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Comparative Comparison of City and Urbanism during Sassanid Period in Iran and the Ancient Roman

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**Abstract** 

Sassanid replaced migrating nomads and tribes with urbanization system and concentration of population. Sassanid desire to increase the population was due to the fact that population is the core of urban systems and focus-oriented system. Sassanid tried marching to Syria and Asia Minor to gain population. Immigrant Roman population was accommodated in newly established cities. Romans had structured and deep thinking about urban development, such that their territory was made up of urban units which were connected through a system of roads and bridges. Romans innovation in urban development can be summed up in creating military cities. Sassanid urbanization after the Parthians was influenced by Roman urbanization which is most visible in the shape of Sassanid cities. In this study, while examining cities and urbanization in Sassanid reign and Roman Empire, their influence on each other and their similarities and differences in their urbanization methods were also investigated.

**Keywords:** City, Urbanization, Sassanid, The Ancient Roman, Hippodomus.

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#### Introduction

The history of emergence of cities and urban development, followed by urbanization reflects profound changes in different periods of time. Understanding the logic of urbanization development lies in understanding and analyzing the rules governing these changes and formulating an appropriate methodology framework for it. Sassanid and Roman Empire cities and urban development are important due to their competition and mutual impact on each other. Although Sassanid reign is remembered as a period of urban growth in ancient Iran, we cannot ignore the impact of the Parthians and the Romans on their work. Sassanid government initially followed the tradition of the Parthian in urban development, but later it adopted the urban pattern of Rome and created its cities in Roman style. The impact of Roman Empire was so much that Sassanid government used Roman captives to build cities and dams, which shows growth and dynamism of the urban development among the Romans. The importance of cities and urban development was very important for both governments, since despite the mutual impact, they tried to maintain their originality which is understandable from the constituent elements of their cities. According to genuine documents, cities and urban development and factors influencing them in Sassanid period can be drawn.

## **City and Urban Development**

Studying the history of the city, urban development and urbanization are important in human civilization and history. Studying city life and discovering the secrets of city development and using the thoughts and decisions of people living in cities are important issues. Dietrich Hoff considers urban development in Sassanid period so important that he claims this empire started with building a city. Building cities was a clear aspect of Sassanid government program which had political, social and economic consequences in the community. The use of the word "Iran" in the names of the cities was purposeful and reflected the Avestan thoughts, and on the other hand linked myths and epics of Iran in the third century.<sup>2</sup> Citing the names of the cities by kings in inscriptions, including the names of the cities by Shapur I (241-272 A.D.) in the inscription named Kaaba of Zoroaster shows the good situation in the country at that time.<sup>3</sup> Other instances include areas that the government considered for building cities which were located on land owned by the government, which indicates that Sassanid government didn't interfere with public ownership. Among resources we can see some cities which were built by Sassanid kings. In this regard, it should be said that some cities with specific names were attributed to Sassanid kings, such as Ardeshir (224-239/40 A.D.) and Shapour I. this can be seen in resources such as Tarikh Al-Ṭabari, Majmā Al-tawarikh wa alQesas, Al- Kāmel and etc. although there are some disputes about the name of the cities and the number of constructed ones in these resources, the obvious and striking point is that building the city was attributed to the king and not making a change in the elements of the city, and it is even clearly stated that in the period of a particular king such measures were not conducted. To clarify, it should be added that the resources have mentioned about Ardeshir that Dinwari attributes six cities to Ardeshir.<sup>4</sup> Majmā Al-tawarikh va Al-Qesas have mentioned eleven cities, while Tabari and Ibn Asir in Al-kāmel attribute eight cities to him. Old cities represent a structure that shows the habitat to local people easily and to foreigners with some difficulty. Romans had a functional and daily view about cities and in line with this delicate view; an idea with precise and certain engineering was developed in accordance with the ancient times. Romans learned urban civilization from the Etruscans and Greeks and the arts of these two groups such as urban development had a decisive role in the formation of Roman art. Albert Malet believes that no nation has constructed large and durable buildings like Romans. The division of the great Roman Empire into various provinces which were a set of more or less autonomous countries-cities and showing their attention to citizens by building special places for different classes, is important. Urban development complexity and depth of thinking and urban development in detail even for advancement of goals can cause people to rush into cities from countryside. Roman city was a reflection of systematic thinking about urban development. These cities are so important that even in building today's modern and big cities, they cannot be ignored. Urban development in Rome was in line with military and political expansion and Roman cities were formed following the Hellenistic cities with predetermined checkered plan. In fact, Roman thinking considered crowded or in irregular cities problematic for the government. It should be added that Romans preferred to build cities in strategic points, since their government also launched from the same areas. As Pakzad states, this urban development emerged as establishment of military bases and camps to protect the power of Rome. 10 One of the important factors in building Roman cities was outlining location of the city by specialists. Marking the location and determining the scope of the city and its division, specifying the geographical aspects of the city and building east-west streets and finally entrust gods to maintain and protect the city were other common traditions. 11 Khoramshad argues that in this civilization, four factors influenced its formation, of which three are derived from Greek civilization. Also, Romans made these factors more powerful and delicate and they also consider the fourth factor the progress in Roman civilization.<sup>12</sup> Symbol of Roman civilization in relation to Greece is what Rael Thomson says: it was Rome that underwent destruction, reconstruction and fundamental changes in urban development and the construction method during its life.<sup>13</sup>

#### Concrete

Constructions led to Roman initiatives in urban development; in fact, stone and mortar was created by Romans which was against marble quarries of Greece. Using concrete gradually shifted from filling stones and was used independently in urban constructions such as walls and arches.<sup>14</sup>

#### **Construction of roads**

Roman road making is very interesting. In each location, different material was used for paving and pavements were different in each place, but usually the lower surface was filled with a bed of sand with determined diameter. Then, on this surface, a four-story construction was built: first, "Statoman", second, "Rodence", third, "nucleous" and the fourth one "krostasoma".<sup>15</sup>

# Waterways

The most sophisticated operation that took place in between was bringing the great abundance of water to the city for multiple uses of public and private. High waterways were placed in front of mountains that had to fill holes or trenches in order to keep the water level.<sup>16</sup>

## **Bridge building**

The common point between the Roman Empire and Sassanid government was that they were both skilled in building high arched bridges. These bridges were constructed over streams to wetlands.<sup>17</sup> Sassanid bridge construction is actually a combination of Hachaemenid methods and styles along with influences of the Roman bridge construction by Roman captives who were brought to Iran after the defeat of Valerian.<sup>18</sup>

## Factors affecting the development of the city and Urban Development

The growth of urbanization had several causes. Population increase more than production followed by urban development and the formation of new industry and jobs which needed urban life were factors that caused urbanization and migration from the countryside to the cities. In the meantime, the role of government, politics, business, trade, or even religious factors on the development of cities and urban development was important. These factors can be seen in both governments and they are almost common factors in both.

Expanding scope of Sassanid cities was largely dependent on the factors of city emergence. If these factors were reinforced, not only the city would expand, but its longevity would increase too. One of the most important factors of emergence of cities in Iran was administrative-political factors, which in turn created administrative-political cities (Shāihi Cities). The basic principle of formation of these cities was an element called government. One of the reasons of government formation is some affairs that cannot be done by individuals and groups, like resistance against the invading nations and groups of offenders. Principles of these cities were to accommodate governmental organs and political-administrative institutions. The establishment of cities in accordance with the requirements resulting from the expansion of the scope of government and the need to organize it, led to establishment of small and big cities after the creation of the kingdom.

## **Political-military cities**

Military cities in Sassanid period indicate safety and safety is the most important principle for human survival. This goal can only be provided by creating safe places against natural disasters and human events.<sup>22</sup> Iran's geographical location and its position within areas such as Asia, India, Mesopotamia and Asia Minor was the reason for invasions and attacks of adjacent tribes. Therefore, kings and rulers had to defend the boarders against these attacks. Sometimes, creating defense and military institutions led to emergence of cities. In the new areas of the country, defense of the country was assigned to boarder cities which were fully equipped from a military perspective. Cities of the middle areas were responsible for protection of road traffic and cities of inner lands dealt with production.<sup>23</sup> Military and political factor in Rome brings up Roman soldiers who were very painstaking and skillful in constructing fortifications and barricades.<sup>24</sup> The knowledge of Romans about maintaining ownership helped them in regards with military force. Indulge in this issue used to led to ongoing wars and the army could not perform its responsibilities, among which is development and preservation of it is Empire. On the other hand, it was detriment to trading. Therefore, they were all dependent on the privileges which encouraged the local people to join the imperial system. Other cities which were built for economic and politic goals consisted of retired soldiers or migrant of Rome and other ancient cities. In order to preserve the sovereignty over these cities, thousands of military camps named Castra were formed. These were temporary camps, most of which formed the basis of stable cities for politic and military purposes.<sup>25</sup> In this period, political and military factors were inseparable and walked in the same direction.

#### **Production-trade cities**

Max Webber believes that from the economic view trade and business, city is the habitat of those who earn a living by business rather than agriculture. However, not all places that commerce and trade can be called city.<sup>26</sup> A prerequisite for creating such cities is trade and commerce and government's need for money causes it to create the necessary infrastructures for trade cities. Such measures include building paths, home (inn), construction of harbors and commercial vessels, etc.<sup>27</sup> Rome was a master of governing people and assuring them about having living facilities. Special importance was given to agriculture because it was the glory of Rome. Rome community was a big economic unit and industry had a great impact on its growth.<sup>28</sup> Relying on agricultural economy was so important that in order to develop agriculture and benefit more from the soil, cities were made to increase production. The economy and agriculture factor even led to creating government and army to manage and organize the affairs. Other factor related to the economy is industry and commerce which should be considered. Political organization of Roman and Greek government relied on business and industry that had been developed in cities.<sup>29</sup> In this period, the most thriving industries were weapon and tool making, and the industry growth was so serious that factories were built for this purpose. Industry development followed by production of more products needed a context to offer them, so markets were formed in this regard.<sup>30</sup> These bazaars originated from and developed in cities. The progress was less noticable in industries than in agriculture. 31

#### Religion

The last factor is religion and the phenomenon of religious cities. Religion contributed to the creation of cities by gathering various social groups in human settlements. The foundation of some Sassanid cities was due to a fire temple, and it increased the role of religion in Sassanid era. Human traffic in temples led to creation of markets around them and the wealth of temples led to human evolution and progress of communities. In Roman society, religion arose from families. Family was the source of religion and also morality, economics and government. Each part of its property and each aspect of its existence were linked to spiritual world by a sacred string. It is not far from reality to consider religion a factor in the sustainability of cities. Although the government was aware of the issue of superstitions prevalent among people, it built some places for them and in this way controlled the affairs. Religion, since the gods were very popular or even since Christianity and God, was a key factor in urban development as well as controlling people.

#### **Urban elements**

Before focusing on urban elements in mentioned periods, we should pay attention to social classes in them, because they represent urban separation by the power ruling the city. The part of the city where each of these groups used to live is very important; but, since the purpose of this article is the city itself, we stop here.

Urban spaces were divided into different parts which had separate areas and different use, but they were also connected to each other, which led to coordination and linking together classes of society in Sassanid cities.

# Governing fortress (this fortress was known as Kohandezh or Qohandezh in Islamic period):

A strong castle or fortress with political or governmental function, and organized city management was applied from this place on social and economic figure of the city. For this reason, it was the residence of the ruler, his family and relatives, as well as security guards.<sup>34</sup> This fortress was constructed in the highest and best part of the city. Huge walls protected it and it had a gateway to the outside.<sup>35</sup>

#### Shārestan:

Shārestan or shārsan was the habitat of bureaucrats, aristocrats and soldiers, which had walls and other necessary fortifications. This part of the city was divided to middle shār and outside shār and each formed a separate space for different groups and classes.<sup>36</sup>

#### Square:

A wide space in front of Sharestan's gates, and it was built inside the city walls. Rather than social, this space was considered administrative-political.<sup>37</sup>

#### Market:

As the backbone of the city, it began from the middle of Sharestan (middle Shar) and continued to outside Shar. In this path, it formed neighborhoods and finally, it can be named as the heart of the city and various commodities from anywhere were brought to it. The importance of the market in the Sassanid era was such that a head named "Vazarbad" was selected for it.<sup>38</sup>

## Sawād (suburban):

The suburbs were often the habitat of farmers and craftsmen and their construction took place in spatial relationship with the city.<sup>39</sup>

# Roman urban elements can be categorized as follows:

<u>Fort</u>: for Etruscans and Italic people, fort was a symbol of independence. During the Roman Empire, the fort became a symbol of power and order. Roman engineering integrated with some Etruscan traditions, and inspired by Hellenistic style, a multi-cultural fort was built. About the shape of the forts it should be said that they initially followed the square form and then they became semi-circle.

Building mass and spaces: maybe it really cannot be considered as an urban element, but the way of using building masses and space and vice versa is such that it makes it noteworthy to be mentioned in the context of city elements. In this period, tendency to build public buildings and structures with noticeable greatness and grandeur was common. Using masses and space in constructing a city and its buildings was an evident phenomenon among Romans which somehow can be considered the Roman style. Using space for grandeur of building mass and the ability to turn this mass into space again was a Roman art.<sup>40</sup>

**Square:** at first, forum included a public plaza, an empty space, around which shops were constructed and traders earned a living. <sup>41</sup> Over time, in addition to trading, administrative and political centers were located at squares too. Markets were established there and business took on a more formal look. Mumford believes that forum is in fact a combination of Agora and Acropolis and doesn't have any distinctive characteristic in comparison with the Greek sample, <sup>42</sup> but Pakzad talks about its change of use in the second period in comparison with Greece and informs us that this square was for giving lectures and reading poetry in Greece, but Romans used it as a platform for statues of commanders. <sup>43</sup>

**Street:** Romans had three kinds of streets: passages for pedestrians, routes that only a cart could pass through it named Actus, and routes that two carts could pass through it.<sup>44</sup> A fine note about streets is the traffic rules which prevented congestion and accidents.<sup>45</sup>

Residential houses: in most Roman cities, there were no neighborhoods like eastern cities. Morris states that in terms of physical construction, the city was non-class. At first, Roman houses were enclosed and had a central courtyard. These houses were usually introverted and had one or two floors and didn't have any windows opening to the street. Gradually, some windows opening to the street were built and houses became extrovert. This extroversion led

to apartment building in overcrowded Roman cities.<sup>47</sup> Houses were divided into two categories; aristocratic houses located in the center of the city named Insula and houses around the city named Damus with four stories and a central courtyard. House evolutionary path was not planned; rather it was shaped under the influence of socio-economic changes over time.

<u>Public buildings:</u> including theater, circus, Roman baths and temples. Each Roman bath was as big as neighborhood <sup>48</sup> and it was not merely a place for washing. In fact, it was a convenient location for negotiations, conspiracy or even assassination. <sup>49</sup> At the end of urban elements discussion, an urbanization criterion is worth mentioning. Despite the adoption of land ownership, Roman government had the permission to interfere in the affairs of citizens and had a leading role. Some examples of urban streets discussion include: (1) each owner should vacant 80 cm from the width and length of the land for crossing pedestrians; (2) width of the sidewalks was assigned 66 cm; (3) The roadway width was about 370 cm; (4) rules about hygiene and cleanliness of the streets by neighbors; (5) Terms and conditions of the lease, construction or demolition of buildings and <sup>50</sup>...

# Morphology and form of the city

Urban morphology is studying the city as a human settlement; That is, studying the form and shape of settlements. It is one of the most structural approaches to the city shape. Various factors and involved in the form of one city. City form can protect the city strategically. Or even in terms of adequate security, there is no specific form. In this respect, economic, religious, commercial and other factors can have an impact on this matter. Functional theory is a theory that explains why cities tend to take a certain form and what is the function of each of these forms. Designing the shape of a city is not restricted to modern cities; rather it is rooted in the history. It is not opposed to reality to accept the fact that the city is a reflection of the beliefs and practices of people living in the geographic area of the city. Sassanid cities are divided into three categories in terms of shape: (1) round, (2) Hippodam, and (3) irregular.

# Round city:

This shape is the legacy of Parthians and they used it for two reasons: (1) lack of adequate security and suitable defense aspect of these cities which is an adaptation of Assyria government; (2) the design of the city was selected because of its fitness with environmental and climate condition and the land on which it was constructed.

## **Hippodom city (rectangular):**

They were cities with a checkered design, designed by a Greek architecture with the same name. These cities were a strange industry entered from Rome to Iran.

## Irregular city:

Perception of these cities is obtained by the kind of ground on which they were made. These cities didn't have a specific geometric shape and the topography of that place was the reason of inability to consider a certain form for them. Therefore, everything was subject to natural living conditions, or they were a countryside which had grown as a result of various factors and had become a city.<sup>53</sup>

For high density accommodation, rectangular construction is the only plan that will lead to efficient use of space.<sup>54</sup> All sustainable urban settlements, whether castra or cities originated from a specific origin, similarly had simple and standard designs. Roman cities were usually square or rectangular in shape, and two main streets formed the basis of streets inside the city. Decomanous passed through the city and Cardo which usually cut it vertically, only extended in one side. Side streets formed the checkered design and created building blocks called the insula. This checkered construction without difference was used both for new cities and rebuilt ones. It was the ups and downs of land that determined the details of the city.<sup>55</sup>

## Conclusion

Sassanid era was a glorious age of urban development in Iran before the Islamic period, which started with establishment of Sassanid government and their relationship with the old and wealthy Roman Empire. Ancient Rome was also considered an advanced government due to urban development, which increased in time and it can even be seen in later periods and today.

In this regard, the urbanization and urban development of two governments were evaluated. About Sassanid Iran it should be noted that this period was influenced by the previous government, the Parthians, and also Rome. Its biggest manifestation can be observed in the shape of Sassanid cities; cities built at the beginning of the rise of this government followed circular-shaped cities of Parthians. After that, at the time of Shapur I, followed by Iran's conflict with Roman government, circular cities were replaced by Hippodomus ones. Hippodamus cities were in fact rectangular cities which Roman's learned in their relation with Greeks and started using it. Another similarity in this context was that both governments believed that the plan of Hippodamus city preserves the city in the event of an attack by

outsiders; that is, they considered sieging Hippodamus city far more difficult and they believed that more troops are needed for this purpose. Another issue was in urban development context which indicated the progress of science and engineering of Romans in comparison with Sassanid. Sassanid government used Roman captives to build their own dams. But this is a sign of Sassanid intelligence to use the knowledge of other nations, because in the resources reviewed by the writer, it is not mentioned that Romans also used captives for urban development. Although, Romans used captives as slaves in order to provide recreation for people. Sassanid cities were built in areas under the dominance of kings. This indicates that Sassanid kings only built cities in their own lands and this development not applied to other areas. This issue has been raised in the Urban Development of Rome. Ownership also existed in Roman civilization, but not in this way. Instead, Roman government sometimes interfered with citizens' ownership for the public interest to improve the condition.

After planning the cities, the issue was the constituent elements. Some information about these elements in constructed cities in these two periods can be extracted. For example, Sassanid government considered city security and protection from the beginning of city construction, but Roman cities were closed with walls after being attacked by outsiders. Many urban elements such as squares which were called forum in Roman civilization, or public buildings such as palaces and temples were common. But in general, these elements are an indication of the complexity of cities, followed by the thinking of city planners of the two governments. In this regard, Roman cities were more advanced than Sassanid's, which is obvious from their infrastructure, the use of apartment houses in that period, the transfer of water to the residents and municipal sewage systems. In addition, urban elements in both governments are the expression of the social classes. Each government assigned a part of the city to specific class. Certainly, important people were accommodated in central and expensive parts and public population were settled in peripheral areas. Urban development factors are common between the two governments. There was no factor in one government that the other one didn't benefit from. After planning and identification of cities, Sassanid kings used to put their names on them which can't be mentioned among Romans.

In Roman urban development, it can be realized that this government paid attention to all details regarding this issue and developed cities for the welfare of citizens. These cities were built for a specific population which obviously cannot be mentioned about Sassanid urban development. Compliance with laws and regulations that were approved in the Urban

Development of Rome was not raised in the Sassanid era. Another issue is city restoration which was common in both governments. In general, Roman cities were a model of urban development for Sassanid government, although urban development policy in the Sassanid era was very significant.

#### **Footnotes**

- 1. Dietrich Hoff, A glimpse into the Iranian capitals since the beginning of Islam, Translated by Gholam Ali Shamloo, the capitals of Iran by Mohammad Yousef Kiyani, (Tehran: Cultural Heritage Organization, 1374), 22.
- 2. Touraj Daryae, Sassanian Empire, Translated by Morteza Saghebfar, Fifth publication, (Tehran: phoenix, 1390), 141.
- 3. Saeed Orian, Directory of Middle Persian inscriptions, (Tehran: Iran Cultural Heritage Organization, 1382), 70-82.
- 4. Ahmad ibn Dawood Abu Hanifa Dinwari, Al-Akhbār Al-towāl, Translated by Mahmoud Mahdavi Damghani, (Tehran: Ney, 1364), 72.
- 5. Majmá Al -tawarikh wa Al-Qesas, The correction of Bahar, (Tehran: Kolaleh Khavar, 1318), 61-62.
- 6. Mohammad ibn Jarir Tabari, Tarikh Al-Ṭabari, Vol. II, Translated by Abolghasem Pyandeh, (Tehran: Iranian Culture Foundation, 1352), 144; Ali ibn Mohammad Ibn Athir, al-Kāmel, Vol. I, translated by Seyyed Hassan Rouhani, (Tehran: mythology, 1349), 85.
  - 7. Mansour Falamaki, Modernization and urban sanitation, (Tehran: Samt, 1388), 131.
- 8. Albert Malet, The history of Rome, vol. I, Translated by Gholam Hossein Zirakzadeh, (Tehran: the world of books, 1383), 269.
- 9. William james Durant, The history of civilization,vol. III, Parviz Dariush Translation, (Tehran: Scientific and Cultural, 1367), 542-544.
- 10. Jahanshah Pakzad, The history of the city and urbanization in Europe, (Tehran: utopia, 1392), 132.
  - 11. Ibid.

- 12. Mohammad Khoramshad, "From city to city in the history: An overview of the history of urbanism, Soore Andishe, No. 69-68, (May and June 1392): 32.
- 13. Henry Thompson Rowell, Rome at the age of August, Translated by Abu Talib Sarami, (Tehran: agency of translation and boo publication. 1349), 150.
- 14. David Vetkin, Architectural history of the West, Translated by Mohammad Taghi Faramarzi, (Tehran: Kavoosh pardaz, 1390), 88.
  - 15. Durant, The history of civilization, III/385-386.
  - 16. Ibid., III/386.
- 17. Henry Lucas, History of civilization form the oldest to our century, Translated by Abdul Hossein Azarang, (Tehran: Sokhan, 1382), 327.
- 18. Nadia Aboueye Mehrizi, "Architecture in Iran from the beginning to the end of the Sassanid era", research in the humanities, fourth year. No. 19, (1392): 81.
  - 19. Reza Mehrafarin, Sassanian cities, first publication, (Tehran: Samt, 1393), 68-69.
- 20. Hossein Soltanzadeh, An introduction to the history of the city and urbanization in Iran, (Tehran: Abi, 1365), 39-40.
- 21. Shahram Yousefi far, "The emergence of cities and urbanization in the history of Iran", the history of Iran, no. 64/5, (1389): 152.
  - 22. Mehrafarin, Sassanian cities, 70-71.
  - 23. Seyyed Mohsen Habibi, From street to city, (Tehran: Tehran University, 1383), 3.
  - 24. Malet, history of Rome, 55.
- 25. James Morris, The history of city shape to industrial revolution, Translated by Razieh Reza zadeh, (Tehran: University of Science and Technology, 1388), 60-61.
- 26. Max Webber, City in the course of time, Translated by Shiva Kaviani, (Tehran: Sahami Enteshar, 1375), 64-66.
- 27. Abul Hasan Ali ibn Hossein Masoudi, Morouj Al-dhahab wa Maāden Al- johar, Translated by Abolghasem Payande, (Tehran: Scientific and Cultural, 1374), 254.
- 28. Bernardin Barbadoro, Twenty-seven centuries of history of Italy and Europe, Translated by Hassan Afzali Nezhad, (Tehran: hall of book, 1381), 37.
  - 29. Lucas, History of Civilization, 379.

- 30. Durant, The History of Civilization, III/89.
- 31. Paul Biroch, Cities and economic development: from the dawn of history, translated by Christopher Braider, (Chicago: The university of Chicago Press, 1988),102.
  - 32. Mehrafarin, Sassanian cities, 73.
  - 33. Durant, The history of civilization, III/69-71.
- 34. Ismaeil AliAkbari, "An approach to restore the old values in contemporary urbanism", Peyk Noor, no. 2, (1383): 51.
  - 35. Habibi, From street to city, 32; Soltanzadeh, an introduction to, 67.
  - 36. Ibid., 67.
  - 37. Habibi, From street to city, 32; ibid., 69-70.
  - 38. Ibid., 32; ibid., 69.
  - 39. Ibid., 69.
  - 40. Pakzad, The history of the city, 139-141.
- 41. Pierre Grimal, Roman cities, Translated and Edited by G. Michael Woloch, (The university of Wisconsin, 1983), 14.
- 42. Lewis Mumford. Civility and civil society in historical context, Translated by Ahmad Azimi Bolourian, (Tehran: Aria cultural institution, 1381), 317.
  - 43. Pakzad, The history of the city, 145.
  - 44. Morris, The history of city shape, 67.
  - 45. Pakzad, The history of the city,146.
  - 46. Morris, The history of city shape, 69.
  - 47. Pakzad, The history of the city, 149-150.
  - 48. Thompson Rowell, Rome at the age of August, 149.
  - 49. Pakzad, The history of the city, 155.
  - 50. Ibid.,163-164.
- 51. Kevin Lynch, The theory of city, Translated by Hossein Bahreyni, (Tehran: Iran Cultural Heritage Organization, 1381), 43.

- 52. Yadollah Farid, Geography and urbanity, (Tabriz: Tabriz University, 1371), 94.
- 53. Mehrafarin, Sassanian cities, 159.
- 54. Dan Stanislowski, "The origin and Spread of the grid- pattern town, geographical review, vol. xxxvi, No.1, (Jan, 1946):106-107.
  - 55. Morris, The history of city shape, 60.

#### References

Aboueye Mehrizi, Nadia (1392). "Architecture in Iran from the beginning to the end of the Sassanid era". *Research in the Humanities*. Fourth year. No. 19.:63-90. (Iranian Calendar).

Abu Hanifa Dinwari, Ahmad ibn Dawood (1364). *Al-Akhbār Al-towāl*. translated by Mahmoud Mahdavi Damghani. Tehran: Ney. (Iranian Calendar).

Ali Akbari, Ismaeil (1383). "An Approach to Restore the Old Values in Contemporary Urbanism". *Peyk Noor*. no. 2.:47-62. (Iranian Calendar).

Barbadoro, Bernardin (1381). *Twenty-Seven Centuries of History of Italy and Europe*. Translated by Hassan Afzali Nezhad. Tehran: Hall of Book. (Iranian Calendar).

Biroch, Paul (1988). *Cities and Economic Development: From the Dawn of History*. Translated by Christopher Braider. Chicago: the university of Chicago Press.

Daryaee, Touraj (1390). *Sassanian Empire*. Translated by Morteza Saghebfar, Fifth Publication. Tehran: phoenix. (Iranian Calendar).

Durant, William James (1367). *The History of Civilization*. vol. III, Parviz Dariush Translation. Tehran: Scientific and Cultural. (Iranian Calendar).

Falamaki, Mansour (1371). *Modernization and Urban Sanitation*. Tehran: Samt. 1388. (Iranian Calendar).

Farid, Yadollah (n.d.). *Geography and Urbanity*. Tabriz: Tabriz University. (Iranian Calendar).

Grimal, Pierre (1983). *Roman Cities*. Translated and Edited by G. Michael Woloch. The University of Wisconsin.

Habibi, Seyyed Mohsen (1383). *From Street to City*. Tehran: Tehran University. (Iranian Calendar).

Hoff, Dietrich (1374). A Glimpse into the Iranian Capitals since the Beginning of Islam. Translated by Gholam Ali Shamloo. The Capitals of Iran by Mohammad Yousef Kiyani. Tehran: Cultural Heritage Organization. (Iranian Calendar).

Ibn Athir, Ali ibn Mohammad (1349). *al-Kāmel*. Vol. I. Translated by Seyyed Hassan Rouhani, Tehran: Mythology. (Iranian Calendar).

Khoramshad, Mohammad (1392). "From City to City in The History: An Overview of The History of Urbanism. *Soore Andishe*, No. 69-68.:30-34. (Iranian Calendar).

Lucas, Henry (1382). *History of Civilization Form the Oldest to Our Century*. Translated by Abdul Hossein Azarang. Tehran: Sokhan. (Iranian Calendar).

Lynch, Kevin (1381). *The Theory of City*. Translated by Hossein Bahreyni. Tehran: Iran Cultural Heritage Organization. (Iranian Calendar).

Majmá Al -tawarikh wa Al-Qesas (1318). The correction of Bahar. Tehran: Kolaleh Khavar. (Iranian Calendar).

Malet, Albert (1383). *The History of Rome*. vol. I. translated by Gholam Hossein Zirakzadeh. Tehran: The World of Books. (Iranian Calendar).

Masoudi, Abul Hasan Ali ibn Hossein (1374). *Morouj Al-dhahab wa Maāden Al- johar*. Translated by Abolghasem Payandeh. Tehran: Scientific and Cultural. (Iranian Calendar).

Mehrafarin, Reza. (n.d.). Sassanian Cities. First Publication. Tehran: Samt.

Morris, James (1393). *The History of City Shape to Industrial Revolution*. Translated by Razieh Reza zadeh. University of Science and Technology. 1388. (Iranian Calendar).

Mumford, Lewis (1381). *Civility and Civil Society in Historical Context*. Translated by Ahmad Azimi Bolourian. Tehran: Aria cultural institution. (Iranian Calendar).

Orian, Saeed (1382). *Directory of Middle Persian inscriptions*. Tehran: Iran Cultural Heritage Organization. (Iranian Calendar).

Pakzad, Jahanshah (1392). *The History of the City and Urbanization in Europe*. Tehran: Utopia. (Iranian Calendar).

Soltanzadeh, Hossein (1365). *An Introduction to the History of the City and Urbanization in Iran*. Tehran: Abi. (Iranian Calendar).

Stanislowski, Dan (1946). "The origin and Spread of the grid- pattern town., *Geographical Review.* vol. xxxvi. No.1.: 105-120.DOI: 10.2307/211076.

Tabari, Mohammad ibn Jarir (1352). *Tarikh Al-Ţabari*. Vol. II. Translated by Abolghasem Pyandeh. Tehran: Iranian Culture Foundation. (Iranian Calendar).

Thompson Rowell, Henry (1349). *Rome at the Age of August*. Translated by Abu Talib Sarami. Tehran: Agency of translation and boo publication. (Iranian Calendar).

Vetkin, David (1390). *Architectural History of the West*. Translated by Mohammad Taghi Faramarzi. Tehran: Kavoosh Pardaz. (Iranian Calender).

Weber, Max (1375). *City in The Course of Time*. Translated by Shiva Kaviani, Tehran: Sahami Enteshar. (Iranian Calender).

Yousefi far, Shahram (1389). "The Emergence of Cities and Urbanization in the History of Iran". *The History of Iran*. no. 64/5.:145-170. (Iranian Calender).