

CONSTRUCTION AND VALIDATION OF CULTURE'S ROLE IN RESIDENTIAL BUILDINGS OF BABOL CITY

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ABSTRACT

Present studies' purpose is defining culture's role in design of Babol city's residential buildings and lawful making of culture's role in residential building design questionnaire, this questionnaire is gathered based on interview with architecture professors and experts by using random cluster sampling, 135 experts and advanced experts Babol city have been chosen and the questionnaire has been exerted on them then the questionnaire has been analyzed by SPSS software. Used method in this research is question analysis (loop method and clearness coefficient), lawfulness of content and structure's lawfulness (factors analysis), validation of Cronbach alpha coefficient calculation for whole the questionnaire and factors. Factor analysis results or in the other word effective cultural factors in residential buildings design consists of: safety and piece, intimate and veil, unfavorable height, lack of overlooking, prohibited harm and avoided loss, ranking, justice and equality, neighborhood right, humbleness, discipline, contentedness, god trust and obedience, hop and effort. Chronbakh Alpha has been calculated for this questionnaire 0.983. Considered results of this questionnaire shows validation and proper lawfulness of this questionnaire and resulted factors by using factor analysis can be effective factors of Babol's culture or on the other word this paper's goal is achieving a proper pattern for cultures role in residential designing of Babol city in present time.

Keywords: *Validation, Lawfulness, Culture's Role, Building Design, Present Era*

INTRODUCTION

Nowadays domicile problem is a mater in every city of Iran. This problem is not only about quantity and number of domicile but also is about quality of domicile. In Babol residents live in the houses which are built for Babolis but these homes don't retail their life stories and Babolis' life sole doesn't exist in these homes. Verifying trend of domicile development and integrated acquaintance of Babol district and it's citizens by presenting domicile pattern are purposes of this research which help identification to the urban atmosphere and social stabilization of this city.

Although, Babolies nowadays live in the different domicile by where their dependents used to live in but their life style and their culture is as their fathers. The only difference in their domicile construction that don't allow them to satisfy their demands. Because nowadays homes are built without paying attention to the humid and mild climate of this district. So, this research intends to introduce some designing factors, which could be so helpful in updating home planning process, by verifying culture's role and also collecting architecture's and urban planning's expert's ideas carefully.

Conceptual Basis of this Research

Culture and Domicile

Every activity of humans is based on culture. Culture is in contact with common-law. Every activity related to traditions, costumes, life styles and life methods happens in frame work of culture which assigns different meanings to each space. These activities depend on cultural characteristics of society which activators belong to. According to this definition persons define their personal and social relationship with different spaces and different elements and try to utilize them. In the other word at first culture defines behavioral patterns and then behavioral patterns define and state the way that people use spaces. Domiciles must be considered as a cultural and social structure not a stolen, wooden or stoned

Research Article

structure. So different cultures have created different cultural patterns of concept and shape of domicile. Domicile is a cultural limitation where separate us from others and at the same time makes symbiosis between us and others possessions. Every domicile is a museum of historical icons and symbols which are not only heritages of a defined tribe and family but also are heritage of a defined race and nation. Domicile is not only a safe keeping place for humans body but also is a museum for keeping safe relics and symbols which makes human's domicile different from animal's lair and nest. Domicile is a place for keeping family, racial, national and humane memory. In other word domicile is or cultural memory which or memories are configured and continues in modernity reforms and its impacts on the habitation and cultural patterns of domicile have gone so complicated and difficult in every nations especially in developing countries. Hence, Modernity development of international communicational developments and integration and propagation of different cultures at the same time has made culture to a non unique and non integrated concept vice versa what has been used to be studied by anthropologists (Shaygan, 2009).

Domicile

Table

Descriptions	Researchers
Home in Dehkhoda dictionary is defined as where people live in , =habitation =domicile	Dehkhoda
Home stands for a building for habitation of one or more family	Islamic world encyclopedia
Home is a place where it's residents do not feel bothered. Also inside home and every place where women and children live in must be peaceful so tiredness be not felt.	Pirnia
Hosham Morteza has quoted to Yusufaghdaies famous Islamic thinker which has defined home as follow: a place where people bot protect themselves against climatic factors and also could be suffered from air pressure and social limitations. Home is a place for human rest and interpiece	Hosham Morteza
Home is center of universe for it's residents and is most outstanding building in universe for it's residents	Charls More
At the rank of priority home is an establishment not an structure, and this establishment has been established for complicated purposes. Building a home is cultural phenomena. So it's shape and it's atmosphere is so impacted by the culture that the home is belonged to. Even when home was mentioned as a shelter for early men. Performance meaning haven't been intended just for benefit. Positive accepts of home's meaning has been discussed for making a calm atmosphere for family life as a social unit.	Amus Rapaport
Home in contact with some conditions could make a proper relationship perimeter and physiological human phenomena. A person or a family must live at a home. It means they could sleep, walk, rest, see, think at home	Lockor Buzie

RESULTS

Discovering analysis has been done by analyzing main components and warimax rotation in order to recognize that the set of questionnaire includes how many important and meaningful factors.

In this research R factor analysis is used for summarizing and achieving goals which are hidden in a set of variables (Dous, 1997) is one of the main porpoises in present study. Factor analysis is chosen as the main component analyzer method. Because we are trying to forecast and define least number of factors which must be able to define highest value of variance in main values (field 2005) done rotation in this research is perpendicular and in form of warimax because it's purpose is defining factor's results and using for

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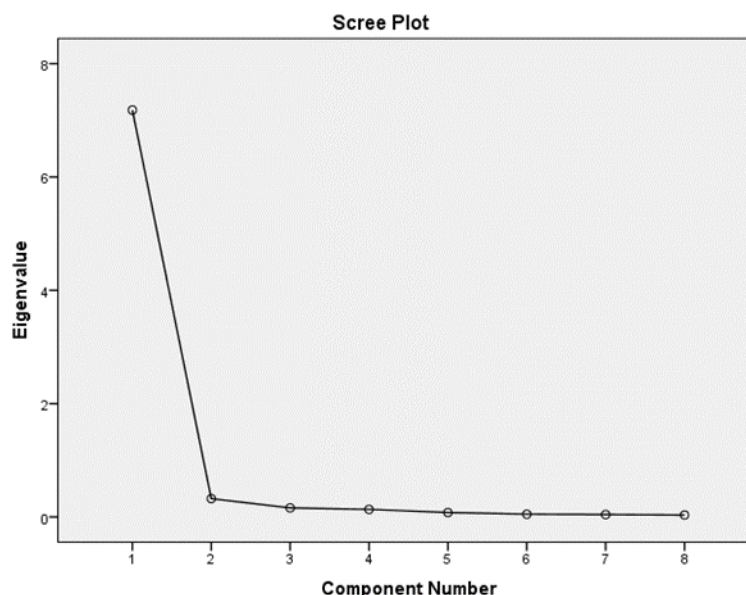
future analysis and in later researches. So linear problem will be avoided to. Also researchers didn't enough evidences to prove independency of factors from each other. So perpendicular rotation was used in this research. On the other hand it was proved that warimax method as an analytical manner in perpendicular factor rotation has been more successful than other methods and present more stable and firmer results than other methods of perpendicular factor rotation method (Hairvb, 1990).

Kirz Mayer Olkin (OMK) sufficient sampling test at first has been done step. Also Kervit Barlet test has been taken in practice in order to prove that in stochastic universe, correlation between different members is not zero.

Table 1

Meaningful Level	Degree of Freedom	K-Square Kurvit Barlet	Test of Size (KMO)
p>0.0001	28	1972.	0.919

OMK's size must be more than 0.6 but in the present research it's size is about 0.919 which is an acceptable value, also Kuervit Bartlet test is meaningful just in $P>0.0001$ level. Information of factor analysis is presented in table 3. Present research has recognized 13 factors in discovering factor analyzing step.



Figure

Clear- Points of Vewes About Iranian's Architecture

Iranian architecture and especially Domicile has got some principles which are widely discussed by some experts like Dr. Pirnia, Dr. Hojat, Dr. Vafamehr. When Iranian architecture is studied and it's characteristics, concepts and principles are driven it is clear that it's principles and foundation must be detected in existence philosophy of Iran as a country. So studding Iranian architecture is impossible with out studding Iranian literal, social, national, religious and cultural issues. At follow some of these hypothesis will be pointed out:

- Humanity means exerting relationship between human limbs and building's elements.
- Avoiding frivolity: in Iran's architecture it used to be mentioned to avoid jobs frivolity and avoid extravagance as much as possible.

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- Nyaresh: Nyaresh is static knowledge, technical knowledge of building and knowledge of materials.

- Autarky: Iranian architectures used to try to prepare their needed ideas and materials from closest places. So they have been not dependent on other districts and have been autarkic.

- Introversion: one of Iranian beliefs have been saving private and it's reverence and also Iranians contentedness which have made Iranians introversion (Pirnia, 1392).

Dr Hojat has mentioned most outstanding traditional Iranian architecture's specialization as workability, durability, beauty and Haigh ranking.

Work ability: this specialization prepares most proper atmosphere for human living.

- Beauty: this element refers to beautifulness of Iranian architecture.

Solidity: solidity purpose is integrating and giving a unique sole to structure and atmosphere. So architecture plan causes internal piece, internal happiness and internal carefulness of residents.

Sublime: architecture in past used to rely on sublime of human. So beauty, workability and autarky have been needed to make a domicile suitable for mankind who are representative of god on the earth. In this attitude architecture had got saintliness.

Dr. Vafamehr states 7 specializations for traditional Iranian architecture as follow:

-intelligent architecture

-Iranian architectures relies on human demands

-Iranian architecture uses least facilities and materials to achieve could prepare best supplementations.

-Iranian architectures have utilized honesty purity, beauty and especially contentedness which have root in Iranian culture.

-Traditional architects used to solve problems with multi-dimensional solutions but nowadays architects solve problems with one dimensional solution.

-Traditional architectures first pay attention to whole and derive munities from bulk. But nowadays architectures mostly pay attention to travails and munities. So usually it is not perfect.

Specializations of Traditional architecture of Babol city is not different by the stated principle and all principles of traditional Iranian architecture was exerted in it. So, traditional Babol architecture was suitable for this district's climate.

Different Validation Methods for Questionnaire

Different Methods for Assessing Questionnaire

Three different methods are utilized in order to asses this article:

Kind analysis, validation and making lawful

Statistical Universe and Sampling Method

Statistical universe in this research includes all the Babol citizens. According to cyclopean studies, in order to define number of samples in regression studies number of questions must be multiplied at least at 3 and at maximum at 5. In this study this method is utilized exactly. Random cluster sampling method, exerting equal size cluster from all over the statistical universe, because sample statistical universe didn't belong to a large city and didn't has many sublevels. Statistical universe of this program has got 135 members of Babol citizens including 28 different kinds. Eventually information about 135 persons have been analyzed, using rotation and remix, analyzing main components methods and analyzing main factors, by a software. Calculated results have got a value about 0.919 which is more than 0.6 and proves efficient performance of sampling.

Utilized Tools in Research

"Recognizing culture role in residential buildings of Babol city" questionnaire is used in this paper. This questionnaire includes 28 different kinds which is classified in 5 ranking including very low to very high. Ranking is done from 5 to 1 in order to make responses quantitative and effect of each factor is calculated separately. Options (1, 2, 3, 4, 5, 6, 7) refer to piece and safety, options (8, 9, 10, 11, 12, 13, 14) refer to limitation and veil, options (15, 16) unfavorable tall buildings, options (17, 18) neighbor being right, options (19, 20, 21, 22) refer to contentment, options (23, 24) refer to trust and obedient, options (26, 25)

Research Article

refer to humbleness at home and options (27, 28) asses ranking and eventually every options totally asses designing patterns in contemporary domiciles. Discovering analysis has been done

Confirming Factor Analysis

Resulted factors from analyses of discovering factor have been analyzed by using discovering confirming factor analysis by using AMUS software. Confirming factor analysis is a method in which parameters and assumption's tests are estimated according to number of infrastructural factors and relationship between set of variables. In this method researchers define compatibility of data with a defined factor structure. So confirm for an assumed factor structure could be derived by using this method. So a confirm for an assumed factor structure could be resulted by using this method. In confirm factor method value of research's data is confirmed and compared with the set of assumed data. In this research linear root index, goodness of curve fit index (IFG), comparative curve fitting index (IFC), goodness comparative curve fitting index (IFGA), root of mean error of squared estimation (AESMR) and root mean square residuals (RMR) are verified. Researchers have assessed designed model with factor analysis method because discovering factor analysis has been exerted on the resulted data from construction, validation and making lawful "culture's role in planning residential buildings of Babol city" questionnaire and absorbing human contribution factors has been defined.

Table 2

Fee square	Degree of Freedom	of Curve Fitting Pattern Index	Index of Root of Increment of Following Allowable Mean Error
34.1132	134	0.851	0.869 0.087 0.011

Introduction of Factors

There are many different effective components for planning domiciles in Babol city. Only 13 most important factors among them are mentioned as follow: 1- piece and safety 2- intimate and veil 3- unfavorable tall height 4- neighborhood right 5- contentedness 6- obedience and putting trust on god 7- humbleness 8- ranking 9- lack overlooking 10- discipline 11- justice and equality 12- prohibiting harm and avoiding loss 13- effort and hopefulness. In the present project 13 mentioned factors among culture situation components, which are intended by experts and society in order to contribute society in planning pattern, have been recognized which aren't dependent from each other and are related to each other. In addition all of the questions of questionnaire asses planning situation in sight of experts and society generally from accept of planning domicile contemporize. Cronbach alpha has been calculated once for each question and another time for whole the questionnaire in order to validate the test. Table3 shows validation coefficients of factors and validation coefficients of questionnaire in whole.

Table 3

Alfa coefficients	Factors
0.76	Factor 1
0.97	Factor 2
0.971	Factor 3
0.947	Factor 4
0.963	Factor 5
0.911	Factor 6
0.897	Factor 7
0.953	Factor 8
0.983	Total scale

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Present study is about construction, validation and lawfulness of "culture's role in Babol city's residential building planning" questionnaire. This questioner includes 28 questions which could be exerted in form of personally and collective. Some different methods have been used in order to validate it and make it lawful. In lawful making some contents' lawful methods and also structure's lawful methods have been utilized. Also in structure's lawful method, discovering factor analysis has been used. According to factor analysis results 13 factors have been recognized all of which have been meaningful. In the present research first factor, piece, is mutual with third, fourth, fifth, sixth, seventh, eighth and twelfth factor and could confirm scientific architectural remarks and discoveries of John lang (2015), Morady and Amirkabirian (2002), Tavasoly and Naghizade (2004). John lang in architectural hypothesis creation suggests putting familiar and lovely elements in a familiar atmosphere as a way to bring piece and safeness filling in to domicile. Morady and Amirkabirian (2002) have discussed exerting ranking in architecture as a effective factors on piece and safety feelings. Tavasoly and Naghy Zade (2004) have suggested ranking in approach network, preparing facilities for public Monitoring as two methods for increasing safeness of homes, approaches and networks.

Second factor, veil and intimate: this factor is mutual with first, third, fourth, eighth and ninth factors. Mr Haerymazndarany (2009) has stated a system which separates private rooms from public rooms. Also he has referenced Noor and Ahzab verses of Quran mentioned some evidences about his hypothesis. Mr. Horemeli (1985) has stated about veil necessity of covering body from opposite sex.

Third factor is "unfavorable tall height" which is mutual with first, second, fourth, fifth, seventh, eighth, ninth and eleventh. Nahj al Fasahe which is a collection of hadiths from Shia's Imams includes some hadiths which state short height and compatible with climate issue. As it is proved nowadays short height causes good relationship with parameter in case of minimizing heat loss.

Fourth factor is "neighbor being right" which is mutual with first, second, third, ninth, eleventh and twelfth. In Torah Necessity of paying attention to neighbor's rights and keeping him safe from dangers is stated in some verses. Also in 10 commandments which are significantly important for Jews it is remarked that "don't be greedy about your Neighbor's family and possession"

Fifth factor is contentedness which is mutual with first, third, seventh, eighth and twelfth factors. Contentedness means most favorable grade of utilization of available resources and managing personal and social life according to existed facilities (Naghyzade, 2002). In this method of architecture materials are used according to contentedness principle and their workability and power are utilized at maximum.

Sixth factor is obedience and putting trust on god. Putting trust on god means relying on god.

Seventh factor is "humbleness" which has been emphasized in Araf verse of Quran and Shia's Imams remarks. This factor is mutual with first, third, fourth, ninth and twelfth factors.

Interiority means outstanding advantage of interior design of domicile comparing with outside of domicile, compatible design with perimeter nature, simplicity (simplicity is an important evidence for humbleness of Iranian traditional architecture. In Iranian Traditional Islamic architecture, no building wanted to show off), using indigene material and minimizing ornamentation.

Eight factor is "ranking" which is mutual with first, second, third, fourth, ninth and twelfth factors. Naghyzade states that ranking in each domain is defined by surfaces and space volumes and distinct from other domain by its especial identity. These surfaces, volumes and spaces could be defined as a domain because they can connect two main domain and define boarders and limitation of domains and prepare facilities of connecting two main domain and destroy possibility of integrated connection of different domains.

Ninth factor of "prohibition of overlooking" which is mutual with first, second, third, fourth, seventh and eighth factors. And Hojarat verse of Quran and in hadiths of Imam Sadegh and Imam Mohamad Bagher "prohibition of overlooking" and its related issues are pointed out. Sight controlling and avoiding overlooking, paying attention to limitations according to social beliefs, codification of some laws to minimize number of buildings which residence could look directly over, some items which could improve rate of piece and saltiness in society.

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Tenth factor is discipline, according to Gestalt: hypothesis a disciplined set is set that avoid contradict self-reduction and social contrasts. Eleventh factor is "equality and justice" which is mutual with first, third, fourth, seventh, eighth and twelfth. Araf, Maede, Al-Nesa and Hojarat verses of Quran have pointed out this subject. In Quran equality and justice are described as follow: Quran says that humans are equal in Humanness as a principle and equality in laws, administration of law and administration of commencements. According to this factor everybody must receive equally from social welt proportional to his capabilities or his workability and demands.

Prohibiting harming others and prohibiting suffering from loss, which is mutual with first, second, third, fourth, fifth, seventh, eighth, ninth, tenth, eleventh, is introduced as a factor that is verified in Baghare and Araf verses of Quran. Prohibiting harm to others can reflect in architecture as avoiding manners of room planning that bother piece and privacy of persons. In Islam every activity which bother others, even a little bit, is sin.

Thirtieth factor is "hope and effort". This factor states some porpoises of symbolic performances of nonstructural elements like directing main entrance of building to Macca. Even there have been a metaphoric synchronization between time of leaving home and sun rise.

Discussion and Conclusion

As an answer to the question that asks about lawful being of the lawfulness, construction and validation of this questionnaire? Verification and analyzing the stochastically data show that this questionnaire has got good lawfulness for the mentioned stochastic universe. In this research for the stochastic universe lawfulness of factor analysis and lawfulness generally has been calculated: verifications in this research showed high grade of reliability for planning in stochastic universe of this research. Eventually it could be deducted that this questionnaire has a good grade of lawfulness and reliability and results of factor analysis could asses position of planning in contemporizing properly or in the other word by obtaining society's ideas about pattern of planning with the introduced factors could help to asses amount of social agreement and hence could help to asses amount of contemporary making success. It should be mentioned that present research is pioneer in this case.

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