Available online at www.ijapas.ir

International Journal of Applied Arts Studies

IJAPAS 9(3) (2024) 07–34

The Role of Age in Understanding the Components of Tradition and Modernism in University Buildings in Tehran

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Received 02 March 2024; revised 29 April 2024; accepted 18 July 2024

Research Article

Abstract

Tradition and modernism as a concept also follow the same thing, but there may be differences in the effect of each indicator due to the difference of groups in the type of view of the past and the future. This research was conducted with the aim of investigating the components of the modernism tradition in the age groups (20-30), (30-40), (40-50) and (50-60). For this purpose, first, the components in the tradition of modernism are extracted from the review literature. Then to verify them, Kendall's w coefficient is used. In the next step, a questionnaire based on the Likert scale is distributed among space users. The research method in this research is a qualitative and quantitative combination. The results show that among the age groups of 20-30 and 30-40, the correlation drops to an incredible extent, which can almost be said that they do not fully explain each other's behavior. In the age groups of 20-30 and 50-60, the correlation value is low. In the age group of 30-40 and 40-50, the correlation value is low. In the age group of 30-40 and 50-60, the value of correlations has increased slightly. But the correlation between the indices of tradition and modernism obtained in the age groups of 40-50 and 60-50 is high. According to the fit obtained

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The present article is extracted from the doctoral dissertation of the first author entitled "Comparative Study of Contemporary Architecture of University Spaces in Iran and India", which was done under the guidance of the second author and the advice of the third and fourth authors at the Faculty of Architecture and Urban Planning of Islamic Azad University, Central Tehran Branch.

Publisher: Islamic Azad University, Yazd Branch.

from the step-by-step regression model of age groups, due to the increase in data, only age groups (50-60 and 50-40) and (20-30 and 40-30) can predict each other.

Keywords: Tradition; Modernim; Age Group; University Buildings.

1. Introduction

During the formation of modern Iran during the first Pahlavi period and the beginning of reforms in various administrative, economic and social fields, as well as higher education in the country, the development of educational centers and institutions was placed as one of the important agenda. The main pillars of this transformation in Iran's university system were established in 1934 with the establishment of Tehran University as an important neighborhood in the contemporary history of Iran and a starting point for the development of new sciences and the process of modernization of Iranian society and society (Shahbazi et al., 2017: 43). Economic and cultural necessity in the second Pahlavi period, planning policies for the growth of universities, colleges and higher education centers were followed with considerable intensity and speed (Behnam, 2013: 102).

Many factors that caused fundamental changes in Iran's architecture in different political, cultural, social, economic, etc. fields in the contemporary era, left their effects in the form of physical and sometimes structural changes in public buildings. that the architecture of universities was not exempted from this; The prevailing cultural conditions and the spirit of the times, the dominant architectural trends of the day, the attitudes, working methods and experiences of architects, motivations and goals, etc., are among the factors influencing the formation of universities with different architectural patterns and orientations. Emerging modernity in Pahlavi, Iran had significant achievements in various fields including science and education. But following its transformation, it created a kind of break that emerges from traditional architecture to modern architecture and caused the emergence of a new body that is not compatible with Iranian architecture in the bed of emerging buildings, the faculties were in the universities. Also, paying attention to modernity and preserving the values of traditional architecture created buildings that used the indicators of tradition and modernism in different ways in the body of its spaces. These indicators seem to have different effects in associating this concept in different age groups. Tradition and Modernism It seems that the concept of the passage of time and the speed of development of communication has made architecture as a global process and this can have a significant impact on the understanding of body spaces as a phenomenon of tradition or modernism. This research aims to examine the components of Tradition and modernism in 4 age groups and presenting the correlation between them tries to answer the question that which of the age groups has a high correlation between the understanding of the components of tradition and modernism and at what age this understanding of space decreases.

2. Research Background

In 2000, Naghizadeh came to this conclusion in an article entitled the relationship between the identity of "Iranian architectural tradition" and "modernism" and "modernism" in order to provide an insight into determining the boundaries and limits of how different views and ideas influence the past and contemporary architecture of Iran. that the architectural tradition of Iran is based on the values of Iranian culture, which itself is inspired by the Islamic worldview (Naghizadeh, 2000: 81).

In 2007, Şerefhanoğlu Sözen and Gedik, in an article entitled "Evaluation of traditional architecture in terms of the body of the building: the old house of Diyar Bakr" emphasized the importance of the characteristics of traditional buildings in terms of energy efficient design, providing suitable buildings for the environment. Common examples of vernacular architecture are to represent local climate conditions, materials, techniques, building systems and lifestyles, traditions and economy, and people's living conditions. The best and most examples are residential. Usually, contemporary buildings are the same regardless of the weather and the region in which they are built, and favorable conditions are created by technology and high energy consumption. It is to create favorable conditions for the residents with the lowest energy consumption.

In 2013, in an article entitled Tradition, Art, Architecture, with the aim of revitalizing architecture through tradition, Akrami came to the conclusion that the neglect of the main concept of tradition in the collective mind of society, especially in the eyes of academics and art owners, has caused the decline of traditional society and distortion of the concept of tradition. Is. In this sense, reviving the true concept of tradition in the current crisis-stricken world, and especially in the disjointed world of the East, seems necessary and vital (Akrami, 2004: 144).

Pourmand and Khazaei in 2014, in an article entitled Manifestation of Tradition in Today's Architecture, while briefly examining the common features of the content and form expression of traditional Iranian architecture and how to use them in today's Iranian architecture, came to the conclusion that there are glimmers of hope in a fundamental transformation in The field of architecture has emerged and the preservation of traditional principles can be seen in the modern works of Iran today (Pourmand and Khazaei, 2014: 51).

Hamid Majdi, Jamal al-Din Sohaili in an article titled "Emergence of Modernism in Turkish Architecture and Confrontation with National Architectural Sectors" first studied the fields of national identity crisis and confrontation with Western modernism in Turkey's social and political conditions and by examining the areas of influence of western modernism ideas in The Ottoman Empire has come to the conclusion that the contemporary architecture of Turkey has always been affected by the struggle between the influence of modernity and national trends (Majdi, Soheili, 2011: 57, 51).

Pourahmad et al. in 2011, an article entitled "The Effect of Modernism on the Spatial-Physical Development of Iranian-Islamic Cities (The Example of Tehran)" investigated and analyzed the process of formation and physical-spatial changes of the Iranian-Islamic city with an emphasis on the city of Tehran and how They discussed the organization and influence of urban elements from various factors, especially modernism. In addition to the physical shape and physical characteristics, the old textures along with the inner-city elements and spaces have hidden special cultural, social, and historical values. Following the content and physical changes of the cities, a huge population poured into the cities without any plan, it created the physical and spatial development of Iranian cities, especially the city of Tehran, and in fact, modernism as a new model of urban development first led to the change of the shape of the city and then to the change in the people interested.

Mahmoud Abedi and Hossein Sultanzadeh in an article entitled Interaction between tradition and modernity in the contemporary architecture of the Persian Gulf countries: a case study of the United Arab Emirates with the aim of analyzing the interaction of tradition and modernity in contemporary architecture and the relationship between native and cultural aspects, with a comparative analysis of 8 examples for this result It has been found that in the United Arab Emirates, most of the forms do not represent the culture of the Emirates and lack designs with symbolic form in relation to the

place, which weakens the relationship between tradition and modernism (Abedi, Soltanzadeh, 2014).

In 2015, Parsaee et al., in the article "Research on the Former British Consulate as the first example of modern architecture in Iran", first introduced and explored the British Consulate Hall (Sabze Abad building). The results indicate that there were changes in the situation of Bushehr, especially during the Qajar period, when this city faced changes and reforms, these changes were manifested in various political, economic, and architectural fields, and the building of Sabz Abad was the result of these changes. By analyzing the architectural mechanism, this issue has shown that the Sabzabad building did not follow the traditions of Bushehr and had a modern approach, which has very few similarities with the local features of the region, and this building can be one of the first modern buildings in Iran.

In 2014, Agboola and Zango in the article "Development of Traditional Architecture in Nigeria: A Case Study of the Structure of USA Houses" identified the moderating and determining factors as the main issues affecting the development of traditional architecture, including knowledge of local materials, construction methods, existing new methods, social factors. , cultural and environmental factors have helped and architects have been asked to put their efforts into traditional design and use modern construction techniques; This is through the use of low-cost building materials such as wood, stone, and soil and the design principles of privacy, space, and comfort in traditional Nigerian architecture.

In 2015, Rezaei and Hanachi, in an article entitled "Oudjalan Neighborhood, Urban Heritage in the Confrontation between Tradition and Modernity", identified the obstacles to the revitalization of the Oudjalan neighborhood. They concluded that the obstacles in the way of revitalizing Odlajan neighborhood are cultural and social rather than economic, technical, and political, which consists of citizens' and residents' apathy towards old textures and buildings, in other words, the process Modernization, which started in Iran at the end of the Qajar period, was accompanied by the rejection of tradition and history, one of the results of which is the community's disinterest in heritage and a permanent desire for various members. Regarding the historical values of tradition and heritage, it is necessary to carry out extensive studies.

In 2016, in an article titled "Comparative Study of Architecture and Content of Iranian Schools from the Traditional to Modern Period", Sepideh al-Muhammiq et al. compared the changes in the architecture and content of schools and the relationship between the two in the traditional, transitional, and modern eras of Iran (Alaghemand, 2016: 5).

In 2017, in an article titled "Native and Contemporary Architecture, Aswan's Construction Developments in Egypt", Bayoumi researched and analyzed the construction of the Nouvian environment. The results of the research show that native architecture is the result of many aspects of the social and cultural environment and economic values, which is unique and dependent on tradition, and despite the new words of architecture in architecture, new technologies such as materials were developed, and in rural architecture, everything existed stably, not instability. There was an economy and not a lack of water and the lack of it, the cycle should have been used to create a new city and new buildings, which has also been ignored.

Baseti in 2017, in an article entitled "The relationship between tradition and modernism in the formation of the fabric of cities with emphasis on cultural dimensions" investigated the relationship between tradition and modernity in the formation of the architecture of the Qajar era in the years 1918-1965 AH. The results indicated that society has faced many problems in understanding and accepting the principles of modernity, especially in the field of culture, and has been caught in many challenges that it has not succeeded in getting rid of, and this fact can be seen at the

community level. Obviously, with the lack of such a plan, society unconsciously takes advantage of the culture of modernity and uses it without knowing its exact nature and function.

Yousef and Al Haroun in an article titled; The perception of the yard in Kuwait between tradition and modernity was discussed. The yard is a multi-purpose open space where families gather, and in the 1950s, it was subjected to rapid and unprecedented urbanization. In this study, the yard is used as a means to investigate a number of socio-cultural, economic, political aspects and move towards the modernity of the domestic environment, which is far from the type and culture in the society and how people deal with the concepts. Traditionalism and modernity come to the conclusion that there is a connection between past realities and current perceptions about the yard (Yousef, 2019: 2).

Xiaoxim. Zhao et al. in an article entitled: From indigenous to semi-native; A case study of the display of vernacular architecture and adaptability in Chinese village revitalization deals with the fact that vernacular architecture is considered as a heritage that should be protected because it is changing day by day due to the trend of villagers towards modern architecture. The purpose of this study is to present the term new vernacular (buildings with vernacular appearance and contemporary execution methods and materials) and semi vernacular (reuse or renovation of vernacular buildings in combination with new traditional and traditional building techniques) in order to differentiate between two types of vernacular villages. Is. As a result, a new definition of new terms arises (Xiaooxim, 2019: 1121).

Mannan et al. in an article titled: I.M.Pei Islamic Museums of Qatar and Tradition and Modern Development in Islamic Architecture aims to improve methods of evaluating efforts in the development of traditional architecture in the context of modern architecture. With the expansion and connection with various nations in the Middle East, modernization makes differences compared to the ruling traditions, the buildings in the vicinity of the museum have differences with the museum itself. But on the surface, it has commonalities, but after analysis, it is concluded that it has many differences with the original topic of tradition (Mannan, 2019: 271).

Alcinador and Coq-Huelva in an article titled; Restoration, native architecture and invented traditions with the aim of analyzing the role of rehabilitation of native architecture and mainly social groups with a high level of territorial dynamics in Catolinia. This issue is of particular importance because the introduced place of Empor Dant near Catalonia has a social and political position very similar to the center of Catalonia. This article discusses various methods in reclaiming and restoring different traditions in the new world with It has the benefit of contemporary techniques and it comes to the conclusion that social sciences can be the most important factor in rehabilitation to promote existing traditions and adapt them to modern architecture (Alcindor and Coq-Huelva, 2019: 2).

In 2020, Ataei Hamedani, in an article entitled Leaping of tradition through modernity in contemporary Chinese and Indian architecture, looked for the quality of the relationship between the concepts of tradition and modernism in Chinese and Indian architecture and concluded that the goal of an architect in designing is to create prosperity and Comfort is for people of every region and it doesn't matter which one can be used (Ataei Hamedani, 2020: 125).

3. Theoretical Foundations

3.1. Tradition and Modernism in the Context of Contemporary Iranian Architecture

The Naseri period is one of the most important cultural milestones in Iran (Saremi, 1995: 59). From the middle of the Qajar era, a fundamental change took place in the architecture of Iran, in

such a way that the source of inspiration, the structure of design ideas and architectural form, and subsequently, the materials and the method of building construction, became oriented towards the Western world and Iran's several thousand-year-old architectures was pushed back (Qabadian, 2013: 123). The approach to the West in the course of contemporary architecture is the fruit of a cultural approach, and the course of modern architecture in Iran is the result of the context that was created based on this approach and formed on its foundation. The collapse of the Ottoman Empire, the sending of Iranian students to Europe, the establishment of Dar al-Funun, the change of social customs and benefiting from the industrial achievements of the West and other achievements of the Western civilization was a solution that no one could ignore. Architecture and urban planning were exposed to substantive changes as a result of this cultural trend (Mokhtari-Taleghani, 2010: 235). Although the main point of changes in the contemporary architecture and urban planning of Iran was founded in the Qajar period, but the turning point of these changes and developments comprehensively came to the fore in the first Pahlavi period. In this period, the process of developments gained special momentum, so that the first Pahlavi period can be called as the founding period of modern architecture in Iran (Baman, 2012: 1).

The beginning of modern architecture in Iran (as the style of the school of architectural modernism) began in a relatively active way at the end of the first Pahlavi period. In fact, avoiding history and negating the use of historical and classical architectural signs and forms was an attitude that modern architecture in the West is part of the principles. The same thing that happened later in the contemporary architecture of Iran, and modern architecture tried to completely separate from the past and from the traditions in architecture (Kiani, 2012: 8). In the second Pahlavi period, under the influence of Western modern architecture is the dominant and influential current of modern architecture (Bani Massoud, 2013: 267) and its distinctive features, as in the past, are attention to the outside and adherence to a theory that promotes universality and standardization of the way of life, including architecture (Naghizadeh, 2000: 1987). The establishment of Tehran University is considered to be the beginning of the formation and establishment of the architecture education system in the country, and it has a strong influence on the transfer of Western art - modern art - this faculty is one of the most important institutions that was able to 1970 solar to cultivate the most expert and influential architects.

Parallel to the flow of modern architecture, between the 1960s and 1970s, modern architecture is formed with the trend of localism and historicism. In these decades, architects tried to create a kind of integration between modernism and tradition in architecture, so that the created space has an Iranian identity (Bani Masoud, 2012: 267). At this time, a number of prominent architects such as Hoshang Sihun, Nader Ardalan, Kamran Diba, Hossein Amanat, Koresh Farzami, Ali Sardar Afkhami and Gholamreza Farzanmehr designed important and valuable buildings in which these two completely different architectures were combined in an innovative and beautiful way. accepted. In this way, even before the postmodern architecture spread in the West and finally in other countries, a kind of modern Iranian architecture that paid attention to the civilization, culture and history of Iran grew in our country. In this period, the traditional forms and architecture of Iran's past were not used as ornaments for modern buildings, but the architect from the beginning of the design tried to integrate and display both aspects of the native culture of Iran and the global characteristics of the modern age in the physical body of the building. This article is contrary to the form of new buildings, which are either completely modern or completely traditional, or traditional designs are used as the design of modern buildings (Qabadian, 2007: 42-43).

After the victory of the Islamic revolution in Iran, the Iranian society faced comprehensive changes in all aspects of life, and religious traditions and values were emphasized. In architecture, it

changed under the influence of the ideas and works of the second Pahlavi period and the familiarity of architects with the postmodern movements of the nineties. In this way, the eight tendencies of architecture after the revolution - revival of the traditional architecture of Iran, vernacularism, tendency towards Western architectural styles, continuation of the topics of transcendental modern architecture, integration of concepts and elements of Iranian architecture with technology and modern architecture, tendency towards superior technology, the tendency towards neomodern architecture and computer architecture was formed (Hamze Nejad and Radmehr, 2016: 150), and the trend towards modern architecture and its integration with tradition continues.

3.2. Characteristics of Tradition in Architecture

Sunnah in Dehkhoda culture means way and method - method and law - rite - custom and institution - duty - obligatory - necessary - rules of religion and Sharia, mustahab (against duty) - the religion of the congregation (against Shia - Char Yari) and also against Heresy has come. According to Nazim-ul-Itabaa: "The so-called jurisprudence is what the Prophet and the Imams of Hoda, may God bless them, have acted upon, unless they have abandoned each other once or twice in their lifetime." In the opinion of Dr. Seyed Hossein Nasr: Sunnah emphasizes the aspect of continuity and transmission, and religion emphasizes revelation and receiving a message from a divine origin. On the other hand, both are essentially one reality. Tradition in Webster's culture means the non-written transmission of beliefs and customs from one generation to the next (Hujjat, 2013: 19-20). In terms of its lexical root, the word "Tradition" is related to transmission, and in its scope of meaning, it includes the concept of transmission of knowledge, customs, techniques, laws, templates and many other elements that have a written and written nature (Nasr, 2001: 135).

When the tradition in Iranian architecture is mentioned, it means the forms, combinations, routines and decorations that are accepted as characteristics of Iranian architecture and are always in important, large and designed buildings and especially It has been used in ritual and religious buildings and in addition to climatic, material, environmental or functional reasons, it also has a cultural aspect and has been noted as a feature, sign and in some cases a symbol (Soltanzadeh, 2004: 141).

The most important terms used in the definition of this architecture are: historical architecture, old architecture, authentic architecture, architecture with identity, insider architecture, meaningful architecture, native architecture and local architecture; By examining the common synonyms, it can be said that traditional architecture has four times: time, place, culture and meaning, and the three basic characteristics of this architecture can be: 1- Traditional architecture has patterns that are the crystallization of society's culture, in The length of time has been continued and transferred from hand to hand. 2-Traditional architecture is related to sacred matter and is a valuable and meaningful type of architecture. 3- Traditional architecture is the product of a traditional method in design and construction; Danst (Sadeghi Pi, 2018: 8).

Indicators indicate the most general, most important and main perceptions of an audience from the characteristics of an architecture and reveal the most important traits in the works of an architecture. The indicators are the alphabet of the space design in every architecture and are the basis and standard of cleanliness and separation of different architectures from each other. Although it is possible and perhaps obvious that each of the characteristics of an architecture is used in other architectures, but as a rule, the set of characteristics of each architecture should be able to distinguish it from other architectures. By carefully planning the buildings and its different levels in each architecture, one can get more characteristics of that architecture and in this way provide more precise means to distinguish it from other architectures (Haji Ghasemi, 2011: 8).

Table 1 Opinions of some experts regarding the characteristics of traditional Iranian Architecture (Source: Author)

Characteristics of Iranian architecture	Opinion
People-loving, self-sufficiency, avoiding futility, shyness and introversion (Hashemi, 1995, 3)	**Mohammad Karim Pirnia**
Climatic agreement, direction of establishment, sanctity and privacy, interior and exterior, introversion, spatial hierarchy, priority of Yazdani sense over the sense of beauty and goodness (same)	**Latif Abul Ghasemi**
Symbolic vision, environmental adaptation, exemplary model of Garden of Heaven, positive spatial systems, complementarity, human scale and social participation, innovation (Ibid.)	**Nader Ardalan**
Reflecting the ideas and values of the time with the help of visual size-geometric signs, the connection between the cosmic order and the earthly order, the centrality and having four sides of the earth, respect for light, the reflection of ideas and values in typology and architectural morphology, urban links (ibid.)	**Mohammad Amin Mirfendersky**
Legibility and ambiguity, connection with the system of creation with the help of geometry, introversion, complementary and coordinating role of decorations, obvious coordination of form and function, reflection of design lines on the structure, climatic compatibility, reflection of function in the spirit of the building, acceptance, mobility and Slippery and lightness, storytelling (the same)	**Yaqoob Daneshdoost**
Geometric diversity and richness, spatial and temporal hierarchy, human scale, adaptation to the environment, empathy with nature, unity in multiplicity (same)	**Darab Diba**
Inducing a sense of unity with the help of rhythm, repetition, order and geometry tools, the completeness of the part while playing a role in the whole, introversion and the difference between the interior and exterior space affected by the climate and respect for the nobility, the absence of excess of beauty in the function, the transcendence of the function from meeting normal needs (same)	**Hossein Sheikh Zainuddin**
Simplicity and clarity, balanced and proportionate and mutual and balanced combination of mass and space (same)	**Mahmoud Tavasli**
Application of coatings (same)	**Ali Akbar Sarmi**
Transparency (permanent movement from material quality to spiritual quality and as a result the reduction of matter and increase of space), noble humility through the horizontal stretching of the building, happiness resulting from a positive worldview (the same)	**Hadi dies**
The definition of space, either single or multiple, according to the degree of coverage or degree of enclosure, with how the floor, ceiling and wall are clearly realized, in the form of open, covered and closed spaces; The establishment of closed and covered space groups and walls around the open space through communication, connection, expansion, sequence, interference and continuity of space, fluidity and buoyancy of space, multi-valued spaces, mutual dependence of structure and spatial organization; architectural response to nature and climate; compliance of space with human movements and settlements; Light, perspective and direction. (same)	**Mohammadreza Haeri**
Inventing patterns of space components such as porches and domes; Inventing a four-evan plan as an evolution of the use of porches and domes, inventing and evolving four-sided, four-row, eight-heaven patterns, inventing decorations with brickwork, tiling, plastering, carving, and moqrans. (same)	**Hossein Sultanzadeh**
Centralization, centralization, symmetry in centripetal architecture, spatial classification, organization of movement in space, fluidity of space (Noghrekar, 2017, 604-612)	**Abdul Hamid silversmith**
privacy and seclusion (inward tendency, connection between inside and outside), crystalline order (purity and perfection of forms, central order, emphasis on axis and direction, symmetry, repetition), gem inside (geometry of applications), taropod Hidden (hidden geometry of Islamic buildings), soil and chemistry (materials of traditional Iranian architecture) and Naqsh Ajab (geometric and plant motifs), voice of love (color in Islamic architecture), kalk khayalangiz (presence of line in Islamic	**Kambyz Haji Qasmi and Kambyz Navaei**

architecture), in Golestan Khyal (design of open spaces). (Navaei and Haji Ghasemi, 2011)	
Interior architecture, architecture of courtyards, architecture of connecting open and closed spaces, architecture of semi-open spaces, architecture with full stories, architecture of order and neatness, architecture of dignity and moderation, architecture of openness and serenity, architecture of aimless space, architecture Easy and restrained, architecture of diversity and harmony, architecture of ceilings, architecture of sophistication and elegance, architecture of pattern and color, architecture of similarity of part and whole, architecture that fosters light, architecture of coexistence with water, architecture with lines, poetic architecture, architecture peace of mind (Haji Ghasemi, 2013).	**Cambyz Haji-Qasmi**

3.3. Features of Modernism in Architecture

The modern word Modernus was first coined by the Romans in the 6th century AD from the word Modo meaning "newly" and the word modernity was first used by "Baudelaire" in 1863 in an article about Constantin Guise titled "The Painter of Modern Life" (Jahanbeglu, 1995: 49-50). The term Modernism has been used as a symbol of new ideas and ways that have replaced traditional ideas and ways and has covered all aspects and fields of the individual and social life of Western man, especially the aspects related to religion, religious knowledge, art and beauty (Tavakoli Kazeruni et al., 2022). In its identification of modernism, the comprehensive culture of political science states that modernism or modernism is an attempt to harmonize traditional institutions with the progress of science and civilization, that modernism is the external manifestations of the new western civilization, and modernity is its internal intellectual, philosophical and cultural elements (Malleksabet and Sakenyandehkordi, 2022). And it has a series of basic concepts that are related to each other. Modernity is said to be an age in which man, as the subject of identification and in a way, turns the foundation of the whole world and man into his epistemic model and authority, in this human age, the basis of everything is placed at the service of mankind (Aghajari, 2010: 35). This historical period began after the cultural renaissance in post-medieval Europe (Ahmadian, 2010, 101). But before it is a historical event, it is a philosophical point of view; which was historically formed late in the 18th century and was institutionalized with the Enlightenment thought, modernity acts as self-organizing and transformative actions in different strata and sections of society, (Noor Alizadeh and Jahangard, 2022), and now it has migrated to non-European areas and environments and to Modernity is a process that by elevating science to the status of a myth, it came to benefit greatly from science as the only way to happiness and called for the downgrading of the two principles of "prudence and progress" of the transition from tradition (Behnam, 2013: 25). The intellectual project of modernism, in a general and philosophical sense, that is, the ideal of individual sovereignty over the individual and social life of man, in other words, the main element of the intellectual and philosophical project of modernism is rationalism (Haji Ghasemi, 2013).

4. Evolution of Modern Architecture - in relation to its Drivers and Foundations - can be Traced in Four Periods

4.1. The First Period - Birth of Modern Architectural Components

This era, which begins under the influence of the industrial revolution, the weakening of feudalism and the economic system based on landholding, the emergence of labor societies and the rapid development of cities, as well as the discovery of new construction facilities, is the era of the

dispersion of modern architectural components. Because its structural, economic and cultural aspects are evolving and forming separately (Agboola and Zango Modi, 2014)

In this stage, which began in the 1760s according to Benevolo, although modern architecture has not yet taken a cultural-philosophical form, it is not accompanied by the eclectic thoughts of the day. Thoughts that are the result of the dead end of European traditional architecture - aimless returns to the past and the chaos of architecture and have been approved by some philosophers:

"Hegel tries to solve the hierarchy of different styles through dialectics. He considers these schools as a series of thesis, anti-thesis and synthesis, and as a school of eclecticism, he calls it the result of the clash of different styles. "Knows it, recommends it" (Bani Masoud, 2013).

4.2. The Second Period - Assimilation of Components

This era, which begins about a century after the beginning of the first era, is the era of convergence and alignment of components that were formed due to various causes and factors during a century, and each of them carries a corner and facet of modern architecture. they do "After each of the components are clearly defined, the need to organize them with each other emerges. When this need is implemented in the form of a work program, modern architecture as a means to Making thought into action is born" (Bemanian, 2015).

The second era of modern architecture is the era of convergence of industrial architecture and socialist architecture and the era of rejection of retrogressive and aristocratic architectures.

It was during this period that the French Academy announced in a statement in 1846 that the imitation of old styles was false and artificial.

4.3. The Third Period - Emergence of the Modern School

This era, which begins shortly after the beginning of the 20th century, is an era when architects and architecture make up for their backwardness from the socio-philosophical and technological developments of the time, and a perfect harmony between thought and architectural structure emerges. Modern architecture takes an ideological form, and architectural statements range from the simplest - such as: "Decoration is a crime" by Adolf Loos and "the less, the better" by Mies Vander Rohe - to the most complex ones. Because the resolutions of Siam are published (Chakhrekh, 2004).

The architecture of this time understands the rationalist spirit of the 20th century and aligns itself with it. Benevolo considers this era as the stage of creating a bridge between theory and practice, and its date is 1919 AD, which is the year when Gropius opened the Weimar School. According to him: it is only at this time that we can talk about the modern movement in a special sense.

The establishment of the architecture school in Weimar meant that modern architecture found itself and became a modern school and has clear, definite and enforceable principles and rules that can - and should - be taught (Şerefhanoğlu Sözen and Gedik, 2007).

The great need for construction, after two world wars, gave modern architecture, which now claimed to be international, an opportunity to leave the motherland behind and spread throughout the world.

4.4. The Fourth Period - Collapse of the Modern School

When modern architecture named itself as a school and started compiling the dos and don'ts and demanded globalization; And when the goodness and badness of every work was measured by the standard of modern architecture and it was taught and imposed in architecture schools all over the

world - including Iran - as a definite and undisputed verdict, a new tradition was being formed. It was a tradition that had to be broken by the express decree of modernity, even though it has given itself the modern name.

At 3:32 p.m. on July 15, 1972, the Perth Ego residential complex in St. Louis, which was built based on Le Corbusier's idea (Machine for Life), was exploded with dynamite. A European tradition that was broken in America and then an American heresy (post-modern architecture), in pursuit of an illusory and brilliant identity and past, which of course did not last long (Tavakoli Kazeruni et al., 2022).

Just as the pre-modern era of eclecticism is given a philosophical face by philosophers such as Hegel and Moliere, the post-modern era, which first started with the rejection of modern dogma, is gradually put into a philosophical form; A format that considers the hard-earned unity and coherence of the modern school as narrow-minded, monopolistic and unipolar and demands a wide range of views and multi-polar thinking. We pay attention to the recommendations of this thinking from the language of "Michel Foucault": "Perform actions, thoughts and ideals by multiplying, combining and separating" and "collect what is positive, numerous and diverse". Prefer a form and what flows over stability and mobility arrangements to systems. Believe that what is productive does not remain stagnant and is always in motion" (Sadeghipi, 2018).

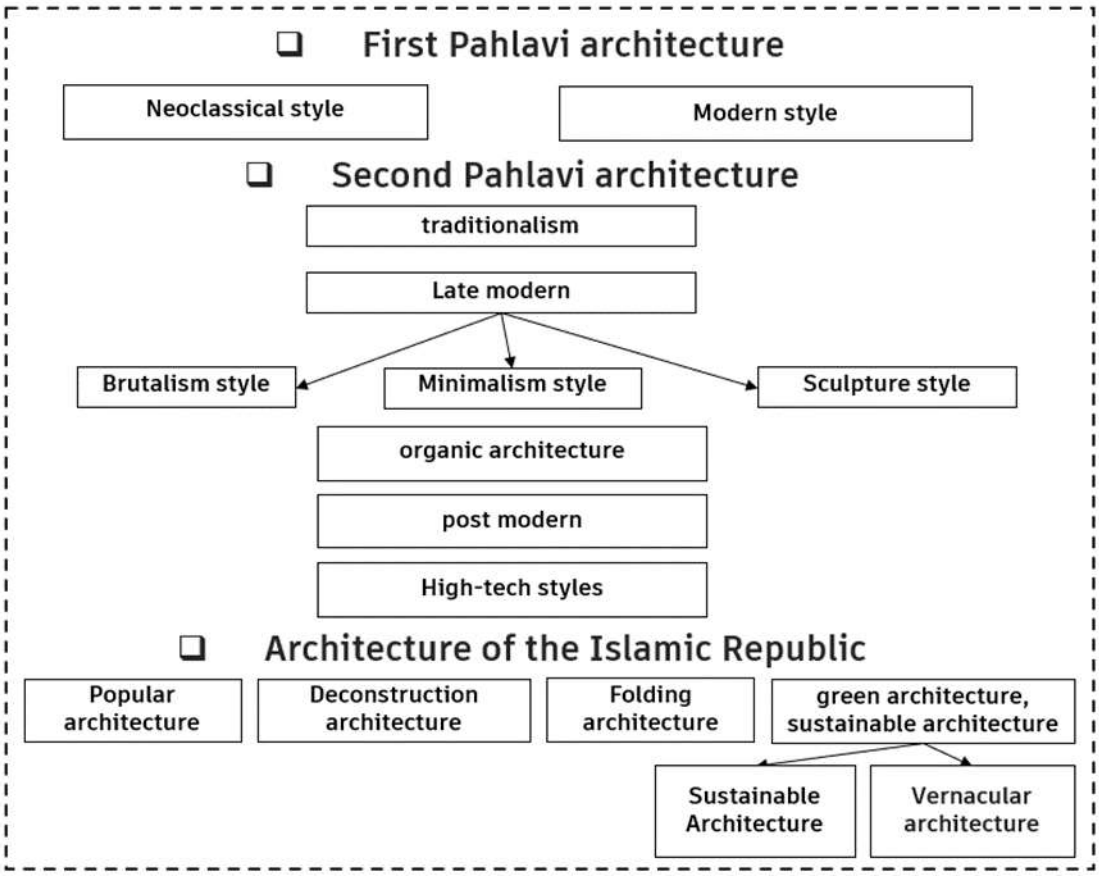


Fig 1 Architectural styles in contemporary Iranian architecture (Source: Author, 2024 adopted from Naghizadeh, 2019; Hojjat, 2013)

In this way, we are witnessing an eclecticism that is much wider, more equipped, more technical and more philosophical than the pre-modern eclecticism, and this time modern architecture is also playing alongside ancient architecture, classical architecture, Gothic architecture, oriental architecture, etc. Gird: Architecture of Modernity (Hojjat, 2013: 125-123).

The features of modern architecture that separate it from the ancient and traditional architecture are as follows:

Table 2 Characteristics of modern architecture from the perspective of foreign and Iranian thinkers

Characteristics of modern architecture		Theorist
Modern architecture was born with a change in the definition of architectural beauty. According to Peter Collins: ... all that is added to the Vitruvian Trinity - stability, efficiency and beauty - is that space is a positive architectural quality and this is the life word of modern architecture... (Jahanbeglu, 1995).		Peter Collins
Modern architecture is the architecture of breaking previous molds and frameworks. Refusal of the past as a source of inspiration for works of art and the use of technology in a pure way are among the topics of concern for modern architects.		Ernst Borden
Applying the industry with an aesthetic approach and expanding its facilities	Early modern	
Functionalism, paying attention to car aesthetics, urban issues, production and construction, etc.	Superior modern	
Getting rid of purely functional restrictions, expanding form-oriented features, dealing with symbolic analogies (Kamelnia, 2013: 82 and 83) and (Burden, 2002).	Late modern	
The language of modern architecture includes: the list of functions, non-perspective, anti-perspective, breaking the box, architectural structures; Membrane, sheath, space in time, building in the city (Kamelnia, 2013: 83).		Bruno Zoey
Removing decorations, completely abandoning history and historical elements, a plan free from the constraints of classical geometry, paying special attention to the function and function of the building, combining simple and pure geometric volumes such as cubes, cylinders and cones, etc., and finally building a building that can answer all Humans should be of different cultures and races (Saremi, 1995: 64).		Ali Akbar Sarmi
Renewing construction and design processes, rejecting traditional environments and following the principle of universality, following the same principles in construction, having a wise and practical order, using new materials of glass, concrete and steel, avoiding unnecessary decorations (Bani Masoud, 2012: 277).		Amir Bani Massoud
An end to historicist architecture and looking to the past, inventing new and emerging forms and emphasizing performance and compliance with new science and technology and observing geometric and mathematical proportions and optimism towards logical and scientific solutions (Qabadian, 2007: 178).		Vahid Qabadian
Modern architecture is based on innovation, depends on time and breaks the pattern. Philosophically, it is subject to modern thought and philosophy (modernity), benefits from advanced techniques and materials, and is constantly changing and evolving. Relying on new technologies, this architecture does not consider itself obliged to adapt to the conditions and use environmental resources and can be established in various environmental conditions. Modern architecture appears in the West as an original phenomenon and in other lands as an imported and alternative phenomenon (Hojjat, 2013: 104, 105, 108).		Isa Hojjat
Avoiding history, reduction based on the simplest elements, concentrating the spatial existence to the main core, uniformity of all components by reaching a simpler form, avoiding decorations and the use of even one unnecessary form, reaching forms to show the main function of the building, brevity, functionalism and extremes. in simplicity (Kiani, 2013: 160 and 161).		Mustafa Kayani

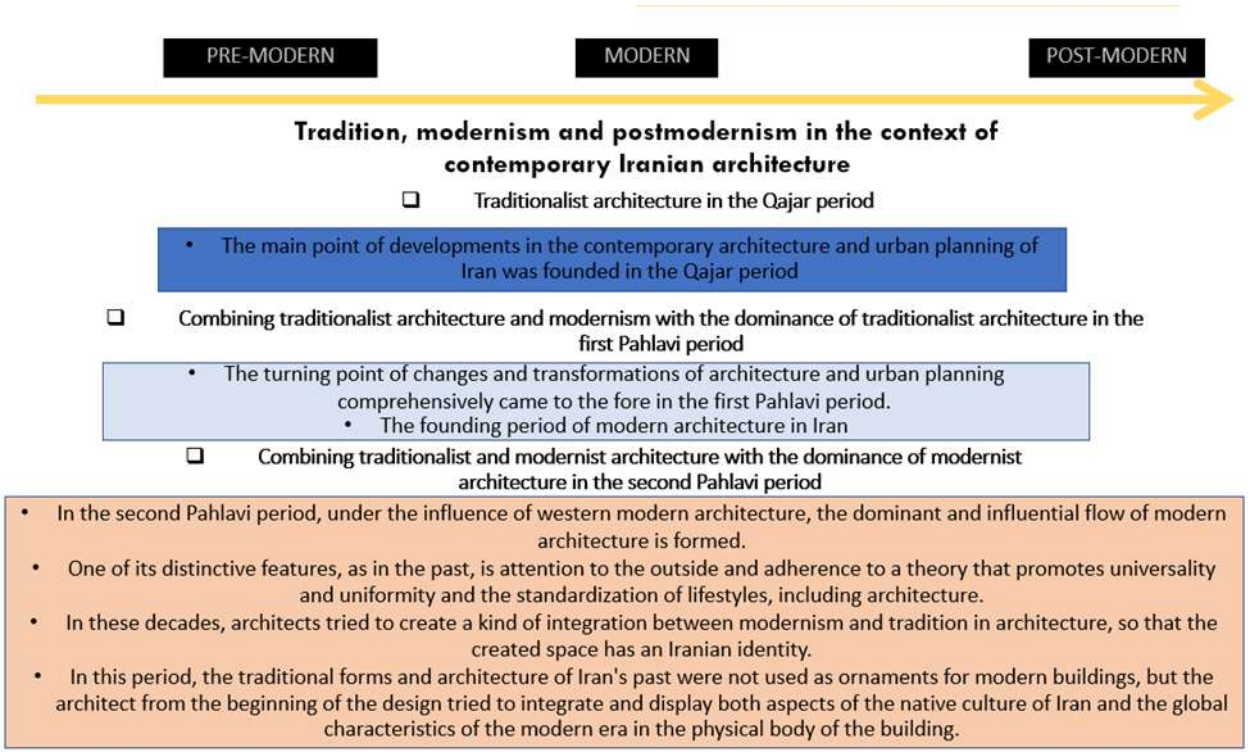


Fig 2 Contemporary architectural developments in Iran (Source: Author, 2024 adopted from Mozamiq, 2016)

5. Research Methodology

The present research method is fundamental-applied in terms of type, and in terms of the type of method, it has a nest-to-nest combination method. To answer the research questions, nest-to-nest research method of qualitative and quantitative type is used. After studying the theoretical foundations and research background, research variables are extracted. After extracting the variables and creating a conceptual framework, it is tried to refine the variables according to the studied samples. The first qualitative sampling of 30 experts who are completely familiar with the topic of tradition and modernism and their indicators in architecture as well as university buildings. Therefore, experts are first asked to confirm and then score the variables of tradition and modernism, and according to the obtained scores, the Kendall coefficient of each variable is calculated, and those whose values were less than 0.5 are eliminated due to non-compliance with the case samples. Then, in the quantitative stage, the variables of tradition and modernism obtained in the previous stage are compiled in the form of a questionnaire with a Likert scale and given to space users randomly. In quantitative sampling, based on the opinion of experts and the extracted variables, a closed questionnaire with five-point Likert answers was developed. The structure of the questionnaire includes questions related to the main question of the research; that is, to investigate the effect of each of the factors of tradition or modernism in university buildings of Tehran and in line with responding to it. In order to perform the calculations, a score of 5 for "very high impact" and a score of 1 for "very low impact" were considered by each expert. The sample size is considered as four clusters (20-30), (30-40), (40-50), (50-60). For more validation of the sample size, the upper limit of the Morgan table, which is 384 people, is used. To facilitate the analysis with inferential statistics, JMP software is used. Finally, based on the results, the correlation

between the variables was taken. The validity of the questionnaire using the CVI formula is 0.76 and the reliability using Cronbach's alpha is 0.75.

Conditions for entering the research	Number	Expert board
1- Aristocracy to tradition and modernism	10	Professors of architecture
2- Designing university buildings	8	Professors of landscape architecture
3- Academic faculty or with a doctorate degree	7	Urban design professors
4- aristocracy characterized by tradition and modernism	5	Urban planning professors
5- Aristocrats for future research Delphi	30	Total

6. Study Area

The range to be measured was selected by the board of experts in Tehran and the existing faculties in each national university. These universities have different campuses and faculties.

Table 3 Character of faculties of universities in Tehran

Number of faculties	Year of construction	city name	University name
10	1964	Tehran	Al-Zahra University
9	1978	Tehran	Tarbiat University of Shahid Rajaei
17	1981	Tehran	Tarbiat Modares University
24	1934	Tehran	University of Tehran
14	1918	Tehran	kharazmi University
5	1990	Tehran	Shahed University
19	1959	Tehran	Shahid Beheshti University
13	1984	Tehran	Allameh Tabatabaei University
15	1962	Tehran	Iran University of Science and Technology

7. Findings

7.1. Qualitative Findings

At this stage, the expert panel is asked to first study the variables extracted in theoretical bases and confirm if they are representative of tradition or modernism, then introduce the case examples of universities in Tehran and they are asked to the variables Give a score of 1 to 10 according to the presence or absence of the study area. In the next stage, the experts were dealt with as a separate panel and they were asked to rank the indicators selected by each panel. 50% of the experts were selected. Experts are asked to rate the agents on their board's edit lists; Average rank is calculated for each item. In each list, evaluation is done using W. Kendall and this continues until they reach a consensus and some of the variables of the first round are removed. The table below shows the calculated Kendall coefficient for each variable, as well as the excluded variables of the first round.

Table 4 Kendall coefficient of indicators of tradition and modernism

Characteristics of tradition							
W Kendall	Index	W Kendall	index	W Kendall	index	W Kendall	index
0.745	Introversion	0.431	Climate agreement	0.635	Avoiding futility	0.725	public relations
0.388	being complementary	0.769	Human Scale	0.521	Space systems	0.483	An exemplary model of the garden of paradise
0.456	Internal and external	0.582	Niaresh and introversion	0.573	self-sufficiency	0.611	Respect and privacy
0.631	Respect for the light	0.781	Link between components	0.477	Reflection of ideas	0.584	social participation
0.684	Environmental compliance	0.530	Symbolic insight	0.822	Spatial hierarchy	0.744	settlement
0.711	Coordination of form and function	0.873	Decoration coordinator	0.695	Link with the creation system	0.693	Readability and clarity
0.517	Geometric diversity and richness	0.506	storytelling	0.423	Slippery and lightness	0.599	Climatic adaptation
0.839	unity in diversity	0.617	Empathy with nature	0.582	adaptation to the environment	0.811	Spatial hierarchy
0.478	Application of coatings	0.726	Balanced composition	0.624	Simplicity and clarity	0.722	Repetition and order and geometry
0.298	Space buoyancy	0.492	Manifest realization of components	0.578	Horizontal elongation of the building	0.818	transparency
0.623	Create patterns	0.856	Conformity of structure and spatial organization	0.396	Fluidity and buoyancy of space	0.713	Interference and continuity of space
0.481	Spatial classification	0.901	Symmetry in architecture	0.730	pivoting	0.905	centralism
0.208	soil and chemistry	0.569	hidden geometry	0.296	Geometry of applications	0.623	privacy
0.542	Color in Islamic architecture	0.544	Design of open spaces	0.886	Geometric and plant motifs	0.655	Traditional architectural materials
0.619	Architecture with line	0.496	Living together with water	0.593	Diversity and harmony architecture	0.486	Connecting open spaces
Characteristics of modernism							
W Kendall	Index	W Kendall	index	W Kendall	index	W Kendall	index
0.120	Breaking the mold	0.308	Beauty	0.507	Performance	0.436	stationary
0.588	Development of form-oriented features	0.772	functionalism	0.688	Use of technology	0.749	Rejection of the past
0.673	Break the box	0.408	Anti-perspective	0.568	Inconvenience	0.326	Symbolic analogies
0.769	Formalism	0.314	Space in time	0.576	membrane	0.699	Tower structures
0.595	Simple volume combination	0.844	free plan	0.907	Remove decorations	0.592	"Honest" expression of materials and structures
0.671	Compliance with geometric proportions	0.543	Invent novel shapes	0.862	Use of new materials	0.516	Construction compliance
0.307	Focus on spatial entity	0.496	Uniformity of all components	0.617	Aversion to history	0.658	Beneficiary of techniques and materials
0.765	No decorations	0.713	transparency	0.326	Connection with nature	0.552	extroversion
0.564	Brutalism	0.788	Dumb element of building components	0.514	style	0.811	Statue-like building
0.539	Development of form-oriented features	0.218	time dependent	0.659	Simplicity	0.688	Honesty

According to the table a number of indicators were removed after talking with the expert panel, climate agreement, obvious realization of components, cohabitation with water, complementarity, internal and external, use of coatings and space buoyancy, spatial classification, soil and chemistry, were eliminated due to the low Kendall coefficient. From the modern indicators, static, symbolic analogies, connection with nature, beauty, anti-perspective, space in time, uniformity, all components, dependent on time, breaking molds, concentration in spatial existence are removed, the reason for removal is repeated by the expert panel. By other indicators in other concepts, the lack of existence in university buildings, the lack of understanding by spatial users have been mentioned.

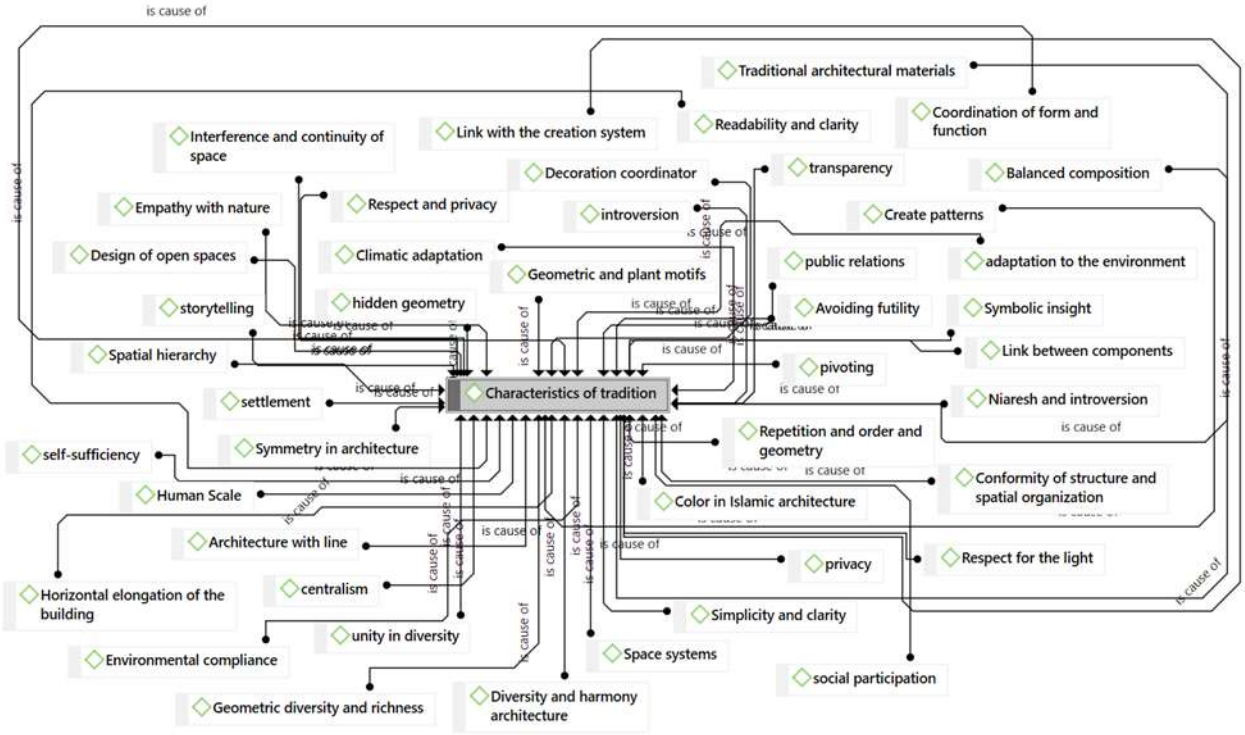


Fig 3 Finalized characteristics of tradition according to experts

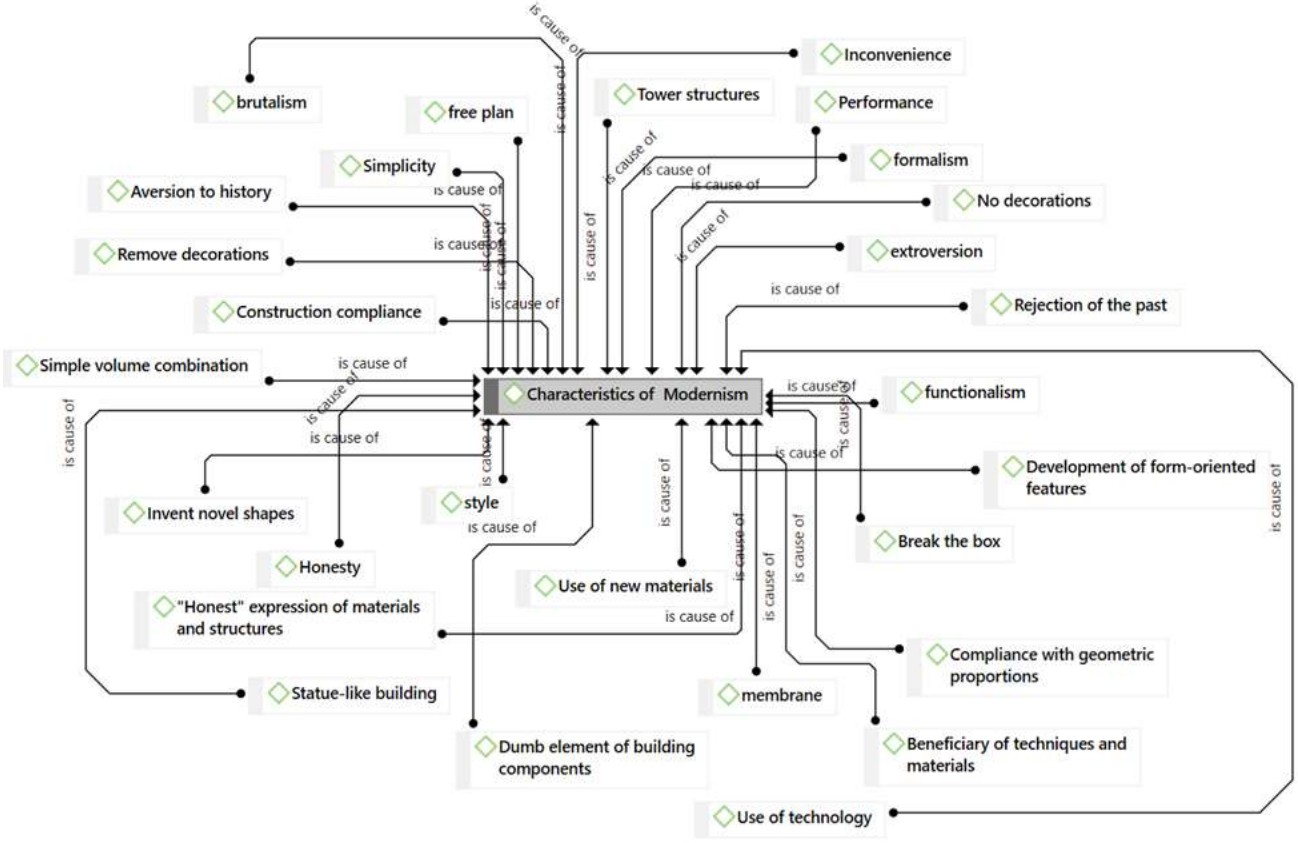


Fig 4 Finalized characteristics of modernism according to experts

7.2. Quantitative Findings

Descriptive statistics

In this section, one question has been formulated for each variable. The questions are closed with a Likert scale that has answers from very high to very low. To convert them in the JMP software, they are given a range of 1 to 5 points. It was found that in tradition, the most common feature of architecture for all age groups is variety and harmony, the least is related to the interference and continuity of space, in modernism, the use of new materials is the most and the innovation of novel forms is the least.

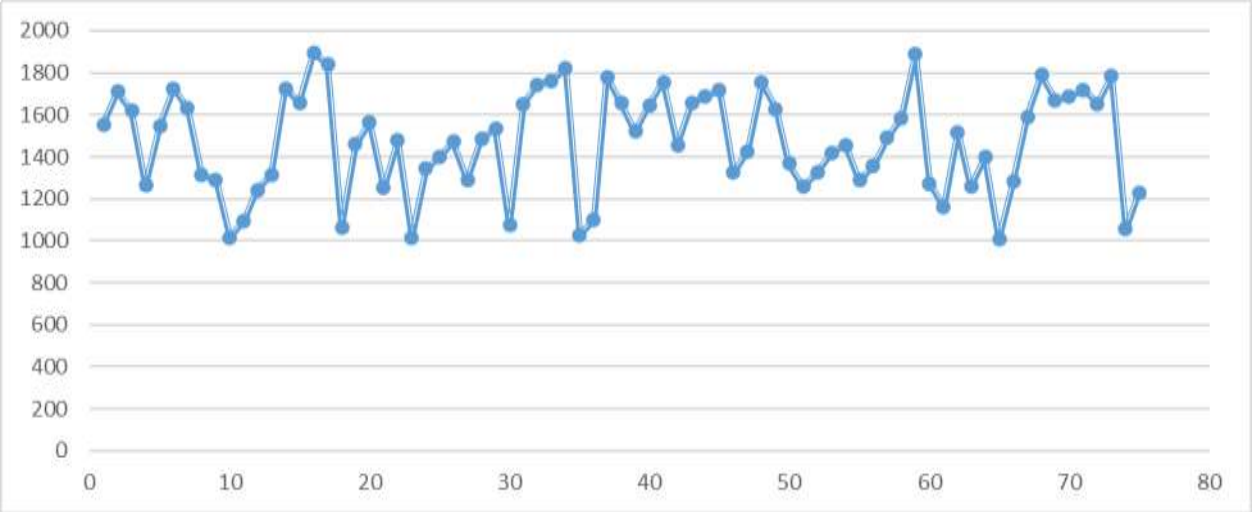


Fig 5 Frequency chart of tradition and modernism indicators for all age groups

Inferential statistics

To use the type of linear or multivariate regression, the internal correlation matrix diagram of the variables is used. After drawing the correlation matrix diagram, it was found that the factors have no linear relationship, so it is correct to use multivariate regression.

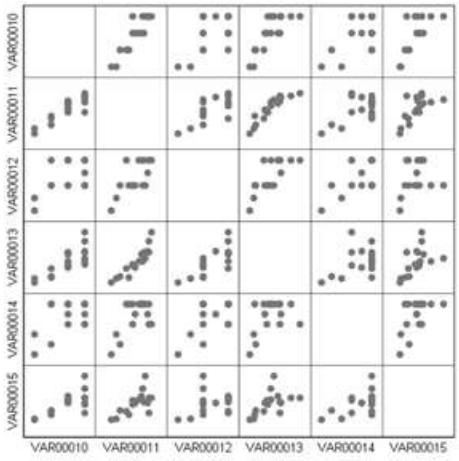


Fig 6 Correlation matrix diagram

According to the Table 5, obtained from the coefficients the indicators of tradition in all age groups, the following items were determined for the indicators of tradition:

20–30-year group:

In this group, social participation, symbolic vision, natural empathy, architecture with line has the highest coefficient of determination with a value of (1.000) and spatial hierarchy with a value of (0.246).

30–40-year group:

The highest coefficient of determination is related to the indicators of spatial hierarchy, symbolic insight, empathy with nature, inventing patterns, architecture with a line with a value of (1.000) and the lowest coefficient is related to adapting to the environment with a value of (0.254).

40–50-year group:

The highest factor contribution is derived from the coefficient of determination related to the symbolic insight component of empathy, empathy with nature, respect and privacy, balanced composition, inventing patterns and architecture along with the line with the value (1.000) and the lowest is related to the adaptation of the environment with the value (0.244).

50–60-year group:

The lowest coefficient of determination is related to the factor contribution of shyness and introversion with a value of (0.246) and the highest is related to the introversion of form and function coordination with a value of (1.000).

Table 5 Step-by-step regression of tradition indicators for different age groups

50-60 years				40-50 years				30-40 years				20-30 years				
t	β	F	The coefficient of determination	t	β	F	The coefficient of determination	t	β	F	The coefficient of determination	t	β	F	The coefficient of determination	Scale
571/44	0.741	342/411	0.645	571/44	0.741	342/411	0.710	522/46	0.781	222/527	0.752	451/39	0.762	217/314	0.867	people
365/31	0.429	446/444	0.788	365/31	0.429	446/444	1/000	152/42	0.732	122/405	0.920	328/44	0.372	147/523	0.895	Respect and privacy
255/31	0.623	752/985	0.913	255/31	0.623	752/985	0.714	223/40	0.662	343/217	0.803	823/36	0.872	381/852	1/000	social participation
479/58	0.685	223/211	0.514	479/58	0.685	223/211	0.883	239/38	0.648	943/199	0.746	362/39	0.685	921/298	0.625	To establish
982/21	0.621	773/225	0.749	982/21	0.621	773/225	0.619	958/8	0.664	612/201	0.681	958/18	0.597	257/247	0.612	Readability and clarity
134/11	0.652	681/653	0.656	134/11	0.652	681/653	0.836	134/11	0.662	623/643	0.816	644/16	0.436	321/644	0.656	Climatic adaptation
425/24	0.612	654/724	0.813	425/24	0.612	654/724	0.920	441/18	0.652	683/849	1/000	422/21	0.852	523/845	0.645	Spatial hierarchy
132/23	0.381	621/741	0.625	132/23	0.381	621/741	0.654	144/19	0.665	603/349	0.846	144/19	0.665	254/754	0.645	Repetition and order and geometry
121/48	0.484	325/512	0.715	121/48	0.484	325/512	0.625	173/49	0.483	945/184	0.814	231/39	0.213	541/124	0.715	Interference and continuity of space
963/47	0.464	748/276	0.806	963/47	0.464	748/276	0.546	963/47	0.464	748/276	0.546	914/29	0.425	241/232	0.514	centralism
348/33	0.372	752/985	0.315	564/43	0.421	125/302	0.881	226/46	0.452	943/199	0.795	221/24	0.414	321/201	0.795	privacy

735/402	741/77	321/12	256/11	219/18	398/91	218/54	452/47	425/24	134/11	982/21	479/58	255/31	365/31	571/44	342/13	421/22	325/29	524/44	
0.411	0.545	0.542	0.521	0.454	0.423	0.424	0.615	0.421	0.421	0.414	0.425	0.213	0.665	0.852	0.436	0.597	0.685	0.872	
159/411	420/865	425/154	175/431	256/369	219/511	667/216	309/215	214/475	222/461	421/131	425/154	175/431	325/512	621/741	654/724	681/653	773/225	223/211	
0.756	0.754	0.675	0.285	0.821	0.246	0.421	0.921	0.958	0.584	0.752	0.919	0.583	0.345	0.518	0.842	0.755	0.792	0.756	
811/26	725/28	310/39	542/20	458/36	458/13	807/16	214/32	698/29	566/48	581/48	839/28	324/23	341/32	354/18	552/22	216/22	214/15	448/49	
0.919	0.361	0.518	0.603	0.517	0.301	0.202	0.456	0.574	0.542	0.628	0.679	0.529	0.223	0.425	0.325	0.311	0.124	0.631	
104/204	415/245	211/305	219/523	415/161	405/121	125/423	235/456	317/645	382/752	312/520	210/521	937/621	695/325	371/458	214/315	258/149	125/521	034/519	
1/000	0.635	0.365	1/000	0.311	0.701	0.325	0.418	0.745	0.756	0.654	0.452	0.244	0.882	0.275	0.368	0.540	0.745	0.265	
852/21	728/25	325/29	564/24	458/36	458/36	897/16	231/12	658/23	566/48	587/44	879/24	694/19	321/58	356/21	552/41	256/45	288/25	228/47	
0.823	0.562	0.619	0.607	0.517	0.517	0.309	0.411	0.545	0.542	0.521	0.589	0.421	0.411	0.401	0.452	0.661	0.472	0.463	
112/114	475/245	214/475	211/568	415/161	415/161	325/411	115/421	301/699	382/752	362/214	960/542	987/650	658/471	371/492	564/321	258/147	034/523	034/499	
0.984	0.825	0.285	1/000	0.311	0.811	0.315	0.831	0.645	0.756	0.781	0.455	0.254	0.745	0.331	0.462	0.978	0.895	0.243	
342/13	421/22	325/29	524/44	348/33	418/43	861/287	131/22	618/25	566/48	586/31	825/21	324/29	351/58	326/25	517/49	254/65	288/25	248/48	
0.902	0.162	0.619	0.524	0.522	0.521	0.221	0.654	0.541	0.542	0.514	0.578	0.341	0.454	0.423	0.424	0.615	0.421	0.421	
667/216	309/215	214/475	222/461	421/131	425/154	175/431	167/428	321/514	382/752	654/218	920/581	991/621	541/321	211/441	412/323	265/229	134/522	124/443	
1/000	0.963	0.275	1/000	0.331	0.727	0.265	0.874	0.661	0.756	0.754	0.675	0.285	0.821	0.246	0.421	0.921	0.958	0.323	
Empathy with nature	storytelling	Decoration coordinator	Symbolic insight	Link between components	Niarash and introversion	Human Scale	Diversity and harmony architecture	Geometric and plant motifs	pivoting	Horizontal elongation of the building	Simplicity and clarity	adaptation to the environment	Link with the creation system	Spatial hierarchy	self-sufficiency	Space systems	Avoiding futility	Traditional architectural materials	

458/36	0.309	633/572	0.661	231/23	0.765	221/324	1/000	555/35	0.451	243/582	1/000	525/45	0.532	219/511	0.624	Balanced composition
542/20	0.517	485/152	0.874	128/21	0.338	213/520	0.658	126/28	0.628	284/714	0.590	163/28	0.852	256/369	0.646	Conformity of structure and spatial organization
310/39	0.517	117/525	0.265	821/65	0.716	272/122	0.266	878/34	0.745	542/215	0.369	811/30	0.725	544/219	0.262	Symmetry in architecture
725/28	0.607	252/731	0.727	316/55	0.985	420/839	0.726	211/81	0.923	411/825	0.662	011/31	0.911	420/865	0.735	hidden geometry
811/26	0.619	781/37	0.331	411/43	0.326	121/241	0.852	452/47	0.147	159/411	0.860	452/47	0.147	159/411	0.881	Design of open spaces
231/23	0.562	312/652	1/000	321/44	0.218	612/542	0.681	111/24	0.235	653/414	0.793	218/54	0.436	633/572	0.843	introversion
128/21	0.823	234/746	0.275	331/69	0.224	421/215	0.921	326/63	0.211	444/185	0.781	398/91	0.274	485/152	0.982	Respect for the light
458/36	0.451	252/731	0.963	181/32	0.812	234/746	0.425	881/26	0.744	136/981	0.309	219/18	0.688	117/525	0.274	Environmental compliance
542/20	0.628	342/124	1/000	256/11	0.821	252/731	0.374	256/11	0.821	252/731	0.374	256/11	0.821	252/731	0.374	Coordination of form and function
310/39	0.793	841/372	0.624	214/32	0.807	342/124	0.316	856/42	0.947	781/882	0.621	321/12	0.835	781/37	0.842	Geometric diversity and richness
458/36	0.781	309/564	0.646	345/24	0.213	841/372	0.983	381/82	0.851	848/682	0.831	741/77	0.625	312/652	0.745	unity in diversity
564/24	0.309	602/175	0.262	821/769	0.521	309/564	1/000	894/174	0.409	188/660	1/000	735/402	0.308	218/935	0.819	Creating patterns
325/29	0.624	222/461	0.735	574/31	0.857	602/175	0.256	879/28	0.789	660/544	0.435	852/36	0.856	720/524	0.435	Color in Islamic architecture
728/25	0.646	214/475	0.881	717/65	0.842	801/520	1/000	517/40	0.842	662/224	1/000	508/37	0.932	622/856	1/000	Architecture with line

According to Table, in which the coefficient of determination for the indicators of modernism is mentioned, the following items were identified in different age groups:

20–30-year group:

The lowest coefficient of determination is related to tower structures with a value of (0.354). And the highest coefficient of determination is related to the index of compliance of hardware and construction, removal of decorations, observance of geometric proportions and development of form-oriented features (1.000).

30–40-year group:

The highest coefficient of determination is related to extroversion, removal of decorations, compliance with geometric proportions and lack of decorations with a value of (1.000) and the lowest is related to the membrane index with a value of (0.355).

40–50-year group:

The coefficient of determination is related to rarity (0.388) and the largest factor contribution is derived from the coefficient of determination related to the removal of decorations and compliance with geometric proportions with the value of (1.000).

50–60-year group:

The highest coefficient of determination is related to the removal of decorations and the absence of decorations with a value of (1.000) and the lowest factor contribution is derived from the coefficient of determination related to date avoidance with a value of (0.417).

Table 6 Step by step regression of modernism indicators for different age groups

50-60 years				40-50 years				30-40 years				20-30 years				
t	β	F	The coefficient of determination	t	β	F	The coefficient of determination	t	β	F	The coefficient of determination	t	β	F	The coefficient of determination	Scale
571/44	0.845	366/520	0.755	581/54	0.265	175/431	0.855	231/12	0.665	245/627	0.672	852/58	0.662	501/318	0.757	Rejection of the past
365/31	0.653	639/621	0.955	855/33	0.727	425/154	0.796	897/16	0.483	255/428	0.820	686/69	0.406	801/544	0.354	Tower structures
255/31	0.211	981/919	0.714	255/31	0.331	421/131	0.511	458/36	0.464	383/527	0.789	886/52	0.355	857/369	0.659	"Honest" expression of materials and structures
479/58	0.395	183/532	0.844	479/58	0.255	222/461	0.804	458/36	0.452	911/259	0.658	586/55	0.646	506/710	1/000	Construction compliance
982/21	0.211	425/186	0.744	944/61	0.275	214/475	0.684	564/24	0.463	564/243	0.815	321/83	0.262	289/658	0.974	Beneficiary of techniques and materials
134/11	0.251	441/139	0.511	956/15	0.963	309/215	0.711	325/29	0.472	611/621	1/000	681/16	0.735	526/689	0.711	extroversion
425/24	0.511	288/458	0.920	712/65	0.588	667/216	0.811	728/25	0.661	619/872	0.895	411/59	0.881	314/278	0.569	Statue-like building
132/23	0.284	239/488	0.529	632/84	0.624	219/511	0.784	852/21	0.452	652/349	0.756	106/12	0.843	586/784	0.724	Honesty
121/48	0.326	369/225	0.855	141/89	0.646	175/431	0.684	555/35	0.401	941/285	0.723	296/42	0.982	695/174	0.882	Performance
963/47	0.745	614/255	0.873	923/63	0.266	425/154	0.688	126/28	0.414	763/786	0.745	854/53	0.274	261/824	0.514	Use of technology
0.421	0.699	349/214	0.755	544/14	0.735	125/302	0.388	878/34	0.421	943/153	0.795	581/74	0.374	316/512	0.823	Inconvenience
0.246	0.452	698/215	0.866	488/21	0.881	125/423	0.711	288/92	0.421	624/485	0.355	228/55	0.921	255/984	0.676	membrane
0.821	0.523	214/365	1/000	232/45	0.865	405/121	1/000	538/55	0.615	034/574	1/000	518/39	0.421	250/518	1/000	Remove decorations

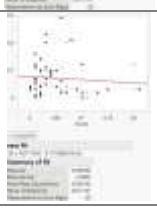
0.285	0.842	789/522	0.972	286/52	0.727	415/161	0.614	276/86	0.424	838/569	0.913	364/41	0.246	211/159	0.883	Use of new materials
0.675	0.623	632/741	0.417	522/22	0.331	219/523	0.789	554/44	0.423	864/921	0.522	526/58	0.821	588/453	0.823	Aversion to history
0.754	0.714	965/745	0.533	323/16	0.425	211/305	0.455	346/22	0.454	351/582	0.685	258/62	0.285	255/439	0.607	style
0.756	0.849	856/254	0.695	312/38	0.823	415/245	0.653	321/86	0.521	658/447	0.695	322/37	0.675	565/325	0.518	Simplicity
0.661	0.652	751/359	0.981	388/63	0.662	104/204	0.735	564/18	0.414	958/683	0.356	324/29	0.754	551/825	0.685	functionalism
0.874	0.912	526/852	0.872	839/25	0.406	221/324	0.658	823/18	0.421	620/875	0.425	825/21	0.921	133/746	0.575	free plan
0.421	0.853	126/752	0.932	581/21	0.355	381/584	0.589	562/14	0.421	362/325	0.706	586/31	0.421	655/145	0.874	Invent novel shapes
0.246	0.358	635/157	0.836	456/69	0.646	388/858	0.754	566/48	0.615	382/742	0.723	566/48	0.246	325/659	0.756	transparency
0.821	0.751	365/415	0.942	652/31	0.262	388/644	0.684	858/23	0.424	325/675	0.689	618/25	0.524	333/544	0.581	Dumb element of elements
0.511	0.695	654/892	0.711	256/14	0.693	244/486	0.722	231/39	0.213	185/481	0.951	131/22	0.688	154/448	0.914	Development of form-oriented features
0.804	0.215	214/611	0.855	854/41	0.522	175/424	0.736	877/57	0.425	365/251	0.869	522/27	0.295	183/532	0.573	Break the box
0.684	0.623	358/851	0.746	413/23	0.365	424/210	0.758	458/63	0.414	469/815	0.661	652/85	0.855	425/186	0.747	formalism
0.711	0.214	248/621	0.875	459/76	0.652	422/178	1/000	458/41	0.421	742/251	0.581	901/56	0.742	441/139	0.581	Simple volume combination
0.312	0.975	511/321	0.863	545/24	0.625	226/544	0.792	985/52	0.421	223/541	1/000	501/88	0.922	288/458	1/000	Compliance with geometric proportions
0.214	0.325	741/259	1/000	314/79	0.516	269/375	0.698	325/84	0.615	219/852	1/000	312/20	0.629	239/488	0.814	No decorations
0.742	0.145	654/987	0.715	728/18	0.352	495/248	0.857	722/25	0.424	575/249	0.511	421/62	0.252	369/225	0.403	bruthalcium
0.752	0.147	328/146	0.706	812/25	0.745	106/225	0.399	882/45	0.423	154/254	0.542	042/13	0.982	614/255	1/000	Development of form-oriented features

After explaining the factor contribution of each of the indicators, it was found that there was a correlation between the space users of the age groups of 20-30 years and 30-40 years with a value of r2=0.78 and the target community of one can explain the other to a large extent. So, to check one age group, it can cover another age group. Among the age groups of 20-30 and 30-40, the correlation drops to an incredible extent and its value reaches r2=0.0004, which can almost be said that they do not fully explain each other's behavior and behave differently than have each other In

the age groups of 20-30 and 50-60, the correlation value is low and is around r2=0.008. In the age group of 30-40 and 40-50, the correlation value is low and is r2=0.003. In the age group of 30-40 and 50-60, the value of correlations has also increased slightly and reached r2=0.02. But the correlation between the indices of tradition and modernism obtained in the age groups of 40-50 and 60-50 is high and r2=0.73. According to the fit obtained from the step-by-step regression model of age groups, due to the increase in data, only age groups (50-60 and 50-40) and (20-30 and 40-30) can predict each other. In general, in relation to responding to the perception of the characteristics of tradition and modernism in different age groups, the following correlations are in order;

(20-30 and 30-40)> (50-60 and 40-50) > (40-30 and 60-50)> (50-40 and 40-30) > (30-20 and 40-50)

Table 7 Fit between the components of tradition and modernism in different age groups

40-50	30-40	20-30	
			**30-40**
			**40-50**
			**50-60**

8. Discussion

The important point in these results is that considering that in the age groups of 30-40 years and 40-50 years, the maximum and minimum indices correspond to each other, but there seems to be a very low correlation in the mentioned age groups. So, in the study and designs related to tradition and modernism, the target population should be divided into age groups of 20-40 years, 40-60 years, and 60 years and above. Due to the higher average coefficients obtained from the indicators of modernism, it can be concluded that users The space of their perception is more than the indicators of modernism and they have been able to communicate with these indicators in a more concrete way, which does not change with age and increases a bit more. Also, the index of removing decorations in all age groups has the same coefficient. But in the age groups of 20 to 30 years, the most attention is related to various spaces that have the presence of people and many details along with traditional signs and modernism in simple forms that are combined with each other and lacks decorations. It is known that the same thing exists in the age groups of 30 to 40 years, but most of the patterns that arise from balanced combinations in volumes without decorations play a greater role in the association of modernism and tradition at the same time. In the age group of 40 to 50 years, most of the characteristics of tradition and modernism overlap with

most of the previous age groups, but there is a significant difference in other components, which designers need to consider in their development and design planning projects. Taking the age groups of 50 to 60 years, a balance can be observed between the maximum indicators in the number of components of tradition and modernism. But in general, this age group can be predicted due to its less availability in the society with the previous age group, and it is suggested that the following age groups be evaluated as well.

It is suggested that the following age groups are also evaluated.

9. Conclusion

Iran's architecture and urban planning, with its several thousand years of history, suddenly suffered an interruption during the Qajar era. The emergence of western academic education, the existence of various advisors for the training of different departments, new materials and new manufacturing technologies were the things that were very influential in the formation of this matter. University buildings in the city of Tehran can coincide with these developments from time to time and buildings derived from the presence of modernism and its beginnings, which were designed for specific cultural groups. In the current era, despite the phenomenon of time and the high speed of developments in the age of communication, it seemed that the way people look changes with the passage of time in relation to the perceptual indicators of tradition and modernism. This research showed that the age groups of 20 to 40 years and 40 to 60 years think in the same way, and changes in the perceptual norm for the indicators of tradition and modernism happen every 20 years. According to the results of the research, many of the indicators that induce tradition in the past do not have these meanings and change. Physical characteristics are more important at younger ages and gradually decrease at older ages and spatial characteristics take their place. In general, it is suggested to use the following strategies to design collections that all age groups benefit from and that require the simultaneity of tradition and modernism;

- Research and investigation on local patterns showing the simultaneity of tradition and modernism for all age groups
- Conducting unstructured interviews of different age groups to find commonalities and differences regarding the way of looking at the body and... space
- Using national elements in the form of branding patterns for the design of components of different places to familiarize and assimilate all age groups
- Paying attention to the visual elements of tradition and using them in the body of the building and associating them with modern technology and materials
- Applying all indicators with high factor load as a result of this research in the designs depicting tradition and modernism.

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