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Formal Representations of Local Rural Housing in Contemporary Interior Design

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Abstract
Throughout the ages, humans have sought to establish shelters that meet the basic needs related to their survival and provide a home that offers a suitable environment for their evolving requirements to overcome environmental challenges. Therefore, various types of housing have developed, differing and changing according to the societal particularities over time and place. Across centuries of development in general systems, local housing has evolved and varied, in addition to climatic conditions that drive the search for effective solutions to serve human comfort and well-being. The use of building materials has a significant impact on both the function of the residence and its inhabitants. Environmentally friendly building materials add value to human life and significantly reduce negative environmental impacts. Traditional houses were built effectively to meet human needs by adapting to local environmental standards—both material and cultural of the local community.

The current research consists of the research problem, represented by the attempt to answer the question: What are the formal characteristics of local rural houses that can be utilized in contemporary rural interior spaces while preserving their local reference and meeting design requirements? The aim of the study is to identify the formal and structural characteristics of local clay houses and to reveal their formal representations for houses that can be used in contemporary interior design. The theoretical framework is based on two topics: the first is (interior design of local rural houses) and the second is (traditional rural houses). The researcher adopted the case study method and achieved the following main results:

1. The study showed that the local clay rural house represents an integrated system that combines form, construction, function, climate, and social structure, and is not just a formal or decorative element that can be transferred to interior design.
2. The study showed that the spatial organization of the rural house is related to the nature of daily activities and family and social relationships, as spaces gradually transition from private areas to spaces designated for gathering and social interaction.
Keywords: formal representations, clay houses, interior design, local identity.

Research problem

Contemporary interior design has witnessed a growing trend toward leveraging local references as sources for creating a distinct spatial and cultural identity. However, the use of elements from local rural houses often ranges between directly copying heritage elements or using them decoratively, detached from their original contexts, which may lead to a loss of their formal and symbolic distinctiveness.

Various types of building materials are used in constructing houses, classified as natural or manufactured materials. Natural materials were used in traditional houses that didn't require prior preparation for their use, while some materials needed preparation that varied depending on the material and how it was used, as well as its functional and aesthetic performance in the house. Many natural materials, such as clay, rocks, sand, long-stemmed plants, herbs, branches, and leaves, were used to build houses.

From this arises the research problem, which questions what the formal characteristics of local rural houses are that can be integrated into contemporary rural interiors in a way that preserves their local reference while meeting design requirements.

Research Importance

1. Enrich studies related to the relationship between local heritage and contemporary interior design.
2. Support studies that explore spatial identity and inspiration from the local environment.
3. Utilize the characteristics of rural houses in contemporary interior projects.
4. Enhance the local identity in interior spaces, especially homes in rural Iraq.

Research Aim:

To identify the formal and structural characteristics of local clay houses and reveal their formal representations that can be applied in contemporary interior design.

Subject Boundaries: Studying the formal and structural characteristics of local rural houses and the mechanisms by which they are represented in contemporary interior design.

Spatial Boundaries: Clay houses spread throughout rural Iraq.
Time Boundaries: In the year 2026.

Definition of Terms:

1. Formal Representations

Technical Definition: Formal representations involve reinterpreting elements related to form, structure, materials, spatial relationships, and symbols, and transforming them into new design elements while preserving their local reference.

Operational Definition: Formal Procedural Representations: These are the manifestations through which the formal, structural, constructive, and symbolic characteristics of the local rural dwelling are employed within the contemporary interior space.

2. Local Rural Dwellings

Terminological Definition: Local rural dwellings are those that arose and developed within a specific geographical, social, and cultural environment, relying in their construction on clay, tree trunks, reeds, and other locally available materials, with spatial organization linked to rural lifestyle patterns. Procedural Definition: Local rural dwellings, procedurally: are the traditional clay houses found in the Iraqi countryside, characterized by formal, structural, spatial, climatic, and social features resulting from the use of local materials and inherited building techniques, whose characteristics have been adopted as a reference for analyzing the possibility of representing them in contemporary interior design.

3. Contemporary Interior Design

Terminological Definition: Contemporary interior design is the process of organizing and shaping interior spaces in light of human functional, psychological, aesthetic, and technical needs, using contemporary concepts, materials, techniques, and treatment methods, with the possibility of leveraging cultural and local references and reinterpreting them in a way that fits the present.

Operational Definition: Operationally, contemporary interior design is the modern design formulation of interior spaces that utilizes the formal, structural, environmental, social, and symbolic characteristics of local rural homes, and reinterprets them using contemporary methods, techniques, and materials, achieving a balance between local identity and the functional, aesthetic, and environmental requirements of the contemporary user.

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Chapter One: Interior Design of Local Rural Houses.

The interior space is considered one of the essential components of architecture and the container that accommodates various activities. Individuals carry out their activities within it and express their opinions and lifestyle. Historical follow-ups show us the role of interior space throughout the ages and in all previous civilizations and its impact on shaping societies and their references. Humans live in external and internal spaces that vary in size and shape and differ in terms of impact, using local materials that achieve environmental and social adaptation and provide special enjoyment. To achieve this, the interior designer must create the pleasure that comes from moving from one interior space to another, creating a sense of familiarity and belonging. To accomplish this, the designer should ensure that the traditional interior space:

1. Positively engages with the surrounding nature
2. Adapts to the existing environment
3. Uses available construction materials from the local environment, as shown in the figure (Ahmed, 1995, p.120)

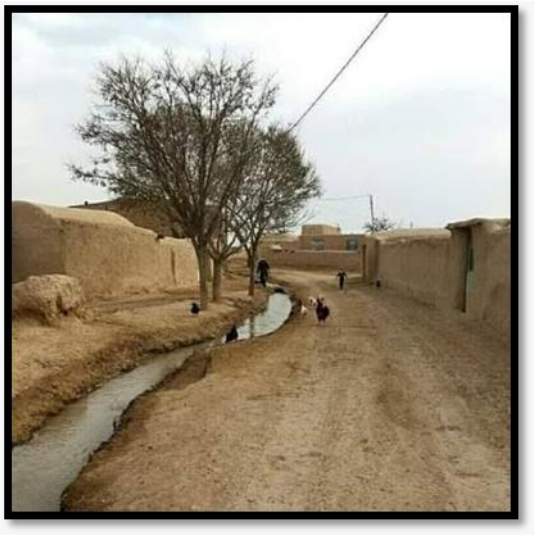


Figure (1) shows one of Mosul's villages, which consists of a group of adjacent clay houses that use locally sourced natural materials. Source: https://alzawraapaper.com/content.php?id=379923&print=

Depending on time, place, and the activities carried out in the space, the interior space is considered a human activity organized through the overall relationships of the building elements (walls, roof, and floor) and by coordinating these elements along with studying colors, proportions, light, and shadow, in addition to suitable supplements that fulfill aesthetic, functional, and user requirements. The interior space is a three-dimensional area (Basyouni, 2007, p.62):

Spatial Dimension: This refers to the standard dimensions of space.
Design Dimension: This refers to the aesthetic perception of space and its shaping.
Social Dimension: This is about how suitable the space is for the user socially and psychologically to carry out an activity.

Local Natural Materials: Humans have relied on renewable resources that can be easily obtained and used. Building materials in the construction process, environmentally sustainable materials have many suitable properties and can be efficiently used in construction. Using local building materials is an environmentally friendly source that is not limited in use or construction and is a renewable energy source. Additionally, the main benefits of these materials are their low cost, availability, and their thermal and sound insulation properties (L.R. Brown, 1990, p. 56).

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The use of any natural material in housing construction generally depends on:
1. Physical properties
2. Implementation possibilities
3. Surface specifications as shown in the diagram (Meiss, 1992, p.460)

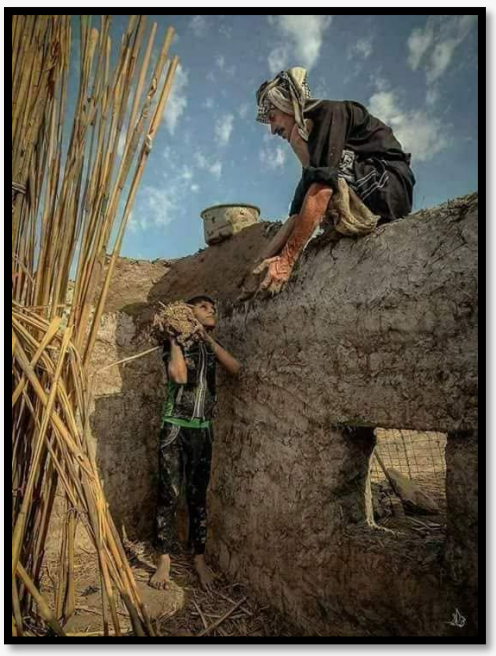


Figure 2 shows the construction techniques of mud houses (https://www.facebook.com/photo?fbid=715557495690427&set=pc) Heritage and Archiving Organization / Iraq 2026

Building materials are considered a fundamental industry in most countries and usually involve professions like clay building and roofing with straw or reeds. They provide the structures and parts of homes as well as the requirements for their construction.

Historically, there are trends in building materials such as:
1. Starting as natural materials and gradually becoming man-made composites.
2. Materials differ in how much they deteriorate over time and their exposure to damage.
3. Housing construction techniques can be used locally or globally.
4. The extent to which they can be repaired or modified.
5. Providing levels of fire safety.
6. Resistance to seasonal insects.
7. How well they prevent entry of reptiles and rodents.
8. Reducing long-term economic costs (Nabokov, 1989, p.16).

The relationship between the interior and exterior in clay houses:
A person in any indoor space does not just interact with the actual size and area of the space, but also with the quality of the relationship between the interior space they occupy and the surrounding spaces. Whether it's internal or outer space (Sadhkan, 1992, p. 73), it focuses on the space around it in the flat plane in which it moves, and as a being with imagination, humans also care about the space above and below them—the space they might be able, even in imagination, to jump into or fall into (Sinclair, 1986, p. 74). This feeling increases as the transparency in the interior space increases, reflecting a sense of continuity between spaces. There are various types of relationships connecting interior and exterior spaces, which are either separation between inside and outside or transparency between them through openings or hinge spaces. This relationship between interior and exterior is influenced by how strongly these connections are interlocked (Al-Akkam, 1999, p. 51).

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Separation between inside and outside occurs due to a weak connection; the smaller the open area and the more the openings resemble small holes, the greater the separation between the two spaces (Joedicke, 1985, p. 10). Separation also happens when the openings, which are the points of contact between inside and outside, are closed. When they are open, visual spatial links are created between the two spaces, as noted by the architect Robert Venturi: The interior and exterior are considered separate, independent systems from each other, and communication between them occurs through a third element (Venturi, 2021, p. 225), which is the junction through which information passes. From this, it becomes clear that the separation between the interior and exterior happens either due to small openings between the two spaces, their closure, or by using opaque, non-transparent materials that isolate the spaces. Human behavior in interior spaces and interpersonal relationships deals with the relationship between individuals and their environment, and their perception of space, which is related to social needs, psychological state, and individual differences. Users of the space interact with their environment, which influences their behavior, in addition to intellectual and physical factors affecting occupants' behavioral responses. Environmental behavior inside such interior spaces is influenced by four basic concepts:

1. Privacy: This is an organizational human action through which an individual or individuals can carry out their activities in the interior space and ensure the greatest possible comfort, influencing their interaction within the space they occupy both positively and negatively. Privacy is achieved through the physical or sensory components of the space.
2. Levels of personal interaction: By achieving the desired level of privacy, as well as having enough space to interact and carry out different tasks, an individual moves within a spatial area that meets desires and needs according to social conditions. The size of the movement space determines perceptions, experiences, and the uses of that particular environment. People distinguish their nature and relationships with others in terms of personal distances or the space between them, which can be defined as follows:
    - Intimate space is the area immediately surrounding an individual’s body. This is the most private zone and involves both physical and emotional interactions.
    - Personal space is the area a person allows family members or coworkers to interact within.
    - Social space is the area where a person expects to engage in casual social interactions.
    - Public space is the area where an individual does not expect to have direct contact with others.
3. Vital space: It is a means to achieve a level of control and domination, as it involves exclusive control over space by an individual or a group of individuals. These are measures that involve defending the vital space. Social contact, whether desired or undesired. (Edward, 1990, pp. 122-125)

Sensory response in interior spaces:
homes are built as vital spaces to be occupied by humans who carry out their activities there. It makes sense that traditional or contemporary buildings meet their motor or behavioral activities, as the psychological response of the individual and its reflection on the environment is complex and can be understood in terms of three psychological stages of human behavior: Perception of the environment: the integrated meaning that only occurs through obtaining information via direct sensory perception through sensory organs, determining a complete perception of the individual's relationships with the interior space. Cognitive awareness: the mental processing of this sensory information, which involves activities like thinking, remembering, or evaluating the information. Spatial behavior: It refers to action and reactions to the environment and acquired experiences. Through this perception, the designer creates environmental stimuli to positively affect the psychology of the interior space user, as well as the environmental expectations resulting from experience and interaction with the environment. Achieving

the aesthetic appeal of the interior environment involves getting information through the senses. Determining an individual's activities inside the interior space is a complex process, including all physiological, psychological, and available material factors within the space, along with behavioral responses to the environment, taking into account individual differences among various interior space occupants and their physiological, psychological, and social responses (S. Korydon 2012, p. 13). The aesthetic evaluation in the interior environment is subject to defining aesthetic qualities that align with the space's identity and performance since the concept of beauty varies with time, place, purpose, and context. Aesthetic values are linked to design aspects that go beyond functional performance and construction limitations, connecting to the physiological and physical responses of occupants. This includes the functions of the space, their safety, and health conditions. The performance of interior space is connected to how well it adapts to physiological needs of a physical nature, especially the requirements of the human body. Interior environments should respond to basic human functional needs such as vision, hearing, comfort, and easy movement between spaces to achieve an appropriate level of comfort and efficiency, along with clarity and the general ability to perform tasks and activities effectively.

Chapter Two: Traditional Rural Homes

Traditional homes are built to meet the tasks required of their construction while fully considering all site conditions and environmental factors, which can be a key point for future sustainable environmental construction processes. The traditional materials used in their construction (clay, straw, mud bricks, and wood) are commonly used by builders in the rural areas of Iraq. The characteristics of these materials determine their effective use in the environment. To find optimal solutions and environmental treatments for local climates during the design process, there is a need to make use of local raw materials and exploit them to face problems posed by the local environment. These materials are used to create suitable housing under various conditions.

Extreme climate and temperatures in summer and winter, with spaces that are practically and suitably connected, thick insulating walls, and high ceilings appropriate for maintaining a comfortable indoor environment (Almusaed, 2004, p. 168). Most traditional homes in different cultures have one or more bedrooms, bathrooms, a kitchen or cooking area, and a living room. The house may have a separate dining room, or the dining area may be integrated into another room. In traditional rural communities, pets like chickens or livestock might share a part of the house with humans. The family living in the house represents a complete social unit, whose size varies. Some families might have only one home, one large family, or consist of a group of small adjacent homes connected to the main residence, containing a garage or a shed for agricultural or hunting tools (Sacks, 2004, pp. 65–66).

Rural homes (mud-brick).

Most of the world's population lives in traditional homes with different techniques linked to the available materials and technologies passed down through generations. The majority of homes rely on natural materials that can be found in the local environment (L. Keefe, 2005, p. 243). Primitive people built entire building structures from plant parts, mostly using trunks, branches, twigs, leaves, and grasses. Woven structures are considered one of the oldest construction techniques (Shaffer, 1993, pp. 59–75). Housing structures are made from natural materials that can be used directly with minimal effort and processing to be technically suitable (Marchell, 1974, p. 250). Clay is used to build rural homes and is readily available in the local environment; it is an organic building material with high strength, making it durable and flexible in artistic work and structures (EliasLe, 1980, p. 213). Its relative durability, flexibility, and unique properties have made clay housing material for thousands of years. Building homes from clay requires high skill and specialized workers, as it involves preparing materials locally, despite some drawbacks.

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Although mud houses are durable, they stand out for their climate adaptation and energy efficiency (F. Lauren, 2000, p. 34). The history of mud houses goes back to the Sumerian civilization, as the first residential settlements in the marshes of Iraq were known and the first civilizations were built (Ilay, 1998, p. 214). The local countryside became one of the largest unique ecosystems, hosting a population living in harmony with the natural environment and building their homes from mud and straw (Tobias, 2009, p. 273). Mud houses are made from wet soil and used for building walls either directly as a mixture or in the form of blocks that are dried first (adobe), then built using mud as a binding material, leading to different building styles. Other main components include varying amounts of sand, gravel, straw, and organic materials. Mud is known for its thermal insulation and maintains a steady temperature. Houses built on the ground tend to stay naturally cool in summer and warm in cold weather. Mud can withstand heat or cold, significantly reducing the need for heating and cooling sources, as temperatures remain stable for longer (McHenry, 1984, p.104).

The presence of houses made of mud in villages across different regions of Iraq and the edges of the marshes or the zanayeb is diminishing (Smith, 2002, p132–133)The houses were built in the form of interconnected huts, and these arched huts rest on a set of opposing columns called 'shabab' that support the roof, which is called 'hatr' (singular 'hatar'), and are roofed with mats made from local reeds called 'buwari' (singular 'baria'). The walls are equipped with circular storage niches on the sides of the mud house, which are closed in winter with straw to maintain moderate temperatures, and lifted in summer to allow the passage of cool air. The mud house contains a bed also made of clay that is used for sitting and sleeping, and there may be a circular stove in the center of the hut made from fired clay, where fuel made of dry clay stalks or animal organic materials is placed. The stove is used both for heating and cooking, and the pot is placed on three fired clay supports called 'manasib'. (Ministry of Water Resources, 2007, p6

Research Methodology

The researcher relied on the case study method, based on objective justifications related to the similarity in construction and design methods of mud houses and the local materials used, represented by clay, and roofing with tree trunks commonly found in Iraq. The researcher relied on photos published in Al-Zawraa Iraqi Magazine and the Heritage and Archiving Organization concerned with Iraqi tangible heritage, in addition to the researcher's own experience, as he comes from rural origins, which enabled him to know details about construction methods, local materials used, spatial distribution, as well as social life in local villages,



Figure (3,4) represents a mud house from the Iraqi countryside, consisting of a group of internal spaces with a transitional space (the courtyard) in the middle.
https://www.facebook.com/100067216298118/posts/
Source: Heritage and Archiving Organization / Iraq

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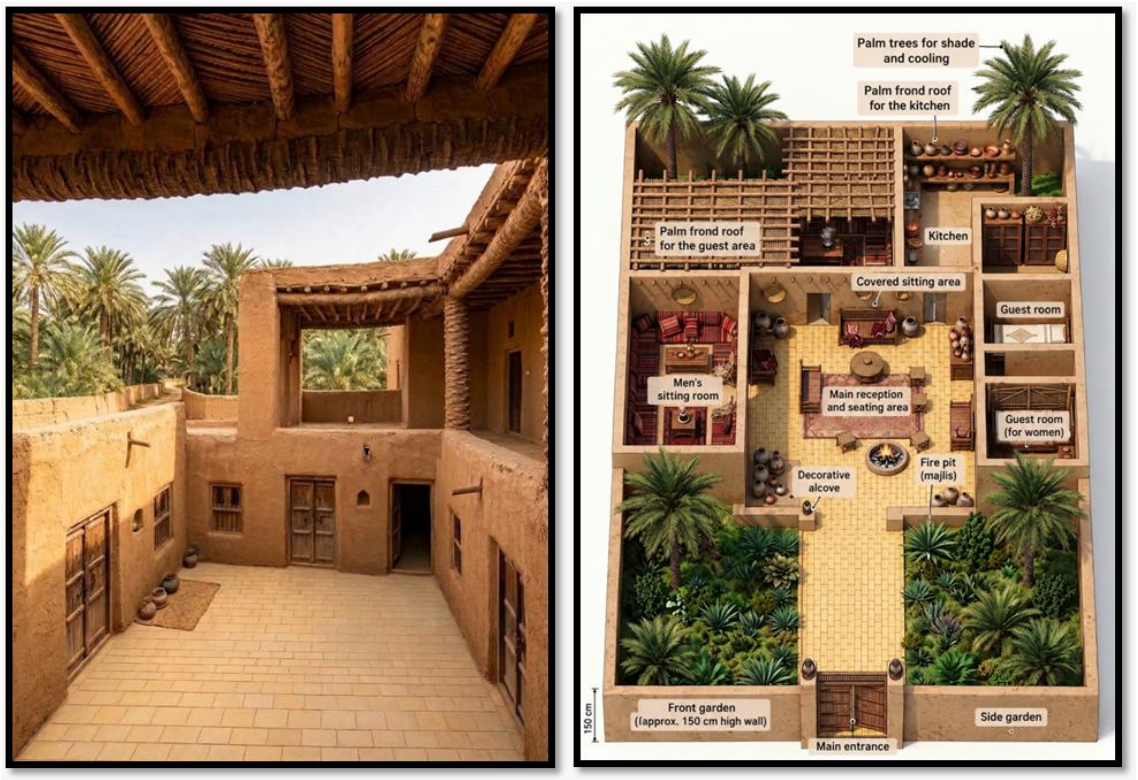
Research Tool:
It included two forms:
• The first one is an observation form prepared by the researcher to describe the mud house construction-wise. The researcher relied on the information available in the theoretical framework, as well as personal experience, living in rural areas, and field visits.
• The second one is an analysis form prepared by the researcher based on the outcomes from the theoretical framework, Some of the axes can be relied upon to determine the variables in the rural house. The researcher used a five-point verification scale (Very Good, Good, Average, Acceptable, Weak).

Description: The house contains several mud rooms with lengths not exceeding 4 meters, depending on the number of family members. It is preceded by a guest room, with its entrance from inside the mud fence (the enclosure), followed by other interior spaces for sleeping or cooking. These spaces are connected to a transitional area surrounded by a mud fence, which contains animal pens on the far side and a spot for the bread oven, as well as a coop for chickens and ducks. The following table shows a detailed description of the structural framework of the house's component spaces.

Analysis: The researcher analyzed the research sample according to the analysis form mentioned earlier. Daily activities and social communication Social interaction is linked to reciprocal behavior among individuals in different situations in the mud house, which in turn contains various social activities, achieving harmony among family members or those living in the house. Moreover, the mud house is a place for individuals to gather, fulfilling social requirements associated with tribal laws and customs governing these relationships. The inhabitants of the house, along with their visiting guests, come together in the mud house, making it a means of connection and communication. The mud house, made of mud and roofed with the trunks of local trees, carries symbolic meanings through its historical depth spanning thousands of years. The dwelling has maintained its structural form, which contributes to replacing the traditional meaning with an artistic and intellectual one, relying on a parallel meaning and content in terms of its general form but differing in connotation through the use of creative and metaphorical execution techniques shaped by proximity and historical intertextuality. The symbols, including the mud house, reflect the rural community's culture to both local and foreign audiences and, in turn, convey. On historical intellectual connotations. Contemporary technology has influenced the reshaping of the local identity of rural interior spaces to varying degrees through the efficiency achieved in the interior space of the mud house, reaching a high-performance space due to the use of modern technology. Technology contributes to achieving sustainability in the interior space by aligning with the spirit of the times, which allows for enjoyment based on understanding and knowledge in choosing how to adapt the space. Air coolers were used for air conditioning, electric heaters were used, as well as modern ceiling lighting. The mud house relied on ventilation achieved through side openings (windows). Furniture is linked to local heritage, consisting of handmade local carpets separated by wool cushions on mats made from palm fronds, or local carpets are used for protection and better heating, in addition to covering the area separating the two sides of the guest space. Gas cooking devices were used alongside traditional methods for their availability, and using modern technologies is considered essential. The variety of available materials and technologies allows their use without affecting local identity. The local community is characterized by The Iraqi local community is characterized by tribal hierarchy and strong paternal authority. The father holds the highest authority, and the common family pattern in rural areas is the extended family, meaning it consists of more than one nuclear family living together in a single household. The prevalent marriage pattern is endogamous, with the family living in one location in adjacent homes in the village. The social status of an individual in the rural community is determined according to customs and traditions, which assign specific traits to people that are difficult to change. The design system is

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closely linked to the performance standards in a mud house, relating both to the functional performance of the interior space and to construction constraints. A mud house differs from any other building where requirements can be strictly defined. The vertical constraints are represented by the opposing mud walls, while the mud floor and roof made from local tree trunks represent horizontal constraints. The roof element separates the interior environment from the outside and provides a sense of containment, ensuring maximum safety and security for its inhabitants. Smooth movement is achieved by the layout of interior spaces within the enclosure of the house's walls. It is the center of movement and activities. The levels of personal interaction and the degree of privacy required, as well as the aspect of having space for interaction and carrying out different tasks, make the mud house the spatial mediator between the community structure and individual practice in the local society. It also reflects the openness of the self to the outside community. The mud house is a private space, as well as a somewhat social space that relatives and guests visit.



Designed by the researcher and processed by artificial intelligence software

Results:

1. The study showed that the local rural clay house represents an integrated system combining form, construction, function, climate, and social structure, and is not just a formal or decorative element that can be transferred to interior design.
2. The analysis showed that thick clay walls, roofs made of tree trunks and reeds, and side openings (al-Rawazi) are key elements in the composition of the rural house, while also serving structural, environmental, and aesthetic roles.
3. The study found that the spatial organization of the rural house is linked to daily activities and family and social relationships, with spaces gradually transitioning from more private areas to spaces designated for gathering and social interaction.
4. It was found that the courtyard/transitional yard plays an important role in organizing the relationship between indoors and outdoors, acting as a spatial and social mediator between interior spaces and the surrounding environment.
5. The study revealed that the relationship between indoor and outdoor in a rural house is not based on total separation, but can be achieved through openings, transitional

spaces, and levels of transparency, enhancing visual, movement, and environmental connection.
6. The results showed that local materials do more than just serve a structural function; they also help shape the visual identity of interior spaces through their texture, color, and natural qualities.
7. It was found that clay has environmental potential that can be utilized in contemporary design, especially for thermal insulation, regulating the indoor environment, and reducing the need for heating and cooling.
8. The study showed that the formal symbolism of clay homes can be reinterpreted in contemporary interior design through metaphor, abstraction, and recomposition, rather than by directly copying traditional elements.
9. It was found that modern technology can integrate with local references without compromising identity, by using modern systems for air conditioning, heating, and lighting alongside traditional treatments.
10. The results showed that local furniture and accessories, like handmade rugs, cushions, and mats, serve as supporting elements in achieving a rural identity and can be repurposed in contemporary ways.
11. It turned out that representing the rural home in a contemporary way is more effective when it maintains the underlying relationships and design principles of the home, rather than necessarily copying its exterior appearance.
12. The study showed that the social and cultural dimension is a key factor in shaping rural interior spaces, as the layout of spaces is linked to levels of privacy, social interaction, and family relationships.
13. The formal and structural characteristics of local rural housing can be used in contemporary interior design within a system that combines local identity, functional efficiency, climate adaptation, and responsiveness to the demands of modern life.

Conclusions:
1. The formal representations of local rural houses are not limited to reproducing the external appearance of the house, but rather are based on reworking their formal, structural, functional, and social system within a contemporary context.
2. The clay rural house represents a comprehensive design system where physical, climatic, social, cultural, and aesthetic determinants interact, making it a source of inspiration for contemporary interior design.
3. The relationship between inside and outside is one of the important design features in rural houses and can be modernized through transitional spaces, openings, transparency levels, and the gradation of privacy.
4. The climatic characteristics of traditional building materials and techniques provide a foundation that can be used to achieve an interior design that is more adapted to the local environment.
5. The aesthetic value of a rural home is connected to its functional, social, and environmental value, so separating form from these aspects weakens the significance of local reference.
6. The social and cultural dimension is one of the main pillars for sustaining local identity, because rural spaces are shaped not only physically but also through patterns of behavior, interaction, privacy, and living environment.
7. Successful formal representations of rural homes in contemporary interior design should achieve a balance between local references, contemporary user requirements, and modern techniques.
8. A research system that includes spatial and structural organization, social and cultural structure, technological adaptation and modernity, and the governing principles of housing can be used as a basis for building design standards to draw inspiration from local rural homes in contemporary interior design.

Recommendations:

1. Using the design features of local rural homes as inspiration for contemporary interior design solutions, while avoiding literal copying of traditional elements.
2. Conducting extensive documentation studies of rural mud houses in Iraq, especially those at risk of disappearing, documenting their dimensions, materials, construction techniques, and spatial organization.
3. Making use of mud and sustainable local materials in contemporary interior design after developing treatment techniques that meet current performance, safety, and maintenance requirements.
4. Developing contemporary design models that leverage the relationship between indoor and outdoor spaces in rural homes through courtyards, transitional spaces, and well-planned openings.
5. Preserving local physical and visual identity by using materials, colors, and textures derived from the rural environment, with the possibility of reinterpreting them using modern materials and techniques.

References:

Ahmed, Mohammed Shihab: architecture rules and methods of building evaluation 1995.

Akam, Akram, Jassim, "the dramatic situation in the aesthetics of the language of contemporary interior space", Unpublished Doctoral Dissertation, University of Baghdad, Faculty of architecture, 1999.

Bassiouni, Sid: the art of architecture, Al-yazouri scientific publishing and distribution house, Jordan,2007.

Complexity and contradiction in architecture-Robert Venturi T. Suad Mahdi publisher: Arab Foundation for studies and publishing 2021.

Edward T. Hall, The Hidden Dimension (Garden City, NJ: Doubleday & Co, 1990.

F. Lauren Green building materials City of Santa Monico 2000.

Joedicke, Jorgen, "Space and form in Architecture" Karl Kramer Verleg Stmllgart, Germany, 1985.

L.R. Brown State of the World Watch Institute, Washington 1990.

McHenry, Paul Graham. Adobe and rammed earth buildings: design and construction. New York: Wiley, 1984.

Meiss, piene Von., Elements of architecture: From form to place. London: E and FN Spon, Champman and Hall, 1992.

Michael E. The Ecohydrology of South American Rivers and Wetlands. International Association of Hydrological Sciences, 2002.

Ministry of Water Resources Center for the recovery of the Iraqi marshes, study and assessment of the socio-economic situation of the Iraqi marshes, 2007.

Nabokov, Peter, and Robert Easton. Native American architecture. New York: Oxford University Press, 1989.

S. Korydon Introducing architectural theory, debating a discipline Routledge, Taylor & Francis.2012. Almusaed, Intelligent sustainable strategies upon passive bioclimatic houses, a school of architecture in Aarhus, Denmark, Postdoctoral research, 2004.

Sacks, David, Letter perfect: the marvelous history of our alphabet from A to Z. Random House Digital. 2004.

Sadkhan, Karim Majid, " an architectural study of international trade fairs: the Iraqi experience and the global concept, unpublished Master Thesis, University of Baghdad, Faculty of Engineering, Department of architecture, 1992.

Shaffer, G.D. "An Archaeomagnetic Study of a Wattle and Daub Building Collapse." Journal of Field Archaeology, 20, No. 1. Spring, 1993.

Sinclair, Kolde, "taste of architectural art", translated by Dr., Mohammed bin Hussein al-Brahim, King Saud University, Saudi Arabia, 1986.

Smith, Michael G. "Cob Building, Ancient and Modern," in Kennedy, Smith and Wanek, (2002).

W. Tobias, P. Walter, Z. Thomas, T. Karl, M. Hildegund, B. Barbara Passivhaus- Bauteil katalog Springer Wien, New York 2009.