

Light as a central component in the aesthetics of Islamic architecture And its impact on the creation of contemporary design formulations

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Abstract:

Light is the visual perception of the world, since the start of human civilizations light plays a basic role in formation and understanding architecture and interior spaces especially in holy architecture as it had a symbolic role connected directly to religious beliefs, because of this light and architecture interacted since the beginning of history, our perception for this interaction differs according to light concept from one culture to another, and in Islamic culture light reflects the concept of God's guidance light so light plays an important role in Islamic architecture as we can describe light as ethereal building material in Islamic architecture as we find that architectural structures compose spaces and light gives these spaces life sense, as we find that architecture, lines, decoration and colors has no meaning and can't be recognized without light, so generally Islamic architecture is luminous architecture as light plays a basic role in making functional, aesthetic and psychological effects more strong in architectural spaces, Mosques was the more generous architectural spaces in using light as they are related directly to God so light supports the feeling with sacred attributes in this space and gives the people inside a strong feeling with the presence of God. So this research paper comes to answer **this question** : How can we take a benefit of the concept of light and its aesthetics in Islamic architecture in contemporary interior designs in which light forms a basic component? By studying the importance of light and its concept in Islamic Philosophy and the psychological, spiritual, aesthetic and functional effects in house and mosque architecture with the purpose of extracting the principles that forms the aesthetics of Islamic architecture using light to help in the formation of valuable contemporary designs. And this research depends on **descriptive and analytical Methodology** in the theoretical Study and the applied approach in the practical study .results of the research shows that light is one of the most important components of Islamic architecture which had been used in different ways to convert architecture and architectural spaces to human architecture full of interaction between these spaces and their users with supporting their aesthetic, functional and spiritual values and converting static building blocks to dynamic human environment full of life donated from light with its intensity, contrast and movement characteristics.

Keywords:

Light concept
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Residential architecture
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Spiritual effects
Aesthetic effects

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Introduction:

Since architecture had been arisen in ancient civilization, Light was playing an important role in confirming symbolic meanings in internal architectural holes especially holy religious ones. And although Gleam has the same meaning in all faiths and religious cultures, the way to express it is different from culture to another and from civilization to another, such in the Egyptian temples, light integrated in parallel with the layout temple integration that it is fully light in the temple first hole, then it gradually decreased inside the hall pole, then it completely disappeared except from a small aperture in Holy of Holies' roof only illuminating the statue of God to create a state of dread and curtsy corresponding with greatness of God. As for church buildings, outer

walls have no many holes which decrease light in it, and they were using candles in lighting that it was giving dim light which inspires dread and curtsy, and it was used in front of saints as a signal that they were the world' light. As for Islamic civilization, light played important role in Islamic architecture that it reflects the concept of the divine light, Allah is the light of heavens and earth, so we find Islamic architecture is characterized by fully bright light especially in Mosque buildings which was recorded as the best use of natural light, as light is related to Allah and darkness reflects concepts of Polytheism and iniquity.

From here, the important role of light become obvious in Islamic architecture and it was embodied as in the buildings of houses as private

residential whole or in mosques as general religious hole and this will be discussed and studied and the role of light in it through its function or its various impacts on Islamic architectural holes which enriched it distinctive personality and unique aesthetics.

The Study Problem:

How to benefit from the concept and aesthetics of light in Islamic architecture at internal designs in which light has a significant value?

The Study Aim:

- 1- Drawing values and principles that created the Islamic architectural aesthetics within light.
- 2- Taking advantage of light aesthetics in contemporary Islamic architectural design.

Methodology:

The study is based on descriptive and analytical approaches in theoretical and applied studies in practical study.

Theoretical framework:

Nature of light:

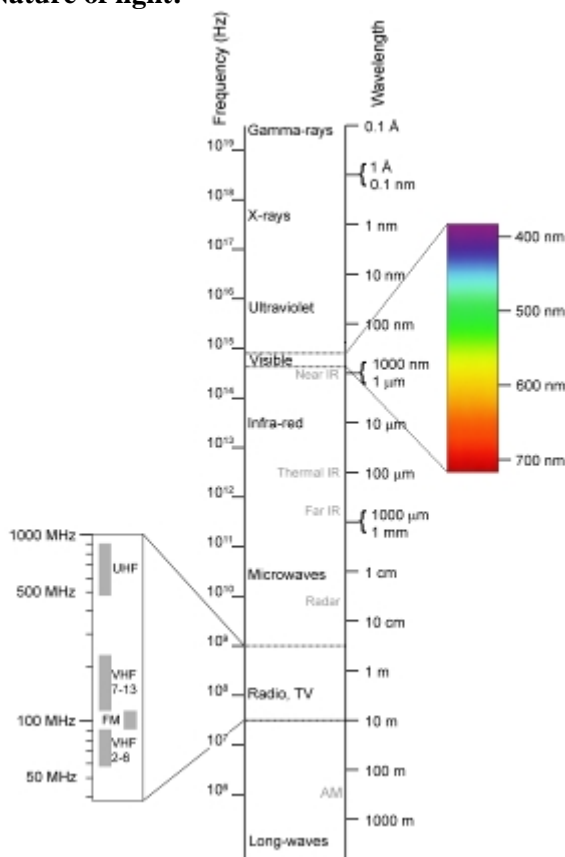


Figure 1 visible light between(750: 400 nm

Light is considered a form of energy moving in space from all directions in the form of electromagnetic waves which lengths for visible light are ranging between 750 nm for red light and 400 nm for purple light (fig.1) ranging other different spectrum between them. Thus, visible

light is the part of the electromagnetic spectrum which human eyes is more sensitive to it that visible light is absorbed and released by electrons in molecules and atoms moving from an energy level to another and this allows the chemical mechanism that causes human vision.

Natural Light:

It is the light that comes from natural sources and the most important one of them is the sun which coming light varies and changes according to difference in time, location, and distance from the equator and this diversity makes continued change in visuals and causes achieving visual diversity inside space which helps to preserve the vitality of man unlike artificial light.

Artificial Light:

Artificial light sources vary from light bulbs of different intensity and color and artificial light is used to provide sufficient lighting inside the hole at night or when natural light is not sufficient, and there are agreed equations and controls when designing any place lighting, and the calculation of lighting depends on radiation laws that control the spread of light and enable measurement of its intensity, density and reflection².

Light and Space Realization:

Human's perception of light works by mixing the nature of physical light which is the physical side of light with its moral side which is directly related to the human future. Thus, it varies and changes according to the subjective experience of humanity. The first processes of perception begin with the physical nature of light and the process of vision beginning with shape sensation within the eyes, followed by sensory perception in which things are interpreted to gain their specific meanings, followed by the process of cognition where more complex interpretations occur from the previous one¹. As for the moral aspect, the awareness exceeds the limits of the utilitarian and functional side and this gives a meaning, reflect a symbol and providing beauty. Therefore, light clearly and effectively affects the way we perceive the internal spaces either through its physical properties like reflection, dispersion and refraction or through its intensity and color and the resulting features like brightness, contrast and shadows which can affect our hole realization that we cannot see and realize objects and colors without light or the hole without light effects which gives each space its features and characteristics according to the good use for light and employing it according to the place nature and its occupants to create a cognitive state for the viewer that not only enhances vision but also creates a state of

comfort and enhances the aesthetic potential of internal hole (fig.2).



Figure 2: light clearly and effectively affects the way we perceive the internal spaces

The importance of light in Islamic architecture:
 Architecture is the perfect game of visible blocks under the light (Le Corbusier)

The light and architecture complement each other that natural light features give architectural holes a meaning and each color, shape and texture become with visual value we realized. Light is considered one of the most important factors that select the hole that we can resemble the relation between light and architecture with the relation between spirit and body; if body is the visual material, spirit is what gives him life. Also architecture is the visible physical entity and light is the spirit that gives life to this entity. In Islamic architecture in particular, the relationship becomes more strong and coherent where the light was connected to the

Creator "God the light of the heavens and the earth", and thus light had been given an added value on its first importance which is sanctity of its connection to God. Light in Islamic architecture reflects Muslim's culture and clarifies the thought on which this architecture based, also it emphasizes the architectural details and the existence of decorations and it reflects the architecture's aesthetics, so describing and analyzing the Islamic architectural role of light is a main factor to understand and indicate the importance of light in Islamic architecture and to indicate the relation in which light becomes as a central determinant reflecting the concept of a Muslim within his architecture.



Figure 3: wind tower in Zainab Khatoon house(right) and malqaf in Soliman Agha mosque(left)

Role of light in Islamic architecture:

Utilitarian and Functional Role:

The main function of light in architecture is illuminating and to exploit light well to illuminate the place with sufficient light adequate for the nature and activity of architectural space. In house and mosque architecture, providing sufficient lighting becomes an indispensable essential

requirement to respond the needs of life activities in house, movements of prayer, reading Quran, and the imam's vision of all ranks of worshipers in the mosque. Also Muslim architect sought to benefit from daylight promoting it by artificial light configurations to provide the comfortable lighting level at night or in the case of natural light weakness.



Figure 4: Dome windows distribute light well (photographed by researcher)

Daylight Sources:

A- The Ceiling: The Wind Tower and malqaf were the source of the ceiling light in houses that they were helping in moving light into the lower parts of the building (in addition to its functional importance in wetting the internal space temperature) (fig. 3). As for mosques, the dom was the source of the ceiling daylight, and the prayer hall may be recovered with one dome or

more, opening windows that become the main source of light and a good dispenser for daylight in it (fig. 4) ; that getting light from high level enables the standardized light distribution which is one of the most important requirements in prayer hall that ways of worship in it like praying and reading Quran take place at any part of the mosque.



Figure 5 : Walls was the main source of lighting in houses

B- Walls: Walls was the main source of lighting in houses especially the walls overlooking the internal courtyards that it represents a major importance in lighting where windows are opened in large areas that may reach the entire width of the wall and that what creates the sufficient light

for the internal space (fig.5). Also the internal courtyard itself was having great importance in adjusting and organizing the light directing to houses and mosques through the radiation refraction on the surrounding walls and the presence of plants in it reduces the rates of

reflected radiation on walls (fig.6).

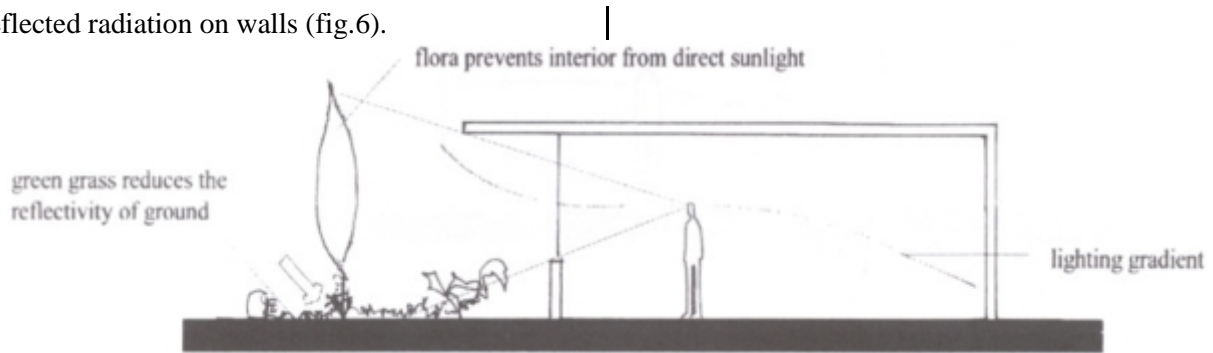


Figure 6: presence of plants reduce rates of reflections in the courtyards



Figure 7: windows of Ibn Tolon mosque



Figure 8: windows rarely exists in qibla wall, mosque of aq-sunqur(mihrab and qibla wall)



Figure 9: Ibn Tolon mosque

As for mosques, walls presents the second source to provide daylight through openings of windows either fixed ones or the moving extended ones along the mosque's wall (fig.7) except the direction of Mecca's wall which frequently has no windows for two reasons, the first is to provide more vision to avoid stress on worshipers' eyes from glare rays in case of opening windows in the direction of Mecca's wall in front of them, because Eyes is adjusting with the intensity of lighting and the extreme contrast in lighting between windows and the surrounding internal area make it difficult for eyes to adjust with it and thus it becomes a continued stress on the prayers' eyes. And the second reason is to avoid distraction of the prayers' attention with external views (fig.8) . And for the last reason, we notice that the window openings at most mosques are high because the main function of windows here is lighting and followed by ventilation. And as for dialing out, it is not required in mosques, but the visual separation of the inside from the outside is the one required to enhance the prayers attention by separating them from the external physical world and to help providing spiritual aspects. The Windows give a useful lighting level to a depth equal one and half times of the window's height and the utilization of a square meter of glass increases by a height of 1.3 to 3 meters³ to spread light into deeper spaces inside mosques. The windows are often processed to reduce glow and reducing the rate of contrast either by using colored glass or by covering the hole with gypsum nets or wood or stone and thus, the desired value can functionally be achieved (fig.9) .

C- Artificial Light: Artificial lighting is used as a comprehensive one to achieve sufficient light to perform activities inside houses to practice various life activities and inside mosques to practicing different activities like praying or reading Quran or a good visual follow-up to the imam or the teacher and this is in times of natural lighting weakness or its vanishing like in night times. There are three types of artificial lighting:

Public Lighting: It is the pervasive lighting which

provides sufficient light to perform different activities easily and it exists as ceiling to achieve better light distribution as an alternative the

daytime sky light (fig.10).



Figure 10: public lighting for better light distribution , mosque of Prophet Mohammad (photographed by researcher)

Comprehensive Lighting: It may exist on vertical surfaces either on walls or on pillar to equal the emitted glare value from the directed public light by providing lighting areas around it making lighting homogeneity which reduces the sense of the uncomfortable glow (fig.11). It is also used for aesthetic purpose in confirming Quran decorations and verses decorating internal walls (fig.12) . One of the affecting factors on internal lighting is the color selection of materials that glitter materials reflect lighting on eyes which causes visual discomfort if materials are not selected accurately

and covering the floor of mosques with carpets, in addition to its use in prayers' seating. It also helps to reduce brightness and reflection rates of floors especially if they are marble which is characterized by its extreme glitter causing high brightness in the case of high light. And this is what we notice in the floors of the The Meccan Sanctuary which are made from white marble that in peak times and high sun rays, its high brightness causes sun rays directed uncomfortable reflection on the eyes that may cause temporary loss of vision.



Figure 11: comprehensive lighting to equal the emitted glare value , mosque of Prophet Mohammad (photographed by researcher)



Figure 12: The aesthetic effects of lighting , mosque of Prophet Mohammad (photographed by researcher)

Also the color is important that it selects reflections inside the architectural hole and Light colors have a higher level of reflection than dark colors, so we notice the tendency to use light colors to reflect the lighting and help to make

fixed lighting gradient that light is reflected on its surface equaling the contrast rate which may exists because the lighting source is generally far from the mosques part's (fig.13)



Figure 13: Light colors confer the space better light, Al-Aqmar mosque (right), Amr Ibn Elaas (left)

Architectural work is not more than holes formed by shadow and light changing tangibles by its physical nature. Islam considered light the essence of things which makes the Muslim architect applying it with all his works. In Islamic architecture, we especially find mosques focused on light by using various images and this symbolizes the divine essence that if the universe vision shows us the existence of God (fig.14), the vision of things will show us the presence of light. Also the attribute of illumination in light is the attribute of Allah "the absolute light is Allah" Allah the light of the heavens and the earth light like as a lampshade", "Light on Light will God guide His light whom He wills" (verse 35). As for The Prophet, he was described "Sirajan Muniran" " shining lamp" verse 46 parties. And God made

Quran a guiding light by the verse 52 Shura "indicating the importance of light in Islamic thought. Thus, the light in the architecture of Muslims and the mosque in particular was of great importance that may reach the level of sanctification. Also we cannot find a dark mosque if light symbolizes the light of God. Darkness symbolizes infidelity that God has set an example to refer to infidelity "and out of darkness to light with his permission". Darkness refers to infidelity and light refers to guidance and faith. And injustice in the Muslim's doctrine is of darkness. Thus, light was always associated with the sacred higher values of the Muslim faith. God is light, faith is light, the Prophet is "Sirajan Muniran" and the Quran is a glorious book.



Figure 14: using light to symbolize the Qiblah, Sancaklar Mosque,Turky (right) & Baitur Rauf Jame Mosque (left)

But Darkness was associated with infidelity, injustice and fire which makes light a central

governing element in Islamic architecture especially in the mosque's building (fig.15) .



Figure 15: Mosques are abundant in light, mosque of Prophet Mohammad (right), asultan Hassan mosque (Top left), alsultan Barqouq (down left)

Despite the lack of external holes in houses, the internal ones are very well lighted, because the wall holes overlooking the internal courtyard and which may sometimes reach the width of the whole wall, they are covered with compartments

which is a great solution for good distribution of lighting and preventing the directed vertical sun rays from permeation of internal spaces by the round wood cutting forming the compartment's parts (fig.16).



Figure 16: mashrabiya was a good solution in Islamic houses for preventing direct sun rays through it's wood cutting

Light Symbolism:

The house in Islamic architecture is characterized by lighting, it is well lighted that light penetrates all its parts and there are no dark hole inside it or it is not illuminated by the light of heaven which is Allah's light. In the mosque, the importance of

light increases as it is a place formed by the association of the relative lighting (light)with the absolute light (God) selecting its features from its birth of internal space in the lamp containing light. Mihrab is one of the most important elements of the mosque because it is the directed element

towards the Kabaa, so it is the source of light at the symbolic level (fig.17) .



Figure 17 : Mihrab is Symbolized with light , from right to left : Baitur Rauf Jame,qatar mosque , Assyafaah Mosque

And we note that the light that is reflected on the courtyard of the building of the house and the mosque is a functional and symbolic element of great meanings, so the Muslim architect exploited it in his art work to reach his goal¹⁴, As for the source of lighting (light) in the mosques, it is the existing window openings above walls and under the dome which is one of the governing elements designing mosques because of the associated symbols with the religious faith. The association of light with heaven and earth has its relative relation in the height of these openings above the human level¹⁴, and in addition to its functional role, the dome represents the heaven and the light interspersed into it equally illuminates the pillars of the mosque as is the light of God (fig.18).



Figure18: dome of Barquq mosque

Spiritual Impact of Light:

Spiritual impact of light especially appears in mosque's buildings, they are the houses of God in the earth and creating spiritual holes was one of

the most important aspects according to the Muslim architect and light had played its effective role in it and the importance of this role can be analyzed in three ways:

§ Internal Courtyard:

The opened courtyard represents the reflection of the Muslim's association with heaven and the divine light that we find the opened courtyard in the heart of the mosque building as the light in the Muslim heart (fig.19) . The courtyard plays an important role in the spiritualization of the internal spaces of the mosque that the courtyard's association with the heaven makes it as the greatest passage for the light of God into the mosque within the exposed directed lighting from the courtyard.The mosque seems to have been carried out to the sky adding a kind of unparalleled psychological comfort to the internal space (fig.20) .



Figure 19: courtyard of Braquq mosque



Figure20: courtyard Creates a spiritual scene within the architectural spaces through a sense of divine presence within the place

- **Window openings above the walls:**

It allows the sunlight to enter the nearby internal spaces directly falling on the walls and different materials inside the architectural space and then it dissolve its rigid nature into the light inspiring the spirit in it within the energy of the inspired light, The light has this important value in reducing the material's rigidity and cooler buildings making changes in sense of a space's existence creating a spiritual scene inside the architectural spaces that helps to separate from the physical and internal world and only connecting with Allah within the sense of divine presence at the place (fig.21) .

- **The Dome openings :**

The dome is one of the architectural forms refers to the extension of internal spaces and its connection with the sky, its openings are perfect

patterns of equally and well distribution of light inside the space during the day. And its height allows unified distribution of light and here the dome becomes a symbol of the heaven (fig.22) , also the sun equally spreads its light to all the people of earth and the light entering from the dome's openings spreads its light all over the mosque for all the prayers, and the unified light and not having dark places or strong shadows vanishing the place or the objectives creates a feeling of safety and peace. In addition, the sense of natural light during daylight helps to achieve spiritual communication between the prayers and God and the intensity, strength and color of light change with the changing of the daytime promote the spiritual values inside the place.



Figure 21: light creates a spiritual scene inside mosque spaces.



Figure 22: dome becomes a symbol of the heaven, (shah emam mosque)



Figure 23: light and shadow in Bayt al-Kiritliya (Gayer-Anderson Museum)

§ **The aesthetic effects of light:**

The light helps to enhance the aesthetic values of Islamic architecture clearly and effectively. It adds a dimension to the architecture and without it, the architectural holes become deaf and lifeless ones. The vision and sense of architecture varies throughout the day as it represents the human life from the beginning, strength and the first light to

weakness, sunset and the end and this sense is followed by the architectural hole itself during the daylight to sunset, until the light bulbs come on to become an alternative to it and their places and arrangements are designed to give the hole the same values presented by natural light as much as possible.

In houses, compartments present a perfect model

for the aesthetic effects of light within the holes of the house through the cutting wood forms which allow the light to pass back inside and paint art paintings through the formed shadows moving inside the hole with the light direction changing during the daylight hours (fig.23). The Muslim architect presented different aesthetic solutions for lighting in the houses, in addition to "shamsiya" like "qamariya" "MOONS" which is rounded holes used in Bath ceilings to illuminate the internal space and achieve privacy. Calling it as relative to the moon refers to the light that permeates it is dim and at the same time, the glass that had been colored with it grants the place great aesthetic effects resulted from colors that the light grants to the space because of the glass color which gives a kind of comfort helps to relax achieving the desired purpose of this internal space (fig.24).



Figure 24: light grants the place great aesthetic effects,(Al- ashraf Bersbay restroom)



Figure 26: light creates dramatic atmospheres in nasir ul mulk mosque



Figure 25: bright light from shamsiya opening (Ibn Tolon mosque)

And in the mosque's architecture, one of the most significant openings which is granted many aesthetic effects inside the space is "shamsiyat" "sunshades", it is made of marble, stone, plaster with geometric, vegetative and written motifs and its name is related to the "shams" "sun" that the light interspersed into it is strong as bright as the sun on the earth (fig.25) and some of them are covered with colored glass which helps in passing the daylight within it in producing specific visual expressions on walls and floors seem as it is paintings and colored graffiti moving in the direction of the sun and this creates dramatic atmospheres that increase the internal aesthetics of the space and promote spiritual values inside the place (fig.26). And "qamariyat" "MOONS" exists above doors, windows or on walls at interfaces and it gives a dim light unlike the one emitted from sunshades which fill gaps with colored glass or leaving it empty¹⁴ (fig.27).



Figure 27: soft light from qamariya in Cordoba Mosque

The external architectural configuration shows the effect of light on it because of the large differences created by the light and shade on the surfaces of architecture, which are characterized by dynamic in their lines, which are highlighted by the light and highlights them in concrete, the stone touch different and carved surfaces and the splendor of marble all show beauty only by the fall of light on them. The Muslim architect benefited from this characteristic in emphasizing the elements, shapes and decorations that he wants to highlight and see this clearly at the entrance to the Sultan Hassan mosque (fig.28).



Figure 28: Light confirms the interface configurations (asultan Hasan mosque)

The high brightness of light during the day

produces sharp variations and specific lines, so it is more influential on external architecture for mosques, focusing on the Islamic architectural aesthetics appearance, visual bedazzling, and confirming structural and decorative details of architecture (fig.29). And as for the internal one, the architect had avoided contrasts and gradually presented the light to create equated lighted spaces.



Figure 29: light confirms decorative details of architecture

And as for artificial lighting, it was used to help in high aesthetics of decorations, architectural forms and elements, the dome and emphasizing decorative details in the internal space especially Quran verses, Majesty's name, and the Prophet's and Companions' name by focusing on them within the light (fig.30).



Figure 30 : Using light to emphasize the decorative elements

From the previous theoretical study, we find that Islamic architecture has employed light inside and outside to serve its presenting ideas, and it has benefited from the natural features of the light like brightness which emphasizes forms and elements, the contrast created by the resulting Shadows of architectural formations and impressions attracts attention and helps to confirm the scene, the nature of the dynamic daylight resulted from the angles

of the light's fall and intensity during daylight hours gives the architectural blocks and significant decorations dynamism appearing on the surfaces of the architectural facades, and this helps to distinguish the Islamic architecture with Dynamic fonts which forms the Islamic architectural interfaces. And as for the inside, using the light has achieved its functional, spiritual, symbolic and aesthetic purposes, and also it merges inside it and

interacts with it which gives it its own beauty as if it was alive.

Practical Study:

The applied study aims to benefit from the effects of light in Islamic architectural in the contemporary internal design to create aesthetic and comfort internal residential holes associating with our local roots. In research applications, the researcher had employed the natural and artificial light on basis of design serving the internal holes according to its nature and the required activities. Lighting in applications is divided into:

1- General Lighting: It provides the sufficient lighting level for a clear vision inside the residential hole to do different activities (to achieve the functional aspect) through ceiling units providing the required intensity of lighting . And as for the daylight, the researcher employed it to provide Homogeneous lighting by using internal large hole to provide the general sufficient lighting for the place. And to reduce the glow that

may be happened as a result of the wide window size, she used glazed glass which provides the light and prevent the sun rays from reaching the internal hole, especially as it faces the east and the sun rays was one of the design's problems (fig.31). And by this processing, the researcher provides an equal light level inside the hole and decreases the Non comfort light intensity rates achieving visual comfort inside the architectural space.

2- Sub-dim lighting: It is used by corridors and it is represented as in ceiling units of wrought copper and wood units. Both of them depend on the use of shadows and formations resulting from the passing the light rays within extras of the lighting units. And we can realize the interaction between the light and the internal hole within the formation that the light gives to the hole changing its characteristics in case of using the light (fig.32).



Figure 31 : Achieving visual comfort by providing adequate general lighting within the space



Figure 32: using dim lights in the corridors gives them aesthetic effects and achieves the interaction between light and space

3- Dynamic Lighting: It is achieved within the use of Geometric decorations in the fillings of the cutting wooden door covered with usual glass to allow the daylight rays passing within it. And with changing the direction and intensity of rays during the daylight hours, geometric decorations have been painted within its falling on the wall surface with different rates, directions and spaces according to the angles of sunlight, also the light

color changes during the daylight that it changes from the lighting white color within the midday hours to warm yellowish white color in the last time from day to sunset (fig.33). This movement of the decorative scene on the surface of the wall gives the internal hole a great dynamism and adds the temporal dimension that adds life away from the monotony of fixed objects in place.



Figure 33: Creating dynamic effects within the space by using geometric patterns in window's design to allow the light to pass through the space, changing its intensity and color during daylight hours

4-Concentrated lighting: It comes through two wrought copper appliques hanging on the wall hollowed out with a sofa with natural flowers bouquet on its sides giving it the spirit of nature and joyful colors inside the place, and it was the attraction point in the design which the researcher wants to confirm and underline that she used the light of applique to confirm it and create an attraction point in the design, and the lighting unit was designed from wrought copper with plant decorations at a height of one and a half meters from the ground to the source of light directly directed above the plant formation, and this strong

contrast creates a photographic area only focused on flowers. Also the round design of the lighting unit made the lines of light above the ground in the shape of the circle, as if they were embracing the flowers selecting them a specific hole by separating its hole surrounded light and shadow (fig.34). As for the gradual lighting with light shadow which is spreading through the holes, it paints an art painting with light and shadow on the wall and the ground adding great aesthetic values to the internal space that can be strongly realized when seeing the same space without the effect of this light (fig.35).



Figure 34: Using light and shadow to create dramatic and aesthetic effects and emphasize the attraction element within the space



Figure35a: gradual lighting adds great aesthetic values to the internal space that can be strongly realized when seeing the same space without the effect of this light



Figure 35b: Effect of light and shade on the perception of the space (gradual shadows) (no shades - light shades - medium shades - strong shades)

Conclusion:

- 1- Internal spaces have no meaning without the presence of light, and because the main source of light is the sun, so the Islamic architecture has benefited from its light and it very well embodied it in housings and mosques. Mosques were the most successful architectural holes in the use of light and the most wonderful in embodying it in a form adding the required tranquility and spirituality. It was even described as the "Houses of Light". And in modern Islamic architecture, artificial light was used to provide spiritual, functional and aesthetic values during the night and to become an effective alternative to daylight.
- 2- The role of natural and artificial light in forming specific aesthetics in Islamic architecture is sustainable that can be used and apply its concept to create specific aesthetics in contemporary interior spaces in Islamic architecture.
- 3- The researcher had applied the analytical studies of the Theoretical framework for many internal spaces in attempt to benefit from the aesthetic values of natural and artificial light in Islamic architecture and employ them in contemporary interior design.

Recommendations:

- 1- Taking advantage of the role played by light in Islamic architecture in the design of lighting for contemporary residential spaces and the exploitation of natural light and good utilize light within it.
- 2- Inspiring the aesthetics of light and its symbolic and spiritual impacts in contemporary designs of the mosque building does not depend on the traditional form of Islamic architecture, but on the concepts and aesthetics presented by the light in that architecture and re-presenting it in a contemporary manner depends on the idea rather than the shape.
- 3- Making use of natural and artificial light in confirming the identity of the internal spaces in designs that give them their distinctive features inspired by Islamic art.

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