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# Explaining the Concepts of Organizing Desirable Housing in the Corporate Town (Case Study: New site and AB & Bargh Residential Complexes)

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**ABSTRACT:** Need to solve the housing problem, the formation of experimental projects and the design and construction of new organized concepts have been done. One of the areas that, due to the development of industries, contains various examples of corporate housing is the city of Ahvaz. The present study intends to explain these concepts by recognizing the components of optimal housing containing internal and external characteristics in these complexes. The research method in terms of applied-developmental goal and mixed technique includes; Descriptive methods and content analysis in the theoretical and correlational sections are comparative, and field in the case studies section. The type of simultaneous variable design combines quantitative and qualitative approaches with a theoretical framework. Finally, based on the conceptual model, In the first step to finding descriptive statistics, questionnaires with answers from the Likert spectrum according to the sample size are provided to the residents of 105 units on the news site and 66 units in the water and electricity dormitory for analysis by SPSS software In the next step, interviews based on research questions from a community of 10 experts who were selected by snowball method are compiled and inferential statistics are extracted by analyzing them. After introducing the results of two areas, quantitative and qualitative, and to achieve the desired housing components, a link between human factors, physical-social factors, and decision-making factors should be established. Strategies should be presented in the short, medium, and long term. **Keywords:** *Housing, Organizing concepts, Architecture, Urban planning, Corporate town.* 

#### **INTRODUCTION**

As a human science, architecture deals with the question of the possibility of human dwellings and as a knowledge of what is a general dwelling place and its concepts (Dibaj, 2012). For this reason, buildings, like all human innovations, are influenced by different and often conflicting forces that create concepts and ultimately lasting patterns (Rapaport, 2016). Organizing concepts can also be considered a kind of order. Unfortunately, we do not have any tools to validate them to date because there is no fundamental mechanism for constructing these concepts (Stringer, 1975). Sustainable concepts and construction

patterns for people in any land and historical period lead to preserving indigenous values (Hojjat, 2012, 35). Therefore, housing is the best way to connect the lifestyle with a system consisting of a house and a biological complex that includes internal and external concepts. Accepted housing from the residents' point of view has components that it is considered desirable from the point of view of space users. Following it causes more desirability in the spaces of residential complexes. Each country region also has unique characteristics (human and natural) and sometimes different forms of dealing with these concepts. One of these regions is Khuzestan, which has had

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a special experience organizing and modernizing the people during the last century.

The existence of a rich and valuable civilization and the necessary potential and, on the other hand, the necessity of discovering and identifying the values of contemporary architecture in Khuzestan province is the necessity of conducting such research. Research in the field of these concepts in contemporary buildings in Ahvaz, especially in the housing sector, involves recognizing the features and components of the architecture. Of course, achieving this goal is impossible without looking back and analyzing ideas, values, signs, and fixed components (Mojtahedzadeh & Namavar, 2009, 11). Corporate town1 with the model of identity transformation shows that the arrival of Western modernity in Khuzestan in the form of modern architecture and urban planning in the world could easily attract a large population and their lives moved towards creating a new identity. On the other hand, living in these areas could at least meet the relative satisfaction of residents in some respects compared to other areas of these cities (Rostampour et al., 2014). This study aims to describe and analyze the characteristics and features of the organizer of housing architecture and urban planning and achieve a model to improve and complete the picture of residential qualities incorporating complexes. The selection of the items studied in this research, on the one hand, can achieve the systematic goals of the concepts and, on the other hand, other necessities; Because the architecture and urban planning of these complexes as a part of the recent past that is neglected has not been scientifically and purposefully researched, and this lack explains the need to do so. For this purpose, first, the concepts and approaches in this field are presented, and case studies and their selection criteria are reviewed. Then, the theoretical framework of the research is developed based on the causes and context of selecting indicators related to the concepts of architecture (internal) and urban planning (external) influencing the formation of housing based on an indepth analysis of the proposed model especially in terms of content. After selecting the samples, to measure each of the types of indicators in corporate housing due to their diversity, from different interview techniques, questionnaires, objective, and behavioral observation, measuring attitudes, intellectual evaluation, review of articles, documents, map analysis Related and other experimental techniques have used.

# Global Developments and Examples of Organizational Housing

From the beginning of the last century AD, a new relationship emerged between Western countries and other countries, divided into different categories. The center-periphery model is one of these divisions. According to John Galtung's structural theory, the countries of the world are divided into two categories: center (industrially advanced countries) and periphery (developing countries), and each of them has a central part and a peripheral part (Galtung, 1971). However, the most common type of relationship during the last century has been the influence of the central countries on the center of the surrounding countries. The centers of their countries also influenced the surrounding countries under the pretext of development (Ashraf, 2004). Researchers' focused view on identity, the urgent need to build housing, and the quantitative view of planners in this field, separated residential architecture from the context of its region, the symptoms of which can be seen in the similarity of residential architecture in different parts of the country and lack of connections. Observed with his region (Moazami, 2012, 36). The theoretical fields related to modernist developments in the central countries and the effects that it has left in different regions of the world, and the resistance against it can be divided and studied in several areas. In the first group, the result is the internal reaction of the central countries against the phenomenon of globalization. This contrast can be seen in the entry into the 1960s and the critique of modernity that led to the emergence of subsequent movements. The second group; The result of the second form of relationship was the reaction of intellectuals and critics of the surrounding countries to globalization and modernity, who, on the one hand, saw the social, cultural, and civil spheres of their countries in the domination of globalization and on the other hand the concern of their own culture and identity. They had heads. In architecture, its crystallization can be observed, especially in countries with a rich history of civilization. Third group; the third type of relationship goes back to the direct role of central countries in certain regions in peripheral countries. In the fourth group, In the face of globalization, peripheral countries, including Iran, undertook development measures in their peripheral regions, which were mainly based on modernist principles. As a result, the architecture of the country's periphery was also affected, and centrist experts have made even efforts to create identity in these areas with a focused view on identity and the form of Iranian-Islamic identity.

Residential spaces occupy more than half of the world's cities and are the crystallization of culture, tradition, way of life, civilization, and technology of any society. Therefore, the issue of providing housing in Iran since the third development plan before the revolution has always been a constant goal of policymakers, planners, and researchers (Ahri, 1991, 26). In previous research related to the subject, by looking at contemporary architecture in cities such as Ahvaz and studying different periods of contemporary architecture in this city, we can overcome traditional patterns and formal and spatial innovations by expressing patterns in pure patterns and geometric forms. As a new interpretation of the ancient traditions of Iranian architecture; The traditional style, along with some modernist inspirations and complete modernist patterns in the Middle Ages and an imitative and descending trend in architectural inspirations in the new period in Khuzestan architecture, which has only a brief look at the

# Table1: Review of the background of the subject, books, researches, and articles

Researcher	Title and Context	<b>Review of Results and Achievements</b>
Ashraf, 2004	Contemporary architecture in Egypt: Reflec- tions on the architecture and urban planning of the nineties	Investigating the paradigms for future architecture and urban plan- ning in this country based on the components of desirable architec- ture and urban planning
Mahmoudinezhad et al., 2006	The structure of the pattern language in urban design and architecture	An Inquiry into the Structure of the Model Language in the Litera- ture of Urban Planning and Traditional Architecture
Alexander, 2008	Pattern language	A reference for the timeless way or method of construction
Reffat, 2008	A study of contemporary Saudi residential architecture patterns using data mining tech.niques	Determining components and formulating characteristics such as; Spatial relations, spatial allocation, relations and circulation, build- ing form, important facades, building structures, internal and exter- nal relations and standards of the building and cultural aspects and the impact of these fields in the design
Alexander, 2011	Architecture and the mystery of immortality, the way of making timeless	Theories and instructions for using this language in the form of buildings and cities
Mahdavinejad et al., 2012	Stylistics of contemporary architectural trends	Codification of contemporary architects' tendencies in components such as; Idea, form and shape and morphology, materials and tex- ture, and background of architects
et al., 2012 Soltani	Adapting the role of pattern and experience- based concepts in the architectural space	Comparing the concept of pattern with related concepts and its dis- tinctive role compared to other concepts in the field of architecture
Shahbazi et al, 2014	Investigating the role of identity patterns in the identity of contemporary Iranian architecture	Investigating the role of paradigm, tradition, pattern, and cultural achievements in the process of identity formation
Smith, 2014	Housing in premodern cities: patterns of social and spatial diversity	Provide typology of houses based on house concepts based on cul- tural tradition, density, and political dynamism
Bagheri et al., 2015	Evaluating the evolution of model language in housing architecture, a case study: Qajar houses and contemporary housing in Zanjan	Deep attention to cultural (behavioral) patterns and spatial organi- zation, the language of the pattern of habitation
Shafipourivard Shahi et al., 2016	Meta-analysis Explaining theories, patterns, methods, and techniques of creativity in archi- tecture and design of creative cities	Methodology, patterns, theories, methods, and techniques of cre- ativity in creative cities and their architecture and architectural design system
Alitajer & Molavi No- joumi, 2016	Privacy at Home: Analysis of behavioral pat- terns in the spatial configuration of traditional and modern houses in the city of Hamedan based on the notion of space syntax	Analysis of behavioral patterns in the spatial configuration of tra- ditional and modern houses in Hamadan
Asefi & Imani, 2016	Redefining the design patterns of desirable Iranian-Islamic contemporary housing with a qualitative evaluation	Final evaluation of data by hierarchical analysis; Significant rela- tionship between the quality of traditional houses, people, architec- ture, and lifestyle of the past
Salama et al., 2017	Lifestyle Trends and Housing Typologies in Emerging Multicultural Cities	This paper explores the relationship between new lifestyle patterns .and housing typologies in emerging cities
Danacinia & Hodaci, 2019	The role of tacit knowledge in the formation and continuation of architectural patterns case study: garden-houses of Meybud, Iran	The results indicate that the housing patterns in Meybud have been shaped based on the recognition of two components of the environ- ment (the climate and natural context) and human (social norms), understanding these two and applying them.
Bazaie et al., 2020	Continuous Reading and Change in the Spatial Configuration of Native Houses of Shiraz (Zan- dieh and Qajar) Using Quantitative Data with UCL Depth Map Software	This study aims to read the spatial organization of the native houses of the old texture of Shiraz accomplished by Space Syntax and the graphical analytical analysis (SPSS) software.
Hessari & Chegini, 2021	The Impact of Environmental Construction on the Spatial Configuration of Traditional Iranian Housing (Case Study: Comparison of Dezful and Boroujerd Traditional Housing)	The main purpose of this study is to identify and express the struc- ture and spatial differences in traditional housing in Dezful and Boroujerd
Rajendran et al., 2021	(RE) Framing Spatiality as a Socio-Cultural Paradigm: Examining the Iranian Housing Cul- ture and Processes	His paper examines the spatial planning concepts in traditional and contemporary Iranian architecture and the associated socio- cultural practices.

range of developments in this region. In the present study, with a new method and method, by examining the contemporary architecture of Ahvaz, especially in the housing sector of companies, both private and public, it is possible to find the desired organizing concepts that can classify construction patterns and introduce priority. The housing quality indicators in companies in a city such as Ahvaz, solutions in recognition, and their application in such constructions. After reviewing government or corporate housing developments in Table 1, books, articles, and research conducted in this field inside and outside the country will be introduced.

#### MATERIALS AND METHODS

The field methodology for further research in the field of methodology, from the descriptive method and content analysis to express generalizable organizing concepts of housing qualities and how contemporary architecture in this area in the present and the future using texts, sources, And the opinions of experts apply; Using the causal method, a comparison is made according to the statistical community based on variables, then by using the correlation method, priorities, and classification of housing concepts and criteria will be identified and explained. The field method is also used to take advantage of designers' ideas through superior examples, dealing with examples, and preparing reports, maps, and documents from different periods. Also, the present study will be used in terms of approach following simultaneous qualitative and quantitative strategies of variable2, in which case studies are evaluated based on the determined indicators and according to the main factors. In this regard, the concept of organizing housing as a structure formed from the perspective of people and experts is divided into two parts: internal and external housing concepts. The quantitative method used to assess the concepts is a descriptive method comparable to the causal strategy with observation tools and questionnaires. The qualitative method used in housing concepts and the quantitative content analysis method are clarified by analyzing the opinions of experts and critics of architecture and urban planning with the help of tools such as interviews and questions. The third level of research implementation is the means of its implementation or research measures selected according to the research method. Therefore, the tool of the quantitative part of the research is a closedended questionnaire consisting of 17 questions in the field of internal components and 17 questions in the field of external components, which are set in the Likert3 fifty scale. Be. In both quantitative and qualitative parts of the research, the statistical population should be selected from among the residents of urban companies on the one hand and architectural experts on the other hand. Due to the breadth and generalizability of the subject in the case study, the study's statistical population is selected from the residents of NewSite (350 units) and the town of water and electricity (120 units). Formula4 is used to determine the sample size. Therefore, using Equation5, the minimum sample size in the townsite is equal to 105, and in the water and electricity town is 66. Finally, 110 questionnaires in New site town and 66 questionnaires in AB & Bargh town will be distributed by random sampling among the residents of the houses as mentioned earlier. Qualitative sampling, based on interviews based on research questions and assumptions, includes ten architects and urban planners who have full knowledge of desirable housing and complete familiarity with residential complexes in Ahvaz, especially organizational complexes (Corporate Town)) have been selected as snowballs6.

Finally, the present study seeks to find an answer to the main research question such as "How can the concepts of organizing desirable housing in organizational housing complexes (corporate town) be explained?" and sub-questions such as "What changes have the passage of time and change in the way of living affected the physical and spatial concepts of housing?" and "Is the role of internal (architecture) and external (urban planning) components effective in explaining the concepts of organizing desirable housing?" It will be based on quantitative and qualitative findings.

#### **Case Studies**

### NewsSite Complex

The new town is located in the 7th urban area of Ahyaz and adjacent to the old middle texture residential areas (Ameri, Asiabad, Khazaali, and Zaytoun Kargari). A complete example of a town with a Baghshahr model in Ahvaz is the News site town built north of the Khorramkushk neighborhood during the 1930s. The architecture of the houses on the new site is taken from the architecture of English houses with sloping roofs to emphasize further the originality of the urban garden pattern of the complex. This complex is a combination of villas and apartment houses. The general plan of the complex is based on the construction of villa houses in the form of a combination of two cones around an oval core. In addition to residential areas. this complex has educational, sports, recreational, commercial, religious, and cultural uses. The new site, as a neighborhood, operates on a variety of local, trans-regional (district), and trans-regional scales.

#### AB & Bargh Complex

It is located in the 4th urban area of Ahvaz and adjacent to medium-density residential areas (such as Saadi alley, Golestan alley, and Bargh town). Koi Bustan complex was built in 1974 by an American company and influenced by modern urban planning ideas (Baghshahr). This complex is a combination of villas and apartment houses. The general plan of the complex is based on the construction of villa houses in the form of 3 rings around the central (recreational) core. Apartment blocks and other uses in the complex have been added to the complex in later developments. Some of these apartments were built in 1985 and others in recent years. In addition to residential areas, this complex has educational, sports - recreational, commercial, religious, cultural, and other uses.

### Theoretical Foundations Housing

The introduction and development of systems theory in the humanities led to social systems during which human beings are seen as social beings, and human activities have a systematic relationship with each other at different levels. Accordingly, the critique of Klanger's view of the housing and its consideration as a system of camps in which a system of activities takes place can be considered a consequence of such a development (Coolen & Ozaki, 2004; Hauge, 2007). Therefore, from the beginning of the present century, the social constructivist approach to explaining such a view and justifying some concepts as social construction has been active in housing studies (Clapham, 2002). At the same time, the organizing components of housing, which contained quality criteria of architecture and urban planning with interactive approaches, were introduced. As a result, housing was also part of a larger environment (Clapham, 2005; Shin, 2014). Some researchers have used ecological psychology as an alternative to environmental psychology in housing research (Coolen, 2006 & 2008; Meesters, 2009). Therefore, according to the changes that have taken place in the view of housing during the last half-century, to define it in such a way that it includes a residential place containing internal concepts and part of a larger place in the area, district, town or a city that contains external concepts; be. Finally, according to the approaches of the present study, housing can be considered a system of physical elements in which a system of the basic concepts of organizing the desired architecture (interior) and urban planning (exterior) occurs.

#### **Optimal Housing Components**

Architecture is the art of organizing space, and the cause of fundamental changes is a change in spatial organizing methods. Historical, cultural, social, and environmental contexts effectively form architectural works, especially housing (Ebrahimi & Islami, 2010). With the beginning of the third millennium and the increasing growth of science and technology, various changes occurred in daily life. People's way of life, needs, and consequently, their bodies and environment have changed (Ahri,1991). In Iran, changes in economic, cultural, and social fields, sudden population growth, migration to cities, lack of proper management, lack of construction facilities, and lack of familiarity with construction technology have had adverse effects on architecture, especially in the field of quality housing. (Shabbir, 1993). Satisfaction with housing architecture has specific physical and social dimensions (Varady & Carrozza, 2000).

### **Internal Characteristics of Desirable Housing**

Concerning the internal qualities of physical units, such as housing, there are relatively specific standards that each, depending on individuals' time, place, and vision, can play a more prominent or lesser role in satisfaction with the housing unit. In other words, concerning housing affordability indicators, there is a lot of agreement and commonality between different individuals and groups; However, it seems that such an agreement is rarely reached regarding the factors affecting the quality and desirability of the living environment, and often, this concept is manifested in a completely different way from the point of view of people with different perspectives. Finally, based on external and internal research, various components of desirability, which are mentioned in this section as internal characteristics, have been collected in Table 2.

#### **External Components of Optimal Housing**

Exterior concepts of higher quality housing are presented in recognizing desirable features in urban planning. Therefore, reviewing different theories of urban planning, the similarities and differences in perceptions of the quality of urban design, and the key criteria that theorists have provided to provide a

Researchers	Optimal Architectural Component
Lansing & Marans, 1969	Avoid noise and communicate with residents
Carp et al., 1975	Beauty, neighbors, and security
Canter, 1977	Achieving goals and aspirations
Appleyard, 1979	Avoid noise and dust, proper lighting, and social interactions
Francescato et al.,1987	Objective characteristics of the environment, personal characteristics, perceptions, beliefs, personal intentions, feelings
Smith, 1994	Physical elements in the formation of the neighborhood
Aragonés 1997 & Amérigo	Meeting the needs and expectations of the individual, housing characteristics, adequate access

Table 2: Internal components involved in quality architecture from the opinion of researchers.

	Continiue of Table 2
Researchers	Optimal Architectural Component
Gifford, 1981	Social factors, personality, values, expectations, and neighbors
Galster & Hesser, 1981	Meet different levels of requirements
Weidemann & Anderson, 1985	The perceptual dimension includes the cognition, perception, and beliefs of individuals, and the behav- ioral dimension also includes the intentions and behavioral tendencies of human beings
Liu, 1999	Maintenance and cleaning of neighborhoods, facades of buildings, and proper access to public transportation
Bonaiuto et al., 1999	Physical aspects, social aspects, functional aspects, underlying aspects"
Marans & Couper, 2000	Objective and mental characteristics and physical and social conditions
Naghizadeh, 2000	The main feature of desirable housing in the epistemological layers and inner aspects of human beings
Basolo & Strong, 2002	Functional components and privacy
Marans, 2003	Objective and subjective indicators of measuring the quality of life in a neighborhood
Van Kamp et al., 2003	City development and human welfare
Mahmoudinezhad et al., 2006	Five factors; Design structural ideas, concepts of spatial structures, shape and form in the building, materials in the building, and the relationship with the texture are among the qualitative factors of .building architecture
Haklay & Weber, 2008	Access to public services and facilities of the neighborhood unit
Fleury-Bahi et al., 2008	A mental image of housing unit, public facilities and services, green space, social communication
Mohit et al., 2009	Services and social environment, security
Hipp, 2010	Cultural components
Fokuhi & Ghaznavian, 2012	Spatial diversity" in desirable housing"
Purdihimi & Zamani, 2012	".Good housing is equivalent to the concept of "safe
Arjmand & Khani, 2012	Privacy and social interactions
Jafari Najafabadi & Mahdavipour, 2014	Manufacturing techniques and methods
Pourtaheri et al., 2017	Seven main components; Dynamics, Social Adaptation, Continuity, Physical Performance, Robustness, Integrity, and Visual Desirability
Zarei, 2017	Strength, security, tranquility, optimal form, provision of equipment, and access to natural and ecological spaces
Al-Hafith et al., 2018	Priorities include; Technical, spatial, indoor, economic, and social environment and space - conditions of housing requirements include; Housing production, land management, economy, infrastructure, and building materials

# Table3: External components involved in quality housing architecture from the opinion of researchers

Researchers	Optimal Urban Planning Components		
Violich, 1983Environmental readability; Freedom of choice; Motivation through the use of different urban forms; Th of social life versus private life; Listening to the sounds of the past in the sense of legibility of cultu Including indigenous-regional links in the form of plans			
Trancik,1986	Maintaining the sequence of movements; Enclosure of spaces; continuity of edges; Control of axes and perspec- tives; Mixing spaces inside and outside		
Coleman, 1987	Historical protection and urban restoration; Design for pedestrians; Vitality and variety of uses; Cultural context and environment; Bed and natural environment; Pay attention to the architectural values of the environment		
Jacobs & Appleyard, 1987	Vitality; Identity and control; Access to opportunities, imagination, and happiness; Originality and meaning; Social life; Urban self-reliance; An environment for everyone		
Southworth, 1989	Structure; Readability; Form; Sense of Place; Identity; Views and sights; Human scale or foot		
Greene, 1992	Function, Order, Identity, personality, and specificity Charm: Includes scale, vitality, and harmony		

Researchers	Optimal Urban Planning Components
Goodey, 1993	Vitality; Harmony with the existing substrate; Variety; Human Scale; Permeability; Possibility of personalizing the ;place; Readability; flexibility; Possibility of measured and controlled change
Tibbalds et al., 1993	Place; Hierarchy; Scale; well-shaped; Confinement; material; Decorations; Art; Signs, symbols, and lights, atten- tion to the local community
Haughton & Hunter, 1994	Variety; Focus; Democracy; Permeability; Security; Appropriate scale; Organic design; Economics and its appro- priate tools; Creative relationships; flexibility; Involve users in projects
Nelessen, 1994	Observance of human scale; Ecology-based accountability; Promoting paganism; Predicting open spaces; Predict- ing cores in the design; Pay attention to the street landscape; Variety; Mixed and multiple uses; Use of certain design words; Permanent maintenance of the urban environment
Krieger, 2002	General policy; City architecture; Restoration urban planning; Localization; Smart growth; City infrastructure; Landscape urbanism; Imaginary urban planning; Supporter of the community
Kensner et al., 2002	Combining architectural boundaries; Landscape architecture; Guided urban planning, and urban design
Krieger, 2009	The relationship between mass and space and its purpose is to improve the viability, vitality, and physical quality of cities
Kriken, 2010	Sustainability, accessibility, diversity, open space, compatibility, incentives, compatibility, and density
Bentley et al., 2011	Permeability, diversity, readability, flexibility, visual adaptability, richness, personalization, energy efficiency; Cleanliness, protection, and support of nature and wildlife

Continiue of Table 3

Table4: Organizing concepts of optimal architecture (internal and external characteristics)

<b>Dimension</b> s	Indicators	Dimensions	Indicators				
Internal Components							
Cultural	Creating a sense of identity. 2- A sense of be-1- longing containing cultural symbols and signs. 3- Feeling familiar and associative. 4- Creating a sense of residence	Functional	Circulation. 2- Dimensions and size. 3- Access 1- to housing and its suitability for people. 4- Suitable collective spaces. 5- Beautiful landscapes				
Structural	Strength and stability of the structure. 2- 1- Application of suitable materials. 3- Standard equipment	Physical-Spatial	Ability to change. 2- Proper layout of the space. 1- 3- Existence of intermediate arenas. 4- Proper reso- lution of spaces. 5- Adorned appearance and good appearance				
	External	Components					
Operational	Behavioral camps (adaptation of activity, 1- time, space). 2- Compatibility of urban form with land uses, pedestrian network, horse rid- ing, information network, etc. 4- Environmental safety for activities. 5- Environmental security for activities	Environmental	Microclimate of urban spaces (climatic comfort); 1- Includes sunbathing, shading, wind, humidity, and 2- sounds, smells, and aromas of the environment 3- Sustainable urban design. 4- Efficiency of natural resources (energy, land, and). 5- Balance of ecosys- (tems. 6- Reduction of pollution (air, land, water				
Experimental- Aesthetics	Physical-spatial environment (objective envi- 1- ronment); Includes spatial ossification, physical organization, mass-space permutation. 2- Sen- sory perceptual environment (perceptual envi- ronment); Includes the quality of the objective landscape, analysis of the structure of the urban view, 3- Perceptual mental environment (cogni- tive environment); Includes quality of mental landscape (spatial and temporal), evaluative mental landscape, concrete meanings, vitality	Social-political	Social justice. 2- Public participation and inter- 1- actions, including neighborhood, neighborhood. 3- Health and security. 4- Peace, comfort, and privacy				

desirable urban design are given in Table 3.

In terms of organization, as in many countries, and unlike architecture, which has its specialized associations, there is no specialized organization in Iran, which has widened the scope of ambiguities related to the profession. Major urban design activities in the country should be performed by architects and urban planners who do not have the necessary knowledge and skills to work in urban design. Finally, based on experts' opinions, the internal and external characteristics of the desired architecture are compiled in Table 4.

#### **RESULTS AND DISCUSSION**

As a scientific method process, analysis is one of the basic foundations of any research method. During it, the researcher tests the hypotheses and checks their accuracy. Therefore, in this section, the quantitative data is obtained on the one hand with a field method to study and analyze the desired and effective components based on existing maps and documents. On the other hand, the data is obtained through a questionnaire. Of the two parts that the first part; the Internal components, and the second part; which Is an external component; Distributed among the residents of New Side townhouses and the Ahvaz water and electricity dormitory, and their processing by computer using software (SPSS22)<sup>7</sup>, statistical data are analyzed. Also, in the next section: Qualitative data are collected through interviews and questions.

#### **Field Findings**

To analyze and describe the data, first in the first part, after analyzing the existing maps and documents of the study area based on internal and external concepts, the field findings of the research in Figures 1-4 are presented.

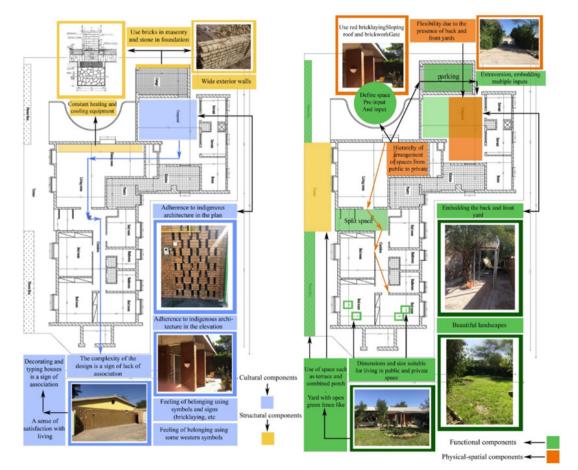


Fig.1: Internal components in the new site based on field observations

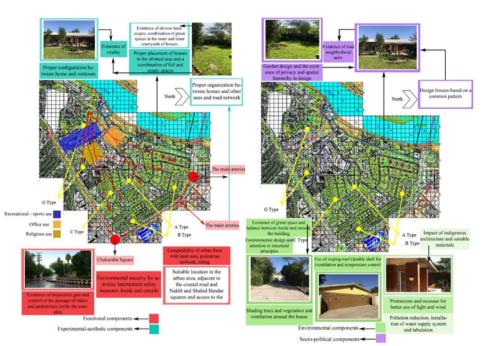


Fig. 2: External components (external) in the news site based on field observations

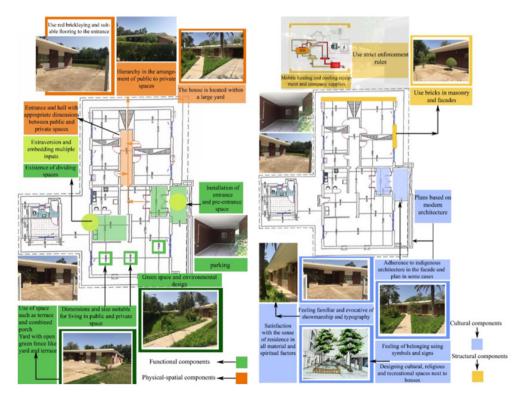


Fig. 3: Internal components in the AB & Bargh complex based on field observations

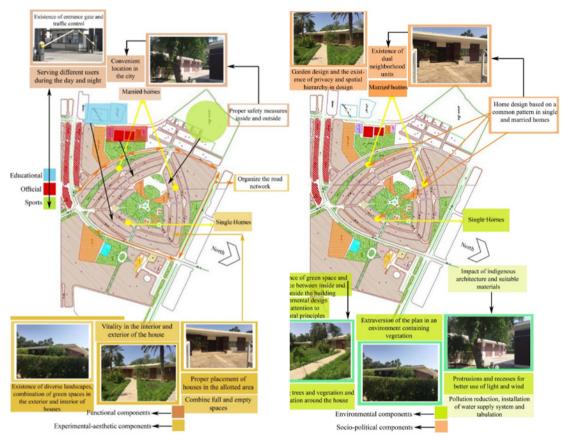


Fig. 4: External components in the AB & Bargh complex based on field observations

# **Quantitative Findings**

In the second step, according to Table 5, while examining the reliability and validity of the measurement tool and the frequency distribution of desirable housing variables among the subjects, descriptive statistics are used to obtain the percentage, frequency, and average descriptive statistics. Comparing the scores of the descriptive statistics of the questionnaires, it can be acknowledged that residents are relatively satisfied with the internal components of desirable housing, such as cultural, structural, and functional-functional. Physical-spatial components and statistics show that Based on the research model and organizing concepts, sub-branches,

Table 5: Descriptive statistics of the questionnaires of internal and external components of desirable housing

Internal concepts of desirable housing	Average scores	External concepts of desirable housing	Average scores				
New site Complex							
Cultural components	3.41	Functional components	3.23				
Structural components	3.23	Experimental-aesthetic components	3.47				
Functional components - functional	3.13	Environmental components	3.39				
Physical-spatial components	3.34	Social-Political components	3.41				
	AB & I	Bargh complex					
Cultural components	3.19	Functional components	2.95				
Structural components	3.18	Experimental-aesthetic components	3.13				
Functional components - functional 3.10		Environmental components	3.18				
Physical-spatial components	3.16	Social-Political components	3.17				

and proposed criteria, the residents of NewSite Company are more satisfied with the architectural components used in the housing of this town than the residents of the water and electricity dormitory. Residents are also relatively satisfied with the external components of desirable housing, such as functional, experimental-aesthetic, environmental, and sociopolitical components. This statistic shows that based on the research model and organizing concepts, sub-categories, and metrics, The residents of NewSite City Company are more satisfied with the components of urban planning and urban design used in housing than the residents of water and electricity dormitories. Then in the inferential statistics section, to answer research questions to find the normality of variables in inferential statistics with the Friedman and Kolmogorov-Smirnov8 test according to Table 6 (probability of all variables is more than 0.05) and to find the importance of each variable, Independent Two Sample Mean tests9 (Table 7) The result of the analysis will be the recognition of the quantitative role of the features and the explanation of the organizing concepts of architecture based on the research model in the formation of internal and external concepts of corporate housing.

Then, using the analysis of principal components, the relationships of each index are obtained. Accordingly, the closer the relationship between each index and the total index is, the greater the effectiveness. In the questionnaire on internal characteristics of housing, the thirteenth item (housing variability; derived from physical-spatial concepts) has the greatest importance and effectiveness. Also, the fourth item (sense of familiarity and association of the place of residence; derived from cultural concepts) has the least importance and impact. Also, in the questionnaire on external characteristics of housing, the eighth item (microclimate of urban spaces (climatic comfort); including sun exposure, shading, wind, humidity, etc. taken from environmental components) has the highest importance and effectiveness, and the first item (Behavioral camps (including an adaptation of activity, time, space derived from functional concepts) have the least importance and impact. The importance and effectiveness of other items are as follows. The importance and effectiveness of other items are as follows.

#### **Qualitative Findings**

In the next section, interviews with experts and experts in architecture and urban planning have been used to describe the qualitative role of components and variables in this dissertation. This analysis aims to explain the objectives of the present study and the data obtained from these interviews. Qualitative data analysis can be classified into three activities: data summarization, data supply, and conclusion. The main criterion for summarizing the data is determined based on the six interview questions. Because different people have different answers in terms of short or long sentences and phrases, some of their important sentences that can be used in analysis and conclusions are summarized and replaced with synonymous expressions for each person interviewed. The first to sixth questions are selected in order. The first question; Comment on the main research question; The second and third questions; Organizing concepts of desirable interior and exterior architecture in housing; Question 4; Intellectual and executive differences in oil and non-oil housing; Question five; Explains why research is conducted in the studied samples and the necessity of conducting this research; Question six; The need to use the desired characteristics and elements of housing and the need for more extensive research in the areas of research. After the summarization stage, it is time to place the inconclusive data categories in the data supply stage. Therefore, unlike

#### Table 6: Evaluation of normality of internal and external architectural variables

Variable	Test statistics	Probability value	
	Internal components		
Cultural components	0.473	0.087	
Structural components	0.595	0.118	
Functional components	0.366	0.429	
Physical-spatial components	0.442	0.218	
	External components		
Functional components	0.547	0.098	
Experimental-aesthetic components	0.224	0.61	
Environmental components	0.408	0.32	
Social-Political components	0.229	0.514	

the previous step, where the data were summarized based on the order of the interviewees. At this stage, the data will be categorized and presented according to the topic of the interview questions to present the general objectives (questions 1, 2, and 3). In addition to summarizing, mainly the narrative text will be used. For sub-objectives (questions 4, 5, and 6), the method of categorization and counting of opinions is done following Table 8.

Table 7: The importance of the items of internal and external components

Item	The importance of internal items with the total index	The importance of external items with the total index
1	0.724	0.512
2	0.786	0.712
3	0.751	0.531
4	0.409	0.528
5	0.650	0.596
6	0.669	0.760
7	0.651	0.738
8	0.568	0.789
9	0.701	0.732
10	0.632	0.682
11	0.696	0.593
12	0.804	0.516
13	0.805	0.726
14	0.777	0.736
15	0.655	0.643
16	0.685	0.695
17	0.644	0.625

Table 8: Evaluation of internal and external components affecting the desired housing based on targets

Component		Inte	ernal		External			
Interview	Cultural	Structural	Functional	Physical- spatial	Functional	Experimental- aesthetic	Environmental	Social- Political
				General go	als			
Expert 1	****	**	***	****	*	****	*	*
Expert 2	****	****	***	**	***	*	****	****
Expert 3	****	*	*	*	*	****	*	*
Expert 4	****	*	*	****	****	*	*	*****
Expert 5	**	****	****	***	****	*	*	*
Expert 6	*	*	****	****	*	****	*	*
Expert 7	*	*	****	*	*	****	*	*
Expert 8	*	****	*	****	****	****	*	*
Expert 9	*	*	*	****	****	*	*	*
Expert 10	****	**	***	****	****	***	****	**
Sum of Point	31	22	26	34	30	31	17	18

Component		Int	ernal			Exte	rnal	
Interview		Internal			External			
				Subsidiary g	oals			
Expert 1	****	*	*	*	*	*	*	*
Expert 2	*	*	****	****	****	****	*	*
Expert 3	****	*	*	*	*	*	*	****
Expert 4	*	*	*	*	*	*	*	****
Expert 5	*	*	****	*	****	*	*	*
Expert 6	*	****	*	*	*	****	*	*
Expert 7	*	****	*	*	*	*	****	*
Expert 8	*	****	****	****	****	****	****	*****
Expert 9	****	****	****	****	****	****	****	*
Expert 10	****	****	****	****	****	****	****	*****
Sum of Point	26	30	30	26	30	30	26	26

Continiue of Table 8: Evaluation of internal and external components affecting the desired housing based on targets

#### CONCLUSION

Housing as a subsystem of physical and human elements in a system of physical, urban contexts and policies of the surrounding area that contains organized internal and external concepts; It is known that in case of its logical connection with the larger system, with its proper form and function in this system, it produces the factors of housing desirability. By this definition, the components of optimal housing result from the association of four characteristics of the internal concepts of housing; Cultural, structural, physical-spatial, and functionalfunctional in the form of their concepts and definitions, and external concepts of housing include four other characteristics such as; Socio-political, environmental, experimentalaesthetic and functional-functional link has been established from the surrounding area, the final result of which will be the explanation and manifestation of desirable residential characteristics.

Quantitative results show that both samples' internal and external concepts, especially the news site, had a relatively high average usefulness in the organized housing components from the residents' point of view. In other words, cultural components resulting from the concepts of interior architecture and experimental-aesthetic and political-social components resulting from the concepts of exterior architecture show the highest percentage of satisfaction. Also, among the items related to the questionnaires, the thirteenth item (housing variability; derived from physical-spatial concepts) of the internal components and the eighth item (climatic comfort) of the external components are the most important. In the next section, the qualitative results of the experts' interviews show that in the internal characteristics of housing, attention to the structural and functional-functional components has the most role, and functional and experimental-aesthetic components are considered the most important role among external factors. After introducing the results of both quantitative and qualitative domains, it became clear that considering the concepts of organizing housing from an internal or external dimension alone could not lead to the full formation of housing concepts and to achieve the desired housing components (ideal) must be a good link. Establish between human factors (residents). physical-social factors (Home and city) and managers, officials and experts in the field of architecture and urban planning (decision-making). Combining these cases and explaining the concepts of organizing housing as a human-policyphysical category causes the synergy of internal and external housing concepts and the formation of its multidimensional components, according to Figure 5.

This article showed that these collections had received more attention from experts in certain aspects, and some have received less attention. To improve the quality of the designs of both complexes and improve the desired housing components, the strategies are proposed in Table 9.

Finally, by considering the human factors (residents' satisfaction), the organizing components of architecture (internal and external), and strategies (policies and planning) and combining these factors, appropriate measures can be taken in three short levels. Provided short-term, medium-term, and long-term (Table 10).

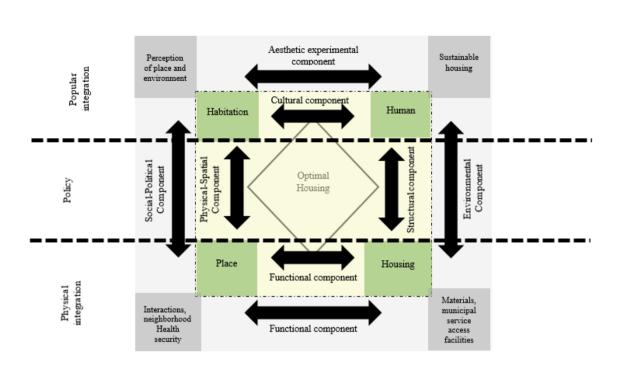


Fig. 5: Conceptual model of research and outcome of theoretical and experimental results and how to combine popular, policy, and physical factors

Compo- nent	Results	Proposed results for housing in the new site	Proposed results for housing in the AB & Bargh				
Cult	ural	Use of Iranian and native symbols and elements, use of native geometric and organic designs for transparency and addressing					
Struc	tural	Use of new structures, new materials, new methods of constru	ction and settlement, updating of home equipment				
Functional		Introversion, visual privacy Introversion, visual space, plan design with more appropriate dimensions and scale					
Physical	Physical-spatial Distribution of public and private spaces of houses according to the needs of the day and future develop indigenous bricklaying designs for facade						
Functional		Access from the complex to roads with local access, access to the coastal road, more traffic control, covering the network of tables, embedding appropriate signs in the town	Access from the collection to roads with local access, more traffic control				
Experiment	al-aesthetic	etic Appropriate criteria for improving the beautification of the town, improving the conditions of optimal sensory psychological perception of the environment, the desirability of sensory stimuli					
Enviror	nmental	Develop improvements in sustainability factors inside and outside homes, apply the principles of car-free cities, is prove and apply up-to-date climate guidelines					
Social-I	Political	Development of more neighborhood units, development of areas between units, justice in the allocation of houses a areas and facilities, more participation of residents in decision making					

# Table 9: Consolidation of the results and suggested points in the Case Studies

Policymaking and planning	Organizing components	(Human factors (satisfaction	Action level
			Period
Research and evaluation of urban planning and architecture criteria and hidden compo- nents in superior construction samples	Research on indigenous materials and architecture with indigenous value and evaluation of successful housing patterns	Behavioral research on how people perceive desirable architectural and urban planning factors with a focus on meeting biological needs	Short-term
Amending and communicating the rules of urban planning, housing construction sys- tem, action, and planning according to the needs of individuals	Construction of housing using success- fully tested models of the previous com- pany	Research on how to strengthen social interactions on a larger scale than housing with the approach of internal and external concepts	medium-term
Monitoring and updating criteria, executive systems, and development for use in hous- ing design	Construction of housing by designers and modification of existing criteria and tex- tures with new criteria and no loss and allocation of previous textures to others	Participation of residents to meet the needs in architectural and urban housing design	long-term

1. A corporate town is a residential complex that is usually owned by a company (public or private) owned by which they are designed, funded, maintained, and managed.

2. Both quantitative and qualitative methods are designed and implemented simultaneously in this type of design.

3. Likert scale questions are questions that allow the respondent to rank, score, and express an accurate opinion.

4. 
$$n = \frac{z^2 pq}{d^2}$$
  
5.  $n' = \frac{150}{1 + \frac{150}{355}}$ 

6. Snowball sampling is an unlikely sampling method for cases where the units under study are not easily identifiable. Especially when these units are rare or form a small part of a very large community, in this method, the statistician is used to identify and select the second sampling unit after identifying or selecting the first sampling unit. In the same way, other units of the sample are identified and selected.

7. Statistical software is used for statistical analysis, especially in field research and testing hypotheses.

8. This test evaluates the homogeneity of ranking variables in two independent or non-independent samples.

9. The test compares the means of two independent and widely used communities in statistical analysis.

#### AUTHOR CONTRIBUTIONS

S. Memardezfouli performed the literature review and experimental design, analyzed and interpreted the data, and prepared the manuscript text and edition. In addition, he performed the experiments and literature review, compiled the data, and made manuscript preparation. M, I. Mazhari helped in the literature review and manuscript preparation.

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#### **CONFLICT OF INTEREST**

The authors declare no potential conflict of interest regarding the publication of this work. In addition, the authors have completely witnessed the ethical issues, including plagiarism, informed consent, misconduct, data fabrication and falsification, double publication or submission, and redundancy.

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