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The safe house as a sustainable home -the Baghdadi house as a case study

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Abstract. A sense of safety is the first requirement for human stability in a place such as a home. Many local studies investigated Baghdadi houses and their architectural changes, but the relationship between safety and sustainability in Baghdadi houses has not been studied, so the research problem was: What are the architectural elements that relate to the concept of a safe house as a home in Baghdad as a case study? How is it related to the sustainability?
The research aims to identify the architectural elements of the safe house in Baghdad, to work on these elements by architects to enhance the sustainability of the residential environment, and create homes that last for a long time and help their residents' age in place with well-being. The research methodology started with studying the research concepts and chose the semi-structured interviews for collecting data from 118 Participants who were diverse in age, gender, and educational level and lived in Baghdadi houses built before 2003 as modern-style houses and houses built after 2003 as residential houses smaller than the legal urban controls. The interviews were conducted in their houses with the architectural documentation for these houses.
The conclusion was that the safety in Baghdadi house as a home is a complex system that consists of physical safety, social safety, economic safety, and psychological safety that work together to enhance the sense of stability in the house for a long time and create a sustainable home, the research finds that the neighbourhood is the center of the sense of safety that extends to the house. The factors of physical safety that enhance stability in the house are the design flexibility, external spaces between the house and its neighbourhood, the efficiency of services, natural lighting, correct design relationships, user participation in design, privacy, and appropriate design for the older people to age in place with well-being. The findings support the construction of houses that encourage stability in the place; the stability will increase the accumulation of memories there and thus enhance belonging. Strengthening belonging to the place of residence will enhance the feeling of satisfaction and citizenship in society.

1. Introduction

Many studies have indicated that residential stability leads to stronger affiliation with the individual's community and more supportive behaviours. [1] Abu Laila's study in 2019 mentioned that the availability of housing that considers the social and cultural requirements of society is one of the most important foundations of sustainability and one of the tributaries of

development. Housing and residential areas must reflect the culture and social characteristics of societies, provide a sense of stability for members of society, and enhance the sense of belonging, which in turn helps strengthen the bonds of communication between them. Ebsen in his study in 2000 defined sustainability arises from a sense of security and belonging, housing availability, good neighbourliness, cohesion, and integration between different social groups, based on respect for cultural heritage, religious traditions, and social mobility. [2]

Security is related to cultural and social sustainability, and a safe place is the cornerstone of stability, so there are groups of international studies that investigated the relationship between safety and place of residence like the study of Ibrahimia et al [3] they explained the tower house that appeared during the second part of the 19th century in some cities in Kosovo. They explained how this house is distinguished by the security principles, and how it is the ideal example that clarifies how the built environment was treated in terms of living, and how the functionality of the house, materials, composition, and construction were affected by the security. The study of Bordun et al [4] aimed to improve a construction and architectural solution for protecting the civilian populace in a multi-story residential building by making it a safe area with immediate availability. This structural and architectural solution is the “safety capsule”.

In the same context and on a more detailed level, the study of Ukpene and Apaokueze [5] considered living in aging, highlighting the significance of ensuring home safety and modifications for elder well-being. According to the study's findings, seniors' safety and quality of life might be improved by putting the research's suggestions into practice, allowing them to age freely and comfortably while lowering the hazards that come with becoming older. Some studies have shown that safety is linked to reducing fires like the study of Zhang et al [6] who aimed to develop the resilience of fire safety of residential self-built houses and reduce the hazards of fire.in other side, Housing is a part of the city; many studies have studied the city and security, such as the study of [7] in 2017 investigated how to achieve urban sustainability in a safe city. The study of [8] produced a model of a conceptual safe city to supply a measurement of city safety by the features of cities in Indonesia.

On the other side, many local studies examined Iraqi housing and cities and their relationship with safety as a scope of this research. At the urban level, the study of [9] in 2017 aimed to establish an overall theoretical frame by which the major principles and mechanisms of environmental design to be used in current, scalable, or new cities to decrease safety threats and security confronting cities to a minimum. In the same context, the study of [10] byAl-Hilli and Al-Alwan in 2023, who tried to improve the "infrastructure security pillar” within the safe city indicator, is made through examining and cross-referencing the safe, resilient, and smart city indexes' infrastructure indicators. The study finds divisions to the infrastructure security pillar offered by Transportation, Ecosystem, Water & sewage, Energy, threats and disasters, and Security system. Each has its own extracted indications depends on the intersection of existing ones, as well as the addition and modification of others. Finally with study of Abdulameer et al [11] in 2024 studied the implicit factors that contribute to the liveliness of urban spaces with a particular emphasis on security and safety. A methodology that is based on the identification of a scope of five key elements – accessibility, density, social interaction, activities, and surveillance- is put forward as vital to urban liveliness. The existence of these elements is suggested to be conditional on the provision of security and safety in urban environments, and their impact is believed to expand to the length of time and nature of the human attachment to these spaces. The study examined the religious center of Kufa City in Iraq as a case study.

In Baghdadi House and its relationship with sustainability and safety as a scope of this paper, Al-Zubaidi and Shahin 2008 [12] studied the sustainability principles in traditional architecture from an Islamic perspective. In the same context, Al Dabbagh 2013 [13] studied the principles of sustainability in traditional urban tissue and the Baghdadi house as a case study.

Hilal 2020 [14] determined the Baghdadi house's aesthetic sustainability by utilizing local materials in its construction and by being concerned with the location's cultural significance. The study of Al-Tameemi and Toma [15] focused on the lack of a comprehensive understanding of the function of automation as a technology and design effect and how it interacts with traditional structures, particularly Baghdadi dwellings. This advances the idea of elevating the architecture and use of some models of Baghdadi dwellings by utilizing the automation effects in them, while also acknowledging the diminishing reality of these representations.

In the same context, local researchers studied the Baghdadi house and its relationship with societal changes during the last fifty years of the twentieth century and the first decade of the twenty-first century [16,17] As well as there are a group of local studies [18-20] studied the infringement that took place on the architectural design of Iraqi housing in the city of Baghdad and its various functions and its impact on creating different design models that differ according to the residential neighbourhoods and its impact on the design and planning level of the city of Baghdad and its services. As well as, the studies discussed how was developing a self-help approach as one of the means of housing implementation in Iraq. Then the study [21] investigated the impact of social, economic, religious, legislative, political, and technical variables and their impact on the identity of residential construction. There have been many studies that investigated residential neighbourhoods and the various phenomena they witnessed, such as the phenomena of random housing and its various urban impacts [22, 23] which have an impact on the level of security in the city. It can be noticed that:

●Local and international studies have indicated the importance of achieving security at the urban level of cities and its effect on the residents and their housing.

●Global studies have indicated the search for safety and its relationship with the home, while local studies have focused on changes occurring in the house and sustainability at the cultural, environmental, and technological levels. This indicates the knowledge gap for the current research in searching for the relationship between safety and sustainability in the Baghdadi house through the social and cultural perspective.

The research problem can be outlined as: What are the architectural elements that relate to the concept of a safe house in Baghdad as a home? How is it related to the sustainability?

The research objectives: The research aims to identify the architectural elements of the safe house in Baghdad.

The research's importance: The knowledge of the architectural elements associated with the safe house as a home will help architects enhance the sustainability of the residential environment and create a sustainable home that lasts for a long time and helps their residents get old in place.

The novelty of the paper is in examining the concept of safety in the Baghdadi house as a social-cultural idea associated with culture society that will work to enhance the sustainability of the residential environment and create a sustainable home for the future.

2. Material and Methods

The research will follow two steps:

First step (theoretical framework): The research will explain the theoretical framework by clarifying the concepts of sustainability, safety, and home, and their relationship to each other to develop the research hypothesis.

Second step (study survey): The research hypothesis was tested by choosing the semi-structured interviews as a tool for collecting information. This tool will help the researchers to know the architectural elements that the participants mentioned in their speech about safety in their house. The research uses thematic analysis and calculates the frequency of each architectural element mentioned by the participants with the help of the Excel program. The results are supported by the architectural documentation of the case studies of the houses.

3. Theoretical framework

The main ideas associated with the home, safety, and sustainability will explained to develop the research hypothesis.

3.1 Home and safety

The studies showed that for a person to feel a sense of belonging to a place, the place must have a specific identity that provides protection, security, and containment for those in it. [24], Nikpour and Darijani [25] explained that there are several practical strategies to achieve a sense of belonging to a place in design, one of them including security and safety. So when the researchers wanted to study the meaning of safety, Hassan and Mohammed [26] maintained that Livingstone defined the concept of safety as the feeling that occurs when danger is removed and when strict security and the necessary strategies are provided to remove the expectation of danger. Security and safety are intertwined, but security precedes safety to take the necessary measures for each case. According to [27], the components of security are (physical safety, job safety, resources security, family and health security, and property security). Both are due to protection. Through the analysis of Maslow's hierarchy of human needs, the relationship between the need for safety and home appeared; the idea of (home) is linked to the feeling of (safety) as Bettaieb and Alawad [28] mentioned in Fig. 1:

Many studies indicate the relationship between the concept of home and safety. Smith,1994 [29] mentioned the (sense of security) as one of the meanings of the home, as well as Despres,1991[30] mentioned that one of the requirements of the home is security and control. According to Al-Tarazi [31], safety needs as a human need are linked to providing security not only outside but also inside, as it protects from various elements such as injuries, theft, and falls. As well as provides safety from external environmental influences, which include several levels, such as protection from the influences of the social and psychological environment, which the home provides in social and economic harmony with it, and reducing noise and visual pollution and undesirable social behaviors. The home must also protect from the negatives of the living environment, as it is one of the basics of a healthy residence so that the person feels safe. The home also works to provide health security from the influences of the natural environment and what it includes of climate fluctuations and to provide safety from the influences of the urban environment by protecting from pollution resulting from outer space and resulting from the components of the home and human activities inside [32]. It can be noticed that:

- Previous studies indicated that belonging to a place must be defined, and specific, and provide protection/safety. The home is the most defined place for a person, the familiar and usual place where a person spends most of his day. This characteristic (protection/safety) contributes to achieving the act of belonging to the place and making it a home.
- Safety is achieved by providing security measures in the internal and external environment of the home. A safe home is related to the inside and outside environment, which makes it linked to the house and the neighborhood. Therefore, the scope of research will be limited to searching for architectural elements in the house as a home that are linked to the sense of safety and its relationship with sustainability.

3.2 Sustainability and Safety

The linguistic origin of the concept of sustainability according to Naeem, 2014 goes back to the verb (dum), meaning that something lasts, continues, and is continuity, meaning to request its survival and continuity. [33] Sustainability is defined as meeting the needs of current generations without depriving future generations of their right to obtain their needs. [34]. Sustainability in architecture is defined as the rational investment of natural systems and inexhaustible resources in the design process, using imagination and technical knowledge to

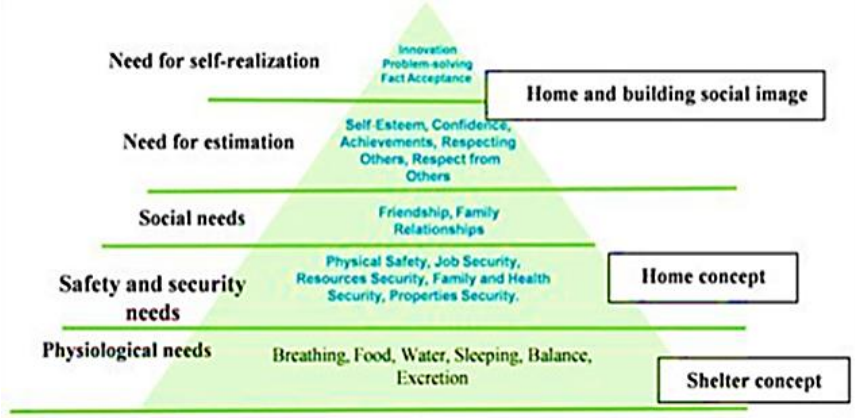

Figure 1. Concept of home according to Abraham Maslow's hierarchy of human needs [28].

contribute to building architectural systems that are in harmony with the environment. [33]. There are three types of sustainability as the following:

●Social sustainability: The fair distribution of wealth and the satisfaction of the material needs of the current and future generations to find the appropriate conditions for achieving further development.

●Environmental sustainability: Rationalizing the consumption of non-renewable natural resources to ensure that future generations have a share of them for use in their development process.

●Economic sustainability: Establishing a balanced global economic system in which indebtedness is absent so that it does not become a burden on future generations and does not limit their opportunities to achieve development. [35].

Helldal 2020 mentioned that Social and cultural sustainability means: meeting basic human needs (social and cultural) in the present and future and shaping appropriate social conditions for future generations. The socio-cultural dimension of sustainable development consists of ensuring well-being, social justice, health, education, safety, human rights, and achieving balance in life. Daly 1996 mentioned that In addition to achieving social integration, meeting social, cultural, and religious needs, taking into account the opinions of community members, feeling its needs, preserving heritage, cultural identity, and values, activating social solidarity, and taking into account customs, values and lifestyle. [2].

In investigating the concept of sustainable development according to the latest studies, it is the "development that meets the needs of the present without compromising the ability of future generations to meet their needs based on wise management of resources and environmental capabilities. It is balanced and harmonious economic and social development that means improving the quality of life while protecting the biological system. It is development based on setting incentives that reduce pollution, the volume of waste and residues, and the volume of current energy consumption." [36].

Sustainable security is based on four main aspects that threaten the stability and cohesion of societies, namely (climate change, competition over non-renewable and scarce resources, marginalization and social exclusion, and global militarization). Working on these four factors in the sustainable security approach is to develop the security situation so it is suitable for achieving development that remains closely related to human security. Security remains one of the basic conditions for the success of development, and security is considered one of the basic goals of any development process. There is a group of goals for sustainable development that aims to improve the quality of human life at the economic, social, and environmental levels within a comprehensive vision that protects the latter from all risks that threaten his life and maintains his security and the security of his society. The reference concluded that the

relationship between sustainable development and sustainable security is a relationship of mutual influence, as each achieves and depends on the other. Without sustainable security, we cannot talk about sustainable development, and vice versa. Thus, sustainable development and sustainable security become two sides of the same coin. [35]. It can be noticed that:

●Sustainability is the act of permanence and continuity in meeting the needs of humans now and in the future. Sustainability has economic, social, cultural, and environmental dimensions, and safety is one of the components of the social-cultural sustainability of a place.

- Access to architectural elements and solutions that reduce competition over non-renewable and scarce resources will contribute to enhancing sustainable security and thus contribute to sustainable development.

● The research hypothesis is that "the architectural elements associated with the feeling of safety at the house and associated with the culture of the society can enhance the act of continuity and survival of the home for the longest possible period and thus enhance the sustainability of the home."

4. Survey study

The practical study of the current research followed the following steps:

● The research seeks to explore the architectural elements associated with the concept of a safe house as a home among Baghdadi persons, so the research chose semi-structured interviews to collect information. According to the state of the current research as a part of the PH.D. thesis and by relying on Subedi [37] and Morse and Janice [38], and relying on the sources of these studies in analyzing a group of dissertations for doctoral dissertations that used interviews as a means of obtaining information, which reported that to obtain rich data for qualitative analysis, the researcher needs a large number of participants (at least 30 to 60). The largest sample was 95. However, the smallest sample size was only one in life history research (narrative) and the most common sample sizes were 20 and 30 followed by 40, 10, and 25. The sources have confirmed that purposive sampling and data saturation determine the sample size. Data saturation is the stage in which participants repeat the same data they previously shared with the researcher.

- Therefore, the research determined the size of the sample was to not be less than 60 participants in the least as the largest size determined through previous references. The research stops selecting samples when reaching saturation of data and the repetition of information begins. Indeed, the data saturation started when the research reached 98 participants, but the research continued until reached 118 participants to confirm the data saturation.
- The interview analysis was based on the thematic analysis approach. This is a method for identifying, analyzing, and defining patterns (themes) within the data. This approach was adopted to analyze the interviews because it provides flexibility in interpreting the data, and provides a deeper understanding of the experiences of the study participants. [39]

●118 Participants were diverse in age, gender, and educational level. They lived in Baghdadi houses built before 2003 as modern-style houses and houses built after 2003 as residential houses smaller than the legal urban controls. The interviews were conducted in their homes with the architectural documentations for their houses by the researchers.

●The questions of the research interview revolve around:

1-Do you feel safe in your house as a home?

2-What are the elements that make you feel safe in your home?

●The researcher listened to participants' thoughts about their safety and investigated their answers to find the architectural elements that related to the concept of a safe home and its relationship with sustainability.

5. The results and discussion

The Analyzing the data collected from the semi-structured interviews with the participants began and supporting with the transcription of the architectural documentation carried out by the researchers. The analysis of demographic information of the 118 participants interviewed was as follows in the table1.

Table 1. The general information of demographic data of participants answers

Distribution of elected houses (63) houses	
Modern Homes Before 2003	49%
Contemporary Homes After 2003	51%
The distribution of the houses in Baghdad	
the Karkh side	(26)Home 41%
the Rusafa side	(37) home 59%
Distribution of average income for participants	
Middle income	30%
Good income	38%
Very good and high income	32%
Age group distribution of the 118 participants	
20-40	38%
41-60	30%
61-80	29%
More than 80	3%
Type of participating categories	
Female	68%
Male	32%
Educational levels of participants	
High School	17%
Diploma	13%
Bachelor's	56%
Postgraduate	14%
Residents' presence in their residential neighborhood	

New residents in the residential area after 2003	42%
Old residents of the residential neighbourhood since before 2003,	58%

(97%) of Participants indicated that they felt safe in their homes for various reasons, but (3%) expressed that they did not feel safe in their homes due to tense social relations in the family, or due to the negative effects of the neighborhood. As a Fig. 2.

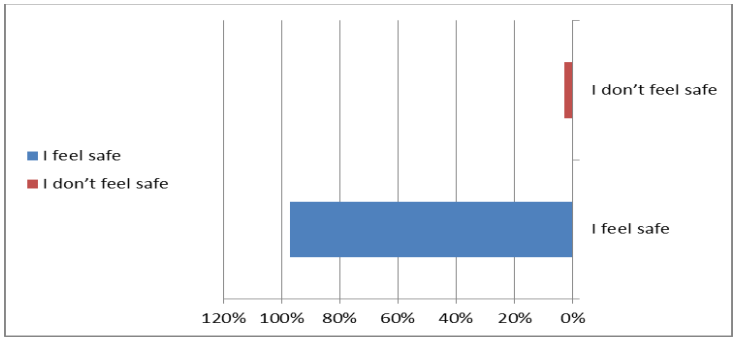

Figure 2. The ratio for participants to feel safe in their homes.

The results of the analysis of the participants' answers showed that there are many types of senses of safety for the participants as following types:

5.1 The Physical safety in the house:

The analysis of participants' answers to the reasons for a sense of safety in the architectural design of the house in pre-2003 or post-2003 house patterns is in Fig. 3.

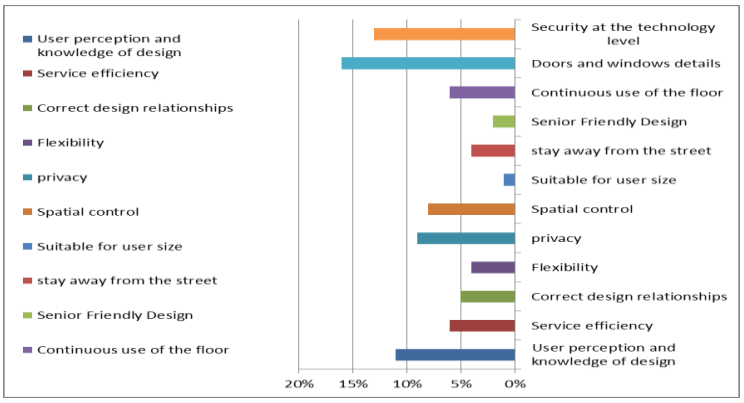

Figure 3. Design reasons for participants to feel safe in their homes.

The preliminary results showed that the physical elements that connect the participants to the neighborhood, such as doors, windows, fences, skylights, cameras, and alarms, are the highest percentage of physical elements when they think of safety. This confirms that the feeling of safety begins in the neighborhood and moves towards the individual house.

The architectural features that enhance the sense of safety according to participants' answers are as follows:

A-The design resilience: It was indicated by 4% of the participants as one of the indicators of the sense of safety; it represented the possibility of making any future modifications in the house to confront the changes that will occur. This was confirmed by the architectural documentation of

the participants who lived in the house patterns before 2003, who indicated (100%) that the large spaces of their houses (more than 200m²) give them the possibility of maneuvering and thinking in a safer way towards the future. These ideas appeared also in the participants' houses that were built after 2003 that were larger than 100 m², participants in these houses think that their houses can accommodate the changes and increase in the family members in the future compared to homes with areas fewer than 100 m². This answer is supported by 54% of participants felt stability in their homes in the long term. The reasons for their stability as mentioned by the participants were repeated are the ownership of the house 40%, and the ability of the home to accommodate structural changes such as additions, modifications, divisions, and investments accounting for 33%, followed by the neighborhood at 15% and then the design of the house at 12%. As is in Fig. 4.

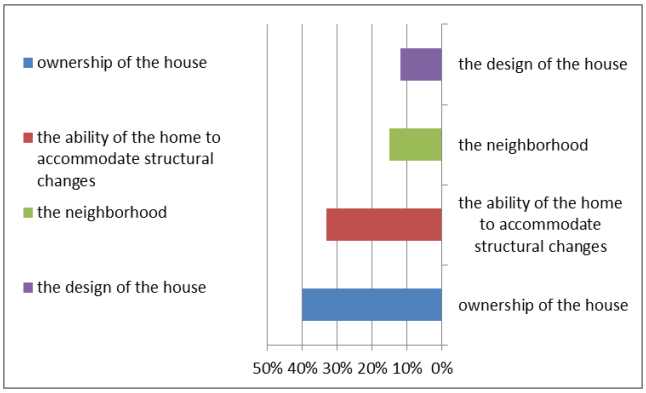

Figure 4. The reasons for participants to feel stability in their homes.

These answers indicated that flexibility as a safety element related to sustainability as an element that enhances the building's durability for as long as possible. As [40] quoted from İslamoğlu et al 2016 Flexibility aims to maximize the timely adaptation of the space and its elements to changes and developments and to meet changing requirements effectively, thus maintaining the quality value at the highest level throughout the life of the space. This agrees with what the research mentioned previously that sustainability is the act of permanence and continuity in meeting the needs of humans now and in the future.

B- Spatial control: This was indicated by 8% of the participants represented by the users' strong sense of clarity of spaces and the ability to see and control them. Clarity may be represented through several design characteristics, which are:

• Open plan system: It was indicated by 3% of the participants who were residents of homes built after 2003. As in Fig (5). However, what supported this indicator is that the participants indicated their desire for the dream house to return to the horizontal extension so that it would be (Open plane and spacious). This is consistent with what the participants indicated that (58%) prefer their childhood home and previous home they lived in it as their dream home. These houses were modern-style homes built during (1930-1990) with large areas. It was also supported by the comfort of residents in homes having an open plan between the kitchen and living spaces and the residents' discomfort with the openness of the reception to the living and kitchen spaces. The living space is integrated with the kitchen and not with the reception, which is better for the residents.

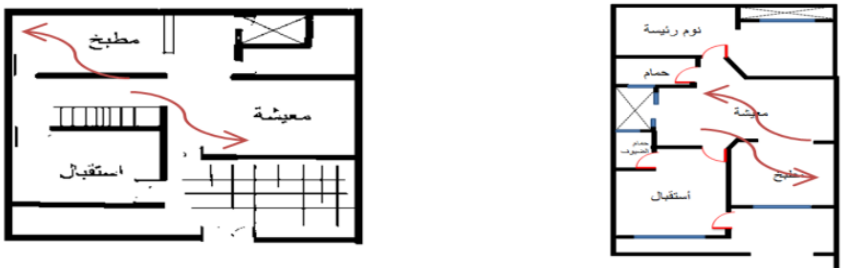

Figure 5. Open plan system between living room and kitchen, and isolated about reception room as a comfortable and safe plan. Researchers.

The open plan spaces are one of the forms of design flexibility at the functional level [41]; therefore it enhances sustainability and the building's survival for the longest possible period on the other hand.

• Lighting: The presence of natural light windows played an important role in the possibility of clear vision, which enhanced the feeling of security in some spaces more than others. Especially the reception spaces in post-2003 homes, which were associated with spaces of control and surveillance, especially for those responsible for the family, and 90% of them are men. Studies have indicated the relationship between design based on natural lighting and sustainability, as future architecture expresses the most important use of technological standards and environmental control techniques that are more energy efficient, in addition to the fact that future architecture depends on design using computers and relying on the distribution of natural lighting through systematic strategies to achieve sustainability and achieve rapidly changing variables and developments. [42]

• Centralization in design: It appeared at the level of the house block that is in the middle of the plot as seen in Fig (6), it appeared in design patterns of the 1960s houses of the twentieth century. which was indicated by 3% of the participants, but it was supported by what was indicated by the male participants, who had the idea of (the central space), which is represented by the living or reception spaces that the head of the family occupies as a main space on the ground floor, and allows the possibility of controlling the house and being close to the street and being occupied upon waking up, whether at the level of small or large houses, at a rate of 80%.

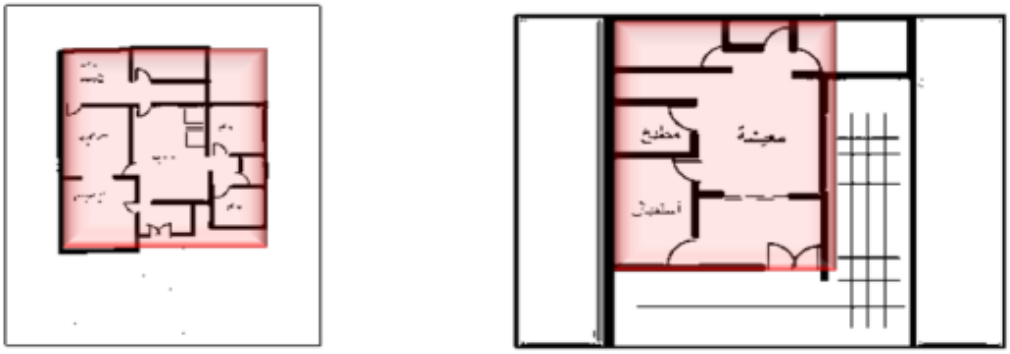

Figure 6. Pre-2003 house styles indicated a central mass of the house for a sense of safety. Researchers.

These answers were supported by the distance from the street which was indicated by 4% of the participants, and it was represented by the presence of:

1-: Setbacks- spaces away from the street: One of the design characteristics that improve the feeling of security by finding the area that separates the house as a private space from the street as a public space. This was confirmed by 100% of the residents of the design patterns before 2003 or what fell under the idea of the centrality of the block.

2- A space away from the street: This reflects the feeling of security due to their distance from the street, which appeared in small houses after 2003 and it was indicated by women approximately 38% and usually represented by the bedroom or kitchen compared to men 8% which represented by the living or sleeping area. as Fig (7).

Figure 7. Pre-2003 house styles, setback from the street is an indicator of feeling safety. Researchers

Centrality and distance from the street are factors that enhance the sense of security among Baghdad residents, but they are also factors that enhance social sustainability between the family and its neighborhood by creating an external space that separates the house from its neighborhood and is an arena to enhance social interaction with neighbors. According to the study Al-Homoud and Tassinary, 2004 [43], many researchers discussed the importance of courtyards (as open spaces) in the house, where indicated that preparing a specific space area in the front area of the house can facilitate interactions between neighbors.

C- Continuous occupation of the ground floor: This was indicated by 6% of the residents, which was represented by the occupation of the ground floor of the house around the clock, it is the occupation of the living spaces during the day and the sleeping spaces during the night, or that the living spaces are occupied as sleeping spaces in the evening if there is no bedroom on the ground floor. The results showed that 66% of the participants in their interviews slept on the ground floor compared to 34% who slept on the first floor and 8% sleep in the (living space).

D- A suitable design for the older people: It was mentioned by 2% of the participants. This result was supported by the fact that 90% of the homes in which the older people live has design privileges that facilitate their movement and prevent them from falling. It is represented by sleeping spaces and appropriate services on the ground floor. The absence of stairs or unevenness at the floor level, suitable ground texture to avoid slipping, and is consistent with what was mentioned by [31] that safety requirements are related to providing security outside and inside, as it protects from various elements such as injuries, theft and falls. This will help the older people to age in place with well-being. Therefore, the research believes that considering the characteristics of safe homes for the older people will provide protection for them in the future and reduce structural modifications and thus the loss of building materials, which contributes to enhancing environmental sustainability.

E- Correct spatial relations: This was explicitly indicated by 5% of the participants represented by the correct design relations between the spaces, as indicated by 100% of the participants in homes before 2003, who confirmed that they felt safe and comfortable with their home plans. Or what was indicated by participants in homes with a post-2003 style which architecturally designed homes, their comfort with isolated spaces between public and private spaces, the fact that each space is defined and isolated, and how the presence of a defect in these relations contributed to thinking about changing them. The correct design relationships between house spaces will contribute to reducing maintenance and restoration work and thus reducing

the consumption of building resources, therefore contributing to enhancing aspects of environmental and economic sustainability.

F- Efficiency of services: The efficiency and safety of services play a major role in enhancing the sense of security, which was indicated by 6% of participants, but is supported by the field documentary research in which 85% of participants indicated their comfort with the efficiency of their home services, such as the efficiency of the water and sewage system, electricity and the Internet. The efficiency of services, when properly designed to enhance environmental, economic, and social sustainability, can play a role in enhancing the sense of safety on the one hand and enhancing sustainability on the other.

G- Involving the user of all the details of his home: This is what 11% of the participants indicated and includes the user's participation in the implementation, design, and modification works, which enhances the user's sense of safety in knowing all the details of his home and that it is not an investment building by the contractors due to their expectation of the inefficiency of the construction materials used and the design problems that may be in the design due to the desire to invest. According to study [44] in 2014 clarified the role of community participation in preparing strategic development plans, which, according to the procedures manual followed in preparing these plans, are considered the basic pillar in drawing the features of development for these cities.

In the physical level of safety in the house, another architectural element was indicated such as the sense of Privacy was indicated by 9% of the participants who live in small houses of the post-2003 type. The security details at the level of home design are 16%. It includes what the researchers indicated such as the presence of detailed treatments for doors, windows, and skylights with the presence of battalions and precise blacksmithing works or high fences on the outside or through doors that are designed without opening from the outside except with their key or double-classed glass.

As well as, there is technological security at the level of the home appeared in 13%. This is what the research samples indicated regarding the manifestation of a sense of safety due to the presence of cameras, alarms, and security devices in some of the research samples. This was supported by field documentation that 52% of the homes had cameras and 39% of those homes were old residents of the neighborhood before 2003, while 61% were new residents, which reinforces that security comes from the neighborhood and more trust in the neighborhood increases, the more the sense of safety increases and thus the use of technology to enhance the feeling of safety decreases.

5.2 The Social safety in the house

This second type of safety is social security at home at a rate of 74% includes what the participants indicated regarding the manifestation of a sense of security due to the presence of the family, such as the husband, children, and parents.

*5.*3 *The Economic safety in the house*

It appeared that 54% of participants felt stability in their homes in the long term, and one of the reasons for their stability was the ownership of the house as mentioned by 40%. The field survey has documented that 90% of housing units are owned by their residents, and the residents in rented houses do not feel safe.

5.4 The Psychological safety in the house

This is represented by what the researchers indicated regarding the manifestation of a sense of safety for psychological reasons related to the percipient himself, which include:

- The resident's sense of the suitability of the house for the size of the family. This supports the idea that the design flexibility in the house is an indicator of a sense of safety in the future.

• The familiar with the place.

• Behavioral activities carried out by residents to enhance their sense of security, such as always locking the doors, placing locks on the door to hear sounds in case the door is opened, not emptying the house of people, not telling strangers that the residents are traveling, sleeping on the ground floor for the person responsible for the family, and feeling safe by hearing the sounds outside of children or neighbors.

The researchers showed that activating architectural elements associated with the cultural nature of Iraqi society and its meaning of (safe house) will enhance the environmental and economic aspects of the sustainability of residential neighborhoods by constructing homes that remain viable for a long time. Therefore, the current work contributes to laying the foundation for the planning and design features of new neighborhoods in new cities far from Baghdad to contribute to solving the housing crisis and knowing what Iraqis are looking for.

6. Conclusions

The sense of safety in Baghdadi house as a home is a complex system that works to enhance the feeling of stability in it for a long time, and the neighbourhood is the center of the sense of safety that extends to the house.

The complex system of safety in a house as a home is linked socially with family and economically with house ownership, as well as psychologically to a set of behaviors related to the people themselves. Finally, physical safety factors that enhance stability in the house now and in the future are design flexibility, external spaces between the house and its neighborhood, which improve social sustainability between the family and neighbors, natural lighting, the efficiency of services, correct design relationships, User participation in design, privacy, and the design considerations appropriate for the older people. The architect's knowledge of these architectural elements will improve the design of sustainable homes connected to their residential neighborhoods, which are the main center of security.

The findings support the construction of houses that encourage stability in the place; the stability will increase the accumulation of memories there and thus enhance belonging. Strengthening belonging to the place of residence will enhance the feeling of satisfaction and citizenship in society. Therefore, the current work contributes to laying the foundation for the planning and design features of new neighborhoods in new cities far from Baghdad to contribute to solving the housing crisis and knowing what Iraqis are looking for.

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