Architectural Decoration in Traditional Houses of Central Region of Saudi Arabia: Symbolism, Abstraction and Tradition

Mohammed Abdullah Eben Saleh

College of Architecture and Planning King Saud University, P.O. Box 57448, Riyadh 11574 Kingdom of Saudi Arabia

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Abstract. The decoration of space and facade is one of the most identifiable architectural features of the elite residential buildings in the central region of Saudi Arabia. The purpose of decoration and coloring is to attract viewer's attention and to enhance the aesthetic quality of space. The ornamentation of these houses is the product of an age of hospitality. A warm welcome and the best food and drink are complemented by an attractive space in which to entertain the guest. Decorated architectural elements include interior walls, alcoves and cupboards and the ornamentation and coloring of doors and windows in the guest reception area. Exterior facades are decorated with mud motifs. Such architectural treatment is considered a system of beautification of space and an aesthetic dimension. The origin, typology and evolution of architectural decoration may be traced fairly well for the period prior to 1932, "the traditional period".

This paper argues that the origin, typology and evolution of the decorative motifs and colors of Saudi Arabia's central region were rooted in culture though there was a steady flow of influences from both indigenous nomads and far countries. The central region's physical insulation from the outside world had never stopped the retention of strong cultural ties with Muslims, even though it was politically disintegrated for a long time. Therefore, it was not by accident that the central region emerged as a major source for various forms of indigenous arts.

The conventional images and stock metaphors of ornamentation are drawn mostly from rooted beliefs, myths and fable which were dated to pre-Islam; the desert scenes and nomadic life. They ideally served as inspiration for the artist and as a source of fascination for the viewers. To appeal to the aesthetic and visual sensibility of the viewer, the indigenous artist infused his composition with strands and colors of desert life. Whether settled or nomad, the artist most likely showed in his composition, the beliefs, the social values, the oasis, and nature. The beliefs as ritual practices, the nomadic social values as liberal hospitality, the oasis in its palm trees, and nature in its stars, lune, and mountains are the vocabulary that the artist revolves around. Beliefs in Arabia, as in other cultures are not limited to magic and talkesman power in driving away the evil but were linked with heavenly religions. In the cultural set-up of the central region, the indigenous art components follow their own course of development as cultural symbols. Evolution is achieved through modification of the original forms into abstract ones. Such abstract shapes become pure motifs before they

finally become tradition. This establishes the fact that once a certain decorative motif gains popularity, it becomes an important part of the craft vocabulary. The author suggests that the typology and evolution of the decorative art must be approached contextually because when materials are removed from the context, they become resplendent with false impressions and misleading information. The contemporary art arrives at history based on probable sequential reconstruction rather than on proven chronology.

Introduction

Worldwide, geometric and decorative patterns have been studied by archaeologists, anthropologists, mathematicians, and architects [1-15]. The decoration of space and facade is one of the most identifiable architectural features of the elite residential buildings in the central region of Saudi Arabia. The purpose of decoration and coloring is to attract viewer attention and to enhance the aesthetic quality of space [16 & 17]. The ornamentation of these houses is the product of an age of hospitality. A warm welcome and the best food and drink are complemented by an attractive space in which to entertain the guest. Decorated architectural elements include interior walls, alcoves and cupboards and the ornamentation and coloring of doors and windows in the guest reception area. Exterior facades are decorated with mud motifs. Such architectural treatment is considered a system of beautification of space and an aesthetic dimension. The origin, typology and evolution of architectural decoration may be traced fairly well for the period prior to 1932, the "traditional period."

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The decorative elements for material culture as an implementation can be linked to vanity, superstition and/or beliefs. Pre-Islamic decoration has superstitious associations while Islamic decoration had religious significance.

The indigenous art in the central region is made of decomposable materials. It is not signed, dated, or recorded. It used checks, squares, triangles, circles, stripes and other geometrical patterns during the period of development. In addition, floral shapes were incorporated into elaborate patterns. The purpose of this study is to identify the decoration, ornamentation, and coloring used in the elite houses of the central region of Saudi Arabia and to attempt to give an understanding of their physical typology and evolution through time.

In the cultural set-up of the central region, the indigenous art components follow their own course of development as cultural symbols. Evolution is achieved through modification of the original forms into abstract ones. Such abstract shapes become pure motifs before they finally become tradition. This establishes the fact that once a certain decorative motif gains popularity, it becomes an important part of the craft vocabulary. The author suggests that the typology and evolution of the decorative art must be approached contextually, because when materials are removed from the context, they become confounded with false impressions and misleading information. The art historians arrive at history on the basis of a process of probable sequential reconstruction rather than on proven chronology [18].

The review of historical forces and underlying theories of decorative motifs in several cultures, (primitive and developed) is of major concern in order to discover if the motif is found in another culture and used in a similar way. Also, the individual creative effort implemented by the decorator is important in order to trace the evolution and modification of the motifs.

Research Methodology

This paper uses a case study approach to investigate the architectural decoration of the elite houses of central Saudi Arabia and induced inherited meaning, like symbolism which comes from abstraction of shapes and metaphors. The approach used comprises field visits to several inhabited and abandoned houses and discussions with five master builders and carpenters who still practice the job. Also, the author discussed the matter of architectural decoration with ten elites who live in houses enriched with this traditional art, studying notable examples and raising many questions including:

- How do master builders and homeowners perceive the decoration in terms of theme or pattern?
- 2) Is it a sense of continuity that is needed or is it a sense of transformation of a dying practice of decoration?
 - 3) Are traditional shapes and geometries suited to new space decoration?

Underlying Structure of Traditional Houses

Subsistence patterns and corresponding ecological niches divided the inhabitants of the central region into two prototypes: settlers and nomads. Until the recent establishment of modern Saudi Arabia and the discovery of oil, life in the central region was a never-ending struggle for bare subsistence. Food and water were permanently scarce and there was a constant fear of war and famine. The subsistence patterns and yearly activities of the entire population were dependent in one way or another on the extreme fluctuations in rainfall, which was never sufficient anyway.

Settled life allowed for conveniences and amenities that were not available in the desert. Nomadic life was generally harsher and much more difficult, yet the nomad was proud of his mobility and freedom. The martial spirit of the nomad always yearned for

raid and booty. In contrast, the settlers yearned for peace and order so that they could till their land and reap their crops.

In the central region, the settlers and nomads are two complementary aspects of the socio-cultural system, though still dominated by the nomadic outlook. The great majority of settled people are of close nomadic origin. The transformation from pastorlism to cultivation and later to technocracy is a continuing process.

Gradually, the settlers developed sedentary habits which distinguished them from the nomads. They abandoned their customs and submitted to civil and religious laws. The tribal loyalties became supplemented by local allegiances. A settler is intensively proud of his tribal affiliation, yet at the same time he is aware of his membership in a local community, all members of which are united politically.

The nomadic outlook is more in harmony with and relevant to desert life, where its physical and political determinants are more immediate and their effects more ubiquitous. This outlook persists, nevertheless, among the settled people, who continue to entertain a sense of affiliation with the open desert and the egalitarian nomadic existence.

The conventional images and stock metaphors of ornamentation are drawn mostly from rooted beliefs, myths and fable which were dated to pre-Islam; the desert scenes and nomadic life [19, 20]. They ideally served as inspiration for the artist and as a source of fascination for the viewers. To appeal to the aesthetic and visual sensibility of the viewer, the indigenous artist infused his composition with strands and colors of desert life. Whether settled or nomad, the artist most likely showed in his composition the beliefs, the social values, the oasis, and nature. The beliefs as ritual practices, the nomadic social values as liberal hospitality, the oasis in its palm trees, and the nature in its stars, lune, and mountains are the vocabulary that the artist revolves around. Beliefs in Arabia 'as in other cultures' are not limited to magic and talkesman power in driving away the evil but were linked with heavenly religions

Hospitality in Arabia is not just the giving of food or drink. It is an intricate web of symbolic acts and rituals that are structurally and functionally intertwined with one another and interrelated with the other components of the social value system in the Arabian culture [21].

Cosmology in Arabia plays an important role in the cultural, economic and religious life. Travellers in the vast desert were always linking themselves to certain stars in orienting them to the proper direction. Farmers were linking their cultivation to certain stars' show up. The sunset and the moon birth is the only start count for certain Muslim religious duties. Preparation and serving of coffee is not just an ingredient of hospitality but its most important and ceremonious part. Coffee is called *kaif*, that substance that sets the mood right [22]. When a host receives his guests at the *majlis*

(men's reception area) and welcomes them, everyone will choose a place to sit. The host first rakes the hearth, strikes a blazing fire, and starts to roast the coffee beans. The beans must be roasted slowly and carefully lest they burn. When they turn yellowish brown and start to glister with sweet, they are cast in *Al-Mubbarad*, a shallow wooden pan, to cool off. The husks are then blown off and the roasted beans are pounded with measured strokes, with an occasional rap on the rim of the mortar to give variety to the beat. The rhythmic pounding of the mortar is soothing music to the ears of the guests and surrounding community. The host empties the ground coffee into *Al-Milgomah*, the first coffee pot used in the preparation of the coffee. After few minutes of boiling, it is drawn away from the glowing coals, and left for a while to settle. The host then empties the boiled coffee into *Al-Mibharihl*, a smaller and more attractive pot, after adding the necessary spices of cardamon, saffron, cloves, and cinnamon. The host performs every step in this ritual coffee preparation ceremoniously and with the utmost dignity with welcoming gestures and pleasantries. He tries to put his guests at ease and let them feel that they have done him a favor by alighting at his majlis and honoring him with their presence.

The serving of coffee is no less ceremonious than the making of it. Making, serving, and drinking of the coffee is a significant theme in the design and decoration of the reception space.

The *Al-Rozinah/Al-Faghrih*, a decorated recess in the wall of the majlis was used for the storage of utensils. *Al-Kumar*, a semi-recess in the form of a held coffee and tea pots on decorated shelves. Originally, the floor was made of packed earth and covered with decorated wool carpets.

Although written information on decoration is lacking, one can probably make deductions from the remaining form and shape of decoration. The use of stone and adobe for walls, columns and roofs was prevalent. Rough hewn beams of Tamarix or palm tree trunks were used as beams and girders to carry treated palm tree branches or stone slates, preceding the adobe layer that finished the roof. Stone drums were used in columns, and stone flanks were used to carry triangular arches.

The interiors of reception spaces maintained a sophisticated level of decoration though spaces are tight. The guest reception sections in the traditional houses were characterized by elaborately carved interior walls, windows and doors. The construction and decoration were based on local expertise and materials.

Origin of decoration

Tribal life presented by its folk arts, cultural norms, social conventions, customs and mobility was a fostering dynamic source to the indigenous arts of settled people. Mostly, the settled people were originally coming from the nomads and have genealogical connections. Nomads are not primitive in their culture, most of them had

come from civilized cultures since the collapse of Marib Dam in the fourth century A.D. [23, 24].

The nomads were 'and still are' a demographic source of settlements in the central region of Saudi Arabia; however, discontinuity of tribal mobile life resulted in its depletion. The tribal arts possess elegance and elaborate workmanship which was a major source of inspiration for many generations of local artists. Wood carving and patterns had sufficient proof that outside influences had penetrated the central region communities long before the traditional period. This is probably demonstrated by the proliferation of ornaments on the standard door decorations of exterior doors. Furthermore, the immense importance of tribal arts as a vehicle of cultural radiation before 1932 should not be underestimated.

The tent or the house in all its manifestations was a cultural institution capable of disseminating an indigenous culture among the nomads or settlers under the umbrella of Islam. Therefore, it was only natural that the indigenous master builder, carpenter, and craftsman of the traditional and transitional periods would turn for inspiration toward the prestigious art of the nomads, readily available in their midst.

Thus one can assume with a fair margin of credibility that the house decoration of the traditional period was influenced by the tribal arts of nomads. On the other hand, this conclusion should not necessarily exclude the simultaneous, though minor, influence of the outside world brought by traders from China, India, Persia, Iraq, Syria, Palestine, Egypt, Sudan and West Africa [25,26]. The economic take-off of the unified Saudi Arabia, after 1932 changed the picture drastically.

Another argument in favor of the originality of the indigenous arts in the traditional period is the fact that until the introduction of the transport vehicles in the forties, the raw materials were produced locally, except coloring materials which were imported from India.

Typology in decoration and the emergence of symbolism

In the central region, three different types of decoration can be identified as being the most characteristic: the interior wall decorations, the wood decoration and coloring for doors, windows and ceiling, and the exterior wall decorations and architectural motifs. Apart from these, there are others which even though not characteristic of the central region in general, are typical of the elite, such as the alcoves for apparatuses of tea and coffee. The master builders, craftsmen, and elites developed their preference for the chosen shapes and forms interdependently for the purpose of either pure symbolism or pure decoration.

All surveyed shapes, forms, and colors of decoration appeared to be produced in the central region, regardless of whether they were carrying a typical or distinguished feature. In the traditional and transitional eras, the decoration types tended to express the social, economic, and intellectual side of the bearer. Perhaps more than any other individual feature, this seems to be the most typical and original signature of the bearer too.

The wall decoration comes first by plastering part of the interior wall with white lime, then the master builder or craftsman started to frame the decorative elements either by relieving part of the lime or moulding the shape in a pre-defined form.

The circle in decoration

The person draws a circle around the belongings which means for every one that this item is protected and many consequences may arise if this circle is entered. In some tribal cultures in Arabia when someone drew a circle around a sitting person, it is meant that the person could not go beyond the circle unless the circle is broken by the person who drew it. The decoration in the circle is a derivation of the arc form passing the center of the circle and centered from the mother circle circumference. The advantages of the centers of the arc on the circumference of the mother circle is the multiplicity of obtained arc shapes that formulate decoration in the circle. Other shapes can be formulated by radiating other arcs or circle centers in or outside the circumference of the mother circle. The circle is by far the most typical decoration form used in both interior wall and wood decoration. It can safely be designated as a symbol of individual territory.

The circle shape, as a purely decorative form, may have been inspired from the Mandala, an Indian symbol of cosmos [27]. It also may have been an attempt at imitating *Al-Tawaf*, the ritual circulation around the Ka'bah, the Muslim's holy shrine. The ornamental circle represents a flower, an auspicious image of prosperity and of the life-giving effect of rainfall on the desert [28]. The presence of the decorative circle suggests a connection between this shape and the cults of the pilgrims. However, the circle emerged as a decorative element even though its meaning is beyond that. Therefore, as a derivation or further refinement of the colors it is a phenomenon of the early periods. It was already in nominal use by the later periods. It was employed not only for functional purposes but as decoration of stellar form. The master builder and craftsman inherited and adopted the stellar form in the decoration because it is characterized by its proportional features.

The evolution of the circle form continued beyond the traditional era of the central region. At that time, not only plain circles but complicated patterns were introduced.

The triangle in decoration

The use of the first triangle appeared to be almost functional and accidental. The triangle is extensively used in the exterior as well as interior. The small openings were using sun-dried adobe bricks to replace the lintel. The central region arcades were almost triangular using stone blanks to carry above load. They became prominent precedents to decorative art. The triangle is another very typical element in granulated

architectural decorative art in the central region. Triangular decorative elements in the shape of Amulets adorns the exterior facades, interior spaces, windows and doors of buildings. Amulets in pre-Islamic time, were believed to protect the building and its inhabitants against misfortunes and the displeasure of the evils. The belief that these "Amulets" in the form of ornaments possessed magical powers. In Islamic times, "Amulets" are ornamentation often incorporated by religious inscriptions in praise of Allah which are recommended by Prophet's traditions. It is named *Al-Shinf*, a metaphor that came from ear decorative motif. It mostly takes an equilateral or isosceles shape. The isosceles triangle is mostly formulated by the sub-division of a square into two. The meaning of these two triangular shapes might come beyond the technical achievement. The technical advantage of both shapes results in greater economy as compared to the circle, in terms of material and time of production. Therefore, the triangle shape represents a technical improvement on its predecessor; the circle.

The shape of the triangle appears mostly in repeated compositions, which embellish the facades, arcades, interior walls of decorative spaces, doors, and windows of elite houses in the central region. The use of the triangle in decorative art appears to be an afterthought rather than the original structural intentions of the master builder. The triangle then can be viewed as an element accommodating such intentional disparity, an either structural or decorative element. Al-Kumar, the cupboard for the tea and coffee pots, is decorated with mostly triangular miniature arcade. There are many examples from the three evolution eras.

The triangle was widely used as decorative motif and structural element, becoming an important characteristic of the indigenous architecture of the central region in both the traditional and transitional eras. Contemporary architecture's reliance on reinforced concrete denied the use of the triangle as a structural determinant, but it remained a decorative one. The triangle pointing up symbolizes fire as well as man active toward heaven, passive towards earth while the triangle pointing downwards corresponds to water or man passive towards heaven and active towards earth [29].

The foliation in decoration

Another important element in the architectural decoration, ornamentation, and coloring are the foliated shapes, composed of multiple foils, lines, and arcs. There are four varieties: difoil, trefoil, cinquefoil, and multifoil. They are composed of recessed multiple arcs which define the number of foils. An important derivation is palm tree branches. Some represent desert fruits such as grapes, dates, pomegranates, etc. Some were engraved on the lime or wood and some only colored. The foliated shapes and forms were executed using more skill and technique than the circle or triangle. The end product is more delicate, so they are able to sustain aesthetic quality in addition to symbolic virtues.

Analysis of Architectural Decorations

The analysis of geometric and floral patterns and colors involves detailed varieties of examples from different settlements in the central region, collected in the course of a discreet period. The objective is to identify recurrent rules which appeared to have been implemented to generate the precept decoration, ornamentation and coloring under the underlying social, economic, and intellectual structure of their owners.

The recorded pattern was investigated and analyzed in hierarchical levels of five

scales:

- The architectural elements, including the space, are considered as one unit. 1-
- The implemented group of geometrical and floral patterns and colors in that 2-space: walls, cupboards, doors, windows and facades.
 - Single group pattern of decoration, ornamentation and coloring. 3-
 - Single pattern in each group. 4-
 - The meaning and symbolism of such pattern and color. 5-

The idealization of decorations, ornamentation and colors as physical matters and the materialization of ideas behind them is manifested in the symbolized and abstracted content of the objects implemented. The symbolism is concrete but its content is abstract.

The decorations, ornamentations, and colors of the motifs and spaces in the central region men's reception space, are classified in terms of sematics meaning into the following types:

- Primitive motifs: expression of ingenuous points, lines, and shapes. 1-
- Symbolic motifs: expression of the power of nature, wholeness, and magic. 2-
- Idiographic motifs: expression of individualism in terms: social, political, or 3-occupational.
- Geometric motifs: expression of compositions by points, lines, shapes and inter lace figures which may contain either all or one of the above.
- Abstract motifs: expression of natural or physical element by a shape that 5 carries a part of the attributes of that element.
- Floral and vegetational motifs: expression of floral and vegetational elements in 6-real or abstract form where the symbolism of floral or vegetational manifestation is meant.

The basic principles and rules in the decorations, ornamentations and colors of the motifs and spaces in the central region men's reception space in terms of composition lie into the following aspects:

- Equilibrium: the process of arranging the elements and colors as they relate to space.
- Symmetry: most of the geometric patterns and floral designs were influenced 2by a symmetry axis either in half or full.
- Ramification: most of the floral and vegetational patterns tend to ramify either 3-from one point or line.

- Repetition: the simplest rule in the art of composition by repeating an element 4-or unit; the result is a creative composition though the element or unit is not elegant.
- Proportion: This is one of the most important rules of aesthetic. There is no 5-rule of thumb for aesthetics, but the matter is left to the individual appreciation, accurate observation, and piece distinction.

The decoration or ornamentation patterns are either geometrical or natural:

- Geometrical patterns : Linear relationship, geometrical shapes, regular shapes, 1-star-like shapes, and circular shapes.
 - Natural patterns: Floral, vegetaional, animals, human, and physical features. 2-

Types of decoration and ornamentation patterns:

- Simple decorative and ornamental patterns; the basic shapes. 1-
- Composite decorative and ornamental pattern; multiples of simple decorative 2-and ornamental patterns.

Sources of decoration, ornamentation and colors:

- Natural source: the flora and fauna kingdoms. 1-
- Man-made: the science of geometry and common sense of people and the 2-synthesis of colors.

The preparation of decoration and ornamentation pattern needs first the basic unit which acts as the essence of symbolism and abstraction of an idea, thought or belief. Once this is established, any decorative pattern is done through the preparation of suitable patterns and transferring its natural shape into decorative or ornamental pattern, the unit pattern. It is the link between the nature and decoration or ornamentation. The natural shapes are not suitable for decoration without alteration and abstraction. This process provides the unit pattern. Out of these units, the decoration and ornamentation become reality in the geometric patterns.

There are many cases where the geometrical shapes of triangle, square, circles, and regular shapes, are given decorative pattern through the following process:

- The use of axis, vertical or horizontal; the shape then is divided into two 1 identical shapes.
 - The use of either one diagonal/diameter or both. 2-
- The use of axis, diagonals/ diameters all together. In this case the shape is 3-divided into small spaces which facilitate the formulation of decorative and ornamental element.
 - The interlace: 4-

The interlace of geometrical or floral shapes that follow intricate path.

The arrangement of decorative or ornamental elements:

- Frame decoration: The restriction of decorative expressions between two parallel lines, either horizontally or vertically. These elements are either attached or detached.
- Area of decoration: The large wall surfaces. The surface is divided into small 2-areas and filled with one or more patterns.

The timber carving was produced locally by skilled carpenters. The lime was also produced locally by burning the lime stone in the near building site and kilns. Plantation of local timber was reduced during the transitional period and necessitated the need for imported timber which was of inferior quality. Electrical wood cutting machines were introduced in the fifties, and imported Swedish and Java timber were fit for machine engraving. Such techniques required new carpenters without traditional experience. Mostly they adopted new prototype patterns with no relation to the indigenous patterns or shapes. Frequent contact with the outside world encouraged further assimilation of exotic features in window and door design and decoration.

The engraving in timber of the traditional period is replaced by coarse ornamentation in the transitional period. Paneled portions in windows and doors are closely connected to the outside influence. However, the relation between the architectural decorations in the elite houses of the central region is more complex than what is suggested in the transitional period. Specific historical forces prevailed in the central region, admitting a constant flow of cultural exchanges. It is difficult to identify a great number of morphological elements as indisputably Nubian, Egyptian, Palestinian, Syrian, Iraqi, Persian or Indian.

As a result, the typical central region architectural decoration in the traditional period simultaneously reflects first-hand indigenous ornamentation derived from tribal arts of the nomads and second-hand outside world ornamentation brought by traders. The indigenous traits derived from the Pre-Islamic beliefs prevailed in the Southern Arabia, Mesopotamia, Greek and Egypt with whom the Arabs had earlier come into contact [30].

Consequently, it is rather difficult to ascertain the direct source of the traditional period ornamentation in carving and coloring of lime and timber. For the rosette motif, one would possibly have to consider a great variety of specimens starting from the antiquities till today. In all probability, the rosette motif found in the traditional central region ornamentation was original, when compared with other samples in other cultures. This can be deduced from its original stylistic characteristic. This fact pertains not only to the rosette but also to other elements which have a lot in common through distinct in shape and form.

The men's reception space type has been identified on the basis of the presence of attributes such as the Misbah in the arcades on the first floor level that mostly overlook the space. The term means literally "lamp" and it provides light and elegancy to the

space. Another attribute is Al-Taq, the back space used to store wood and coal used during the preparation of coffee and tea. Other attributes include:

Al-Kumar: the cupboard containing spices or utensils for coffee and tea.

Al-Mihkumah: the most prestigious place on the right of the host.

Al-Faghrih: the wall niche for Quran, books, or accessories.

Al-Bab: the door for the reception space.

Al-Misra^C: the window in the space.

Al-Wijar: the open fire place.

Mostly, the space contains all of these elements, arranged in standard sequence around the internal walls of the space. Many of these spaces were subject to remodeling when the wall got blackened. These decorations, ornamentation, and coloring were contributing to the ordering of space which is a part of the house as a whole. The existing patterns are the result of historical implementation and changes over the time of the development of these spaces, which resulted in an underlying pattern of design and techniques.

The lintels of arcades in some houses are decorated with geometric patterns reminiscent of the grapes that flourish in the oases. The strong contrast is provided by the dark blue, black, orange, and green colors of the plain patterns, against a light background, perhaps to compensate for the absence of such vivid colors in the desert landscape.

Through the system of the four colors, red, yellow, green and blue, man establishes sensible correspondences with the various aspects of this inherent energy of nature that is continuously in search of a state of equilibrium analogous to its primordial state of order [31].

Islamic cosmology drew its inspiration from Shari^cah [31,32]. Lunar months designate sacred days. Sun positions in the sky define prayer times. The stars guide travellers in the wilderness of the sea and desert. According to [34] all forms of cosmology have meaning which is evident in the blend of astronomy and astrology and whose visual language is clearly demonstrated in the patterns.

In central Arabia; Al-Dinddarih is a kind of temporary circular grouping of a tribe, sub-tribe or extended family at night who expect an attack. The outer circle is occupied by women who were to awaken and spin around so they might awaken the sleeping men in the inner circles. Al-Da'yer, is a kind of permanent circular grouping of tents where the whole tribe, sub-tribe, or group of mixed families would formulate a large circle out of the tents, so the inner circular space would be used for camels and sheeps. Al-Da'yir had one controllable access. Al-CInnah is a kind of permanent circular grouping of one residence. The tent is constructed and a fence of thistled bushes surrounds the inner

space to protect it from wild animals such as wolves. The entry is closed at night by a thistled bush. The sheeps are kept inside the inner space.

The scenario of architectural decoration

The individual creative effort in the design and presentation of decoration is manifested in the personal formula which reflects the good, hard, and imaginative thinking of both the homeowner and the professionals during the development stages of decorative design [35]. Decoration represents an indigenous exhibit of natural process and creative way which is influenced by the following:

- Inspiration: the motivation of nature, life, customs, outside influences and .\ optimism.
- Incubation: comtemplating the theme of the decoration, a design process . shared by the decorator and owner.
 - Illumination: the zest that comes from understanding the above two.."
- Implementation: the confinement of available ideas and use of indigenous . £ materials in presenting the theme in a decorative shape.
 - Evaluation: The feedback of guests and residents on the decoration...°

The pattern analysis of decoration, ornamentation, and coloring using geometrical relationships often leads to discovery of origins of abstraction [36]. For the sake of brevity, this is called analytical brainstorming. It is an individual technique when the person restrains judgment and critical thinking while concentrating on exploring new concepts in decoration, ornamentation and coloring. It is a powerful means of learning how to derive the evolution process. A thorough analysis of a given pattern will reveal fundamental knowledge about its origin. This knowledge exposes shortcomings which lead to ideas for improvements. These ideas, in turn, require more analysis which provides more fundamental understanding of a pattern, leading to further ideas for improvements. In fact, this is a procedure which is suitable for exploring pattern synthesis. For example, knowing the geometrical shape of an element, it is possible to use the solid and plane geometry principles of variations or iterative methods to derive the pattern in the given decoration of space [37]. Another example is the use of various techniques of analysis to synthesize an optimum number of elements to have required frequency response. Perhaps this technique may be considered a means of arriving at an optimum resolution within a basic concept of decoration. The abstraction in decoration is rather a means of offering opportunity to discover symbolism. However, the approach is attracting great interest and attention as it becomes clear that large-scale implementations may eventually be creative in their own right.

Judgement about suggested decorative motif and colors is left to the client. He might postpone the offers of evaluation of the first proposal suggested by the master builder or carpenter. The master builder or carpenter usually mention all ideas about decoration. The wider the ideas and alternatives, the better and sooner the acceptance of choice. It is usually easier to tame down an idea than to build it up. Some one else

may suggest a change which makes a previously impractical idea successful. This encourages the master builder or carpenter to give as many ideas as possible. Also, it encourage the master builder and carpenter to combine and improve ideas suggested earlier, to vary the pace and encourage humor to relax the owner. The master builder and carpenter try to limit the choice time to a period stipulated at the beginning of issuing the job.

They assign a wall, board, or sand to take down the gist of each idea either in the site, place of work or visited place. They keep the list of ideas in front of the client during the session.

They wrap up the ideas carefully after the session and define the agreed upon proposal. They also encourage him to jot it down. According to the interviewed master builders, some of the homeowners asked him to remove some of the executed decorations due to their improper execution and re-do them again.

The brainstorm session usually produces a long list of potential ideas and resolutions and provides decorative motifs for spaces and architectural elements that satisfy the elite and has an attractive visible, believable action.

Two people participated in the group session, with variety of experience, which was sought to define the idea output of the custom made motifs and architectural elements. They both had special skill and social, economic, and intellectual status. They used the field visits, mock-ups and drawings to convey and exhibit the ideas behind beautification and distinction of space.

The brainstorming session is mostly helpful to stimulate the ideas for desired decoration, ornamentation, and coloring. It may also be helpful to elicit fresh ideas if nothing brought up so far seems acceptable to the client. It can produce many alternative possibilities but they may be so difficult to evaluate; so it is more important to evaluate a few ideas than to produce quantity. While it has been found that two can produce more ideas than the individual, it has not been proven that the number of excellent ideas is larger for groups than for individuals. The brainstorming is desirable in order to stimulate several people toward thinking resolutions of an issue. Thus, brainstorming should be appropriate for producing creative and expressive architectural motifs and elements at their early stages of consideration.

Imagine a master builder or carpenter at work. He mumbles over what he has carved, changes shapes around, carves, mumbles again. He wants to give the decoration or coloring a form or shape consistent with his intuitions, but as he works, difficulties arise - he cannot find the right pattern, the relationship between two images becomes obscure, he cannot find the rhythm he wants, etc. He must iron out these difficulties; he must practice more attentively to his work: In short, he must re-search. His desire to re-search is born out of the desire to make a work that is intuitively

satisfying. Finally, the lesson obtained from the pattern in decoration and coloring design comes automatically as part of the design instinct, as the master builder and carpenter struggles to clarify an originally private pattern idea. Thus meaning and pattern form an integral act within the individual; for the designer or user this relationship holds for any enterprise, even the most subjective, where the designer tries to create a form or shape out of practiced language decoration and coloring.

Assessment of architectural decoration

The representation of heavenly phenomena are found in their highest development among the society's religious beliefs whose whole cult consists essentially in the worship performances and inspirations of cosmological objects, in the form of crescent, the sun, and the stars. Geographical motives are used such as sand dune, mountains and valleys in decoration and coloring. The representation of physical features are important to the society of the central region who inhabit the endless desert of Arabia. The seasonal sedentary in the desert implies the representation of wild flowers, and tents to their folk art to.

A number of geometrical and floral patterns adorning the walls, doors, and windows of indoor and outdoor places were investigated since their inception. The spaces and architectural elements were designed by elites and skilled master builders. The owners mostly were possessing distinguished social, economic, and intellectual statues. The houses are considered built without the help of professional architects.

The investigated material showed very clear defined spaces and architectural elements with different types of decorations ornamentation and coloring. The investigation intend to display the consistent use of of a variety of patterns and colors which might depend on the elite status.

The decoration, ornamentation, and coloring of facades and the men's reception space was important in the elite houses of the central region. The practice of decortation was to form an impressive decorative composition responsible for originating shapes, forms, and motifs which ultimately became *bona fide* symbols of the central region. As already discussed, there were at least three sources of inspiration for decorative art in such an insular context: nature, the environment, and religion. The role of master builder, craftsman, and resident was the presentation of indigenous semantics into an attractive art. Bearing in mind that the shape is an important innovation of the period, the actual link between the three eras is the full appearance of the independent shapes and forms that stimulate and present the elite's social, economic, and political status. The wall decoration, as end products, can be considered fragile, while those on wood were of extreme permanence. They both carry extreme visual elegance.

The traditional and transitional shapes and colors declined during the contemporary era. This is due to the discontinuity which prevailed for more than two decades. There was an absence of the traditional sense and consciousness and a reliance on imported

wood and machines to produce most of the decorative motifs as well as the use of low quality colors.

The purity of expression with which the ornamentation is reproduced, despite a new boldness of interpretation, must be attributed partly to a respect for tradition. The economic eclipse would seem to be primarily responsible for the indigenous artists to retain traditional motifs with minimal alteration or renewal. This is in contrast to the contemporary period and the economic rise, which seems to be the dominant factor for a drastic change in attitude towards ornamentation and style.

Decorative motives were used in exterior facades of elite house to serve functional purposes. Al-Shnof are the relieved triangular shapes, a type of ear rings. They combine symbolic and aesthetic purposes. The aesthetic purpose is seen in the metaphoric use of earrings, which beautify the bearer. The symbolic purpose is seen in the resemblence of shape to the Amlute which is used for protection purposes where by the decorative element function as a protector from rain erosion on wall. The recess symbolizes the string which carry the Amlute or the hang of the ear ring. Al-Tarmah; the projected mute face combines symbolic and functional purposes. The functional purpose is expressed metaphorically by giving the form the name of mute who can see and observe but not able to speak to outsiders. Al-Jomjomah; the wooden lock in doors combines symbolic and functional purposes. The functional purpose is expressed metaphorically by giving the form the name of the skull which can protect as a head. Al-Riwaq; the arcade that surrounds the courtyards in the elites traditional houses of central Saudi Arabia, is a metaphoric use of the front part of a tent. Al-Misbah, the gallery that overlook to the men reception space in the elites traditional houses of central Saudi Arabia, is a metaphoric use of the lantern or lamp whereby it provides light in indirect way to the men reception space. Al-Faghrih, the alcove in the wall of men reception space to store drinking bowls,. is a metaphoric use of an open thirsty mouth which want to drink. When the guest see the drinking bowls they may be encouraged to ask for water.

Recent changes in the social organization and socio-economic structure of Arabia, however, have dealt a severe blow to the vitality and vigor of this decoration tradition. It is disappearing rapidly, and the number of its practitioners is decreasing at an alarming rate. Its popularity is diminishing and its propagation has become restricted to very few people who are enthusiasts.



Fig. 1. Map of Saudi Arabia shows the region of investigation; the central part of Saudi Arabia.

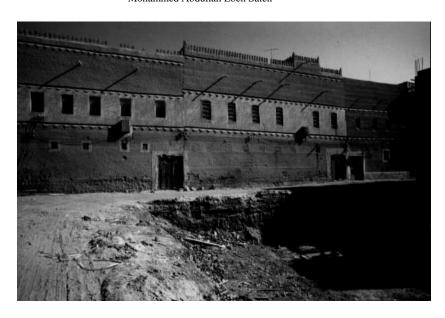


Fig. 2 (a)

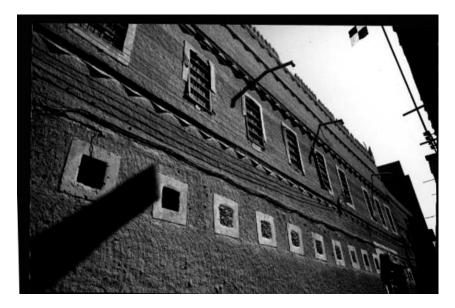


Fig. 2 (b).

Figs. 2(a) and 2 (b). The façades of traditional elite houses in central Saudi Arabia combine several elements of functional and decorative purposes. The openings on ground levels were restricted to doors and clerestory windows. The windows on the second floors were mostly for men reception spaces.

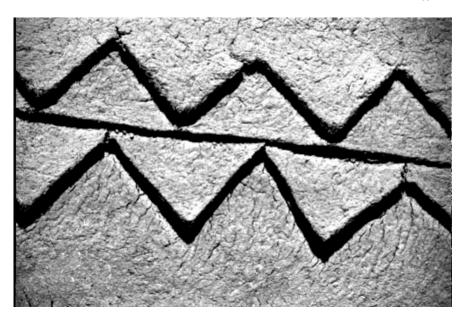


Fig. 3 (a)



Fig. 3(b).

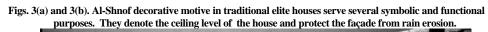




Fig. 4 (a).



Fig. 4(b).

Figs. 4(a) and 4 (b). Al-Tarmah decorative motive in accessible interior spaces of traditional elite houses serve on symbolic and functional purpose. They denote sense of surveillance of strangers.



Fig. 5 (a).



Fig. 5(b).

The tradtional elite houses in central Saudi Arabia had two exterior gates. Figs. 5(a) and 5 (b). One is mainly leading to men reception spaces and the other is leading to the family section, which is wider, and larger that allow loaded camel to enter.



Fig. 6 (a).



Fig. 6(b).

Figs. 6(a) and 6(b). Al-Riwaq, the arcade that served as transitional zone in traditional elite houses between Al-hawsh (the open courtyard and enclosed spaces). The architectural treatments in Al-Riwaq serve decorative and construction purposes.



Fig. 7 (a).



Fig. 7(b).

Al-Misbah, the gallery that overlook to the men reception space, Figs. 7(a) and 7 (b). characterizes the men reception space in traditional elite houses in Central Saudi Arabia.



Fig. 8 (a).



Fig. 8(b).

Figs. 8(a) and 8 (b). Al-Faghrih, an alcove in the wall of men reception space was used to store drinking bowls.



Fig. 9. (a)







Fig. 9. (c).



Fig. 9(d).

Figs. 9(a-d). Al-Kumar, the coffee and teapots alcove. It is located on the left side of host. The amount and quality of pots and decoration are indication of wealth and sophistication. Al-Wijar, the open fire places in front of the host.

Fig. 10 (a).



Fig. 10 (b).



Fig. 10(c).

Figs. 10. (a-c). Themes in wall decoration is a popular practice. The owner of this house took the pots and apparatus of coffee and tea making as a theme. The pictures show coffee cups tray and container; stone mortar for coffee and cardamom crushing; coffeepot; and censor.

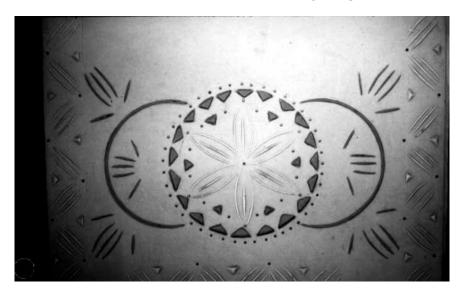




Fig. 11 (b).



Fig. 11 (c).

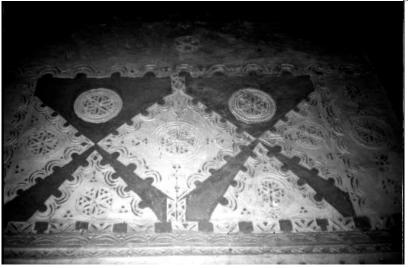


Fig. 11(d).

Figs. 11 (a-d). Geometric shapes were extensively used in decoration.



Fig. 12 (a).



Fig. 12 (b).



Fig. 12 (c).



Fig. 12(d).

Figs. 12. (a-d). Foliation in decoration.

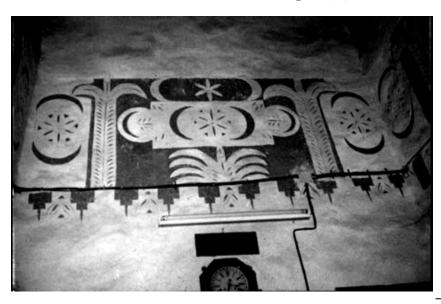


Fig.13. Cosmology in decoration extensively used the lunar and stars as a presentation to the open sky.



Fig. 14 (a).





Fig. 14 (b).





Fig. 14(d).

Figs. 14 (a-d). Colors in decoration was limit in use to wooden surfaces of interior doors and windows.

Exterior doors used black paints.

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الزخرفة المعمارية في البيوت التقليدية: في المنطقة الوسطى من المملكة العربية السعودية

بالمزية المحريد، والتقاليد محمد بن عبدالله بن صالح* أستاذ بقسم العمارة و علوم البناء، كلية العمارة والتخطيط، جامعة الملك سعود، الرياض، المملكة العربية السعودية

^{*} يشغل في الوقت الحاضر منصب عميد الكلية.

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ملحص البحث. تمثل فنون الزخرفة والنقوش للفراغ والواجهات أحد أبرز السمات لمباني مساكن الأغنياء في المنطقة الوسطى بالمملكة العربية السعودية، ويكون الغرض من استخدام الزخرفة والألوان هو جذب الاهتمام وإبراز القيم الجمالية للفراغ وتزيين واجهات المساكن وأماكن استقبال الضيوف ما هو إلا دليل على حسن الوفادة والكرم وعنصر مكمل مع تقديم الشراب والطعام. والعناصر المعمارية التي تزيّن وتزخرف دائماً هي الجدران الداخلية وخزانات أدوات القهوة والشاي وأبواب ونوافذ غرف الاستقبال، ويرجع أصل هذا الطابع إلى العصر التقليدي.

تبحث هذه الورقة في أصل وهوية حركة زخرفة وتزيين وتلوين الفراغات وتطورها في المنطقة الوسطى بالمملكة العربية السعودية، ومدى تعمق جذورها في ثقافة المنطقة وتأثيرها في ثقافات القبائل البدوية في الأقاليم المجاورة، ولم تمنع طبيعة المنطقة الوسطى المعزولة عن بقية أنحاء العالم من التأثر والارتباط بثقافة المسلمين، وليس من قبيل المصادفة أن تبرز في المنطقة الوسطى كثير من أشكال وأنماط الفنون الأصلية.

تناقش الورقة مدى إمكان استيحاء الأشكال للزينة من أصول أسطورية لعصر ما قبل الإسلام وثقافة القبائل البدوية المجاورة المستخدمة في الزخرفة، والأشكال المستخدمة في الزخرفة والزينة تعتبر مصدراً لإلهام كثير من الفنانين ومصدراً أيضاً لإعجاب المشاهدين. ولجذب اهتمام المشاهدين لجأ الفنانون الأوائل في تكويناتهم إلى إرساء قاعدة مهمة من قواعد الفنون وذلك عند استخدام الألوان والمفردات الفنية التي كثيراً ما ترمز لطبيعة الصحراء والمعتقدات والتي يزيد عددها عن ثمانين. وهذه المماوية والنجوم اللامعة وأشجار النخيل والكثبان الرملية وإعداد القهوة والشاي تعتبر الصافية والنجوم اللامعة وأشجار النخيل والكثبان الرملية وإعداد القهوة والشاي تعتبر مصدر إلهام الفنان المحلي الأصيل. والمعتقدات العربية ليست مثل معتقدات الثقافات الأخرى التي تعتمد على السحر لطرد الأرواح الشريرة ولكنها مرتبطة بالأديان السماوية، ولهذا فإن عناصر الفن الأولى في المنطقة الوسطى تتبع منهجاً أصيلاً في تطور الرموز الثقافية الأصيلة في المنطقة، وقد بدأ أساس التطور للأشكال الزخرفية بتحرير الهيئات الأصلية تحريراً رمزياً والتي صارت حركة فنية قبل أن تكون تقليداً، وهذه الحقيقة التي جعلت هذا الفن يلقى رواجاً ويكتسب أهمية في مفردات فنون العمارة وهذه الحقيقة التي جعلت أن يتم بحث موضوع هوية وتطور فن الزخرفة والزينة والزينة

في المباني في إطار المحيط وحصر الدلائل من البيئة، فإن ذلك قد يساعد الفنانين المجددين في التوصل إلى قاعدة تتضمن تسلسل الفن التاريخي مع الفن المعاصر في ممارسات ناجحة، ولأنه إذا تم نقل المادة من محيطها فقد يؤدي ذلك إلى طمس الحقيقة وربما نقل تعبير خاطئ عنها..