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## Analysis of Organizational Network of Participatory Management in Urban Renaissance of Gorgans Historical Context

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### Abstract

The hierarchal structures in organizations and unfamiliarity with the network relations governing the management of urban contexts have resulted in the lack of organizational cooperation and coordination in the field of management of such contexts. Consequently, numerous problems have occurred in the renewal of urban contexts. On the other hand, in the recent years, the government has highlighted the necessity of participatory management founding Urban Regeneration Commission. The historical context of Gorgan is one of the Iran's valuable contexts which like its other predecessors in other cities has suffered from numerous problems that its solution needs to inter-organizational cooperation. However, numerous organizations with different administrative structures are involved in this field. Therefore, this study is an attempt to analyze the participatory structure of organizational network responsible for the renewal of historical context of Gorgan. The main goal of this paper is the analysis of organizational network in relation with participatory management of urban renaissance in the historical context of Gorgan. On this account, the study is seeking for identification of network features, interpretation of participatory structure and analysis of actors in this field. The main question of study is What are the features of the participatory structure of the organizational network used for the renewal of historical context of Gorgan? To answer this question, the study used descriptive- interpretative strategy in pragmatism paradigm of research. Data gathered through semi-structured interviews and then analysed by social network analysis method based on the data of inter-organizational relations.

The results of the study indicates that despite government's endeavor for founding Urban Regeneration Commission and its effects on renaissance network, the renaissance network of the historical context of Gorgan is still governed by a hierarchical structure and based on the central governance pattern, in which mentioned and referred in previous researchs. Moreover, the research findings indicated that the inter-organizational relation could be deemed as coordination, which is formed due to the short-term relations for organizational coordination and data sharing. Considering the features of network participatory structure, the study has classified the network actors into three groups of active agents, potential agents, and indifferent agents.

**Keywords:** *Organizational network; urban renaissance; the historical context of Gorgan*



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## Introduction and proposition

The partial inefficient structures caused to lack of coordination and coherence between the officials. Therefore, the researchers of participatory management have suggested previous management pattern or state governance should be replaced by the enterprise pattern. Application of the enterprise pattern indicates that management, regardless of what it includes, is a multilateral subject and free from governmental and formal commands. Therefore, participatory management is an applied subject when the influencing factors are not under control and the authority of only one actor, and many officers with different capabilities and interests play a role (Duitz and Galaz, 2008). Alignment of participatory patterns with network patterns results in the formation of network enterprise, emphasizing the interactions of policy-making among the various actors at different levels. This could be effective for application of renaissance (regeneration). Regeneration structure in Iran follows a hierarchal structure, with different national, provincial, regional and local scales in which different actors are related to other actors in their own scale and other scale. In Iran due to the centralized nature and governmental domination in all level and arena, important organizational actors play significant role in the field of renaissance. These organizations, for different reasons, have little participatory relation with each other, and in some cases, perform in parallel or –in contrast with each other. However, the application of participatory management in the framework of communication networks could significantly increase the productivity and efficiency of these organizations. The importance of the issue has led the government to issue a law for the formation of urban regeneration headquarters in 2014 (Urban regeneration corporation) to speed up the situation of inter-organizational communications. Therefore, this paper aim to analysis of the organizational network in relation to participatory management of Gorgan city to monitor participatory structure among various organizations involved in renaissance process,

and determine their status . Literature review

Despite of long history of participatory management in natural resources (Bodin & Prell, 2011), water resources management (Watson, et al., 2009, Teisman, et al., 2013) and rural planning (Estelaji & Flahtbar, 2011), participatory management in urban regeneration and renaissance is a new subject, that was more in the focus of socialism (Bailey, 2010; Bruce & Clarson, 2017). Some studies have investigated the role of public-private sectors (Kort & Klinj, 2011; Boxmeer & Beckhoven, 2005) in regeneration. Some have examined the regeneration through the lens of network theories (Alexandrescu, et al., 2016; Booth, 2005). However, in Iranian context , available studies on the contribution of organizational networks to the urban renewal are as follows.

-Chalegani (2016) in his PhD thesis titled redefinition of inter-organizational relations in the urban decision environment for improving quality of life, in reducing risk-taking of cultural heritage in Isfahan, states: a part of city governance and control system is related to the governance and control between political systems in the internal and external environments of city, and we could describe and analyze these systems using supposition of inter-organizational relations. He also acknowledges that inter-organizational relations in the decision making space of Iranian cities are affected by the patterns prepared and imposed by the central government. This type of inter-organizational relations is a fundamental challenge in decision making processes in all Iranian cities and makes the governance and control system of cities defective and ineffective. The findings of research with the redefinition of inter-organizational relations indicated that General Office for Environment Protection of Isfahan plays a key role in reducing risk of cultural heritage of natural environment and improving the quality of life of the residents of Isfahan. Furthermore, the type of inter-organizational relations of decision environment of Isfahan is alliance type, that is, long term alliance and coalition among organizations for progress of

common objectives and or guarantee of common interests.

- In another study titled , Mohebbi, et al., (2017) in their research under title of " 'The Governance of regeneration program of Tehran`s distressed areas based on the network approach", by reviewing power network of organizations, institutions related to with Tehran regeneration program and the level of their interaction, and founded that , the Development and Revitalization Organization, Renewal Organization, Municipality and Local Renewal Offices, among all organization, have the highest interaction level with other organizations in the network. The researchers attribute its reason to the existence of governance hierarchy among them. The results also indicate that the current status of non-centralized governance type with the superiority of state organizations which should move towards interaction governance and uniformity of interaction level in the whole network for the involvement of all stakeholders.

- Fatemeh Tafreshian (2016) in her thesis with the title of "Reviewing the effect of Stakeholders' network on the success of regeneration projects -in urban inefficient context by using social network method", has proved that Tehran Renewal organization, District 12 municipality and City Council are the focus of official communications of the stakeholders, and the people, residents of district, the guilds, shopkeepers, religious centers and council support agencies are in the heart of informal relations. The results also indicate that the stakeholders' network has a strong and significant role on success of regeneration projects in the disteressed texture of Oudlajan district.

the few number of research in organizational study of historical/inefficient contexts indicate the immaturity of the subject of research. However, the novelty of this study lies on the - its emphasis on the structure of participatory network and its features that stems from analysis of organizational relations. in other word while in previous research the focus was on the level and type of organizational relation, this paper concerated on identification and

structuring of relational variable which are important for network analysis.

### Theoretical foundations

From government to network governance Since 1980, dramatically changes and transformations in different organizations, including state organizations , have faced their survival with a serious challenge so that it maked impossible the continuation of present approcehs for managing organizations. due to overcome these challenges, it seems that basic changes in the decision making structure and policy-making of organizations (Reinicke, et al. 2000, Alvani & Yaghubi, 2004) has become an essential and vital issue. On this account, the organizations should seek for a decision making method replacing the prevailing traditional methods (hierarchal and market) at least in some of the policy makings for compilation and planning of general policy. Recently, in this regard , some network models have been examined. The models can strengthen the infrastructure of civil society and positively promote the partnership of all sectors in planning general policies. The initial objective of this type of partnership is strengthening the relations among the different sectors of government and society and improving the performance in the different fields of policy-making through synergy caused by such communications (Kameli, et al., 2009). Therefore, many of authors have suggested a shift form government towards governance (Pierre, 2000, Rhodes, 1997, Kicker & Klijn, et al., 1997) that linked to inter-organizational communications or networks, so that some authors beelieve that governance is not any thing onless network form (Klijn 2008, 520). In other words, in the era of network there is an urgent call for network solutions (Danaeifard, 2012). In this way, nowadays network patterns cover all government areas so that network government is used as a new form of governance. In the network government, the governance of government is imposed through the network, which often include various combinations of government

departments, government levels, suppliers of different sectors (Dyer, 2000). One of the main advantages of network government in comparison with hierarchal organizations is its flexibility more efficiency, utilization of the resources, increase of planning capability, increase of competition power, being innovative in suggestion of new solutions for the traditional issues, specialism in the elements comprising network components and speed in decision making due to the easy access to the information (Danaeifard, 2012; Alter & Hage, 1993; Brass, et al, 2004; Huxham & Vangen, 2005). The significance of this subject has also been highlighted in urban contexts renewal. For this reason network management is deemed important in the areas of Renaissance and regeneration.

### **Network management and renaissance**

Urban renaissance approach as a recent approach in the urban restoration indicates a series of changes and conformities processes which include the subjects such as social deprivation, wealth generation, urban governance, health and welfare, crime prevention, education opportunities, freedom of action, environment quality, infill development, using existed potentials, Bottom up planning and appropriate design. (Punter, 2011:4-7, Tallon, 2010, Carmona, 2001:172), and on this account, it could be deemed as an appropriate approach for the revival of historical textures of Iranian cities. In this approach, the participation of all groups in decision making is necessary for solving the problem, and it there is an emphasis on participation between the local residents and authorities in the frame of integrated management more than other intervention approaches. (Alibak, 2013:56). 56. Reviewing the effective measurements events in the cities in England as the birthplace of renaissance, indicates that a major policy of this theory is striking a balance among the elements of public, private and local sectors and determining the best configuration for intervention (Parkinson, 2004) Both balance and configuration require establishing a network of relations among the agents. Therefore,

urban regeneration/renaissance requires a cooperative structure among the agents who, have commonly different or contradictory objectives in view of mission, organization, and tools (Klijn, Reynaers, 2015; Van Bortel & Mullins, 2009). Based on the global literature, the regeneration and renaissance projects are among the participatory projects which can be carried out among different public and private sectors (Deakin, 2012; Kort & Klijn, 2011; Hodge & Greve, 2005, Tsenkova, 2017), in Iran, the government has activated regeneration headquarters for the improvement of organizational relations for participatory management. In view of organizational relations, the main problem is the existence of various and different stakeholders including private, and public organizations, among which there is not a coherent coordination and planning. The remarkable point is the variety in the structural, ownership and management among the agents, its numerous objectives and missions (Mohebbifar, et al., 2017). Different missions of public-state organizations are: Policymaking (like Road and Urbanization, Visage and Sight committee, ...), supervision (Engineering organization, Road and Urbanization, ...), planning (Road and Urbanization, Construction and Urban Improvement mother specialized Co., ...) provision of infrastructure services (power distribution Co., Water and wastewater Co., ...), supply of basic services (municipality, endowment, guidance, ...) Coordination (regeneration headquarter, urban regeneration company, ...) Facilitation and instrumentation, However, the distribution of work, the degree of role and the authority of each of the agents in targeting, implementation and decision making of projects is unclear and ambiguous. Each of the engaged organizations without considering themselves as a member of the participatory network are responsible for the accomplishment of a part of activities related to the projects.. On this account, the analysis of organizational relations among them helps us investigate and evaluate the situation of the participatory structure of the renaissance network. Participatory structure of the organizational network

Although inter-organizational relations due to the extent and complexity of knowledge with which have faced, is an widespread research subject, but some of the researchers define it with three main aspects: Relational, structural, outcomes or performance aspects. The relational aspect reviews the effect of social factors (individuals or organizations) on its cooperation while the structural aspect, reviews the structure and for relations (Teymouri, Fesharaki & Bazayr, 2011). Indeed, the structural aspect refers to the general pattern of communications among the agents . The most important aspects of this dimension are existence or absence of network connections among the members, network situation and appropriate organization (Abili, Faraji Dehsorkhi, Shateri & Youzbashi, 2010) . On this basis, the researchers introduce two important organizational types. First, governance of the central element based on the hierarchical structure and second, participatory governance based on the organic structure (Teymouri, Fesharaki & Bazayr, 2011). In the organic structure, the formality and focus is at the low level, and this appropriate structure is the conditions requiring resolution of problem, and significantly results in innovation. So, for the determination of the degree of being participatory of a structure, we shall engage in analysis of relations among the agents. Although it has been stated that among the structural aspects, most of the organizational theoreticians agree on the three aspects of focus, formality, and complexity (Mihm, 2010), various studies have introduced different variables like risk taking, authority, control, confidence (Teymouri, Fesharaki & Bazayr, 2011), social capital, social cohesion and stability (Rahimi balkanlou, Ghorbani, Jafari & Tavili, 2015), confidence (Carlsson & Berkes 2005; Kendrick 2003), organizational tolerance (Bahadur & Tanner, 2010), access to the information (Jafari et al., 2016) as the relational variables of participatory structure. In this study, the following variables have been the

**•Variables of participatory structure**

- Social capital: Social capital means the spirit of organization and is like a vessel which transmits

confidence into the organization, which causes realization of organization objectives and creation of competitive privilege and its survival (Danchev, 2006). One of the advantages of social capital is that it increases inter-communications, confidence, intimacy, and cooperation among the individuals. If we consider this issue at the organization level, with an increase of confidence, communications, and intimacy in the organization, the staff tend to cooperate and participate in the implementation of its affairs, which finally results in an increase of participatory management in the organization (Feyzi, Kavousi & Alinajafi, 2010). The social capital of organizational network for each player could be evaluated with analysis of network relations and connections of each player.

- Social cohesion: Social cohesion is related to the relations keeping the people of one group, society or network besides each other (Salimi Kouchi and Ebrahimi, 2016). In the participatory management, different networks of stakeholders are involved, where it is necessary to strengthen social cohesion and institutional cohesion for the organization of successful participatory management. In a social network, cohesion could be reviewed based on the network density indicator. On this basis, the more relations among the network members, the more coherent would be the network.

- Network stability: Stability of a network requires reciprocal relations among the actors so that both actors are dependent on each other and do not ignore cooperation with other network actors for the realization of its interests. Therefore, each player should necessarily respect participatory management for the achievement of its objectives. Analysis of the variable of stability in social networks is performed based on the indicator of reciprocal and transferability.

- Mutual Trust: In view of inter-organizational relations, Mutual Trust is the expectation of an organization in relation to the lack of opportunist action of the other organization (Teymouri, Fesharaki & Bazayr, 2011). Trust facilitates the atmosphere

of group behavior, establishes participation based social atmosphere and encourages attention to group interests and desires (Zanini & Migueles, 2013). The variable of Trust too like stability could be assessed with two variables of reciprocal and transferability.

- Access to the information: Awareness is the basis of all man's willful movements and the focus of all of his performances for participation (Abedin & Golshan, 2016). In this way, the agents rely on the participatory management when they have equal access to the information. In a social network, access to information could be assessed by indicators such neighborhood centrality and or geodesic distance.

- Control: some of the researchers assume control including types of official legal methods and unofficial social mechanisms, which coordinate and protect the partners of participation, specify the amount of resources allocated to each part, determine the tasks and responsibilities of both parties, and define the share of each party from the partnership (Teymouri, et al., 2011).

Considering the relation variables introduced in the participatory structure of the organizational network, the conceptual framework of the research is as followz.

Methodology (method of research accomplishment): In the social sciences, network analysis in the best definition is recognized as a disciplinary research on the pattern of relations among the actors (Breiger,2004:505). Based on this definition, the most important feature of the network analysis is that it changes the partial interpretation and analysis based on the features of independent subjects into the interpretation and analysis of events based on the relations among the activists as a system (Bougarti, 2005). One of the advantages of this method is that it allows the researcher to review the whole of a social system and all of its components (Bastani & Reissi, 2012). With this review, a 360-degree attitude towards each agent is presented, Such an attitude is useful in the preparation of complicated tasks and unpredictable situations (Bodin & Prell, 2011).

Moreover, since the analysis of social networks

focuses both on the theoretical feature and the methodology of connecting indicators of social event, it is different from the traditional attitudes assuming research subjects are independent. Considering that the communication studies among the individuals and actors are useful, and on the other hand, the convenience of access to the basic concepts and techniques in it, the network functions have attracted a great deal of interest from eh area of the pragmatic. Therefore, some of the researchers have assumed that network analysis method is similar to structural analyses which has the potential of utilization qualitative data as well as quantitative data.

Therefore, the current study, following the pragmatic paradigms and descriptive-interpretative research strategies, uses technique of social network analyses in ordr to description and interpretation of organizational network of Gorgan's historical context renaissance management. The step to step stages of research course are as follows:

First step: Determination of the network borders: for network analysis, first the borders of organizational network should be defined. This step is used to identify the agents involving in network. For this purpose, the studies on the role of actors in urban regeneration and renaissance are reviewed . Some of these studies are:

- National report on the improvement of unorganized urban districts of Islamic Republic of Iran (Izadi, 2011)

- Presentation of a modern urban agenda with the title of urban regeneration (Izadi, 2016)

- Participatory renewal project of Hemmat Abad region in Isfahan

- A research project for explaining the position of the different organizations including state, public, private, NGO, ... in the renewal of urban decay (Rousta, 2012)

- The Ph.D. thesis on a theoretical model of governance of participation of public and private sector based on the interactional network attitude (case study: regeneration projects of urban inefficient

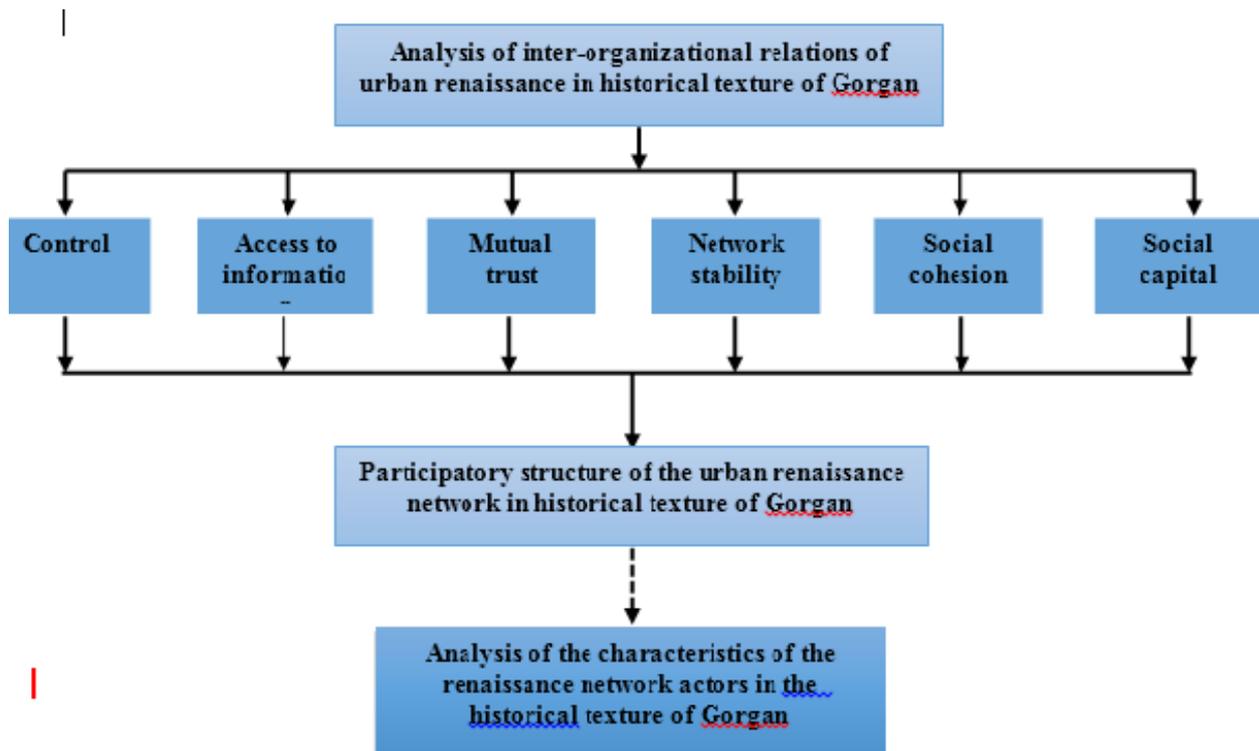


Fig. 1. Conceptual Model of Research. Source: authors.

context) (Mohebbifar, 2017)

- The article of public-private partnership, a new strategy in restructuring and regeneration of deteriorated urban textures (Mohammadi Doust, 2012).

the above studies, in addition to the introduction of organizations involved in the regeneration process, have presented the level of each organization at national and local levels. Based on the results of above studies, the organizations concerned with the Gorgan historical texture regeneration in local level are: Urban Regeneration Commission, The Province branch of Road & Urbanization Ministry, municipality, cultural heritage, handicrafts and tourism organization, Construction & Urban Improvement Office (mother company of Construction & Improvement), Construction and Housing Constructors Co., Housing Engineering Organization, Image and Townscape Committee, Clause 5 Commission, City Council, General Office of environment, Endowment & Charity Affairs Organization, Islamic Guidance & Culture Office,

College of Architecture and Urbanization, Provincial Management and Planning Organization

Second step: Collecting relational data, through semi-structured interviews, in which the inter-organizational relations was recorded by interview with. with organizational experts who are with in inter-organizational relations. In these interviews, the relational value of each organization in regeneraion and renaissance process was recognised (Table 1). This table will show the level of communications in the renaissance network of historical texture .

Third step: the relational data were analyzed in the Ucinet 0.6 tools based on the density network indicators, reciprocity of associations , transferability, the average of Geodesic distance, network size, power, and centrality.

Fourth step: The interpretation of findings are resulted from organizational relations and determination of participatory structure among actors?

Analysis of data and research findings:

In this step, based on introduced variable, , network indicators have been used. therefore, data analysis by

Table 1. The Evaluation of inter-organizational level in renaissance network of Gorgan historical tecture. Source: authors.

Level of cooperation	Value of connection
Without cooperation and relations	0.
Limited cooperation (answering queries or giving information)	1.
Holding joint, but interrupted and limited meetings	2.
Holding continuous meetings (agreements, contracts, ...)	3.
Holding continuous joint meetings, close cooperation on the subject	4.
Cooperation and interaction partnership at superior levels	5.

**•Virtue of each variable is**

Social capital: In analysis of social network, the social network is determined by the number of organization’s links and the size of each group. The network size which is equal to a total number of network communications is obtained from the total of degrees calculated for each active agent . The bigger size of network results in the formation of more connections. Moreover, the bigger knot is in connection with more active agents and enjoys more support, and therefore, it will have higher social capital and stronger socialfoundations . On this account, the table No. 2 defines the level of size of relations of each organization and amount of connections of each one.

Table No. 2 indicates that since Urban Regeneration Commision was founded, many organizational relations was formed. and therefore, this organization has allocated most social capital to itself. After this organization,, the most connections are established in the Construction and Housing Constructors Co., Cultural Heritage organization and municipality. This implies that Construction and Housing Constructors as an official agent have made a lot of endeavors for the establishment of relationships with other organizations to meet its objectives in this viewCultural Heritage Organisation because of its responsibility in Historical tecture and Municipality as serving organisation, have a high network social capital. In contrary to these organizations, the infrastructure, and basic services organizations, like power distribution, gas, Telecom, environment,

and management organization have a small size and have established fewer connections with other organizations.

Social cohesion: Social cohesion in a network is defined by the strength or density of connections. Network density displays the proportion of all existing connection to the all possible connections. Strong connections will increase confidence, facilitate sharing the information and resources and enhance participation and cooperation among the stakeholders. For the renaissance network of Gorgan, the density at different levels is presented in table 3. Table 3 shows that the total density of network is average, and therefore, the cohesion of network relations is medium. Review of the interaction levels shows that the most connection density at the inquiry and reply level and interrupted and limited meetings in the subject of the renaissance of historical context (level one and two with a density of 12.1 percent and 13.15 percent). This table also shows that when the relations are assessed at level 4 and 5 (interaction levels), half of the organizations are eliminated from the network and are changed into isolated, and the network will not have its previous cohesion anymore. The diagrams of network relations are presented in images 2and 3. In these diagrams, the thickness of lines shows the connection strength and also we could analyze somewhat the position of actors in the network.

**• Stability and Trust**

Stability and trust could be assessed by two indicators of thereciprocity and transferability of

Table 2. The size and density of each actor's Ego network in Gorgan Historical texture Renaissance Network. Source: authors.

Headquarters Regeneration	19	154
Management and Planning Organization	6	25
Technical Office of the Governorate	7	35
Civil and Housing Company	18	140
University	10	69
Endowment and Charity Affairs organization	10	72
Telecommunications Co	4	12
Gas Co	7	37
Water and Wastewater Co.	7	40
Electrical Distribution Co.	7	37
Culture and Islamic Guidance	8	52
Department of Environment	6	27
City Council	16	133
Clause 5 commission	10	68
Image & Landscape Committee	12	101
Construction engineering organization	12	93
UDRO	14	109
Cultural Heritage organization	17	138
Municipality	18	138
Roads and Urban Development	18	137
Organ	Links Size (ego network)	

Table3. Size and Density of the network at various interactive levels between organizations. Source: authors.

Number of organizations	Level	Total Expected Links (Based 20 organizations)	Number of available links	Network Density
18	1	380	46	<b>12.1%</b>
16	2	380	50	<b>13.15%</b>
15	3	380	35	<b>9.2%</b>
10	4	380	21	<b>5.52%</b>
10	5	380	28	<b>7.36%</b>
20	<b>Total</b>	380	180	<b>47.3%</b>

the network. The reciprocity of connection indicates the degree of confidence and mutual participation. This indicator indicates that the activists are related to each other reciprocally or their communications are only unilateral and for instance is directorial and not participatory. Transferability is another indicator which is applied to the transfer of relation to the subsets of a situation. This indicator displays the degree of relation between two activists with the third activist. The higher degree of transferability shows the network enjoys more balance and equilibrium.

Table 4 displays the degree of this indicator for renaissance network. This table indicates that reciprocal of connections of renaissance network is about 60 percent and this value includes a relatively desirable limit. Although the reciprocal will not show positive results in the Renaissance, it could show that most activists involving in renaissance have had mutual communications with each other, even as much as inquiry and notification, and the network is currently in a stable situation. The indicator of network transfer too is at a high level,

and of course, the highness of this indicator could be attributed to its administrative structure. Usually, organizational communications, due to the fact that each organization at is infrastructure, has multiple communications with the other organizations, enjoys a high transferability.

### Access to the information

Access to information could be reviewed with two network indicators of the average of geodesic distance and neighborhood centrality. The indicator of geodesic distance indicates the average of the shortest distance between two activists and shows the access to the information and resources among the activists. The indicator of neighborhood centrality implies how fast one knot or creature could have access to the more knots or creatures in the network. In this study, geodesic value has been calculated based on the indicator of power, that is the optimum amount of strongest route. This indicator has been calculated 2.90 for the network. that indicates the low speed of circulation of information in the network. this score also shows that activists access to each other is a relatively far from strong routes. Calculation of the values –associated with neighborhood centrality are presented in table No. 5. As per table 5, municipality, Road and Urbanization and cultural heritage have the most information access in the area of the renaissance of historical context. Considering the administrative structure, it seems natural. The notable point is the inappropriate position of regeneration headquarters regarding the historical context of Gorgan in view of access to the information.

#### • Control

For evaluating control, we could use the authority indicators such as the degree of centrality and centrality of betweenness. Degree of centrality is merely the number of direct relations of one knot. The knot which has a high degree, is an active agent in the network or is in a superior position, and is often known as the investigator in the organizations. Betweenness centrality shows the position of a node

in the network based on its capability to connecting other pairs, rings or groups to each others in the network. These indicators for the renaissance network are displayed in table 5.

Input degree could be related to the political authority and fame and the output degree is related to the political authority and penetration. On this basis, Road and Urbanization, Municipality, Cultural heritage dominate the network in terms of political fame and authority. In view of political authority and penetration, Construction & Housing Constructors Co., Regeneration headquarters and General Office for Road and Urbanization dominate the network. Political penetration of two firms of Regeneration headquarters and Construction and Housing Constructors Co. are due to their shareholding state that has accepted various members for membership in their department or their headquarter meetings are held with numerous actors. In the betweenness indicator, respectively municipality, Road & Urbanization and Construction and Housing constructors Co. are the most capable actors in relating other actors.

#### •Discussion and conclusion

In response to the main question of the research which concern the monitoring of actors inter-organizational relations, the network with 20 actors was identified that its network criteria analysis shown participatory structure of network,. On this account, the network has been appraised at a medium level in terms of stability and cohesion, which of course, with a change of level of relations to the interaction levels, the network cohesion degrades sharply and the network becomes fragile. Moreover, in this network, information access has a relatively low circulation and three organizations of Municipality, Road & Urbanization and Cultural heritage have had access to the most renaissance information. Regeneration headquarters, due to the connective links has acquired most social capital. In terms of control, Road and Urbanization, Municipality and Cultural heritage dominate over the network, and the regeneration headquarter and Construction and

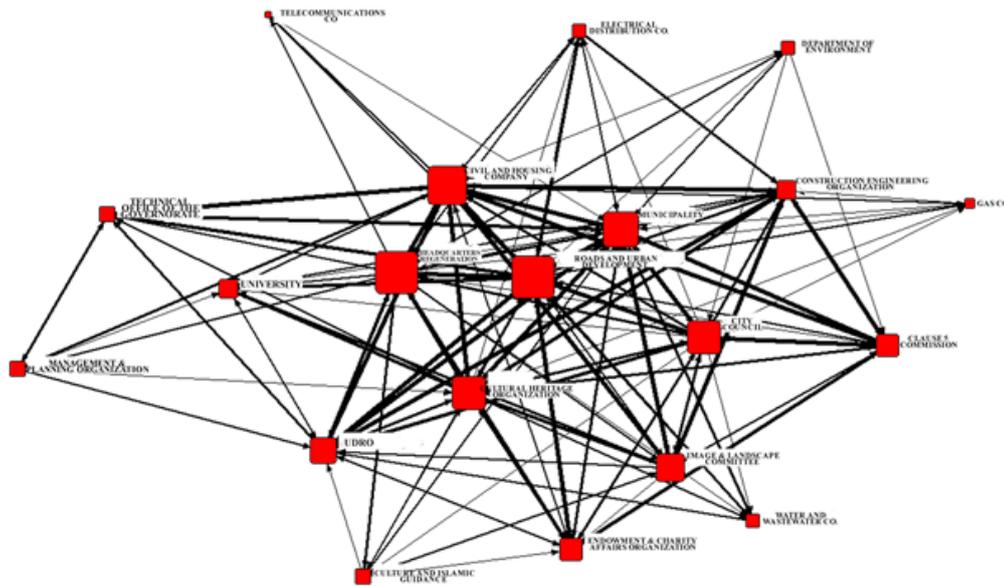


Fig. 2. The network of renaissance actors in the historical texture of Gorgan. Source: authors.

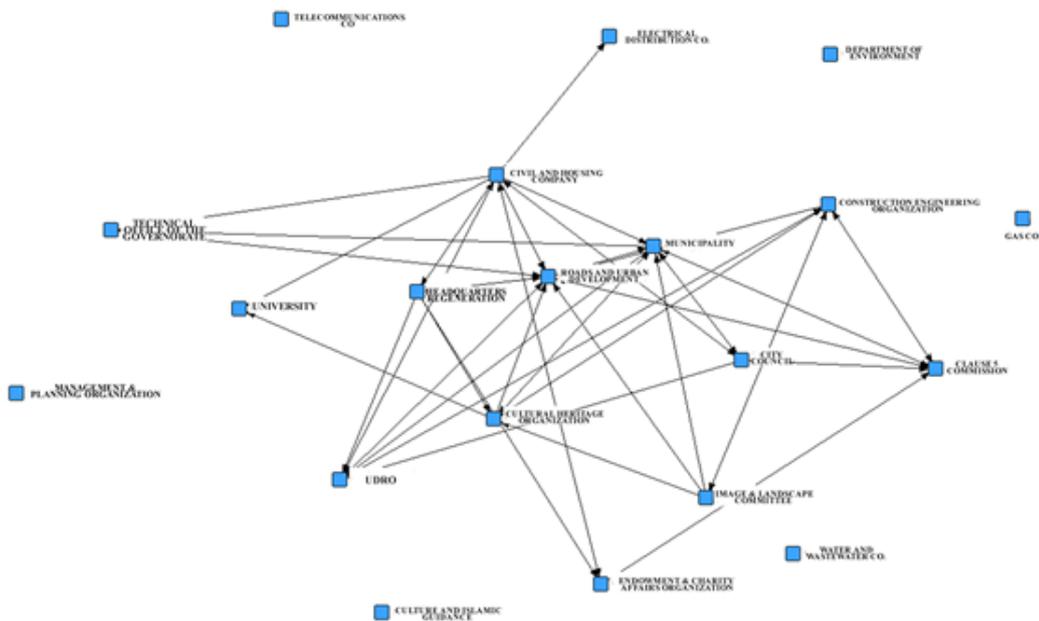


Fig. 3. The network of renaissance actors at interactive levels (Levels 4 and 5) in the historical texture of Gorgan. Source: authors.

House Constructors Co. dominate on the network penetration. Interpretation of findings of this network in terms of participatory structure indicates that despite government’s endeavor for the creation of

participatory management with the establishment of regeneration headquarters, still renaissance network is dominated by hierarchal structure and based on the central governance of government. This outcome had been also defined in the precedent

Table4. Calculation of Reciprocity, Transitivity and mean of geodesic distance indexes for the renaissance network. Source: authors.

Organizational boundary	Transitivity (%)	Reciprocity (%)	z
<b>Urban Renaissance Organizations</b>	87.2	58.41	<b>180</b>

Table 5. Calculation of centrality, Closeness and Betweenness indicates in Renaissance Network of Gorgan Historical Texture. Source: authors.

Organ	Betweenness		Closeness				Degree		
	Percent	Rank	IN	OUT	Rank	IN	Rank	OUT	Rank
Roads and Urban Development	49.3	2	86.4	86.4	2	58	1	42	<b>3</b>
Municipality	55.2	1	95	82.6	1	53	2	40	<b>4</b>
Cultural Heritage organization	24	4	82.6	79.2	3	43	3	38	<b>5</b>
UDRO	9.5	5	76	67.9	4	40	4	30	<b>7</b>
Construction engineering organization	4.9	9	73	61.3	6	30	6	28	<b>8</b>
Image & Landscape Committee	6	8	65.6	70.4	8	22	8	31	<b>6</b>
Clause 5 commission	3.2	12	65.6	65.6	10	30	6	25	<b>9</b>
City Council	9.3	6	65.5	79.2	9	4	16	38	<b>5</b>
Department of Environment	0.23	15	50	55.9	19	9	13	5	<b>17</b>
Culture and Islamic Guidance	0.14	16	52.8	54.3	18	11	11	7	<b>16</b>
Electrical Distribution Co.	0	17	59.4	55.9	14	10	12	9	<b>14</b>
Water and Wastewater Co.	0	17	59.4	55.9	15	7	14	8	<b>15</b>
Gas Co	0	17	57.6	50	16	7	14	3	<b>18</b>
Telecommunications Co	0	17	55.9	46.4	17	23	7	1	<b>19</b>
Endowment and Charity Affairs organization	4	11	67.6	65.6	7	20	9	24	<b>10</b>
University	1.7	13	63.4	61.3	11	36	5	12	<b>12</b>
Civil and Housing Company	30.9	3	76	95	5	23	7	62	<b>1</b>
Technical Office of the Governorate	4.24	10	61.3	57.6	12	5	15	13	<b>11</b>
Management and Planning Organization	0.45	14	48.8	55.9	20	17	10	10	<b>13</b>
Headquarters Regeneration	8.85	7	61.3	90.5	13	17	10	44	<b>2</b>
Whole network	13.74%		62.42%	60.98%	-	19.11	-	21.33	-

studies (Moradi 2016, Mohebbifar, 2017) regardless of regeneration headquarter. In Gorgan, the state governance and administrative structure of the network in practice results in the formation of organizational communications (such as inquiry, notification, and acquisition of agreement, ...) and thus, the organizational networks usually will be in

medium levels of coherence and stability. However, the results of organizational structures do not result in obtaining a useful outcome, because the communications are not made cooperatively and interactively. Rather, it is in the form of elimination of responsibility. Therefore, with reference to present conditions, we could assume the type of

inter-organizational relation from cooperation type. The feature of this type of cooperation is the establishment of short term relations, often unofficial and extensively voluntarily among activists. In this type of relation, the little endeavor will be made for persuading common objectives in the renaissance. This relation is mainly based on the information sharing, aggregation of little resources of the low level of authority, where relations occurring with a low risk. This type of relation is distinctive with the achievement of Moradi research (2016), who assumed the type of inter-organizational relations in Isfahan of incidental. In relation to the incident, long term covenant and coalition among organizations is for improvement of common objectives and or guarantee of common interests.

Other findings indicate that although network under domination and control of actors with high formality and less administrative structure is flexible, the agents such Construction and House Constructors Co. and Regeneration headquarter due to the share structure have high penetration on the network relations. On this basis, the actors like City Council, Engineering Organization and cultural heritage too have a great capability in fulfillment of new role in the network. On the other hand, the interviews acknowledge this. In contrary to this type of organizations, the actors with the role of fundamental and infrastructure services showed that do not have any tendency to acceptance of activism role. They have become isolated and separate from the network in the analysis of network relations at interaction levels. The actors, like university, Endowment, and Charity Affairs organization and management organization too are not deemed as an active activist, although their distinction with the actors with infrastructure tasks have been so that in case of formation, the network observes bilateral communications. Therefore, it has been effective in the network when they have been addressed. On this basis, by virtue of the features of the analyzed network structure, we could recognize

#### • Three groups of actors in the network

1. Active agent : Due to the governance of

administrative hierarchal structure on the renaissance network of Gorgan, at present, this group includes the actors, whose organizational scope of tasks makes them develop inter-organizational relations. In doing so , the network communications of these actors are neither due to the acceptance of participatory management nor due to the social objectives. This group includes actors like Road and Urbanization and municipality. This group usually have delegated their participatory tasks to other actors such as Construction and House Constructors and Revival offices, consultant engineers, etc .

2. Potential actors: This group includes the agent whose organizational management is governed by a more inflexible administrative structure. Special attention to these organizations and their tendency to the activism role could improve significantly indicators of network participatory structure. Therefore, arrangements should be considered for fulfillment of the new role of these actors. This group includes actors such as construction engineering organization, Charity, and Endowment organization, university, etc.

3. The indifferent agents: This group includes the agents who have little tendency to develop continuous network relations, who prefer to limit their relations to the scope of organizational tasks. This group includes actors with infrastructure tasks.

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