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Comparison of the Contextual Components in Regeneration of Industrial Cavities in Tehran City

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ABSTRACT

In today's era, urban development is at the cost of destruction of architectural heritage, industrial architecture, gardens, and their history. Paying attention to the context for reviving industrial tissues and cavities can be an important approach to create tissue recovery. However, contextualism can be effective in improvement, renovation, or reconstruction processes. This research seeks to know the components of contextualism that are effective in improving the dysfunctional tissues of Tehran city. This research is qualitative and quantitative method. Qualitatively, semi-structured interviews were used to extract contextual components and distributed among 28 experts using ATLASTI8 software. Quantitatively, to check effectiveness of each element in improving the texture (renovation, reconstruction), Likert scale questionnaire was given to 384 engineers and architectural designers in Tehran engineering organization. Questionnaire results were analyzed with JMPSAS17. Results showed that highest factor load in the spatial contextualism components related to good feeling of security as (1.000) and the lowest related to beauty component of the adjacent axis as (0.343). The environmental contextualism, the highest coefficient of determination is the positive influence of the surrounding environment as (0.695) and the lowest is the collective protection with prohibitions value (0.356). Socio-cultural contextualism, cultural attractiveness as (0.951), the highest factor is cultural diversity as (0.306). Physical contextualism, the highest factor contribution is related to physical beauty and physical lighting as (1.000) and the lowest to appropriate positioning as (0.511).

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Introduction

The urbanization of the 20th century was formed under the influence of the changes and transformations of the modernism flow and the developments resulting from the transformations of the industrial revolution based on wisdom and technological power (Pour Ahmad and Vafaei, 2016). Relying too much on the power of technology and technology, the concentration of comfort and welfare facilities in cities, the unprecedented influx of population into cities, the transformation of land into capital and a source of profitability, leading to the emergence of the principles of mechanical urban development, bulldozing, The emergence of areas lacking the principles of architecture and urban planning and the abandonment of some physical-spatial elements in the overall structure of cities over time (Sajjad Zadeh and Zolfi Gol, 2014) and the result of the above-mentioned changes is the appearance of an ugly and unconventional face of cities, which is a necessity and The importance of intervention and dealing with these physical elements was felt more and more by city managers and thinkers in the fields of restoration, architecture and urban planning. Interventions and encounters in the abandoned elements and textures, which in this article are referred to as urban holes in the historical context, in every country and even in every city according to the prevailing economic-social, political, historical and cultural contexts. on that society has been different.

Big cities with a historical and industrial record in Iran are being destroyed under the blade of development. Failure to make the right decisions and lack of will to prevent wear and tear, greed and speculation have turned the gardens into ruins ready to cut trees and architectural heritage which turns it into a warehouse of materials, and finally, with destruction (the most basic method of intervention), after producing a mountain of construction waste, in addition to environmental pollution, it leads to the production of construction products, which in the best case, maybe even valuable in its time, he should spend as much time as its dead predecessor to settle down. These interventions are not in the valuable historical cores of the city, but have spread to individual buildings, gardens, etc. The totality of these interventions with the spaces of abandoned buildings has given the city a network of ugliness, identity lessness, and disorder (Almodaresi, 2020: 69).

The city has its identity from its passages, buildings, and memories. The destruction of these images, the destruction of these memories, depletes the city of its identity and value, even if the excuse is imposition and the need to increase functions and the need for more and newer spaces.

This research seeks to identify the context-oriented aspects and examine the extent of their factor contribution in creating improvement, renovation or reconstruction and tries to answer the question of which of the contextual components plays a more significant role in the interventional aspects of improvement.

Theoretical Foundations

Regeneration Interventions

Regeneration is considered the main approach to urban restoration and protection in the contemporary era. The word "recreation" means "to create something again". The word "Regeneration" comes from the verb "Regenerate" which means to revive, to revive, to revive, to grow again (Venturi and Scott Brown, 2000). In urban studies, it is a term that refers to urban changes through redesign, reconstruction, and often the reallocation of urban land (Kim, 2015: 337-338). In the beginning, urban regeneration was the concept of using reclaimed land in changing the use of urban land, due to the change in the approach of industrial production in cities and ports after the 1970s.

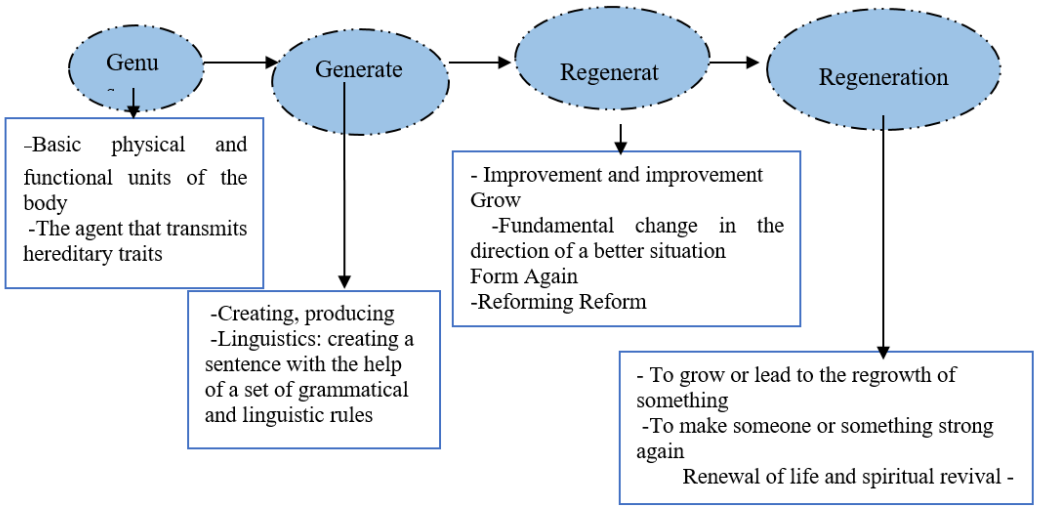


Figure 1. Urban regeneration and its related features (Source: Deek, 2017).

This term is widely used after 1995 as an alternative to urban renewal in the field of urban planning literature. found Urban regeneration has been proposed since the late 1980s and early 1990s in advanced countries, such as the Netherlands and the United States, and has been used to improve dilapidated neighborhoods and improve the quality of living in them. This approach was adopted following the failure of the implementation of purely physical-spatial programs, because the governments realized that investment in urban renewal without the simultaneous process of social-economic renewal can be completely neutralized (Habibi and Maqsoudi, 2012: 5).

Industrial lands have the greatest potential for regeneration to become a new place that includes visual and cultural values in addition to structural attractions, along with observing ecological issues. The goals of regenerating brown lands include creating new opportunities, economic growth, strengthening society, improving environmental conditions, cultural

prosperity, and promoting new values at the level of local communities, etc. (Almodaresi, 2020: 69).

Contextualism

Regionalism is an analytical and critical point of view that emphasizes the preservation of specific features and characteristics of a place, and in this sense, it is opposed to globalization and international style, and it seeks the continuity of local traditions. The formation of the regional approach provided the necessary background for the emergence of contextual thinking in urban planning and architecture (Ludlow, 2005: 11). The term contextualism was first published by Stuart Cohen & Steven Hurrt in an unpublished treatise entitled " Le Corbusier: The Architecture of City Planning". These discussions started in the late 1950s and were continued in 1955 by Colin Rowe & Bob Slutsky with the article "Transversal and Real Transparency" (Almodaresi, 2020: 69). Until the first statement This thought was presented by the idea of Collage City by Colin Rowe. In 1973, Colin Rowe and Fred Kotter began to study and record the idea of collage city and published it in 1978, and thus, the concept of contextualism was formed (Taban, 2020).

(Ludlow, 2005: 11) Contextualism is a new way to respond to constructions. The new is in agreement with the context around it, instead of destroying it. Contextualism has specific coordinates in the process of intertextual development (Dorsey, 2003) because of the nature and essence of the concept of endogenous development, which is the brain and essence of intertextual development (Figure 2).

According to Payne (2016), contextualism has three different uses in philosophical perspectives. First, the conditions for the truth of a group of claims are different according to the context of speech (Pynn, 2016). Second, contextualism is a label used by philosophers of language to propose the issue that linguistic meaning is strongly dependent on the context. They believe that it is only in the context of speech that a word defines a concept (Recanati, 2012: 171). The third application of contextualism in philosophy is used by epistemologists on theories that have no connection with semantics, and Williams considers it a perspective. that justification occurs in an informational and dialectical context. Contextualists put forward the premise that the epistemic standard in a given context influences people's intuitions about the truth or falsity of the knowledge documents expressed in that context (Bach, 2005: 63), thus realizing the central role of the knowledge assigning context. In the doctrine of contextualism, on this basis, the goals, expectations, and presuppositions of the assignor are considered the context of the assignor (Falamaki, 2004).

Contextualism is contrasted with sensitive fixedism. According to contextualists, the context of documenting interests, goals, expectations, desires, presuppositions and intentions of documenting knowledge is the possibility of an error that is explicitly mentioned in the context of

the documenting speech (Almodaresi, 2020: 70) (Table 1). On the other hand, in sensitive constancy, the semantic content of epistemic documents is determined independently of the context of the document provider and the practical position of the subject of knowledge, and the semantic content and truth value of these documents do not change with the change of the context of the document provider or the practical position of the subject of knowledge (Kim, 2015: 337-338).

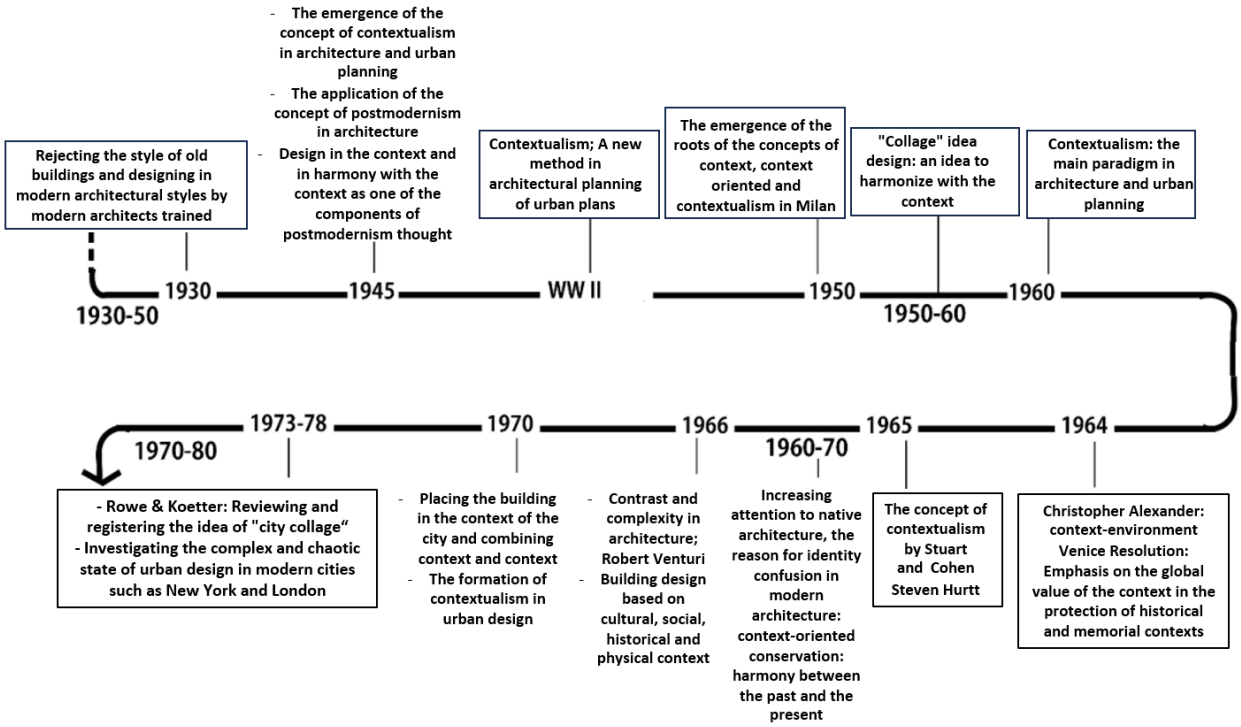


Figure 2. The course of historical evolution of the concept of contextualism in the modern and postmodern period (Source: Naghavi, 2018; Moayedfar et al., 2017).

Table 1. Opinions of experts regarding contextualism and its dimensions (Source: Naghavi, 2018; Hemmati et al., 2024; Moayedfar et al., 2017).

Theorists		Descriptive principles and basics
Different dimensions of the field	Robert Venturi	The design of each building is in accordance with its cultural, historical, physical and special conditions.
	Alan Waterhouse	Context in architecture is like a historical event in which the elements of the city are known, treated and built. Contextualism in architecture is interpreted as having a context and foundation or respecting and adapting to the context, which refers to its various dimensions.
	Merrill C. Gaines	The classification of context in architecture is done under three general topics of sub-patterns, activity patterns and climatic patterns.
	Novin Tavallaei	The presence of ideas and elements of past cities in shaping the body of contemporary cities. Contextualism is adaptation to the physical, historical, social and cultural contexts that are present in shaping the body of contemporary cities according to the ideas and forms of the past.

Emphasis on the historical dimension of the context	Paul-Alan Johnson	The relationship between architectural theory and history is like the relationship between form and context. The form cannot be seen without the context, and the context has no meaning without the form.
	Charles Jencks	Emphasizing the direct transmission of meanings to people through active communication codes and favoring traditionalism aware of the developments in today's world.
	Patric Geddes	The theory of "conservative surgery" and emphasis on efforts to preserve architectural and cultural traditions considers it necessary to study and pay attention to cultural identity and pay attention to the economic, geographic, geological, historical, etc. background before any design.
	Aldo Rossi	Looking at the structure of the city as a whole and according to the relationship of its different parts. He combines creativity and memory and brings cultural memory to Wood with a limited reading of the city.
Emphasis on the physical dimension of the context	Christian Norberg-Schulz	The meaning of each object is rooted in its relationships with other objects. While the structure refers to the shape and form characteristics of a group of relationships.
	Pierre von Meiss	Readability of form from the context is the first step in architectural analysis. The beginning of the analysis and perception of space comes from the legibility of the form in the context and its interpretation is based on the physical relations of the form. The relation of shape in the context is not only in perception, but it is a fundamental thing in the formulation of architecture.
	Rowe & Koetter	Looking at the city as a set of areas where each area is a vast area whose spatial-form characteristics are defined by the organization of masses and spaces in coherent and precise patterns that can be identified in form and context. Emphasis on creating a relationship with the physical context and paying attention to the hierarchical system of collections and evaluating the components of the city structure in a wider context.
	Edmund Bacon	Paying attention to context orientation and the impact of architectural work on the context and formation of urban space as the principle that has been observed in Renaissance architecture.
	Lewis Mumford	Regionalism is a return to the past that can be used for the present, a tendency towards regional and native styles.
	Rob Krier	Paying attention to issues such as morphological aspects of context, classification of urban spaces, emphasis on building legible public spaces, continuous yet diverse urban space system, historical continuity, socio-cultural performance and social communication, etc.
	Camillo Sitte	Emphasis on preserving the surrounding environment of each building Continuity of urbanization through recognition of its rules
	Roger Trancik	Coordination of new pieces with existing spaces and architectural forms through gradual filling Every visual sign can be separated from the text or context and create a new context and text. Every urban environment has a specific pattern for mass and space, but urban design is successful if it can create a positive symbiosis between mass and space.
	Cohen & Schumacher	The theory of form adaptation from context It refers to creating a relationship with the context and adapting the form from the context in all kinds of contexts, including natural, historical, cultural and physical.
	Anthony Togganet	It allows innovation in the context under conditions such as the compatibility of the scale of the element with the context, continuity in order to create a relationship between the buildings, the height of the floors and the height hierarchy of the buildings, etc.

Emphasis on the natural dimension of the context	Christian Norberg-Schulz	Since contextualism is the adaptation of form from the context, it includes various contexts, including the natural context. The regional characteristic is not only hidden in the local architectural forms, but also includes a broader concept of environmental identity and includes the natural forms of the land and plants specific to that area.
	Frank Loyd Wright	He is the founder of organic architecture, which emphasizes the connection and harmony between architecture and nature and the designer's compatibility with his environment.
Emphasis on the socio-cultural dimension of the context	Kenneth Frampton	As a theoretician of "Critical Regionalism", he believes that architects in their buildings should seek regional variations rather than global design in a uniform manner. Architects must combine the influence of global civilization and the themes arising from the characteristics of a particular place. His regionalism emphasizes the relationship of the building with the site and its place in a sociological context.
	Amos Rappaport	Culture in the sense of a set of values, beliefs, world view and common symbolic systems helps people to give meaning to their environment and transform spaces into places.
	Bill Hillier and Julienne Hanson	Proving the importance of the community meaning of the city form In the city, the most important thing that creates meaning is not the sign; Rather, it is the whole saying or expression.
	Christian Norberg-Schulz	When the space finds cultural content, it becomes a place. The characteristic of the place includes both the objects that have shape, texture and color and also the cultural relations that are created due to the passage of time.
	Ross King	In linguistics, architecture is the language of which the city is the "text" and in "semantics" the form of the city is the text to be interpreted.
	Christopher Alexander	The context is a part of the design that is induced into the form, so it is suggested to harmonize the form with the context.

Contextualism has different types that can be mentioned as follows;

Spatial contextualism

There are few definitions of contextualism in the production of space. Robert and Stern consider contextualism as the possibility of developing a building in the future and the desire to create a relationship between the building and the surrounding environment (Brolin, 2012: 15). Mahdavi nejad et al. and the connection between environment and space in space design is considered contextual architecture. According to the researcher, the first definition is strictly physical and does not consider cultural and social aspects (Falamaki, 2004). Therefore, contextualism in the production of space can be seen as a functional and apparent semantic connection between space and context. This means that based on the idea of contextualism in the construction, design, planning and even the understanding of urban spaces and places, there is a need for functional and formal semantic communication between the mass and the surrounding context (Deek, 2017).

Physical contextualism

In the context, the components of the city form are not evaluated and studied alone, but they are placed in a wider environmental context. A great architectural work is related to a large urban

system and is placed in a hierarchy of collections. The tendency of city planners to build in a collection existing means interweaving new and old in a way that can create a living and desirable whole contextual architecture, while not emphasizing imitation, does not hinder innovation and creativity, and its message is the need to pay attention to the physical environment. It is about the architectural work, which is a positive and strengthening aspect for both the architectural work itself and the context (Brolin, 2012). Although contextualism contradicts the essence of modernism (Hemmati et al., 2024: 69).

Because the modernists considered the production of space as a logical and inevitable result of economic-functional necessities. From the point of view of a modernist, the building must be prominent and prominent compared to the surrounding buildings and be a symbol of the future (Brolin, 2012: 10).

According to Robert, Stern, postmodernists have common principles in the following areas: (1) contextualism, the possibility of developing a building in the future and the desire to create a relationship between the building and the surrounding environment (2) allusion and irony to the history of architecture in a way that has passed the limit of selection; (3) Tendency to arrays, a simple pleasure from building arrays (Moayedfar et al., 2017: 16).

With all these attributes, Lynch believes that if the signs have a clear form, if they are in contrast with their context and dominate their place, they will be recognized easily and have a meaning that can be carried in the mind. He also adds that the most effective factor in creating a sign is an image or a form that is distinct from its context (Falamaki, 2004). Although Kevin Lynch's opinion is more based on the modernist approach to urban planning and he did not benefit from the principles of postmodernism in presenting his view, so his opinion cannot be considered a theory based on contextualism (Almodaresi, 2020: 69). Regarding physical contextualism, there are two important theories that are mentioned here. Although these two theories are slightly similar, the outcome of these two theories is physical and visual sequence (Rezaei Rahimi et al., 2020: 38).

Socio-cultural contextualism

Socio-cultural contextualists believe that culture creates a set of rules that is a reflection of its construction. With the help of culture, that is, a set of values, beliefs, worldviews and common symbolic systems, people give meaning to their environment and transform empty space (Rappaport, 1990: 6). Urban space is considered to be a stable element in the level of civil life, privileges and capitals of the city. Urban space in the level of civil life is the place of the emergence of culture and the continuity of life in the city with the level of civil life and the approach of citizens becomes aligned (Habibi and Maqsoodi, 2010: 257). Based on this, Roger Transic's definition of place theory can be a good theoretical foundation for socio-cultural

contextualism. The theory of place is the basis of the theory, the place to understand the human and cultural characteristics of the physical space (Falamaki, 2004). From a physical point of view, space is a limited and purposeful empty ground that potentially connects objects. But this space is called "place" when it finds the meaning of land. The characteristic of place includes both objects that have material, shape, texture and color, as well as cultural relationships that are created by human use over time. It is also in the place that the vitality of social interaction appears and memories have their origin in places (Rezaei Rahimi et al., 2020: 42).

People need relatively stable systems of places where they can develop their culture, social life and personality. The task of city planners is to create a balance between the physical identity and the sense of place, as well as to create a place that best fits the physical cultural context, the needs and expectations of the users (Falamaki, 2004). In order to create these places, city planners need to examine the historical context, to know the needs of the society in order to respond to them, to be aware of the past traditions in the construction of these places, and to be flexible to change in the present and the future. Usually, the most successful design of places originates from the least intervention in the social and physical environment (Tefagh and Yarmand, 2019: 37).

Urban designers significantly compared to the importance of historical, cultural and social values and the theory of place, give an obvious construction to the solid and empty body and respond to human needs and unique elements, and people demand a sustainable system of places by which, to their social life and culture should answer. Roger Tran Sik's theory of place, which is one of those urban design theories. The necessity of place theory in spatial design is to understand the cultural and human characteristics of physical space and spaces are based on category and typology that each place appears unique and unique (Hemmati et al., 2024: 73).

In general, the theory of place is based on the understanding of the human and cultural characteristics of the physical space in order to transform it into a place. From the transistic point of view, if we consider the space as a bounded or purposeful space with the potential to communicate between objects, it becomes a place only when it has a meaning. It is based on the demand of cultural or regional content (Falamaki, 2004). Also, paying attention to the cultural principles of a place in creating space can create communities with identity and originality. In contrast to this thinking, we witness that in the most recent urban development, new cities and neighborhoods fail to create a spatial concept of responding to the physical environment. Remaining symbols and fragments of the past are disappearing. The continuity of time is lost. Even in the construction of the 1960s, the barriers of the site were neglected (Moayedfar et al., 2017).

According to this theory, the new built space must be a reflection of social relations, culture, lifestyle, ruling ideology, and values in order to have contextual characteristics from a social point of view. According to Christian Norberg Schulz in his book titled "Spirit of place towards

the phenomenology of architecture, the spirit of place creates a distinctive character and identity for a place and it is a combination of the function of art and architecture that people's activities in the public space often create the spirit of the place. (Zhang and Zhou, 2009).

The success of a project is the product of understanding people and geographical features of the place. In the construction of places, buildings and open spaces, it is necessary to know the dynamics and characteristics of a society. In this context, opinions of local people, local history and customs, Opinions of influential people, organizational and institutional characteristics, and policies should be considered (Saif al-Dini, 2013: 164).

Historical contextualism

From Rappaport's point of view, history is not only the narrator of events, but historical data can be used to answer questions in a specific scientific field (Rappaport, 1990:80), the crying historians are of the opinion that history should have lessons for current urban planning. The current society cannot separate itself from the past emphasize on respecting the past of traditionalism, preserving old textures. Thinkers emphasize on the protection of pre-industrial cities due to their historical characteristics and innovative perspectives. And proposed the term "cultural heritage" and praises the protection of heritage on an urban scale without diminishing the importance of urban development, because according to Giovannoni, the historical city is both a historical monument and a fabric of life (Veldpaus and Roders, 2013: 8).

Environmental context

Throughout history, humans always try to harmonize their residential environment with the climate of their surroundings; (Falamaki, 2004) but contemporary architecture does not have the ability to harmonize with the surrounding climate and this disharmony has created many environmental problems. If you are aware of the possibilities of your environment, you can prevent their destruction. And how to place the building in the place and maintain the surrounding environment and the access of vehicles and pedestrians, for this purpose it seems necessary to know the climate (Mahdavinejad et al., 2010: 28). Nature can also be a source of inspiration for designers and architects to get shapes, textures, and colors. If this connection is taken into consideration in biophilic architecture and according to the climatic and micro-climatic aspects of human comfort, energy efficiency, and green space, the building is designed (Almusaed, 2011).

On the scale of the city and beyond the architecture, the biophilic city is a city that, by learning lessons from nature and taking natural forms and images from the natural systems, uses them in the buildings, urban visions, and plans and programs related to nature (Beatley, 2011:4).

On the basis of planning based on environmental contextualism, we can create conditions that ensure both the comfort of human life and work and the planning done does not conflict with the environment. Accordingly, environmental contextualism is based on sustainable environmental development.

Contextual approaches in architecture

Three types of orders can be considered for the field of architecture and space production. In the first factor, the context is the cultural and social environment in which a person lives. In the second factor, architecture is separated from the time of its creation like an event, time passes on it, different meanings appear on it and it is added to the meaning of the work (Falamaki, 2004). By default, information is a text field and must be read. The third order is from the context of our definitions of issues related to the work and its past. This order of context is infinite and increasing in nature; Because every day new interpretations about the past and other issues arise (Soltani, 2012: 12).

Regarding how to look at the context in design, there are three approaches in general: the effect-oriented approach, in which the effect is not the result of the context, but it is considered the result of the creator of the work (architect). In the second approach, the contextualist creates the work and is a product of the context (they know the conditions and even the architect himself is a product of the context) (Deek, 2017). Contextualists believe that in the work of understanding the work of art, we should pay attention to issues other than the work of art itself in order to fully understand it, for example, if we find other works by the artist, we should pay attention to them, or if there are other works in the same style. Let's talk about them too (Tefagh and Yarmand, 2019: 37).

In the holistic approach, it is necessary to refer to the context and the effect, and the effect and the context are considered as a single unit, and they separate the two for a better understanding of the truth (Soltani, 2012: 13). Michelle Davis believes that design in historical environment can be done with more than one approach. He divides the approaches between the two extreme levels mentioned above into five categories and defines them as follows: (Shefa'i, 2016: 12).

Imitative approach: design achieves harmony with its surrounding environment by imitating external factors and existing order;

Traditional approach: Like the imitative approach, it is an approach that is highly debated about its preference.

Arrogant approach: This approach is very self-confident and pays almost no attention to the historical context; (Falamaki, 2004).

Contemporary approach: the design in this approach is contemporary with language and receives hints from the present; It also takes inspiration from the past and respectfully talks with the historical context; Sensitive approach This approach has a more balanced and humble behavior towards the environment. This approach has the greatest respect for the historical context in its works (Hemmati et al., 2024: 79).

Several approaches can be taken regarding the relationship between the building and the context

1. The context is unrelated, a person who builds his building on a sandy beach. This approach lacks foresight;
2. Context has functional importance. It examines the internal effects of contextual factors on construction. Considerations related to this approach include stability, land, moisture, precipitation, heat, security and other factors;
3. The context has environmental importance; it examines the external effects of construction on the context. This effect can include air, water, soil, animals and humans;
4. The context has aesthetic importance. This approach monitors both the internal and external effects of construction on the context. The range of considerations of this approach includes mass color, line, pattern, and facade materials (Turner and Millimian, 1996: 16).

Intervention in urban contexts

In the Persian language, the term "intervention in urban contexts" is used as a general and general term that can include all detailed specialized actions and methods in this field. Such a situation is not seen in the specialized literature of industrialized countries. It means that certain terms are used for different conditions (Tefagh and Yarmand, 2019: 40).

In the term of urban development, various solutions and interventions are proposed in order to improve urban centers or, more precisely, inefficient urban contexts. The policies and intervention programs in urban inefficiency contexts in each period are in accordance with the dominant approaches, effective and guiding forces (economic, political and social) (Falamaki, 2004) as well as the environmental, economic and social conditions and characteristics of the cities, which have characteristics and dimensions that are representative of the period and based on the format policy. There are types of intervention based on the level of loyalty to the past as follows: (Deek, 2017).

Renovation

Renovation in the word means rebuilding. The English translation and meaning of "renovation" are mending, rehabilitation, renewal, renovation repair. Habibi and Maqsoodi (2012) and Falamaki (2004) have translated the term Renovation for the word "Renovation". Renovation of inefficient urban structures is a medium-term measure that is the reconstruction or

revitalization of urban areas through the collaborative efforts of municipalities, owners of inefficient urban structures and other stakeholders. Renovation is done when the existing space has a suitable and effective function, but the relative wear and tear of the "body" has caused a decrease in its efficiency and effectiveness (Habibi and Maqsoodi, 2012: 81). The purpose of urban renewal is to improve the economic, social, spatial, natural and physical environment in and around the city.

Improvement

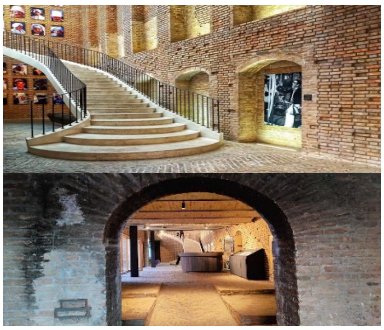
Improvement in the word means empowering again, empowering again and empowering again (Falamaki, 2004: 91). The English translation and meaning of "improvement" is: amelioration, amendment, betterment correct, correction, culture, improvement, melioration, refinement, reform. Examining different urban sources shows that improvement is considered as the same term as improvement in urban sources and architecture. However, when it comes to urban improvement, it includes a set of actions that, in the physical field, are consistent with the original model, to preserve and maintain the fabric and its elements, and in the non-physical field, it helps to promote its inner life (Shefa'i, 2016: 11). Improvement takes place when the relative wear and tear of the space has become acute in terms of functionality (Habibi and Maqsoudi, 2012: 18). This type of intervention is specific to contexts that have historical-cultural value, and intervention in these contexts requires compliance with the rules and regulations of the Cultural Heritage Organization (Abassi and Razavi, 2005).

Reconstruction

Reconstruction literally means rebuilding. Examining different urban resources shows that Reconstruction is considered as the same term as reconstruction in urban and architectural resources. But when it comes to urban reconstruction, it refers to a set of actions that, after destroying more than half of the work, a work is built again with a new face or completely in accordance with its original (Habibi and Maqsoodi, 2012: 16).

Each of these solutions involves a degree of intervention and manipulation in the existing urban context. The improvement of minimal intervention and manipulation in the existing physical condition and the renovation of a higher degree of intervention and manipulation and finally the reconstruction of the most manipulation in the physical condition of the worn and old urban fabric (Habibi and Maqsoudi, 2012: 62-63) (Table 2).

Table 2. Examples of industrial projects in Tehran and methods of using contextual components in improving the texture (Source: Authors, 2024)

Project name	Description	Pictures
Argo factory	*It was established in 1930 as an alcoholic beer company in Iran; *primary industrial use; *Remaining unused due to the government's ideological policies; *Purchase of Argo Factory by Pejman Foundation in 2015 to create a performance space and cultural center with emphasis on preserving the originality of the building and special respect for the old texture of Tehran; *The end of the renovation operation of the complex after three exhibitions in 2019 under the guidance of architect Ahmad Reza Shrikar; *Expansion of the renovated factory space from 460 cubic meters to 1860 cubic meters; *The current space of Argo factory includes courtyard, 5 galleries, cinematheque, cafe, art store, archive room, library, private office and institute office.	
Crystal and glass factory	*The first modern glass factory in Iran *Establishment year around 1930 AH *Has attractive and prominent architectural features in terms of industrial architecture *Using long metal chimneys and multi-story sheds next to dense workshop halls and beautiful old pipes and conveyors *Registration of this factory in the list of national monuments *Setting up an industrial museum	
Ali Nasab factory	*Located at km 17 of Karaj special road, in the vicinity of the license plate exchange center in the west of Tehran *Established year around 1950 AH *Creating a new additional production area next to the old ten-hectare hall of the factory with red bricks and wide skylights *Handing over production units to a private sector industrial company	
Traverse factory	*"Traverse" company, a producer of traverses and ready-made concrete parts, is one of these companies, which was established in 1998 and was handed over to the private sector in 1989 in line with the implementation of the policies of Article 44 of the Constitution, but after the handover, it faced many problems and was plagued by economic corruption. had been *Acceleration in the collection of linear worn tools from the length of the lines *Provision and support and continuous repairs of heavy machinery and engines and tools of maintenance workshops *Preservation and maintenance of the sanctity of railway lines and facilities within the protection area *Completion of current infrastructure management projects *Maintenance of technical lines and buildings	

Due to the combination and simultaneity of several reasoning strategies, this research uses theoretical summation instead of theoretical framework, which is as follows Figure 3.

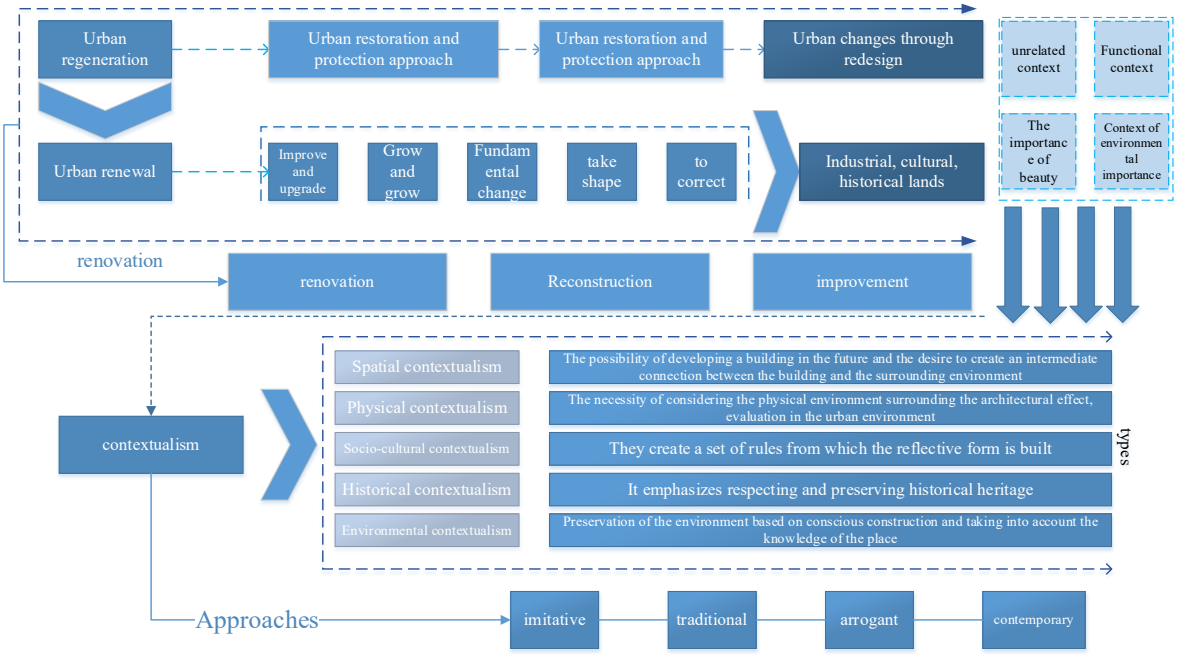


Figure 3. Theoretical summary of thematic literature related to title variables (Source: Authors, 2024)

Research Background

Qale Nuyi in 2022, in an article entitled "The Origins of the Thought and Method of Contextualism in urban planning, architecture, and the areas influencing these two from the 1960s until now" recognizes the evolution of "contextualism" in urban planning and architecture in this period (1960 to Kanon) with a review of its effectiveness from the opinions of thinkers in related fields. The present research method is descriptive and by explaining the thoughts of contextualism experts in the field of architecture and urban planning, as well as related and progressive fields such as philosophy and linguistics, which are the source of the thoughts of these two fields, it categorizes three main and distinct groups. Of the three categories identified, the first category is more influenced by the philosophy and linguistics of French thinkers; The second category, focuses more on history, culture, traditionalism, environmentalism, and fascism, and the third category, takes into account history, tradition, local culture, and environmentalism, has tried to coexist with the environment and strives to converge with the principles of sustainable development.

In 2022, in an article entitled "The Evolution of the Concept of Context and Contextualism in Architecture", Niayi and Eini Far explored the different aspects of this concept and how it affects the theoretical studies of architecture and urban planning. The research method is to analyze the content of related texts, extract the main keywords, and analyze their evolution over time. The analysis of the findings shows that there has always been a conflict of attention and lack of

attention to the context in modern, postmodern, and deconstruction schools. Also, the emphasis on stylistic features and formal profile in contextualism has expanded to the point that other aspects of contextualism have been neglected. Therefore, there is a need for a critical discussion plan and its theoretical development in the discourse of contemporary architecture. The results of the research can help advance the related theoretical issues by taking advantage of the evolution of the collected opinions and making the path of its practical use smoother in architectural design.

Zhou and Zhang, 2020, in an article titled "Contextualism and Sustainability: Beijing's Old Urban Revival" have pointed out that the idea of contextualism is emphasized in urban planning and the surrounding environment. This idea also refers to the sustainability of the landscape, which makes sense in the city. Most of the planning theories do not mention how the background of the city should be considered by urban planning.

Hosseini Nesab and Pouralikhani 2019 in the article "Social-cultural Contextualism: The Method of the Identity of the Architectural and Urban Planning of the studied example (New Shushtar City) based on Rappaport's Theory of Order" have investigated the example of modern urban development, New Shushtar city, and through the analysis of the obtained results in the form of pictures and tables has tried to clarify context-oriented design strategies with a socio-cultural approach. The upcoming research will use a qualitative type and descriptive-analytical research method. The method of accessing library and field information is completed through a case study.

In an article titled "Contextualism in the works of non-Iranian architects in the first Pahlavi period (Alborz and Iranshahr schools)" by Babaei and Khak Zand in 2018, the degree of adaptation to the context of these works was evaluated and it was concluded that two works were more or less influenced by It is from government systems and modernism, and one work, i.e. Iranshahr School, has paid more attention to the context and considered Iranian teachings. In this research, important criteria in contextualism related to functional dimension (dynamics, visual communication), physical dimension (proportions and human scale, spirit of place, relationship with surroundings and infrastructure), cultural dimension, and history (historical aspect and social values), The environmental dimension (the role of the designer and architectural plan) has been categorized and examined.

Sotoudeh & Wan Abdullah in 2018 in the article "Examination of the Appropriateness of the Design of the Historical Fabric of the City: from the Perspective of the Residents" have investigated the preferences of the residents of the historical fabric according to the conditions of the new interactive design and its relationship with the surrounding historical environment. The residents have become a part of the historical context of Shiraz city.

Demiri in 2017, in the article "Modern architecture as the intermediate masses of the historical context," investigated the policies and theoretical ideas in the case examples of the city of Athens. These examples are in the parts of the city where the new architecture is designed and implemented in a historical context, filling masses along the street facade in the vicinity of the old buildings.

Research Method

The research method in this study is a combination of qualitative and quantitative. It is also practical in terms of type. First, to extract the concepts of contextualism, a systematic review system with a library method was used to collect and categorize. This research lacks a theoretical framework (variable relationship) due to its hybridity and uses theoretical summation (summary of concepts and definitions). Then the first phase (qualitative) begins and the interview questions are extracted and formulated based on theoretical definitions and generalizations of the main research question. Then, with a snowball sample and starting with a targeted selection based on the entry criteria, a semi-structured interview is conducted with 28 experts. To facilitate coding based on description and interpretation, the coding system was used in ATLASTI8 software. In the coding system, each line of the text was carefully studied, and the hidden semantic content, underlying themes, and categories in that sentence were identified.

Entry conditions (sample entry criteria) as targeted sampling to conduct interviews are as follows;

- Be a member of the university faculty (at least an assistant professor).
- Have some examples of inefficient urban texture design.
- Have several articles on the components of contextualism or improvement of inefficient urban contexts
- Be proficient in the field of semi-structured interviews.

Table 3. People interviewed in this research

People interviewed	Number	Cumulative abundance	Accumulation percentage
Professors of architecture	11	39.3	39.3
Professors of urban management	7	25	64.3
Urban design professors	6	21.4	85.7
Urban planning professors	4	14.3	100
Sum	28	100	-

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, the components of contextualism were in improving the dysfunctional tissues of the city of Tehran and in line with responding to it. 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, and to minimize the cost and time, a questionnaire among a random sample of the statistical population (engineers and designers) Architecture was distributed in the engineering system of Tehran. The sample size was selected using Morgan's table, which includes 384 people, which is the highest value in this table and was randomly distributed according to the population and the separation of men and women. The results are entered into the JMPSAS17 software and analyzed with inferential statistics. Reliability is obtained by measuring the internal agreement of the data and Cronbach's alpha, which is (0.811). The CVR formula is used to calculate validity and is 0.761 for 28 experts.

Case study

In this research, according to the research question, the industrial area of the city of Tehran has been selected according to the purposeful sampling, and the Azadi Innovation Factory has been selected as the best sample with a preference system (scoring between 1 and 10 without repetition) among 28 experts.

This factory with industrial and workshop use is one of the leading and successful factories in Tehran. Still, when it was moved to the outskirts of Tehran, its original and old space remained stagnant and turned into a ruin. In September 2016, HemAva company, in cooperation with Avatech, AvaGames, Shazan, Zavieh, Novardgah, and Novava companies, started the idea of designing and building a place to assemble this ecosystem;

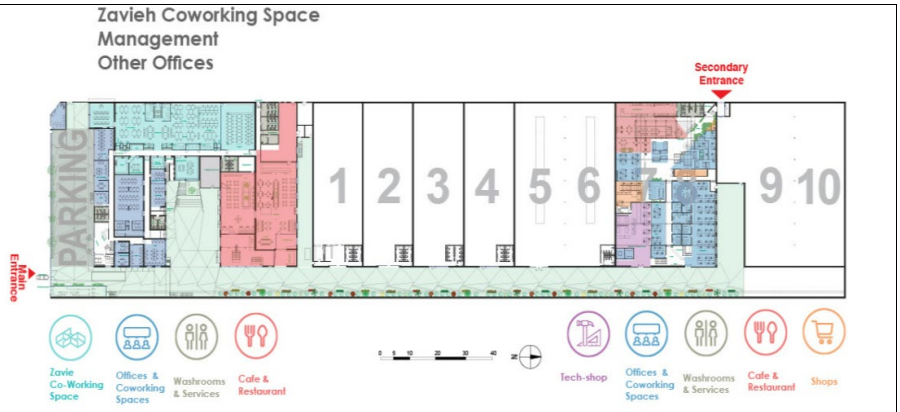
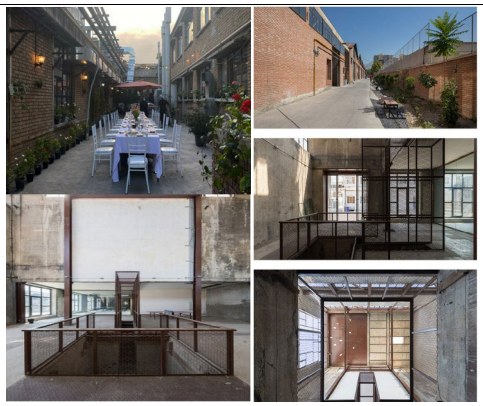
The restoration and restoration of the complex began with a local search for this type of activity and the selection of an abandoned factory near Tehran's Azadi Square. Establishment of the first innovation factory in the context of the Ama electrode factory (it was moved outside of Tehran due to environmental issues). This factory has ten sheds with an area of 10 thousand square meters and also an office building with an area of 4500 square meters. Also, by creating service units including a workspace, multiple meeting rooms, a conference hall, a sports club, a restaurant, and a coffee shop, it has made a suitable place for the concentration of the country's start-ups and risky investment companies.

The goal of setting up Azadi Innovation Factory is to create a platform to respond to the needs of entrepreneurs and those interested in setting up startups, which generally provides a unified space for all startup entrepreneurs, (Table 4). Among its other goals, we can mention better and centralized access for groups that were generally in smaller cities and migrated to Tehran in order to advance their goals in order to continue their activities in the startup ecosystem there. Among the services that this innovative factory provides to applicants, the following can be mentioned:

- Shared work space with team acceptance in accelerators
- Investing in teams entering acceleration programs at different stages of growth
- Leadership and guidance of startup teams by prominent mentors in factory accelerators

- Communication networks between factory member teams, large companies and policy makers for the growth of teams

Table 4. Before and after the re-creation intervention of the re-creation innovation in Azadi Innovation Factory (Source: www.innovationtour.ir)

Plan and section of the factory		
Facade	Before intervention	
	After intervention	
	After intervention	Before intervention
Interior space		
	After intervention	Before intervention

Outdoor area		

Findings

Qualitative findings

In the qualitative findings, the basis for conducting and multiple interviews is theoretical saturation in such a way that by repeating the results of the conducted interviews, the results are repeated. In this research, after the 28th interview, the data is repeated. In the first stage of open coding, a number of 48 codes are extracted, which after summarizing based on description and interpretation, the number reaches 36. They are classified into spatial, historical, environmental, socio-cultural and physical categories. The most prominent code obtained is related to paying attention to the details of the space with the number of 21 and the least prominent is related to the continuity of the shape of the historical texture with the number of 6. In the next step, a questionnaire with a Likert scale is compiled for each component.

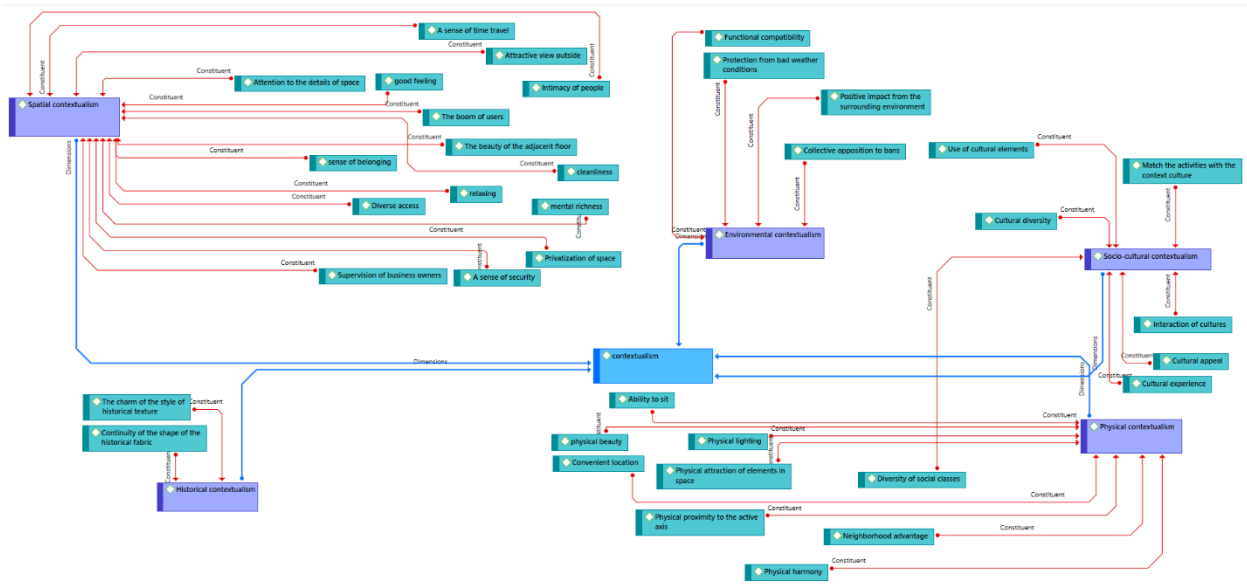


Figure 4. Open coding based on data reduction in ATLASTI software

Quantitative findings

Descriptive statistics

The results obtained from the general research questions show that 58% of the participants are men and 42% are women. Most of the participants' education is bachelor's degree with 52%, 26% master's degree and 12% specialized doctorate. The largest age group of the participants in this research is 47% between 18-22 and 26% between 22-26 and 27% between 26 and 30. The range 1 to 5 is used for unit conversion and numeration (very low to very high) and creates a range between (384 to 1920). The highest frequency of contextual components in improvement includes paying attention to the details of the space with a value of (1856) and the least related to collective opposition to prohibitions with a value of (106). In the modernization group, the positive influence of the surrounding environment with the value (1901) is the highest and the lowest is related to the collective opposition to the bans with the value (323). In the reconstruction group, the use of cultural elements with a value of (1906) is the highest and the lowest is related to collective opposition to prohibitions with a value of (651).

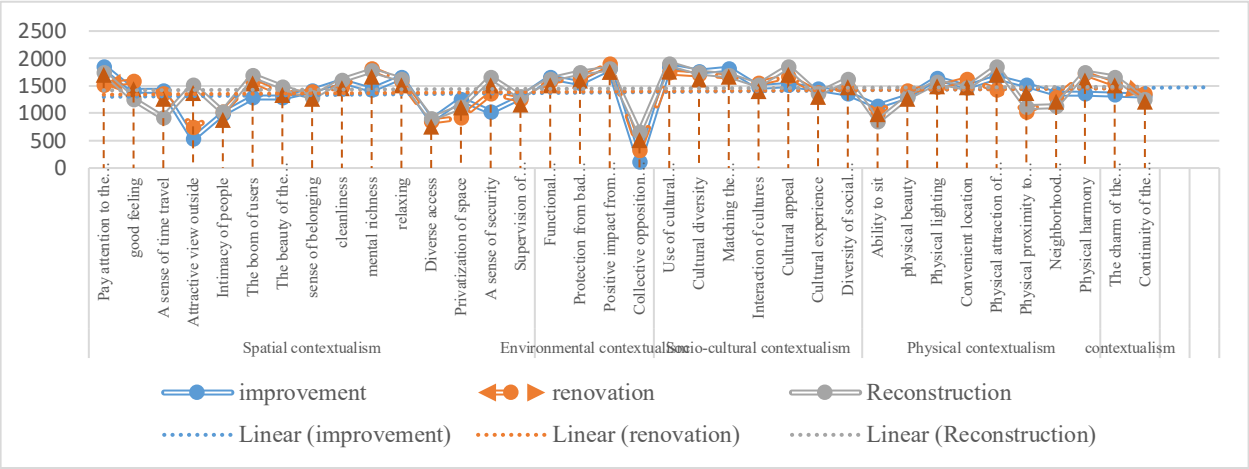


Figure 5. Frequency of effective contextualization components of environmental interventions

Inferential statistics

Correlation

Two-Sample Kolmogorov-Smirnov Test is used to check the parametric and non-parametric type of data.

Table 5. Kolmogorov-Smirnov test to check the effective contextual variables

P	Z Kolmogorov Smirnov	Standard deviation	average	Variable
0.281	0.798	228/3	25/44	Effective contextual variables in regeneration interventions

As can be seen in the Table 5, the Kolmogorov-Smirnov test is not significant (p=0.281) and therefore the components of contextualism variables are effective in regeneration interventions and non-parametric analyzes can be used for them. In the components of spatial contextualism, the sense of belonging has the highest correlation coefficient with a value of (0.981) and the lowest correlation coefficient is related to the supervision of business owners with a value of (0.246). the highest and the lowest are related to protection from bad climatic conditions (0.285). In the dimension of socio-cultural contextualism, the highest factor contribution is related to the use of cultural elements with a value of (0.921) and the lowest is related to the conformity of activities with the context culture (0.246). In physical contextualism, the component of physical beauty with a value of (0.922) has the highest correlation with other components and the lowest is related to the advantage of proximity with the value (0.262) in historical contextualism, the highest correlation is related to the attractiveness of the historical texture style with the value (0.881), the highest correlation and the lowest form of continuity is the historical texture with a value of (0.843).

Table 6. Contextual variables effective in regeneration interventions

Variables	Component	Correlation coefficient	Meaningful
Spatial contextualism	Good feeling	0.662	0.000
	A sense of time travel	0.406	0.010
	Attractive view outside	0.355	0.014
	Intimacy of people	0.646	0.012
	The boom of users	0.262	0.016
	The beauty of the adjacent floor	0.735	0.008
	Sense of belonging	0.981	0.006
	Cleanliness	0.843	0.007
	Mental richness	0.582	0.005
	Relaxing	0.274	0.004
	Diverse access	0.374	0.007
	Privatization of space	0.921	0.011
	Feeling safe	0.421	0.010
	Supervision of business owners	0.246	0.012
Environmental contextualism	Functional compatibility	0.821	0.014
	Protection from bad weather conditions	0.285	0.012
	Positive impact from the surrounding environment	0.675	0.007
	Collective opposition to bans	0.754	0.002
Socio-cultural contextualism	Use of cultural elements	0.921	0.004
	Cultural diversity	0.421	0.007
	Matching the activities with the culture of the time	0.246	0.011
	Interaction of cultures	0.524	0.010
	Cultural appeal	0.688	0.014
	Cultural experience	0.295	0.012
	Diversity of social classes	0.855	0.016

Physical contextualism	Ability to sit	0.742	0.008
	physical beauty	0.922	0.006
	Physical lighting	0.662	0.007
	Convenient location	0.406	0.005
	Physical attraction of elements in space	0.355	0.004
	Physical proximity to the active axis	0.646	0.007
	Neighborhood advantage	0.262	0.011
	Physical harmony	0.735	0.010
Historical contextualism	The charm of the style of historical texture	0.881	0.012
	Continuity of the shape of the historical fabric	0.843	0.014

Regression

To check the amount of factor contribution, it is necessary to use criterion variable and predictor variable. In the correlation matrix, it is compiled from the multiple models by guessing the type of linear or non-linear relationships. As can be seen, the relationships in the dimensions of contextualism do not have linear relationships, and multivariate regression is used for this purpose.

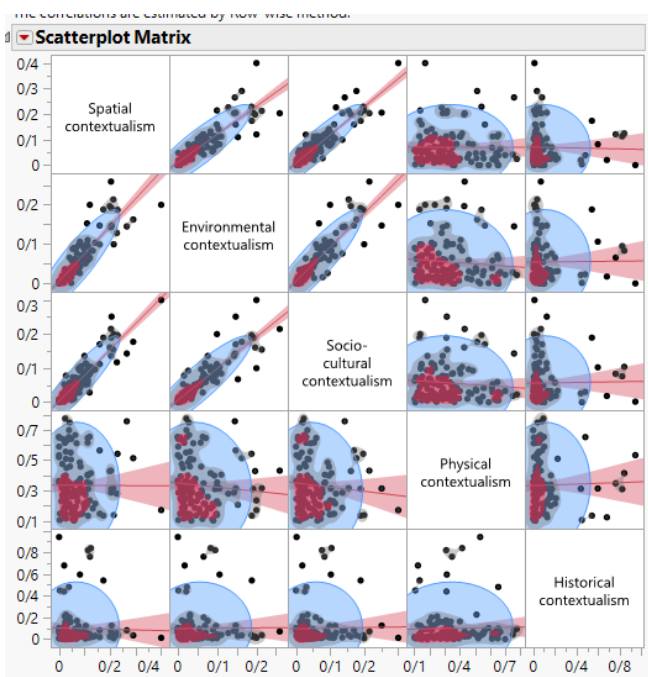


Figure 6. Correlation matrix between variables

Based on the regression results, it is determined that the highest factor load in the components of the dimension of spatial contextualism is related to good feeling and sense of security with a

value of (1.000) and the lowest factor is related to the beauty component of the adjacent axis with a value of (0.343). In the dimension of environmental contextualism, the highest coefficient of determination is related to the positive influence of the surrounding environment with a value of (0.695) and the lowest is related to collective protection with prohibitions with a value of (0.356). In socio-cultural contextualism, cultural attractiveness with a value of (0.951), the highest factor is related to cultural diversity with a value of (0.306). In physical context, the highest factor contribution is related to physical beauty and physical lighting with a value of (1.000) and the lowest is related to appropriate positioning. with a value of (0.511). In historical contextualism, the highest factor contribution is related to the continuity of the form of the historical context with a value of (0.815) and the lowest is related to the attractiveness of the style of the historical context with a value of (0.651).

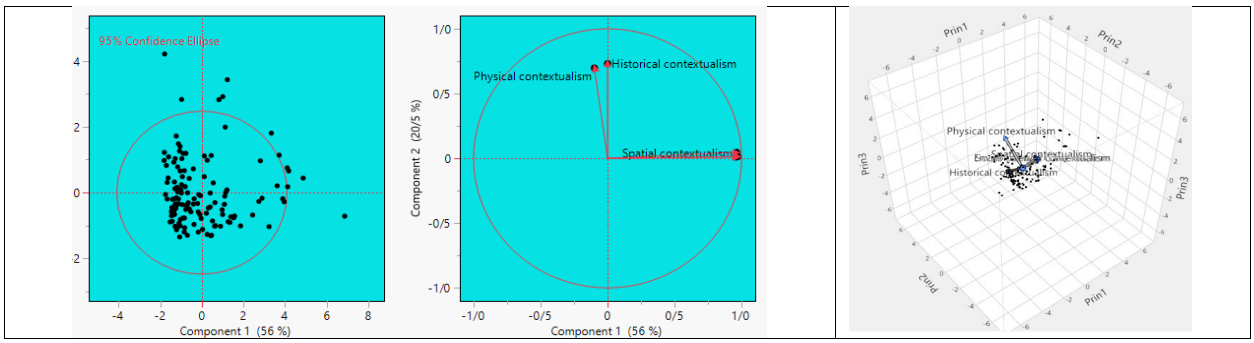
Table 7. Multivariate step-by-step regression of the effective components of contextualism in regeneration interventions

Variables	Component	Coefficient of determination	F	B	β	t	Meaningful
Spatial contextualism	good feeling	1/000	501/318	1/000	0.762	571/44	0.021
	A sense of time travel	0.820	801/544	1/000	0.372	365/31	0.014
	Attractive view outside	0.789	857/369	1/000	0.872	255/31	0.022
	Intimacy of people	0.658	506/710	1/000	0.685	479/58	0.011
	The boom of users	0.815	289/658	1/000	0.597	982/21	0.011
	The beauty of the adjacent floor	0.343	526/689	1/000	0.436	134/11	0.012
	sense of belonging	0.895	314/278	1/000	0.852	425/24	0.001
	cleanliness	0.756	586/784	1/000	0.665	132/23	0.004
	mental richness	0.723	695/174	1/000	0.213	121/48	0.011
	relaxing	0.745	261/824	1/000	0.425	963/47	0.017
	Diverse access	0.795	316/512	1/000	0.414	564/43	0.16
	Privatization of space	0.355	255/984	1/000	0.421	448/49	0.015
	Feeling safe	1/000	250/518	1/000	0.421	214/15	0.071
	Supervision of business owners	0.913	211/159	1/000	0.615	216/22	0.015
Environmental contextualism	Functional compatibility	0.522	588/453	1/000	0.424	552/22	0.021
	Protection from bad weather conditions	0.685	255/439	1/000	0.423	354/18	0.038

	Positive impact from the surrounding environment	0.695	565/325	1/000	0.454	341/32	0.002
	Collective opposition to bans	0.356	551/825	1/000	0.341	324/23	0.003
Socio-cultural contextualism	Use of cultural elements	0.425	133/746	1/000	0.578	839/28	0.021
	Cultural diversity	0.306	655/145	1/000	0.514	581/48	0.014
	Matching the activities with the culture of the time	0.723	325/659	1/000	0.542	566/48	0.022
	Interaction of cultures	0.689	333/544	1/000	0.541	698/29	0.011
	Cultural appeal	0.951	154/448	1/000	0.654	214/32	0.011
	Cultural experience	0.869	183/532	1/000	0.221	807/16	0.012
	Diversity of social classes	0.661	425/186	1/000	0.521	458/13	0.001
Physical contextualism	Ability to sit	0.581	441/139	1/000	0.522	458/36	0.004
	physical beauty	1/000	288/458	1/000	0.524	542/20	0.011
	Physical lighting	1/000	239/488	1/000	0.619	310/39	0.017
	Convenient location	0.511	369/225	1/000	0.162	725/28	0.16
	Physical attraction of elements in space	0.542	614/255	1/000	0.902	811/26	0.015
	Physical proximity to the active axis	0.672	501/318	1/000	0.532	231/23	0.071
	Neighborhood advantage	0.820	801/544	1/000	0.852	128/21	0.015
	Physical harmony	0.789	857/369	1/000	0.725	821/65	0.021
Historical contextualism	The charm of the style of historical texture	0.658	506/710	1/000	0.911	316/55	0.038
	Continuity of the shape of the historical fabric	0.815	289/658	1/000	0.147	411/43	0.002

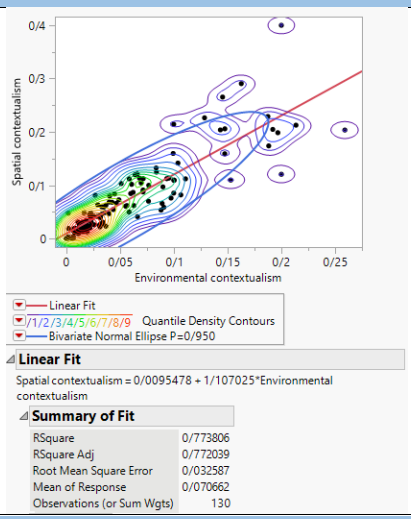
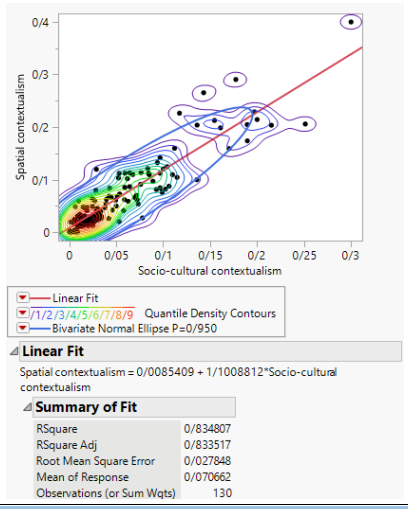
Other to increase the effectiveness of regeneration interventions and also to increase the intensity of the factor effect. Based on the findings, it is clear that the historical and physical components have a stronger causal relationship with each other, and social-cultural contextualism, environmental contextualism, and spatial contextualism also have a greater tendency with each other, as well as the intensity of the factor effect individually in the questionnaires. It was the highest for each person in spatial and environmental contextualism. Also, the size of the larger individual effect in 3D modeling based on spatial spotting indicates the same.

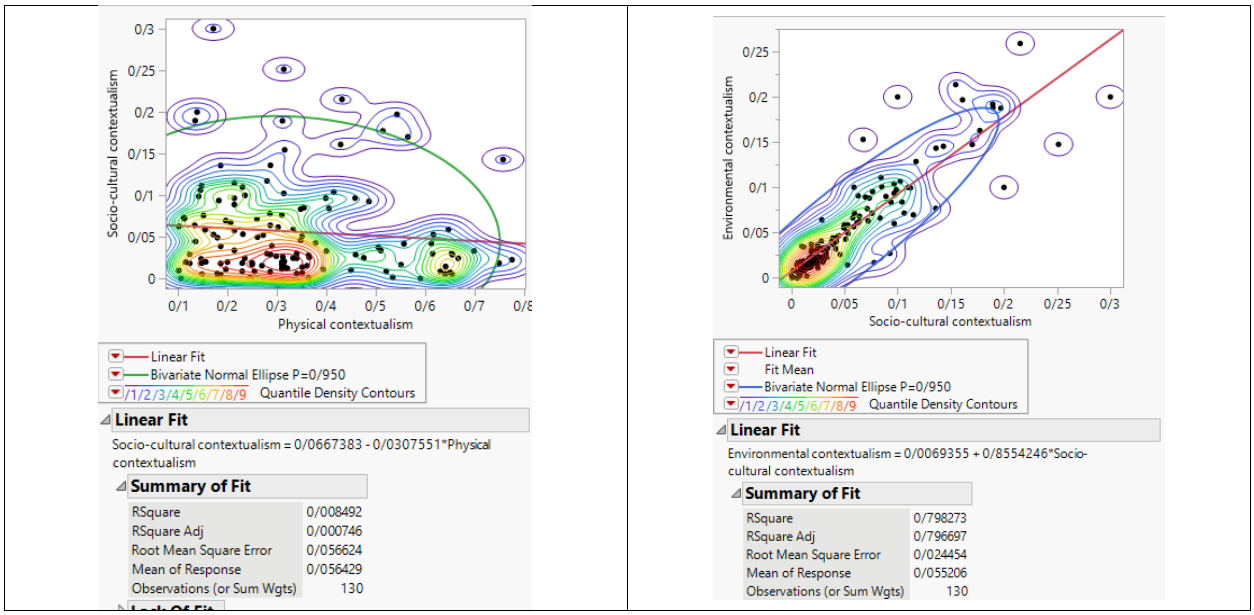
Table 8. PN modeling of the effective contextual variables of regeneration interventions



At the end, a graphical correlation is taken between different dimensions in a pairwise manner and it is determined that the spatial components of contextualism, environmental and socio-cultural components can be more than 0.7. The R2 format is displayed and other dimensions (such as physical and socio-cultural components) do not follow each other.

Table 9. Graphical correlation between the dimensions with the highest predictability from each other

R2=0.778	R2=0.834
	
R2=0.008	R2=0.798



Discussion

This research has emerged with the aim of numerically comparing the components of contextualism for the achievement of regeneration interventions. First, the number of extracted codes and the number of spatial and physical components, as well as the presence of more prominences in these two dimensions, emphasize this issue. Descriptive findings in statistics indicate that improvement, reconstruction and renovation can be considered interchangeably due to the similarity in numerical distribution and following moving average and can be considered as regeneration interventions. The difference between descriptive and inferential statistics indicates that the intensity of the effect should be explained based on inferential findings. For the explanatory conditions of the independent components in the criterion variable, correlation and regression should be used. The correlation between the components shows that the spatial components of contextualism have a greater ability to increase other components to improve environmental regeneration interventions. Also, due to being positive in all dimensions, the correlation results indicate the synergy of a component in the matching application. Regression results showed that paying attention to non-objective aspects in the space (renovation, improvement, renovation) can have the greatest impact in regeneration interventions along with paying attention to local and cultural aspects as well as the type of beauty at night. PN modeling and pairwise correlation show that environment, space, community and culture follow each other in regeneration interventions based on context.

According to the research findings, it can be concluded that in the dimension of spatial contextualism, the most influential component is the element of good feeling and feeling of security. This is because in this factory, preserving the industrial identity, changing the function

of the old spaces, and adapting them to meet the needs of today's users with the least interference and destruction in the existing situation have been considered. Also, in this factory, other spaces meet the needs of the employees during the day and their working hours, so this complex brings them the necessary comfort and the employees feel good and feel safe. In the dimension of environmental contextualism, the most determining coefficient is related to the positive influence of the surrounding environment. The reason for this is that the main courtyard of the complex, which is located all around the complex, has turned into the main plaza of the complex, which is a place to be transformed into a collective open space, which, in addition to resting the staff and users of the complex, can be used during events. The big one is also a meeting place. The staircase of this plaza in the Azadi Innovation Factory complex is designed in such a way that it is in harmony with the concept of the symbol of the complex.

This factory has 10 sheds with an area of 10,000 square meters. Among these ten sheds, sheds number seven and eight are also a suitable platform for innovation in the specialized areas of architecture, and urban design, which provide an opportunity for interaction by providing a suitable workspace, shared workspace, and space for interactions and social events. Dialogue, flourishing, and development of innovative ideas in the form of acceleration services for start-up teams in the field of architecture in Azadi Innovation Factory. As a result, in socio-cultural contextualism, cultural attraction is the most effective component. In the physical context, the biggest factor is related to physical beauty and physical lighting. The sharp and converging surfaces of the two sides of the factory, in addition to intensifying the perspective with the triangulation form of the floor, are also in harmony with the concept of peak and acceleration. This physical form of the pages intensifies the sense of dynamism and speed.

Among the actions of the builders and restorers of this old and abandoned factory are master plan design, initial restoration, structural strengthening, innovation factory infrastructure design, and implementation, as well as interior architecture design and implementation along with light design, furniture lighting, interior design of public and private spaces.

Conclusion

Today, Azadi Innovation Factory has used its inner potential and has been able to modernize this building and revive it as a factory to produce new architectural ideas, and it has also taken steps to connect to the industry. In reading a valuable historical work, several factors are of great importance. These factors will be effective in planning a powerful work, and you can't step into the arena by ignoring these design details. Because its content will appear empty. The limits and general ideas of the plan must be clearly defined. The reason for the current situation of Azadi Innovation Factory and the plan it has advanced is also very valuable. Because in the reconstruction of this factory, different dimensions and approaches have been considered. One of

the most widely used of them is the attention to context and contextualism, which has improved the objective and non-objective aspects of the Azadi Innovation factory. The regeneration of this factory has caused the old spaces of the factory have change quickly and turn into startup and innovation spaces. According to the findings of the research, the highest factor load in the components of the dimension of spatial contextualism is related to good feelings and feelings of security, in the dimension of environmental contextualism, it is related to the positive influence of the surrounding environment, in socio-cultural contextualism, cultural attractiveness and in the context Physical orientation is related to physical beauty and physical lighting. Based on these results, the following are suggested:

- Paying attention to creating different feelings in renovated spaces (liveliness, belonging, etc.) that can increase the emotional bond in the environment. This can be associated with people's recollection based on the use of multiple senses
- Creating security in spaces different from each other in such a way that each space, despite the visual and spatial links, has security in the physical and visual areas in its heart, so that the unity of the spaces can be strengthened in it.
- Paying attention to physical aesthetic aspects in re-creation to create visual appeal and inviting the audience and pay attention to physical aspects at night by lighting the components of building forms.
- Using different cultural elements according to the types of culture of the society to create a spatial metaphor and pay attention to the atmosphere of each region

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Conflict of interest

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