Identifying the Patterns of Components of the Corresponded Physique- Meaning Structure in Yazd Historical Context

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Abstract: *Structure is formed by components. Components are division units, connectors, joints and boundaries which are formed by transformators, around regulators and in adherence to principles. Such a structure has meaning. Meaning is a subjective which is perceived by the reader through a word, sentence, paragraph or text. The meaning structure is a network of semantic units which are formed by transformators, around regulators and in adherence to principles. Likewise, the physique structure of city is a total, consisting of Physique which are formed by transformators, around regulators, and in adherence to the principles. In this study, Yazd[i] historical context is the case study. The physique structure of Yazd historical context has been designed in compliance with rich patterns. This study is about to answer the question: What are the patterns of components of the corresponded structure of physique-Meaning in Yazd historical context? And how these patterns can be identified? The study of this context has been done through the samples in three levels. In this study, after describing the characters of the structure components and calculating the correlation between them, similarities and differences of the characters are categorized based on one or some characteristics and one specification and represented as patterns. This study has been performed by survey, descriptive and correlative methods. The conclusion of studies categorized the meaningful patterns which are formed in the physique structure of the context in accordance with behaviors, value criteria, and society and in general based on facilities, needs and demands of people. These patterns could be used in redesigning of the context.*

Keywords: *structure, meaning, physique, corresponded, patterns, Yazd historical context*

1. INTRODUCTION

The manner of the style, order and arrangement of the component`s shape of different phenomena, leads to the phenomenon called structure. These components are consisted of division unit, connectors, joints and boundaries (Noormohamadzad & Behzadfar, 2011). The term structure became an important word in various fields of knowledge by Ferdinand de Saussure (Meghdadi, 2014). Saussure expressed language structure (Piaget, 2005). After the linguistics, constructivism was introduced into other fields. The most appropriate form of constructivism was appeared in studies and researches of Claude Levi-Strauss in anthropology (Partovi 1999). Strauss believes that constructivism is an attempt to find the unchangeable element among superficial distinctions. (Ahmadi, 2003) Following this process, constructivism, which was emerged in the early 1950s through the discussion between SIAM and TeamX as a method in architecture and urbanism, was corresponded to Strauss's thought. With the development of constructivism in architecture and urbanism, the two other currents of thoughts had won the special position: Brutalism and formalism (Partovi 1999). Noam Chomsky continued current of thoughts which had been performed by earlier scholars such as Ferdinand de Saussure and Louis Hjelmslev, by his language theory (Lotfi, 2005).

Structure is one of the concepts that can be followed in different phenomena. Based on the "structure theory", components of a phenomenon are related to each other by transformators around the regulators and in adherence to principles, and then create the structure of phenomenon. Therefore, in order to model the structure of a phenomenon, 4 points have been considered: components which give existence, transformators that have creative role, regulators that have ordering role and principles which are foundation and basis of meaning structure formation (Noormohamadzad & Behzadfar, 2011).

Meaning has the structure. Meaning structure is a network of meaning units and the relations between these units (Larsen, 2008). In order to compile the meaning structure, the "structure theory" was used. Conclusion of studies showed that the relation of meaning of morphemes, words, sentences, paragraphs and texts, and their intersections with each other, and the confluence of their intersections with each other, by the increment, replacement, and removal transformators and using the regulators in adherence to hierarchy, identity, and referring principles, create the meaning structure. The meaning structure is the resultant of structures of various levels of speech, meaning paragraphs, issues, concepts, and meaning components and their relations with each other.

Likewise the physique of the city has the structure. In order to compile the physique structure of the city, the "structure theory" was used. Based on the structure theory on physique structure, division units are defined as the shape of the intersection of form, material and content. The intersection shape of division units creates connectors. The shape of connectors' confluence creates joints. The shape of most outer limit of division units forms the boundary. These components form the physique structure of the city by transformators, around regulators and in adherence to principles. (Noormohamadzad & Behzadfar, 2011).

This study is aimed to identify the correlated patterns of components of physique structure of the city and meaning structure. Out of the four points that were counted for the structure of each concept, the study is limited to the identification of the 'components' of each concept. Identifying the patterns of transformators, patterns of regulators and patterns of principles could be the subject of further researchs.

Yazd historical context is the precious legacy left from the past. This context has words, sentences and paragraphs rich in meaning which over time has always played an important role in giving meaning to urban life. This context has been chosen as the case study in this research. Studying this historical context and identifying patterns that have benefited predecessors is necessary in order to achieve the goal of creating meaningful physique.

This study has been performed by survey, descriptive and correlative methods. To collect data needed for the study a questionnaire, field notes and sketches were used. Analyzing data has been done by software techniques (SPSS 19).

Article Layout

1- Theoretical Model of Meaning Structure
Based on the structure theory on the meaning structure, division units are including the meaning of morpheme, words, sentences, paragraphs and texts. The intersection of meaning of morpheme, words, sentences, paragraphs, and texts create the connectors. The confluence of meanings of morphemes, words, sentences, paragraphs, and text create joints. The most outer limit of morphemes, words, sentences, paragraphs and texts, form the boundaries. (Rahmani& Noormohamadzad, 2016)

2- Theoretical Model of Physique structure of the City
Based on the structure theory on physique structure, division units are defined as the shape of the intersection of form, material and content. The intersection shape of division units creates connectors. The shape of connector's confluence creates joints. The shape of most outer limit of division units forms the boundary. (Rahmani& Noormohamadzad, 2016)

3. The Correspondence of Meaning Structure and Physique structure
In various writings, the city has repeatedly assimilated to a text; a text full of sings and meaning that should be decoded by the text reader. It is noteworthy that positions, traditions, customs, conditions and even memoirs can change meanings. Hence, meaning should be formed in the context, background, or according to the linguistics, 'text' (Shole, 2009). Therefore, we use the physique structure of city in our study as a text to

reach the meaning: maybe it can be said that we further seek the meaning, since it is meaning that create the life and city is the location for life (Barthes, 2003).

Hence, in order to compare the meaning approach by the characteristics of 'today city', a detailed and deep research is necessary (Shole, 2009).

This study is specifically identifying the corresponded patterns of components of physique structure of the city and meaning structure. Therefore, through the opportunity provided in this study, to reach a conceptual framework and methodology, the correspondence between levels, components, Constituent and characters (characteristics, traits, specifications and features) has been established first. Then by categorizing corresponded characters based on one or some characteristics and one specification, the corresponded patterns of meaning structure and physique structure have been identified and presented.

3-1- Correspondence of the Levels of Meaning Structure and Physique structure

Meaning structure has some levels. The smallest unit is a meaning component. Meaning components are connected to each other and create the concepts. Concepts create the issues, and issues create the meaning paragraphs, and then meaning paragraphs are united in order to form the larger unit, speech(Larsen, 2008). Likewise physique structure is created of various levels. These levels are consisted of physique structure of particle, blocks, superblocks, sectors, and their inner and outer relations in the environment (Noormohamadzad & Behzadfar, 2011).

It has been discussed that the city is a book. City is consisted of sectors, and the book is consisted of speech. Sector and speech are consisted of superblocks and meaning paragraphs, respectively. Blocks and issues have formed the superblocks and meaning paragraphs, respectively. Blocks are consisted of particles and issue is consisted of some concepts. Finally, masses create the particles and meaning components create concept.

Table 1: The corresponded of meaning structure levels by the physique structure levels

Levels of meaning structure	Levels of physique structure	Corresponded levels
Meaning component	Mass*	Mass-Meaning component
Concept	Particle*	Particle - Concept
Issue	Block	Block - Issue
Paragraph	Superblock	Superblock - Paragraph
Speech	Sector	Sector - Speech
Book	City	City - Book

*Yazd historical context is a part of the city consisting of sectors. In this study, the research begins from sector as the highest level and leads to block as the lowest level.

3-2- Correspondence of Components of Meaning Structure and the Physique Structure

In the city, each building has the role of a word. A set of buildings form the sentence. Districts create the chapters and texts, and city is the book. The book can be read in general, without any disorder in the validity of text, sentence and word (Habibi, 2001). The components of Physique structure of the city can be corresponded to the meaning structure as it can be seen in table 2:
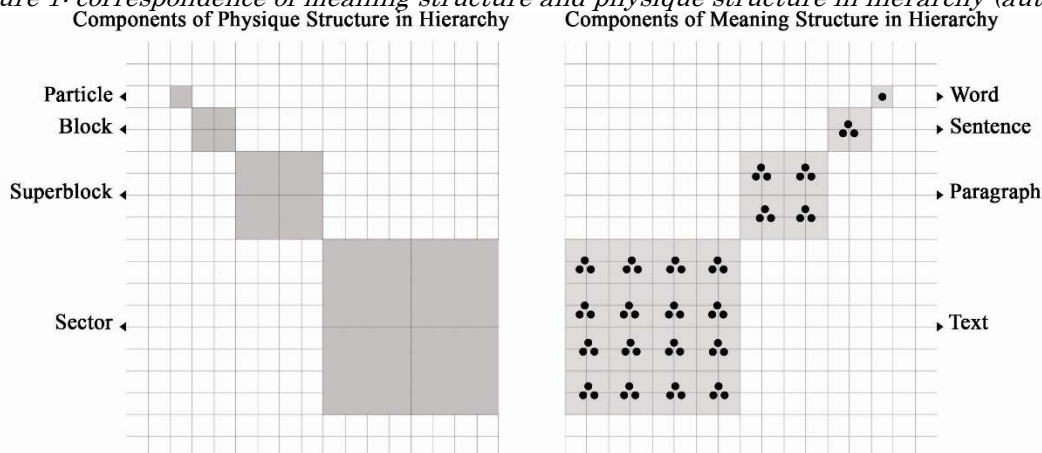
Table 2: The correspondence of components of meaning structure by the components of Physique structure (authors)

Levels	Components of meaning structure	Components of Physique structure	Structure components
Sector - speech level	Text meaning	shape of sectors' physique	Division unit
	Meaning of text intersections	Shape of main passes	connector
	Meaning of confluence of the texts intersection	Shape of intersections and squares and Crossroads	Joint
	Meaning of most outer limit of texts	Shape of most outer limit of sectors' physique	boundary
Superblock - paragraph level	Paragraph meaning	shape of superblocks' physique	Division unit
	Meaning of paragraphs intersections	Shape of secondary passes	connector

		Meaning of confluence of the paragraphs intersection	Shape of intersections and points	Joint
		Meaning of most outer limit of paragraph	Shape of most outer limit of superblocks' physique	Boundary
block -issue level		Meaning of sentence	Shape of blocks' physique	Division unit
		Meaning of sentences intersection	Shape of alleys	connector
		Meaning of confluence of the sentences intersection	Shape of intersections, squares and points	Joint
		Meaning of most outer limit of sentences	Shape of most outer limit of blocks' physique	boundary
particle - concept level		Word	Shape of particles' Physique	Division unit
		Meaning of words intersection	Shape of deadlocks	connector
		meaning of confluence of the words intersections	Shape of entrances, crossing points	Joint
		Meaning of most outer limit of words	Shape of most outer limit of particles' Physique	boundary

The correspondence of meaning structure and physique structure in hierarchy is represented in figure 1.

Figure 1: correspondence of meaning structure and physique structure in hierarchy (authors)

3-3- The Correspondence of Constituent of Meaning Structure and Physique structure

In order to find the intersections of constituents and characters of meaning structure with physique structure, in table 3, correspondence of constituents including "meaning intensity", "meaning role storming", "meaning primacy", "identity", "readability", and "order", from the meaning structure is established by the constituents including "shape" and "elongation", from the physique structure. These constituents have been extracted from several definitions of 'meaning and 'physique' in different sources.

Table 3: corresponding constituents of meaning structure and physique structure (authors)

		constituents of physique structure	
		shape	elongation
constituents of meaning structure	1. Meaning intensity	Meaning intensity of shape	meaning intensity of elongation
	2. Meaning role storming	Meaning role storming of shape	meaning role storming of elongation
	3. Meaning primacy	Meaning primacy of shape	meaning primacy of elongation
	4. Identity	Identity of shape	Identity of elongation
	5. Readability	Readability of shape	Readability of elongation
	6. Meaning clarity	Meaning clarity of shape	Meaning clarity of elongation

3-4- Correspondence of characters of Meaning Structure and Physique structure

The quality constituents of meaning structure and physique structure were presented in table 3. In order to measure these constituents, each of their characters should be identified. The characters have been extracted from the definition of each constituent.

Table 4: corresponding characters of meaning structure and physique structure

		characters of physique structure			
		Length	width	border	direction
characters of meaning structure	1. prominent different	Prominent and different Length	Prominent and different Width	-	-
	2. unique	-	-	Unique border	-
	3. dominant	Dominant Length	Dominant Width	-	Dominant direction
	4. memorable	-	-	Memorable border	-
	5. recognizable distinct	Recognizable and distinct Length	Recognizable and distinct Width	Recognizable and distinct border	-
	6. balanced	Balanced Length	Balanced Width	balanced border	-

Based on table 4, in each of the three levels of 'Block - Issue', 'Superblock - Paragraph' and 'Sector - Speech' the characters to measure are: prominent and different length, prominent and different width, unique border, dominant length, dominant width, dominant direction, memorable border, recognizable and distinct length, recognizable and distinct width, recognizable and distinct border, balanced length, balanced width and balanced border.

Research method

Identifying the patterns is a process which is done by some sub-functions (Describe, Categorize, Determine the change procedure)

This study has been conducted by survey, descriptive and correlative methods through both inductive and deductive attitude. To collect data needed for the study a questionnaire, field notes and sketches were used. Analyzing data has been done by software techniques (SPSS 19). The study of case (Yazd historical context) has been done through the samples in three levels. First the samples have been determined and represented by 'cluster sampling method'. In each level the components` characters of meaning structure and physique structure have been identified and described. Then correlation between characters of meaning structure and physique structure has been calculated.

The components' characters of physique structure, as the independent variables, have been measured. The components'characters of meaning structure, as dependent variables, have been evaluated by questionnaire. Each variable evaluated in questionnaire, that has ordinal scale, has been ranked in 5 degrees (based on Likert scale) which are presented in table 5.

Table 5: Ranked qualitative characters based on Likert scale

1	2	3	4	5
Absolutely Non-prominent	Rather Non-prominent	average	Rather prominent	Absolutely prominent
Absolutely Non- unique	Rather Non-unique	average	Rather unique	Absolutely unique
Absolutely Non-dominant	Rather Non-dominant	average	Rather dominant	Absolutely dominant
Absolutely Not Memorable	Rather Not Memorable	average	Rather Memorable	Absolutely Memorable
Absolutely Non-distinct	Rather Non-distinct	average	Rather distinct	Absolutely distinct

Absolutely Unbalanced	Rather Unbalanced	average	Rather Balanced	Absolutely Balanced

381 samples[ii], as the representative of all people in Yazd historical context, were selected by 'random sampling method'. For each component of the structure separate questionnaire was provided. After filling the questionnaires in and gathering data, studying the correlation between variables (characters of meaning structure and physique structure) has been done through categorizing and describing data in 'SPSS 19'.

Conclusions have been obtained from the case studies in each level. Based on this research process after the description components` characters of structure and calculation of correlation between them, similarities and differences of the characters have been categorized and concluded as species, types and patterns. If categorizing is based on one characteristic, species are obtained; if categorizing is based on two characteristics, types are obtained, if categorizing is based on one or some characteristics and one specification, patterns are obtained; in this study only patterns were identified. (Species and Types could be considered in future studies)

Species, types and patterns are the outputs of describing and categorizing steps in the process. Therefore the last step (determine the change procedure) was not needed to follow in this study and could be discussed in future studies.

Case study introduction (in Yazd Historical Context)

Yazd historical context is the precious legacy left from the past. This context has words, sentences and paragraphs rich in meaning which over time has always played an important role in giving meaning to urban life. This study aims to identify the patterns that have benefited predecessors in order to create a meaningful physique.
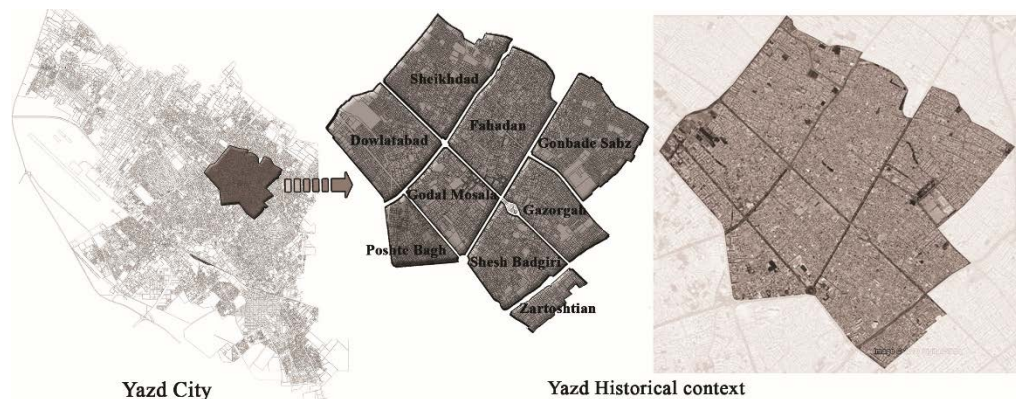

Figure 2: The location of historical context in Yazd

Findings and Discussions

1- Speciology in Sector – Speech level

Yazd historical context which plays a role in collective memory of this city, can act as a semantic field. This field is consisted of elements and components which create its hyponyms. At first level semantic field is consisted of texts. Texts in meaning structure are corresponded with sectors in physique structure.

1-1- *Identifying and describing the components of physique-meaning structure in Sector – Speech level*

Based on the General model of meaning structure, division units in Speech level are texts. Connectors of structure are the intersection of texts' meanings. The joints of structure are the intersection points of Connectors. The boundaries of structure are the most outer limit of the texts' meanings. Based on structure theory, division units in Sector level are the shapes of sectors. The connectors are shapes of intersection of sectors (the shape of main passes). The joints are shapes of intersection of connectors (intersections, squares and crossroads). The boundaries are shapes of the most outer limit of sectors.
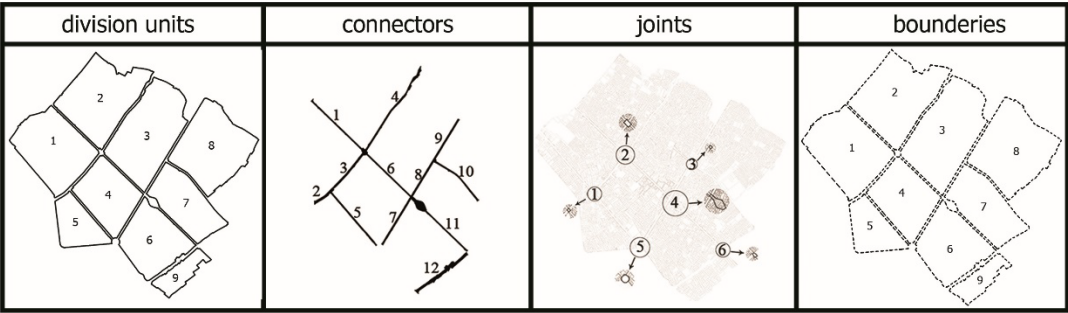
Figure 3: the components of structure in Sector – Speech level

Characters of physique structure components have been described and measured as the independent variables, and the characters of meaning structure have been described and measured by questionnaire, as the dependent variables. The outcome has been omitted here to prevent prolongation.

1-2- *Calculating the correlation between the components' characters of physique- meaning structure in Sector – Speech level*
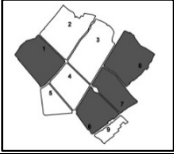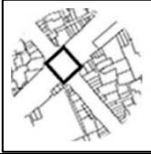
The correlation between the characters of physique-meaning structure, separately for each of the structure components has been calculated. The outcome has been omitted here to prevent prolongation.

1-3- *Corresponded patterns of physique- meaning structure in Sector – Speech level*

In table 6, the similarities and differences of the characters of structure components in Sector – Speech level are categorized and concluded as patterns. Categorization has been done separately for each of the structure components.

Table 6: patterns of the structure components in Sector – Speech level

Characters of meaning		division unit and boundary		connector		joint
dominant		Pattern 1: Division units with a length in the class interval of [1220-1446] meters and width in the class interval of [304-519] meters with Longitudinal direction		Pattern 1: Connectors with a length in the class interval of [1111-1330] meters and with a width in the class interval of [20-24] meters with arc border.		
distinct		Pattern 1: Division units with a length in the class interval of [1220-1446] meters and width in the class interval of [304-519] meters with rectangle border.		Pattern 1: Connectors with a length in the class interval of [1111-1330] meters and width in the class interval of [36-40] meters with non-geometric border.		

Balanced	Pattern 1: Division units with a length in the class interval of [542-768] meters and width in the class interval of [914-1164] meters with square border.		Pattern 1: Joints with a length in the class interval of [31-54] meters and width in the class interval of [48-92] meters with rectangle border.

2- Speciology in Superblock – Paragraph level

Superblocks in Yazd historical context can act as a semantic field. This field is consisted of elements and components which create its hyponyms. At second level, semantic field is consisted of paragraphs. Paragraphs in meaning structure are corresponded with Superblocks in physique structure.

2-1- Identifying and describing the components of physique-meaning structure in Superblock – Paragraph level

Based on the structure theory on meaning structure in Paragraph level, division units are paragraphs. Connectors of structure are the intersection of paragraphs' meanings. The joints of structure are the intersection points of Connectors. The boundaries of structure are the most outer limit of the paragraphs' meanings.

Based on structure theory, division units in Superblocks level are the shapes of Superblocks. The connectors are shapes of intersection of Superblocks (the shape of secondary passes). The joints are shapes of intersection of connectors (intersections and points). The boundaries are shapes of the most outer limit of Superblocks.
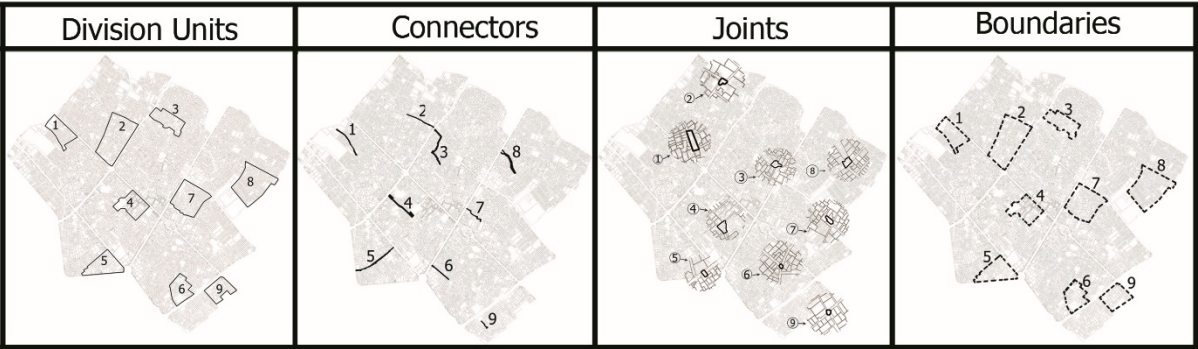

Figure 4: the components of structure in Superblock – Paragraph level

Characters of physique structure components and meaning structure components, in Superblock – Paragraph level, have been described and measured. The outcome has been omitted here to prevent prolongation.

2-2- Calculating the correlation between the components' characters of physique- meaning structure in Superblock – Paragraph level
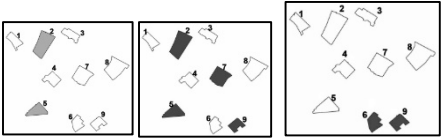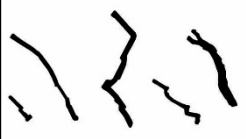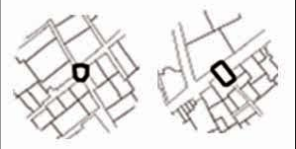
Correlation between the characters of meaning structure and physique structure, separately for each of the structure components, has been calculated and the results has been omitted here to prevent prolongation.

2-3- Corresponded patterns of physique- meaning structure in Superblock – Paragraph level

In table 7, the similarities and differences of the characters of structure components in Superblock – Paragraph level are categorized and concluded as patterns. Categorization has been done separately for each of the structure components.

Table 7: patterns of the structure of components in Superblock – Paragraph level

The Characters of meaning structure	The Characters of physique structure		
	division unit and boundary	connectors	Joints
prominent	There is not any pattern in these division unit and boundary	There is not any pattern in these connectors	There is not any pattern in the joints
unique			
dominant			
Memorable			
distinct	Division units with a length in the class interval of [506-614] meters and width in the class interval of [203-258] meters with geometric border.	Connectors with a length in the class interval of [111-221] meters and width in the class interval of [17-21] meters with Non- straight direction.	
Balanced	Joints with a length in the class interval of [8.5-14.5] meters and width in the class interval of [6-16] meters with rectangle direction.		

3- Speciology in block – issue level

Blocks in Yazd historical context can act as a semantic field. This field is consisted of elements and components which create its hyponyms. At third level, semantic field is consisted of sentences. Sentences in meaning structure are corresponded with blocks in physique structure.

3-1- Identifying and describing the components of physique-meaning structure in block – issue level

Based on the structure theory on meaning structure in issue level, division units are sentences. Connectors of structure are the Meaning of sentences intersections. The joints of structure are the intersection points of Connectors. The boundaries of structure are the Meaning of most outer limit of sentences.

Based on structure theory, division units in blocks level are the shapes of blocks. The connectors are shapes of intersection of blocks (Shape of alleys). The joints are shapes of intersection of connectors (Shape of intersections, squares and points). The boundaries are shapes of the most outer limit of blocks.
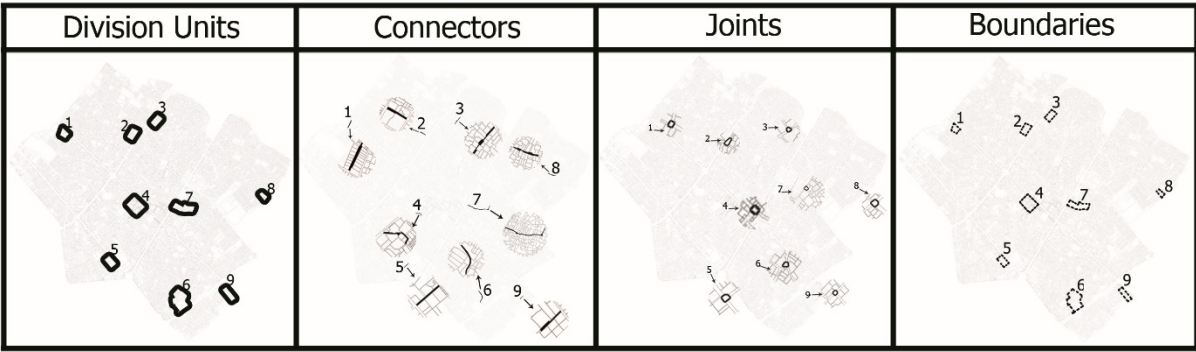
Figure 5: The components of structure in block -issue level

Characters of physique structure components and meaning structure components, in block -issue level, have been described and measured. The outcome has been omitted here to prevent prolongation.

3.2. Calculating the correlation between the components' characters of physique- meaning structure in block -issue level

The correlation between the characters of meaning structure and the characters of physique structure, separately for each of the structure components has been calculated and the results has been omitted here to prevent prolongation.

3.3. Corresponded patterns of physique- meaning structure in block -issue level

In table 8, the similarities and differences of the division units' characters of structure in block -issue level are categorized and concluded as patterns. In table 9, the patterns of connectors and in table 10, the patterns of joints are introduced.

Table 8: patterns of the division unit and boundary of the structure in block -issue level

The Characters of meaning structure	division unit and boundary			
Prominent	Pattern1: Division units with a length in the class interval of [232-294] meters and width in the class interval of [197-238] with longitudinal direction.		Patterm2: Division units with a length in the class interval of [232-294] meters and width in the class interval of [197-238] with rectangle border.	
	Pattern3: Division units with a length in the class interval of [232-294] meters with longitudinal direction With rectangle border.		Pattern4: Division units with width in the class interval of [197-238] with longitudinal direction With rectangle border.	
unique	Pettern1: Division units with a length in the class interval of [46-108] meters and width in the class interval of [197-238] meters with latitudinal direction.		Pattern2: Division units with a length in the class interval of [46-108] meters and width in the class interval of [197-238] meters with non-geometric border.	
	Pattern3: Division units with a length in the class interval of [46-108] meters with latitudinal direction with non-geometric border.		Pattern4: Division units with width in the class interval of [197-238] meters with latitudinal direction with non-geometric border.	

Dominant	Division units with a length in the class interval of [232-294] meters and width in the class interval of [197-238] meters with latitudinal direction	
Memorable	Division units with a length in the class interval of [46-108] meters and width in the class interval of [197-238] meters with non-geometric border	
distinct	Division units with a length in the class interval of [232-294] meters and width in the class interval of [197-238] meters with non-geometric border.	
Balanced	Division units with a length in the class interval of [232-294] meters and width in the class interval of [74-115] meters with rectangle border	

Table 9: patterns of the Connectors of the structure in block -issue level

The Characters of meaning structure	division unit and boundary	
Prominent	Connectors with a length in the class interval of [258-325] meters and width in the class interval of [3-5] meters with straight direction.	
unique	Connectors with a length in the class interval of [258-325] meters and width in the class interval of [3-5] meters with straight direction.	
Dominant	Connectors with a length in the class interval of [258-325] meters width in the class interval of [9-11] meters with Non-straight direction	
Memorable	Connectors with a length in the class interval of [258-325] meters and width in the class interval of [3-5] meters with Non-straight direction	
distinct	Connectors with a length in the class interval of [258-325] meters width in the class interval of [9-11] meters with straight direction	
Balanced	Connectors with a length in the class interval of [57-325] meters and width in the class interval of [9-11] meters with straight direction	

Table 10: Patterns of the Joints of the structure in block -issue level

The Characters of meaning structure	division unit and boundary		
Prominent	Pattern1: Joints with a length in the class interval of [18-22] meters and width in the class interval of [5-7] meters with latitudinal direction.	Pattern2: Joints with a length in the class interval of [18-22] meters and width in the class interval of [5-7] meters with geometric border.	
	Pattern3: Joints with a length in the class interval of [18-22] meters with latitudinal direction with geometric border.	Pattern4: Joints with width in the class interval of [5-7] meters with latitudinal direction with geometric border.	

unique	Pattern1: Joints with a length in the class interval of [6-10] meters and width in the class interval of [11-13] meters with longitudinal direction.	Pattern2: Joints with a length in the class interval of [6-10] meters and width in the class interval of [11-13] meters with non-geometric border.	
	Pattern3: Joints with a length in the class interval of [6-10] meters with longitudinal direction with non-geometric border.	Pattern4: Joints with width in the class interval of [11-13] meters with longitudinal direction with non-geometric border.	
Dominant	Joints with a length in the class interval of [6-10] meters and width in the class interval of [11-13] meters with Non-geometric border		
distinct	Pattern1: Joints with a length in the class interval of [18-22] meters and width in the class interval of [5-7] meters with latitudinal direction.	Pattern2: Joints with a length in the class interval of [18-22] meters and width in the class interval of [5-7] meters with latitudinal direction with geometric border.	
	Pattern3: Joints with a length in the class interval of [18-22] meters with latitudinal direction with geometric border.	Pattern4: Joints with width in the class interval of [5-7] meters with latitudinal direction with geometric border.	
Balanced	Joints with a length in the class interval of [18-22] meters and width in the class interval of [5-7] meters with geometric border		

Conclusion

Meaning Structure is the resultant of its components' structure which is related to each other by transformators, around regulators and in adherence to principles. Likewise, physique structure of the city is the resultant of its components' structure which is related to each other by transformators, around regulators and in adherence to principles. This study specifically followed the components of the structure of each concept.

Corresponded levels, components, constituents and characters of meaning structure and physique structure shows that the meaning structure has an influence on physique structure of the city. In this research, the correlation between the meaning structure components and the physique structure components was calculated. To calculate the correlation, direction (positive or negative) and degree (strength) of relationship between variables (characters of meaning structure and physique structure) were described. Then by categorizing the similarities and differences of the characters, based on one or some characteristics and one specification the patterns of components of the corresponded structure of physique- meaning in Yazd historical context were identified and presented in three levels.

Identifying the patterns was done separately for division units, connectors, joints and boundaries in each level. When redesigning the physique structure of Yazd historical context with the emphasis on meaning structure, these patterns could be applied. If the corresponded bilateral relations with the highest correlation are provided as a network, the network could be the model of physique-meaning structure to be used as a basis for interventions.

Notes
    i.   Yazd is a historical city in the center of Iran. The historical structure of Yazd is a collection of public-religious architecture in a very large scope comprising of different Islamic architectural elements of different periods in a harmonious combination with climatic conditions. (http://whc.unesco.org/en/tentativelists/5191)
    ii.   Cochran's formula was used to determine the samples size. To calculate the sample size, population size was placed in the formula. The population size was 64700, so the sample size was estimated to be 381.

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