Abraham is the same place as the house in the sky and above it is the Throne of God and it is one of the points of power related to the sky and it has high spiritual strength, some buildings act to increase the precise levels of positive vibrational energy that strengthen the spiritual aspects such as holy places, which differ from other places [4]. Therefore, the energy of religious places is a special energy that achieves high spiritual elevation and enhances positive energy.

II. Spiritual energy

It is a force that enables the individual to perform a certain act in the desired form. It is formed in many things not exclusively in humans but may result from surrounding natural factors. Spiritual energy varies in strength based on its source, whether it is a source of movement, heat, or other different sources. And they are different according to the degree of influence emitted from each source. Positive energy is enhanced through the spiritual aspects [2]. Spiritual energy comes from different sources, such as nature, which promote positive energy.

III. The aesthetic energy

It is associated with art and is related to the place and it is latent seeking to derive the characteristics of the symbolic place and employ it accurately, and has been interested in by ancient oriental philosophies, including (Feng Shui) which began as a group of rituals and gifts to rise to the art of coordination and beautification of the place and to explore its aesthetic potential [2] based on the human perception of the surrounding environment and the degree of harmony and compatibility with the surrounding to provide better living conditions and therefore better life and access to a better way to produce the place visually and architecturally and urbanely, aesthetic energy is the energy of art in various aspects and aims to make a better place and construction as a special form of art, this forms the energy of the forms, so as to enhance the positive energy through its forms. We conclude from the foregoing that energy of various kinds enhances the positive aspects of man, some of which are related to the spiritual aspects which have the importance of the equivalent of other aspects in their effect on humans, but the aesthetic energy represented by the shapes and how to deal with them to make a place full of positive energy is the focus of the study, Table I.

Table I: The most important patterns of Spiritual energy and its impact on humans/ Researchers

Energy patterns	Its source	their effect on human energy
The Power of Religious Places	The holy places	give similar power in these places to spiritual elevation
Spiritual energy	Nature	different force by source that supports spiritual power
The aesthetic energy	Art	making a place that promotes positive energy

4. ENGINEERING SCIENCES AND PHILOSOPHY

Which deals with the study of energy: The engineering sciences and ancient philosophies concerned with the study of energy and its organization and utilization, the most important of them:

I. Biomaterial Science "Bio Geometry"

Biomaterial Science is the method of using geometric shapes as models that interact with the energy around the human body to correct the sum of all the energy mixtures, this interaction regulates everything that exists in the human body and these geometric shapes balances in the surrounding areas and control the immune system of the organism, ground energy is considered the first determinants of the designer to design a building balanced by the concept of energy with a positive impact on the health of the user [4] also the Bioengineering studies the relationship between shape, energy, and function, energy guarantees the possibility of change through emotions, ideas, and activities and the task of the architect is shaping the energy to achieve the use and balance. The balancing of its spheres increases the quality of energy and regulates it by introducing vibrational properties that include shape, color, motion, and sound [6] the role of the architect is in forming the source with energy and balance its different fields to enhance the user's power. The organized energy (vital, sensory, intellectual, and spiritual) studies the typical forms and strengthens the paths of positive energy and tackles the different paths. Because it examines the effect of geometric shapes and angles on human vital energy and examines how to utilize the organized energy in various fields to provide total harmony in the universe between all the fields of that energy through the relationship between three elements: shape and energy and then rebalance the function [7]. The importance of the concept of space energy in the process of architectural design is also demonstrated by its strong influence on human comfort and health within living spaces. Because designing the power is one of the basic needs to avoid the harmful effects of modern technology [8], bio-modulation science focuses on the interaction between man and the shapes surrounding him for the purpose of the organization and balances the importance of the architectural role is highlighted by the formation of origin with energy and balancing its fields and improve them and submit them through ideal forms that strengthen the positive energy pathways.

II. Indian philosophy (vast shastra)

This philosophy has many practical applications related to space regulation, including the direction and projection of spaces and the adoption of "mandala" as a metaphysical scheme with a typical shape model for the generation of diverse designs of buildings and depends on the network

divisions of the main square by the (marmas) with certain proportional relations, the central region of the plan has vital energy that must be avoided in the building because it has the unclear spiritual atmosphere and the fields of energy which requires keeping them open spaces and open to the sky, Indian buildings adopt the style of the open courtyard [2], Figure 1.

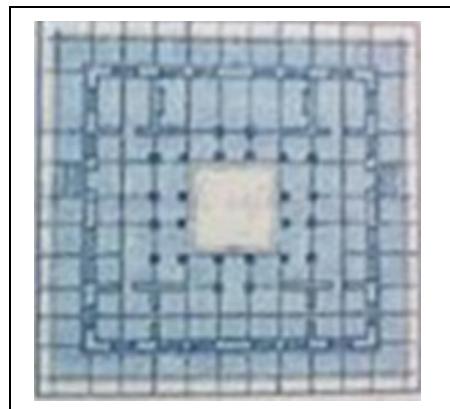


Figure 1: The house has a grid pattern with a sloping roof and an open central courtyard where the mandala is clearly divided as a basis for its design

III. The philosophy of Feng Shui

This philosophy was found to create a kind of harmony between man and his creativity and the nature surrounding it [9] is considered an ideal environmental philosophy and form of bio-art that brings many scientific and spiritual benefits and adopt the principle of "chi" that forms the main energy of Life formed from light and movement and life to nurture human and his world with the positive energy that carries health and life through its continuous motion within the corridors and twisted cavities that helps its flow [10]. Ancient philosophies have confirmed that the middle region should be open to the sky as it is a region of high energy and adapt a standard network proportional with the attention to the nature surrounding the house and its forming it which helps its flow through the corridors.

5. ENERGY LEVELS

The most important energy levels can be determined at the city and neighborhoods and the second level is the energy at the house level, the research objective is it the house in architecture scale which addressed in this article:

I. City and neighborhoods-level energy

The city shape affects its energy that is related to the core underlying characteristics of the social traditions based on the intellectual and cultural concepts and addresses its deep structure [11] Cities with square and rectangular design has stable energy and are affected quickly with the external energy, and the sites and neighborhoods located in the sides are of more stable energy according to the basic currents that move in the streets and penetrate the walls of the houses located in the sides towards the city [2], while the circular planning of cities is considered the most stable and stable in terms of energy, the streets meet in the central city square through the currents coming from the suburban and through the mutual influence of the energies in the city center to form the energy structure and changes in these cities are little, its vector streets has the terms of livelihood because the Organized energy is located in the center, by finding the relationship between the various geometric angles working on power generation from geometric shapes, especially the center of the circle or any movement resulting in the rotation [4] in the strip cities, the energy field can be felt more than the rest of the cities and it loses energy and earn it quickly and do not keep it for a long time and it's dispersed through the main streets [2] It is thus clear that the shapes of square and rectangular have stable energy and are affected quickly by the external energy, but its corners are the most stable, and the circular shapes are the most stable, especially in the center, that is the reason that the planning of most of the Arab and Islamic cities has designs close to circular. Regarding the ribbon design, It quickly acquires energy and loses it quickly.

II. House level energy:

Interpretations of energy in Islamic house is linked to multiple aspects related to environmental consideration by understanding and taking into account the elements of the environment and dealing with them, and aesthetic aspect through its interpretation that is related satisfaction of spiritual and psychological aspects of the family, residential unit in the Islamic concept is not a machine that performs only the functional needs of the family but provides the residential comfort of the dweller and here it is necessary to have the formation and aesthetic aspect [12] to complete the Islamic content from the values of heritage and cultural place, the energy in the Islamic house is achieved through its elements and space organization, at the level of elements such as regular yard shape (square often) which is an essential element of energy conservation within the housing unit, it is a semi-private space that achieves privacy and protection and associated with walkways to ensure easy access to achieve ease the atmosphere through the spaces and water and green bodies and deemed to be a special space for energy conservation within the housing unit [13], and the front yard and balconies form an open space that allows the entry of energy through its brick walls (formation walls) with openings that help see through it to the outside and doesn't allow the opposite besides the surface space that provides the possibility of children's playing or holding celebrations and as a storage space, these open spaces in the vertical direction provides places to the entry of the energy and to preserve it as it is protected place and it gives positive energy to the dweller [13] and the street is considered a carrier of energy for the houses located on it, then which the spaces that need energy and continuous movement are put close to it, and the rest spaces are far away with the preservation of the interior walls that are filled with energy which helps to feel comfortable and calm [2], energy can be applied through the form to regulate the rebalancing of the function and axis horizontally (horizontal designs) and vertically (the facades and sections) which increases the positive energy of the resident, and the spaces that need to be quiet to be put away to the inside, but the spaces with permanent movement will move outward.

At the level of space organization, spaces are listed from the public to the semi-public and semi-private and private with the existence of open spaces at the level of the horizontal design that is able to create a kind of energy flow through open spaces reinforced by the front and side entrance of the residential unit and front yards as general spaces, and the middle yard as semiprivate space connecting to the corridors to ensure easy access while emphasizing the increase of the inner yard space as a special space that conserves energy within the residential unit [13], Islamic architecture used a construction space unit (AL-Bareqah) as an independent unit in its laws as a tool in the hands of the architect in the space configuration that is reflected in the general composition and commitment to it as a unit in the structure of space and construction, space in the Islamic architecture starts from a point (Fountain, the center of the yard, the Kaaba) so that the repeated whole is around it and the recurring unit creates a dynamic energy to unite with the whole without losing its independence and merges with the general form and the whole construction and creates a space of power around it [6] (Figure 2) shows that the achieving the energy in the housing unit in Islamic architecture is achieved within the horizontal and vertical levels. The horizontal level is related to the characteristics of space organization represented by gradual change from the public spaces in the private through the open spaces, which are represented by the entrances and the front yard and the front and middle and internal space with the increase of the internal space and the use of designing centered around the center focal point, around it the repeated whole with dynamic energy, so they are units are unified with the whole without loss of independence which make them a link to the concept of energy and its flow in these spaces, at the vertical level, the achievement of the entry and retention of energy through the elements represented by the balconies and the front yards with the perforated formation walls with different formations and materials in addition to the open surfaces.

6. METHODS OF FORMING HOUSE ENERGY

Methods of forming house energy have varied, some of is linked to the relationship of mass space "space organization" and some are linked to the elements as follows:

I. At the level of space organization

Interactive adjacent nature based on the movement and change that characterize the Islamic approach and is thus associated with energy by interpreting it as (a psychological force derived from the composite meaning resulting from the balance between two things and the continuous movement between them) the method of dealing with the adjacent couples aims to perfection so it is a method

with the interactive nature [14]. The block and space are one of the that adopted interference as one of the methods of interactive nature. This was done by using the U character of the design based on the relationship of the building block and the surrounding space. The interference achieves dynamic through the interrelated relationship between the opposites or the polarity and occurs in the horizontal or vertical levels or both. The horizontal interference is between the block of the building and the surrounding space (inside / outside) through the openings and is the most important outlets for the entry of energy into the interior space and enters very fast, so the use of the letter (U) for causing the interaction between the block of the building and the entrance as one of the openings is very important in the organization of entry of energy to space and is the most important design element that must be wide to help in the flow of energy through it, it should not be hindered by any other elements such as columns and if it should be used then it should be a circular piece [4]. The interference was also employed in creating an internal living and living space to enhance the positive energy of the residents that is created by the formation dimensions resulted from the inspiration of shadow and light that results from the interference [6]. The vertical interference between the block of the building and the designed openings affects the final shape as well as the energy flow from these openings that generate organized energy in the building inside and outside. The use of overlapping on the horizontal and vertical levels and inside and outside the movement are compounded in these levels and gives a composite interference which is better for the process of activating the energy flow at these levels, the occurrence of successive levels or similar follow-up leads to vital dynamic vibrations in design and the sense of rotation maximizes the vital dynamic energy in the space [6]. Also, the location of events according to the degree of its privacy (public/ private) gradually or by space separation accelerates the flow of energy within the space, the formation of the house is the result of a series of integrated coherent social effects and is an essential motive for production and the shape is modified to reach the compatibility with these effects [11].

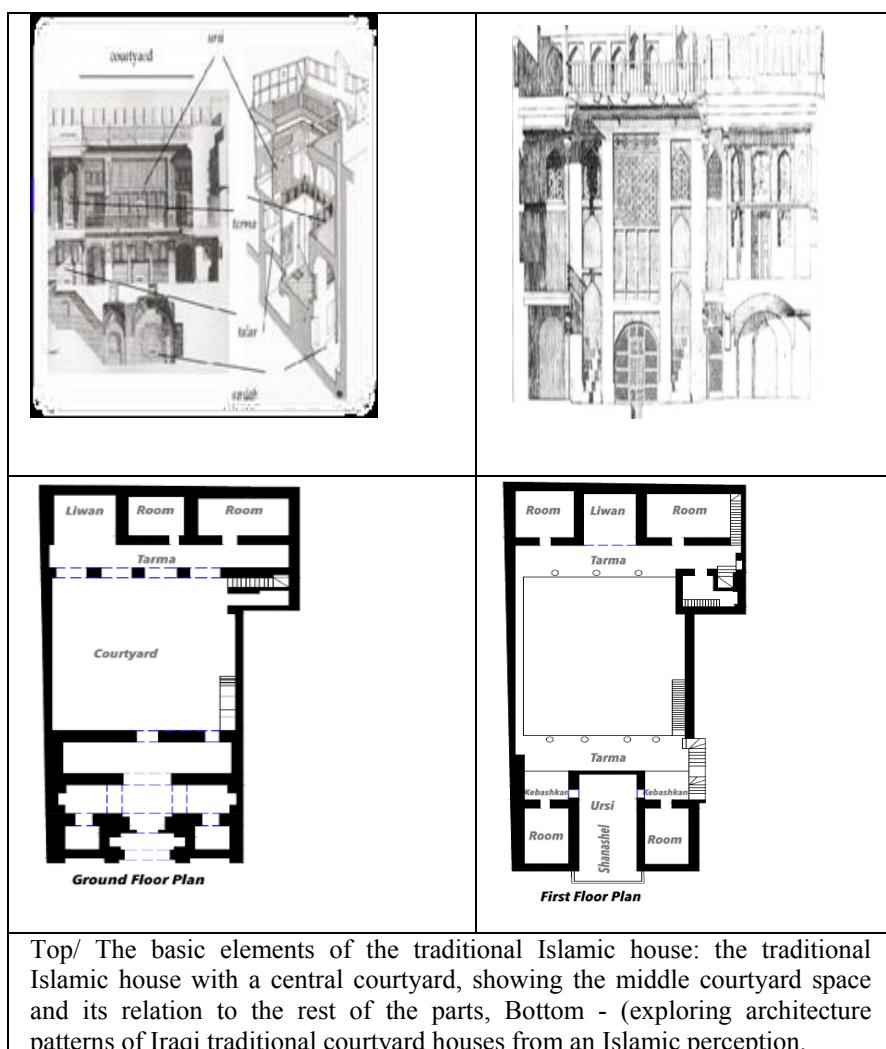


Figure 2: The basic components of the traditional Islamic home

The interactive interaction between the opposing duos (inside and outside, mass and vacuum, both public and private) generates kinetic energy. The mass-space relationship represents the most important of these correlations and employs the balanced interference between them at several horizontal levels by using a U character in design with the relationship of the mass of the building and surrounding space or through the openings or within vertical levels across the courtyard or openings in the surfaces or both together, as well as achieve the positive energy of the occupants of space the occurs from the inspiration of shadows and light that results from this overlap.

II. At the level of elements

The sense of the system is evidence of the existence of energy and can be the system in the form and proportions used and treatment of the elements greatly affect the sensing it, so they are considered important elements in the design, the system is understood through the repetition and regulation of the movement of energy by speeding or slowing it is achieved by using the rhythms for speeding up, as it may be the approach to the building [6]. The regularity in the repetition of the element leads to the regularity of the movement of the energy through the use of the concept of relaying or transfer and thus reaching the organized energy of the moving element and space. Regularity in the repetition of the element leads to regular movement. The used ratios help with that, there are certain ratios repeats that it is proving the existence of one god and it is the mean of communication between the visible and invisible [15]. The golden ratio is the basis on which the natural world is built and it certainly develops it on homogeneity and rhythm, Engineering laws are the basis of physical beauty and knowledge of divine legislation [15]. The use of the golden ratio helps in the organization of space and determine the size of the designs and residential developments, and in the level of treatment of elements, the cancellation of sharp points will achieve the flow of energy and find that the corners of ancient architectural blocks and ancient Egyptian are characterized by rotation or circling the corners [6]. Design with nature in the Islamic dwelling: The capacity of the Islamic dwelling has been achieved by its relation with nature, which has taken two directions, which are represented by observing the elements of nature or the presence in them. Human behavior is influenced by nature and human health is linked to the observation of the elements of nature and the presence in them. It helps nature recover from the stress associated with modern industrial life, but watching the elements of Nature, promotes the positive energy and psychological comfort of the human being and the allocation of space within the Islamic dwelling provides such comfort and this space had multiple names according to the environments it exist in, the Yemeni House is called ALMUFARAJ, where The highest floor in the Yemeni House is dedicated to receive guests and meetings and rest, and usually oversees the city and its natural landscape, and is called the landscape or view and is featured with wide windows that allow the guests to enjoy the pleasures of nature, sometimes it is called the large room because it is the largest room of the house and not only built in the upper story of the house, but built as an independent unit in the garden overviewing a fountain surrounded by flowers and trees [16], In the Emirati house, especially the merchants' houses, a similar element was found: the council, a place reserved for a reception with two doors, one open on the street and the other inside the house [17] while Presence in nature is achieved by combining as much as possible it, in harmony with the achievement of sustainable house and a harmonious compatible relationship with the surrounding nature. The elements of the natural environment have the potential to re-create and rejuvenate through the psychological and psychological healing effects that nature generally possesses. The physical, mental, and spiritual renewal and well-being of people are achieved by providing spaces rich in elements of nature that will bring about renewal and entertainment such as living rooms, yard, backyards and verandas that can be used for renewal, the overlap of the building block with plant and water are important to improve the energy of the interior space [6]. This overlap leads to increasing the positive energy in the presence of plants which is a living element that adds life and movement to the place, the Islamic architecture used the water and plants in the Islamic dwelling after knowledge of the principle of dynamics and energy and benefited from them [6] and the overlap of building blocks with the plant to increase the positive energy, which is emphasized on by the green architecture to reform life by balancing the organic and inorganic aspects of the site [18], from the aforesaid, it is possible to determine the theoretical framework for the spiritual energy of Islamic house informing cotemporary house as following, Table II:

Table II: Theoretical Framework for Spiritual Energy of Islamic house in forming cotemporary House

The main item	The secondary item	The possible values	The variable number	
Power Entry	Ports and slots	within the horizontal level	Open foci within the center layout	1
		Front, interior and central		2
		Windows		3
		Entire	Broken	4
			U shaped	5
		Within the vertical level	balconies	6
			perforated formation walls	7
			Open surfaces	8
Energy activation	at the level of the properties of the space organization	Visual communication with the surrounding nature	Space for rest and positive energy	9
		Combining nature into water spaces	Internal Living spaces	10
			Water	11
			Combining nature into water spaces	12
		The relationship between the mass and space	Interaction between mass /space within horizontal and vertical levels	13
			relationship of building to outer space is U	14
			Space moving between blocks	15
			Horizontal separation	16
			Gradient	17
		The relationship of general/ specific order	Vertical separation	18
			Frequency rhythmic	19
			Columns	20
			Statues	21
		Ratios	Golden Ratio	22
			Fractional proportions	23
		Corner Treatment	Rinse corners and corners or rotate	24
Regulating the flow of energy	Potential		regular forms and orthogonal networks	25
	Positive spiritual		Kinetics through interactive interaction between light and shadow in space	26
	Mobile		Interaction relation between the adjutants	27
			Across the ratios used and leading to the absolute	28
	Aesthetic	across the degree of harmony in the ambient medium	Color	29
			Sense of touching	30

7. THE PRACTICAL ASPECT

The study analyzes the local experiments in the first and second decades of the 21st century to verify the hypothesis of the research. This is done by coding the traditional plan of the Islamic house with the theoretical framework indicators (Figure 3) to compare them with models of contemporary dwellings that were elected on the basis of possessing some indicators of Islamic housing as described by its designers.

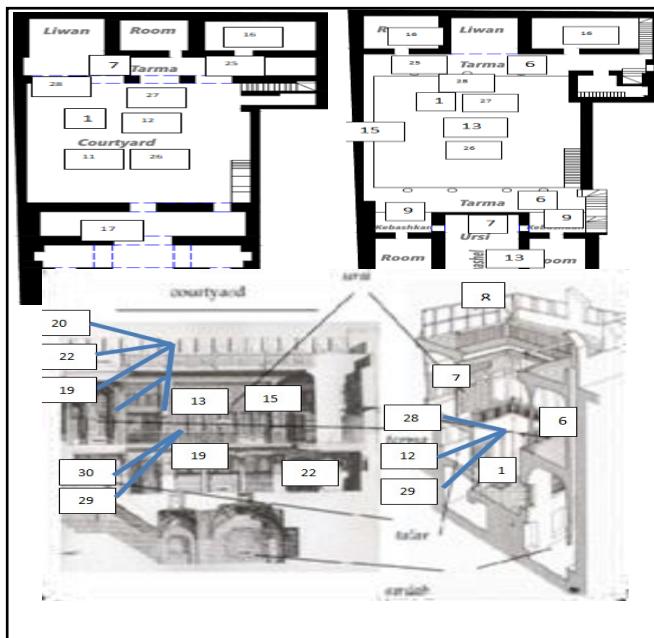


Figure 3: The coding of the vocabulary of the theoretical framework within the traditional Islamic dwelling horizontally and vertically

I. The first model/ House of residence in Karrada 2018

The methods of the formation of the house with energy through its elements, the entry of energy embodied in the model within the horizontal and vertical levels, the horizontal level, open foci are clearly located within the planning as well as the front and interior yards, and the multiplicity of windows overlooking the facade, each activity has its view on the external environment and that increases the number of facades to five, while the front yards, balconies, and open surfaces enhanced the entry of energy within the vertical plane. The activation of energy is represented by the characteristics of the comprehensive spatial organization of (the relationship between inside with the outside, and the relationship of the mass with the vacuum, the relation of the general to the private), the relationship of the interior with the outside of the structural mass with the nature adopted by the designer as the basic starting point of the design idea, stemming from the harmony with nature. To build a garden with a dwelling in it instead of building a house with a garden by combining elements of nature into space, represented by water as a life element with nature through the cascades and fountains and a swimming pool. Achieving a living model is achieved by making the stories live by natural and direct lighting, increasing the number of surfaces facing the facade, and making the majority of the activities overlooking it. The relation between the mass and space was characterized by interactivity and overlapping between them within the horizontal and vertical levels. The beautiful transition between the blocks and above the garden and between the spaces made the space moving between the blocks as well as the multiplicity of levels and overlapping between them horizontally and vertically as the basement was transformed from the traditional understanding of being dark and underground to the floor lighted naturally and the relationship with the rest of the events is the correct description of its relationship with the basement because according to the designer we don't feel going under the landline. While the relationship of the public with the private was through the separation between them with the achievement of communication by suspended bridges, the goal is to give freedom for users of the house to move to their activities without penetrating the rest of the events. The regulation of the flow of energy and the acceleration of its flow represents the treatments of the elements within the surfaces where the repetition is employed within them, while the multiple energy patterns have been within the interior and exterior spaces of the dwelling, vertical networks, and regular forms made the spaces rich with potential energy within it. While positive spiritual energy has been promoted within the spaces through the effects of light and the shadow in the carving of space, and that the entire dwelling is rich in kinetic energy resulting from the interaction between the adjacent mass and vacuum. The total harmony was the feature of the dwelling within its outer and internal spaces and is achieved with color, texture, and material that enhances the aesthetic energy as a whole, as illustrated in Figure 4.

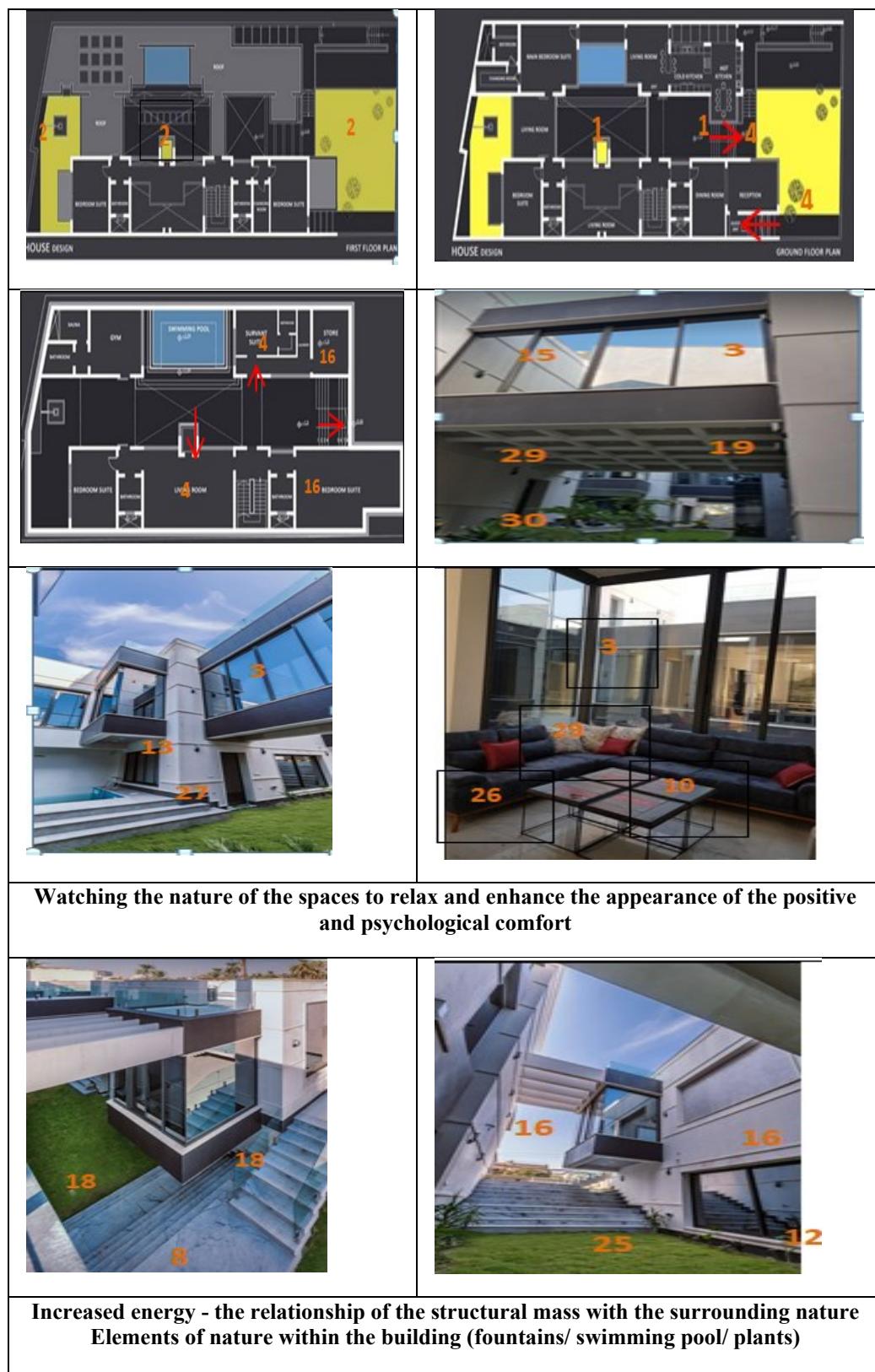


Figure 4: The indicators for the formation of energy house within the selected models

II. The second model/ residence of (ALI HATEM) under construction designer (SAHER AL-QAISI)

Based on the approach adopted by the designer in dealing with the elements of heritage in a contemporary style, the design idea was in the adoption of the courtyard as a central vital focus and around it the rest of the events are formulated, but the method of employment differed from the traditional house with the central courtyard and the movement is circling around it, the courtyard here has been used as an essential dynamic space rich with the elements of nature, such as water through

the central fountain. The methods of the formation of the house are illustrated by the energy in the model, the entry of energy embodied by the openings within the horizontal and vertical level, central focus within the planning and backyard and front yard all represent energy access ports as well as multiple windows within the surfaces that enhance the connection to the environment. In addition to the winding entrance, all of them represent the ports of entry for energy at the horizontal level, while the balconies and planes within the first-floor plan and the open surfaces represented power outlets at the vertical level. The interactive relationships between the two duos that represent (inside and outside or the structural mass with nature, mass, and space, both public and private) represent the energy activation element. The dwelling embodied the interaction with nature by enhancing communication with it in a special space that enhances the comfort as well as the integration of nature with its living elements represented by water and plant within the middle and frontal backyards is one of the basics of design and the goal is to make the house an active and enhances positivity, while the relation of the mass to the vacuum was characterized by the interactive overlap between them within horizontal and vertical levels as well as the relationship of the building in a welcome way of the outer space with U shape enhanced the active interaction relationship such as the yard as mobile space through its relation with the other activities, also, the relation between the public and the private represented by the separation between the private and the public activities within the vertical level in order to provide full privacy to the people of the house in line with the Islamic tradition. The organization of energy flow in the side lattices, which accelerate the energy entry through rhythmic frequency within them and energy patterns were all represented in the dwelling thus was inherent by the adoption of regular shapes and mobility through the interaction adjacent relationship that combines the mass in a vacuum, and positive spirit through the effects of light and shadow within the space, and aesthetics through the harmonious and comfortable relationship of sight through color and material of human scale and texture. This is explained in Figure 5

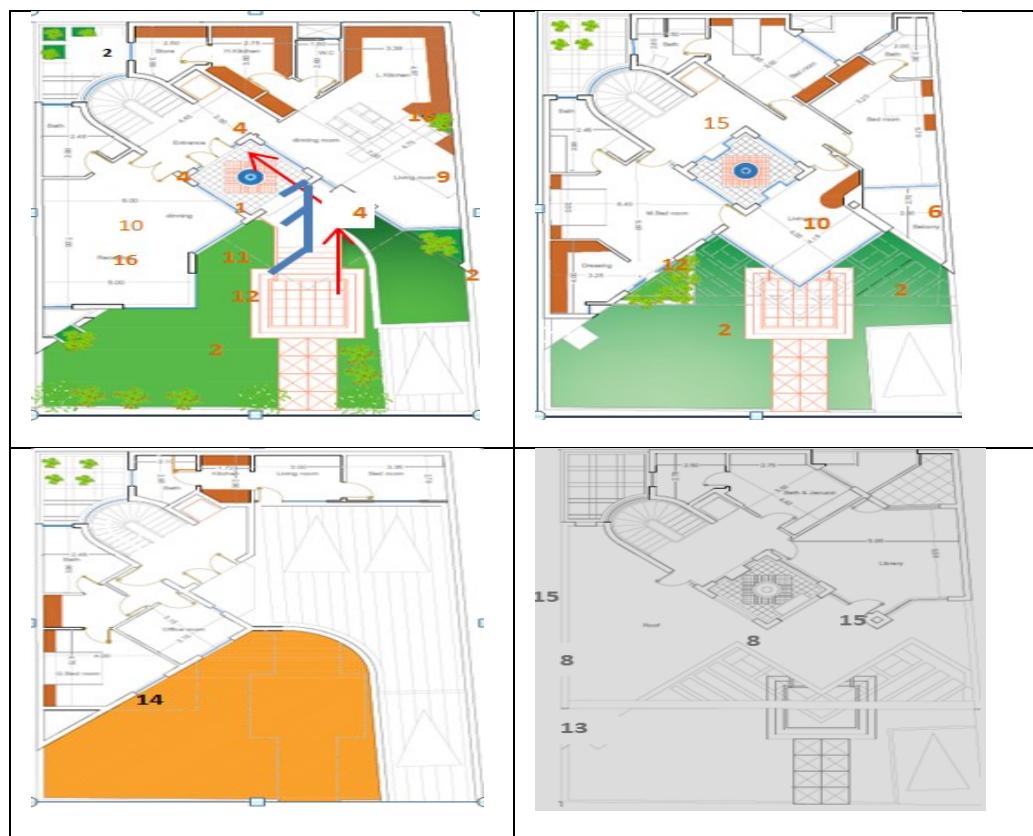




Figure 5: The indicators for the formation of energy house within the selected model

8. RESULTS

The results showed that contemporary models adopted in their treatments of mass a set of methods that were identified in the traditional Islamic dwelling in relation to energy. At the level of energy entry and within the horizontal level, a holistic application of some aspects such as the integration of the design with an open central foci as well as the front and center yards, and its relation to the outside, especially in u shape, have been found, while within the vertical level we find a holistic application of all the elements that include the balconies and the front yards and open surfaces. In addition, the activation of energy with the level of space organization and that included treatments related to the Islamic values that govern the relations between the adjacent (internal and external, mass and vacuum of the public and private) have been achieved in most of its elements. The elements related to the interior and the external has been achieved entirely through interaction with nature optically or including it within the structural mass (10,11), whereas the relation of the mass to space, there is a complete realization of the overlap between them horizontally and vertically, while the relation of the building to outer space in u shape was achieved in part and there was a total application of the moving space between the blocks. The relationship between the public and the private has been achieved partly within the horizontal and vertical separation, except for the gradient. On the formal level, the vocabulary of regulating energy flow was not fully realized, as it was limited to the system of rhythmic repetition without regard to the ratios used and angle processing. Also, the used models represented different models of energy with the full achievement within their different spaces. In addition to the above, designers are alert to the importance of treatments within the traditional house that will enhance energy and try to apply them in their homes, but this has been achieved within the horizontal level (space organization) more effectively from element treatments within the vertical and shape level, which require local focus to provide an integrated model of house configuration with energy methods according to Table I.

9. CONCLUSIONS

- Taking into consideration the formation of contemporary house with energy since the beginning of the design process and its adoption as one of the design constants at various planning levels of neighborhoods, cities, and design of houses because of their positive importance in enhancing the positive energy of the user and the resident.
- Energy formed house enhances the sense of capacitance and spaciousness, even if the area is somewhat small. This is what the true religion reminds us that one of the pillars of happiness is the spacious house.
- The spatial and shape organization with its horizontal and vertical aspects are considered to be the most important reservoir of energy in the Islamic home with its various design processes.
- The levels of achievements of methods for the formation of the house with energy within the contemporary local experience was within the level of space organization more than the shape level, which requires directing contemporary designs to direct its attention to this aspect and enhance it in their designs.

10. Recommendations

- Include the elements of the framework presented by the research for urban design in Iraq to guide and educate the population of the importance of these aspects to be adopted as a criterion that achieves many positive aspects in the house.
- The understanding of the underlying aspects of Islamic thought in a holistic manner as appropriate rules for all eras and adapting them to fit with the privacy and situational data. Therefore, adapting modern trends in the present and future is based on the use of traditional principles of architecture being more effective because they are based on the principles of true religion through time.

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