

Explaining the Geopolitical Evolution of Ports - Hinterland Connections in Iran; A Historical Comparative Approach

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Abstract

This article explores the relation of Iranian ports with their surrounding regions from the geopolitical-spatial perspective since 6th century BC. Content analysis of historical data obtained from written, pictorial and secondary sources is the method used to achieve this aim. The results denote that the geopolitical-spatial evolution of Iranian ports and the surrounding regions can be classified into three general eras: in the first era (from 6th to 15th century), with the domination of the most powerful Iranian states on both sides of the Persian Gulf, the geopolitical-spatial of Iran often had foreland-oriented structure with mutual interaction of ports and hinterlands especially up to regional scale. In the second era (from 16th to 19th century) which coincided with the arrival of powerful foreign forces in the Persian Gulf, the rulers implemented a geopolitical policy: the protection of mainland with the aim of territorial integrity maintenance. So, in this era hinterland-oriented spatial structure was formed based on the interaction in local, regional and national levels. Also, the geospatial scheme of the country was founded on the basis of endogenous activities and integration political power. In the third era and with the exploration of oil (beginning of the 20th century till now), production, trade and distribution system of the country has undergone radical changes and along with formation of powerful world capitalist system, it has become subject to political and economic changes of this system. Directing capital flow to the capital and obtaining such development policies as growth pole, spatial structure of the country has tended towards corridor- polarized pattern. This pattern has led to the pole-oriented hinterland spatial structure based on single-product (oil) export. In other words, in

the country has tended towards corridor- polarized pattern. This pattern has led to the pole-oriented hinterland spatial structure based on single-product (oil) export. In other words, in this era, the political, spatial and economical geography relied on the political and economic decisions that were concentrated in the capital. Accordingly, spatial planning in the local-regional hinterland about habitats, activities and distribution of services depended on the capital decisions in the national hinterland.

Keywords: Iran, Ports, Hinterland, Geopolitical and Spatial Evolution.

Introduction

Persian civilization always could improve its relations with surrounding civilizations by its ports and border towns to create balanced economic development in local, regional and national scales. The way of interaction of Iran ports with surrounding regions in different historical eras differed according to the political and economic condition of the country. It is obvious that the differences of the types of interaction among nodes, supporting spaces, land use zones and quality of connection corridors, bring about different forms of spatial structures. These in turn, exert their influence on the spatial structure of production, distribution and consumption of the territory, and as a result, affect the formation, stabilization and changes at the hinterland regions of the ports. The aim of this article is to describe and interpret the influential factors and conditions in spatial development of Iran ports and their connection with the surrounding regions during the different historical eras. On this basis, at the first section of the research, using qualitative content analysis, structured analysis and study of development trend of ports of Iran as well as their spatial connection in historical texts are carried out. Is torical eras have been classified into three periods according to the role of endogenous and exogenous factors in various historical events and their influence on spatial interaction of ports and the surrounding regions. Then, using thematic analysis, salient features of each era and conceptual model of spatial structure of the port relation with their surrounding regions in that era are

explained. The data; from the 10th century till now, were collected through library research according to the descriptions of historians, travelers, interpreters and researchers in the field of social, economic, geographical and historical sciences. The data gathering was based on theoretical sampling.

First era: interaction of ports of Iran with their surrounding regions since Achaemenids up to Safavids (from the 6th century BC to the end of the 15th century)

It seems that it was in time of Achaemenids that Iranian first noticed the importance of maritime trans-regional trade. Darius I, through facilitating maritime commerce, changed the path of merchandize transportation – which was previously from northern ports of the Persian Gulf to Babel and eastern lands of Greece and the Mediterranean - to downstream ports of the Persian Gulf (Vosoughi, 2005: 34). The conquering of India prepared the way for Achaemenids to start their first commercial relation with areas outside the boarder, and abled Iranian merchants to have regular transaction between Iran, Indus (contemporary India) and Silan (contemporary Sri Lanka). Interaction with Indus caused the south and south-east ports of Iran to flourish considerably (Moqadasi, 1982: 478)¹. Following the trend of conquest by Achaemenids, these relations were extended to Red Sea shores; consequently, the trade flow between east and west of the given empire flourished (Mojtahed-zadeh, 2000: 261). In Seleucid era, for disintegration of political unity of Iran and emergence of various local and regional conflicts, there was unsuitable condition created for the development of the Persian Gulf and its shore lands and hinterlands (Vosoughi, 2005: 48). In Parthians era, taking advantages from marine and maritime facilities in the Persian Gulf increased; although repeated clashes of Parthians with the

¹-Moghadasi, the historian of 10th century, describes Tiiz port (in proximity to contemporary Chabahar port) as famous landing place full of palm-grove and including several Caravansarys, beautiful mosque and moderate residents.

Roman empire reduced from their attention to maritime trading in southern ports and made them to concentrate more on security and military issues (Mojtahed-zadeh, 2000: 261). With formation of the powerful central government of Sassanid, security and military domination on forelands and hinterlands of the Persian Gulf reached to its highest point in the history. This security especially in forelands of the Persian Gulf (such as Oman and India) increased the interaction of merchants with these regions and monopolized the export of India silk as well as gold and other merchandises in the hands of Iranian traders (Whitehouse, 1971: 262-267).

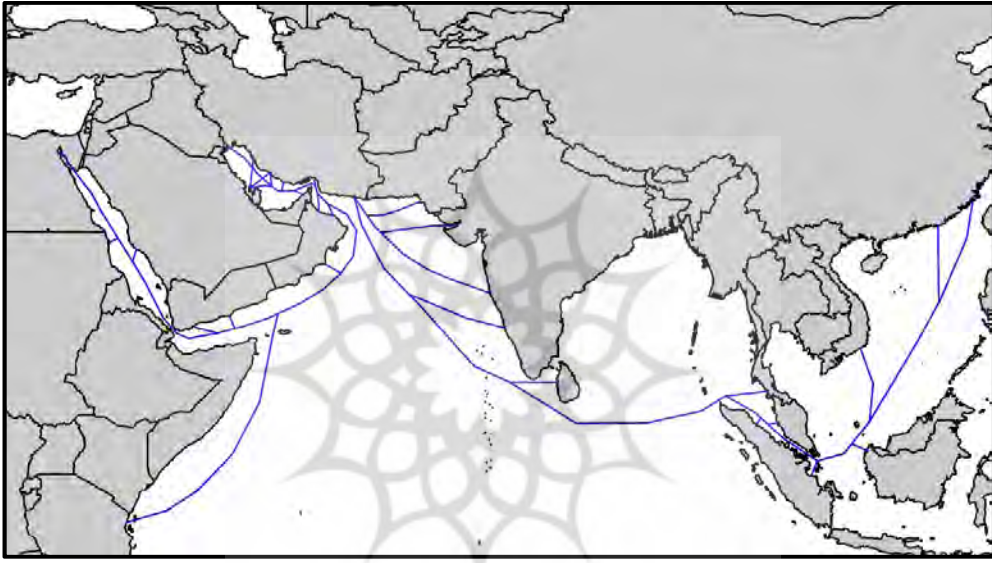
Repair and maintenance of connection routes were among the issues that Sassanid government concentrated on. Although roads and waterways were maintained by Sassanid state, it was people and private sector (merchants) who turned the wheels of the economy (Gyselen, 1998: 104-107). In fact, large portion of goods were exchanged between east and west through several routes located within Fars province. In this era, villages and cities of Fars province were prominent in export of agricultural productions (fruits) and handicrafts (wool, cotton, linen fabrics, perfume, carpet and silk fabrics) to China and India (Daryaee, 2003: 1-16). Evidences reveal that in pre-Islamic era, silk and spices were among the main merchandises of Iranian and played evident role in development of trade routes and supporting infrastructures such as Caravansaries¹ and southern ports of Iran (Lukonin, 1983: 681-746). The power of commercial interaction of the Sassanid was as such that, in addition to hinterlands of the Persian Gulf, it had a considerable role in flourishing of forelands of the Persian Gulf (Arab areas and Indian shores) (Williamson, 1972: 142-151). In this era, each city in internal territory was supported by a harbor city. As an instance, Reyshahr (a city in proximity to the contemporary Bushehr) acted as the especial port for Bishapoor. Darab was also an important city in the hinterlands of the

1- a safe and equipped place with eminent symptom of Iranian Traditional architecture on the commercial ways for relaxing and recovery of merchants

Persian Gulf which had its own especial port near contemporary Lengeh Port (Whitehouse, 1971: 266). Another important port in this area was Siiraf. This port as harbor of the City of Ghor or Ardasherkhorehacted in hinterlands of Fars and was connected to that city through trade routes (Bosworth, 2016). During the first and second centuries of Islam, due to the absence of a powerful united government, trade routes in national and regional hinterlands were less secure. However, based on evidences their local hinterlands and ports did not lose their previous splendor (Mojtahed-zadeh, 2000: 266). Yaqut al-Hamawi regarding this era, talks about thrived ports of Aboleh (northern part of the Persian Gulf in proximity of Basra), Reyshahr (in proximity of Busheher), Tooj (a port in proximity of contemporary Ghenaveh as the hinterland port of Bishapoor and node of precious cloth-weaving) and Siiraf (as the economic gate of the City of Firuzabad) (Yaqut Hemavi, 1996: 463). In the era of Al-i-Buyeh, in the 10th and 11th century, Siiraf had been important for maritime trade and supplying the needed goods of the country via India, China, south-east of Asia and east of Africa (Whitehouse, 1971: 262) (Fig.1). Hormuz Port was also been connected to the north-east regions via the Cities of Siirjan and Kerman (Boucharlat and Salles, 1981: 65–94). Al-i-Buyeh kings played an important role in recovering the power of hinterlands (Moqadasi, 1982: 608), through attacking to the City of Ahvaz; as the storing place for goods from the Port of Basra, In the following, opening of Baghdad and Basra led to this state's domination on all waterways, ports and hinterlands of the Persian Gulf (Ibn-Miskawayh, 1997: 148). Conquest of hinterland cities, establishing new hinterland cities¹ and conquest of important cities in foreland cities² resulted in full political and economic dominance of Iranians in foreland and hinterlands of the Persian Gulf. Shiraz was considered as the hinterland pole of southern ports of Iran and also the meeting place for the majority of

1- Such as Gerdfanakhosro in proximity to Shiraz that was built up for settlement of military forces to protect the security of commercial routes (See Ibn-Balkhi, 2006:132).

2- Such as Sohar and Qlhat ports in shore lands of Oman (See Ibn- Athir, 1987: 292).



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that despite the presence of high hinterland frustration in this era, merchants, were able to transfer their commercial realm to the southern ports of the Persian Gulf – Oman and India. In the 14th and 15th centuries, southern islands of Iran and the northern shores of Oman acted as the center of gravity for Iran. Hormuz upgraded to the greatest commercial transaction pole in the region (Samarqandi, 1906: 29). Centrality of Hormuz in commercial affairs attracted the attention of Portuguese towards this region; in such a way that the consequence was their campaign and dominance on this island. Portuguese stepping on the southern shores of Iran can be considered as the beginning of the decline of foreland-offensive-oriented economy of Iranians and also the end of mutual interaction of hinterlands and ports of Iran. Table 1 outlines the basic concepts and important categories of the first era in order to obtain its summarized theme.

Table 1: Basic concepts, categories and theme obtained from historical texts about the relation of ports with surrounding regions in the first era

Basic concepts	Categories	theme
Suitable structure of geographical space of the Persian Gulf Hinterland-port linear relation in regional scale	Suitable natural environment for trading	
Feeling of insecurity and discomfort changes spatial pattern of interactions Formation of foreland poles in the absence of secure and suitable hinterlands importance of political and military authority and sovereignty in economic development	Financial security and safety and psychological comfort among people and merchants in spatial development	foreland-oriented spatial structure along with mutual interaction of ports and regional hinterlands
Role of strategic goods in infrastructures' development and comprehensive economic boom (government-people) Powerful interaction of the state, traders and people in the system of production and distribution of goods Tact of government in creating economic competition	Tendency of the state to have economic interaction with public sector (people), traders (private sector) and other states	

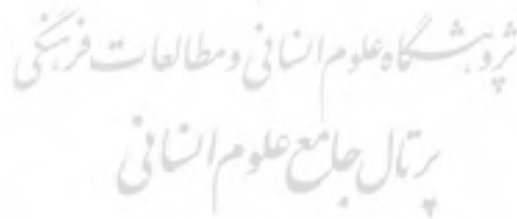
Data analysis in the first era

To explain and interpret this table, it should be noted that the short distance between southern and northern shores of the Persian Gulf and habitation and activity of civilization centers in this gulf's environ have prepared suitable condition for trading and economic interactions. Such a situation is now existed especially in the shores and ports of the Persian Gulf (ports like Siraf, Hormuz, Sohar, Qalhat, and Bahrain) which are located at the front line of maritime trading. Thus, in the first era, it can be claimed that the activity space and the use system governing on cities in the scales of shores, local hinterlands and forelands was a system of commercial and trade. In the following, there were regional hinterland spaces that protected security of the ports beyond supplying consumer needs of flourished southern ports. Supporting and protecting the security of ports caused the commercial splendor to be extended to the capitals of regional hinterland. The type of support in the cities of regional hinterland was different in a way that in smaller cities it was in welfare scale¹. In bigger cities, this support was often in the form of welfare-military. On the other hand, producing handicrafts² was also prevalent in small and big hinterland cities. As a result, it can be said that in the scale of regional hinterlands, the dominating activity space and use system of the capital and bigger cities was commercial-productive-military based; in smaller cities, it was in the form of welfare-commercial-productive; and in villages and tribes, it often had agricultural-husbandry role and also the role of supplying basic needs for consumption of the residents of the capital, ports, big and small hinterland cities and/or supplying strategic agricultural goods for export (such as spices, citrus and horse). Finally, cities in national hinterlands that were located on the path of the historical routes such as Silk or Spice Roads often acted as welfare-service spaces for commercial caravans and at the same time took

1- In the form of caravansaries for rest and commercial chambers for trading

2- Handicrafts such as decorative objects, silk fabrics, carpet and war tools

advantages from commercial interaction with these caravans. On the other hand, while a set of villages and tribes in the scale of national hinterland were engaged in producing agricultural strategic goods (silk and spice), the majority of the cities and villages enjoyed relative independence in supplying their needs and did not play a remarkable role in the chain of supply and trade of goods. Because of political and military authority of Achaemenids, Al-i-Buyeh and Sassanid provided security and supported infrastructures required for trading; interactions between ports and regional-local hinterlands thrived considerably during this era. As a result we can say that the main weight and intensity of spatial flows in the first era existed between city-ports of Persian Gulf shores¹, foreland city-ports² and regional hinterland cities³. Among other hinterland cities in national scale, only those which were locating on the path of historic routes to the ports⁴ enjoyed considerable splendor. In sum, we can explain the pattern of spatial flows in this era as multi core and its spatial structure as semi network. In this structure, a set of exchange nodes were located along northern shores of the Persian Gulf and formed its multiple relations with hinterland and foreland nodes (Fig. 2).

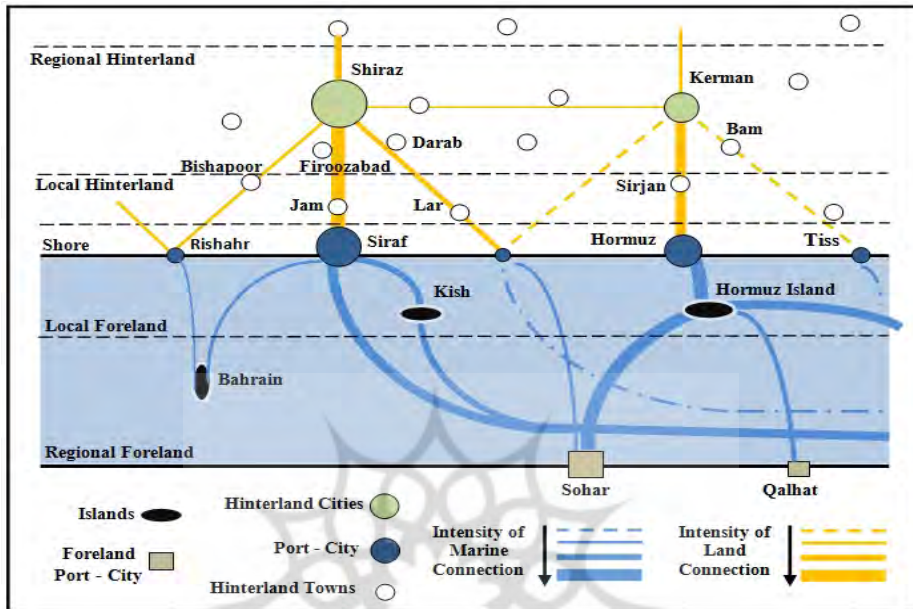


1- Such as ports of Hormuz, Basrah, Siraf and Rishahr (in proximity to contemporary Bushehr), Guzeran (in proximity to contemporary Kong) and also Tiss (in proximity to contemporary Chabahar).

2- Such as Sohar and Qalhat ports and Islands of Bahrain, Hormuz and Kish

3- Big hinterland cities such as Kerman, Shiraz, Ahvaz, and Baghdad and smaller hinterland cities such as Darab, Bishapoor, Bam, Ardashirkhoreh, Siirjan and Lar

4- Such as Yazd, Esfahan, Kashan, Qom and Rey



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ambassadors and merchants started their economic interaction and broad transaction with Iran (Oldham, Ross and Stodart, 1936: 715-716). British merchants and companies usually imported spices, silk, cotton, wool, herbs and lazuli from Iran and India and exported wool textiles, iron, copper and tin to these countries. In Shah-Abbas I era, the business of the British and the Netherlands with Iranian people to buy silk thrived more than ever (Floor, 1988: 15).

In this era, many cities won fame for producing and transacting silk and silk products. Foreign merchants attended and even resided on the way of silk producing cities and regions to its export gates to Europe (southern ports). These paths soon became strategic crossing route for trade caravans (Savaqeb, 2004: 143-154). For better support and security of trade caravans, many caravansaries were established on the hinterland trading paths especially in axis of Bandar Abbas – Lar – Shiraz - Isfahan; this points to Safavids care for security and service quality in hinterlands roads (Floor, 1999: 67-94). Many hinterland cities flourished during Safavids era along with the development of southern ports. The City of Isfahan is among the important trade nodes in this era. Its Location on the route of great trade caravans to south was somehow effective for its selection as the capital. This selection was noticeable both in economic and political-military terms; however, the economic side was more important. Shah Abbas was aware that economic splendor and international trade growth can be accessible only through maritime routes. Due to highlighted role of the Persian Gulf in goods export and centrality of Isfahan and its supporting role in exporting domestic goods especially silk from the north of Iran to the shores of Persian Gulf, this city gained critical importance (Savaqeb, 2004: 144). A large number of Europeans lived in Isfahan in that era, among who are the agents of East India Company of Britain and Netherlands, European and Asian artisans and artists (Savory, 2007: 200-202). Chardin considers

southern shore of Iran, was changed to Abbasi port in honor of Shah Abbas Safavi.

Isfahan as one of the main centers of producing brocade fabrics; these clothes were among the most precious and valuable textiles of the time(Chardin, 2012: 277-278). Silk fabrics woven too delicately in surrounding towns of Isfahan especially in Ardistan, Kashan, Yazd, Qom and Savah, were presented to customers in Isfahan market (Le Strange, 2012: 40). In these markets, there were complementary supporting and service providing uses such as inns, arcades and caravansaries, schools and mosques. Commercial caravansaries in Isfahan were all in high quality(Mandelslo, 1667: 3-18), broad and full of caravans from all around the country; they produced large income for the government and the state. In fact, during the golden age of Safavid which was located on regional and national hinterlands of the southern ports, Isfahan as the gravity center for trade and agricultural and industrial products enjoyed impressive growth. This city as the trade center of Iran was in fact the concentration place for representatives of foreign trade firms. Generally, most of the financial and commercial relations with the European governments took place through this city and southern ports.

Tabriz was another splendid city in Safavids era. The boom of this city started during Ilkhan period and reached to its highest point in Safavids period (Chardin, 2012: 196-198). In terms of trading, wealth and population, it was second only to Isfahan but regarding commercial activities it was among the most famous cities and trade nodes in Asia (Tavernier, 1990: 66-67). Not only through south ports and ways but it was also through north and especially Russia that silk was exported; Tabriz was located at the center of this trade (Bastani Parizi, 1983: 118). The City of Ghazvin was another trade node of Iran in Safavids era. It was also among the main communication centers of Iran before Safavid age. Besides being on connection path of north (Gilan and Mazandaran Provinces) to south (Saveh and Isfahan Cities), this city was located on the connection path of east (Khorasan Province) to west (Azarbaijan Province) and south-west

(Hamadan and Kermanshah Cities); this centrality in connecting the connection corridors allocated the city of Ghazvin efficient commercial credit and also advantaged it in terms of supporting the trade caravans (Parsadoost, 2002:715). Because of the areas of mulberry trees and silk production, northern cities of Iran¹ played important economic role. For the importance of silk among other domestic products, many merchants were interested in its buying and exporting. In that time, vast areas in Gilan Province were covered with mulberry trees. So, silk was produced in these lands (Tavernier, 1990: 600). Thus, it can be said that the Provinces of Gilan and Mazandaran played as agricultural areas of silk production. In other words these places were (Chardin, 2012: 281) the main suppliers of raw material for industry and trading. Other important cities (such as Mashhad, Qom, Kashan, Yazd and Kerman) played the role of fabric and other high quality textile producing centers (Sharifi-e-Mehrjardi, 2013: 103); they operated on the path to the south ports (such as Shiraz and Lar) that provided service for caravans. After collapse of the Safavids, the country was subject to confusion and invasion of hostile tribes; consequently, various local governments were formed in shores and hinterlands. Therefore, hinterland cities such as Lar, Sirjan and Darab were usually exposed to insecurity; this led to disruption in maritime and the land commercial routes (Marashi-e-Safavi, 1983: 76). In Afsharid dynasty, national sovereignty of Iran was strengthened for at least short time and spatial structure of the country found more cohesion. Nader Shah's tendency to campaign and conquest led to growing strength of military force and he founded the first Military Navy in Iran (Axworthy, 2011: 31-39). However, this condition did not last long and local governments ruled again over Persian Gulf shores. Tribal-ethnic conflicts during second half of the 19th century caused sharp decline in maritime business and brought in difficult commercial condition for ports of Iran and its hinterlands.

1- Especially in Gilan and Mazandaran Regions.

As a result, trade nodes of this region moved to west and north-west ports of the Persian Gulf among which were Bahrain and Kharak Islands and Basrah, Bushehr and Riq Port (Al-qasimi, 1999). During Nadir Shah and KarimkhanZand eras, Bushehr Port was propounded as harbor of this big city (Niebuhr and R. Heron, 1792: 145-146) for locating on commercial path to Shiraz. Because of emerging issues in north (Iran-Russia wars) and east (separation of Afghanistan from Iran) During Qajarieh era, monitoring and controlling the southern part of the country diminished. Since the beginning of the Qajarieh onward, Bushehr Port became the most important port of Iran for transaction of goods¹. The goods purchased from the Indian Ocean and adjacent markets were unloaded at Bushehr Port and were transported to Shiraz through ground road. The boom of trading in this port caused a great number of merchants living in hinterlands such as Shiraz, Kazerun and Yazd to migrate to this port and establish new trade offices thereabout. Polarity of Bushehr in this era was as such that almost all export goods were loaded in this port (Issawi, 1983: 134). With selection of Tehran as the capital of the Qajarieh dynasty, this city, over time, got involved in the cycle of spatial flows and goods and capital exchanges. Until the end of the Qajarieh, Tehran turned into the political and economic pole of Iran. At the time of Naser al-Din Shah, Abbas and Lengeh Ports regained their relative security; and properly flourished after a period of relative decline (Hoseini-e-Fasaei, 2003: 792). During this time, Shiraz, the most important hinterland city, effectively communicated with Abbasi, Lengeh and Bushehr Ports. Many merchants from Shiraz, Larestan, Evaz and Bastak Cities were working in Abbasi Port (BaniAbbasian-e-Bastaki, 1960: 243). In the late 19th century, with opening of Suez Canal, maritime and river transit increased between India and Europe (Issawi, 1983: 252). Also with

1- This time is associated with taking power of Napoleon in France. This caused the Britain to more concentrate on their dominated regions. In fact, the presence of England at the end of 18th century in Persian Gulf, unlike to the past, took on a political flavor. Therefore, Bushehr became the most important naval base in Persian Gulf.

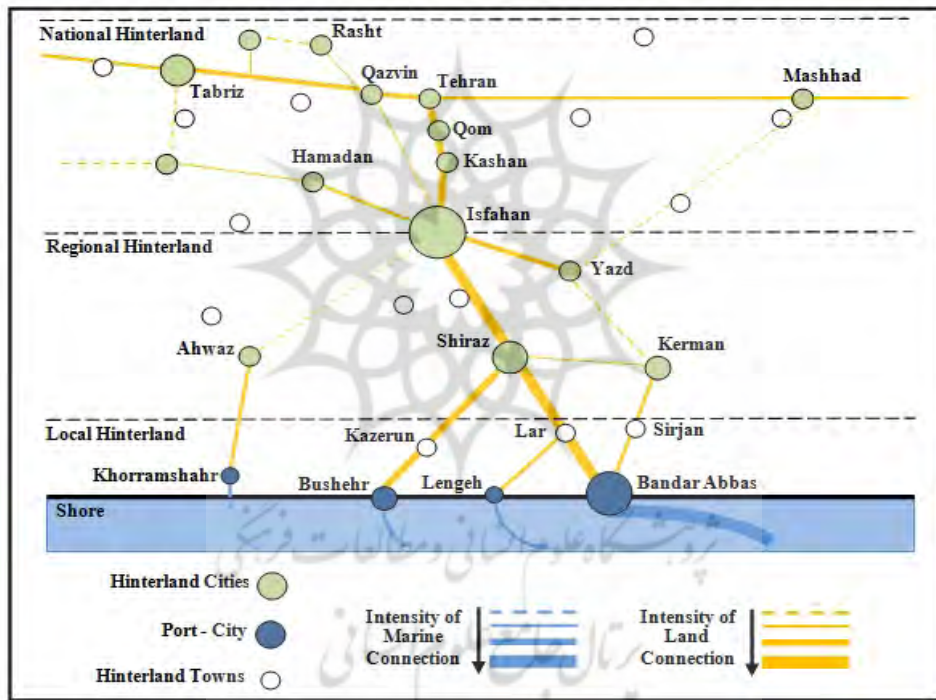
invention of steamboat which led to facilitating their crossing through Karun River, these boats were introduced to the trade cycle in Iran (Wilson, 1987: 304). These factors paved the way for the flourish of river ports of Iran. Connection infrastructures in this region (including telegraph and telephone), created by Britain for the sake of their own benefit, played an influential role in development of ports and hinterland cities of the Persian Gulf (Jamalzadeh, 1956: 180). Table 2 outlines the basic concepts and important topics of the second era in order to obtain its summarized theme.

Table 2: Basic concepts, categories and theme obtained from historical texts about the relation of ports with surrounding regions in the second era

Basic concepts	categories	theme
Emergence of foreign political powers in the Persian Gulf, such as Portugal, the Netherlands and Britain	Reduction of dominance over foreland, maritime areas and concentration on hinterland and inland areas	
Dominance Reduction in the sphere of Foreland and concentration on integration, independence and national security		
Regulation and vast investment of government in production and export of strategic goods	Direct investment and support of the government from interaction with traders and foreign states aiming at increase in production power and national economic boom	Hinterland-oriented spatial structure based on local, regional and national interactions resulted from comprehensive endogenous activity and production
full support of investment and direct presence of foreign traders in local, regional and national hinterland regions of Iran		
selection of Isfahan as the capital within the center of political geography circle of Iran aiming at integrated management and uniform monitoring of the political and economic situation of the country		
Increase in interaction power of national (such as Isfahan, Yazd, Kashan, Hamadan, Rasht, Tabriz and Ardabil), regional (such as Shiraz and Kerman) and local (such as Lar and Bastak) hinterland cities with southern ports in the chain of world goods supply	Planning the spatial system of domestic production and distribution from shore lands to national hinterlands and regulation of labor distribution system in national scale	
Capital integration, creating security and welfare service in the capital aiming at concentration of traders and more proper management of economic affairs (saving resulting from integration)		
Regulation of national labor distribution system for completing the chain of endogenous and comprehensive production		
Powerful influence of Britain on northern and southern shores of the Persian Gulf	Increase of influence and supervision of Britain in regulating hinterland and foreland relations	
The entry of steamships and new communication infrastructures to the Persian Gulf and river ports of Khuzestan		

Data analysis in the second era

To explain and interpret this table, it should be said that Safavids government realized production and economic growth across the country, through securing roads, establishing and reconstructing welfare infrastructures and full support of trading.. In this era, silk as the most strategic production in Iran received great attention of merchants. Cities of Iran such as Isfahan, Shiraz, Tabriz, Ardabil, Rasht etc. flourished as they were the nodes of trading. Commercial caravans passed through these cities and transaction of different types of merchandises took place in them. Isfahan as the capital of the Safavids had the strongest commercial status among cities of Iran. This caused Isfahan (as the capital accumulation pole and the welfare-service center for merchants) to guarantee the duty of political and economic managing and monitoring of the country. What is evident in this time is the existence of social labor distribution in national scale for the purpose of valuable goods' export and also the existence of urban-rural social labor unity system in local scale. In fact, dominant and especial role is allocated to each region in order to obtain optimum efficiency in the chain of supplying export goods, using maximum natural potency, domestic activities and endogenous production of the country. In this spatial system of national labor distribution, north of Iran supplied agricultural strategic goods (Silk). Other national and central hinterland cities were responsible to process silk and produce silk derivations and handicrafts. Local hinterlands provided security, welfare and service for merchants and commercial caravans. Ports imported/exported inter/foreland goods. Created spatial structure in cities and ports during Safavids era was so stabilized that despite the instabilities and inland confusions in other eras, it remained firm by the late Qajarieh; so that in the chain of supplying goods for export, national and regional hinterlands had producing role; the local hinterlands had supporting role and the shore lands acted as the distributors of the goods. In commodity trading process, each region enjoyed potential benefits of trading in its sphere of influence. Thus, it can be said that in this



Third era: Interaction of ports of Iran with their surrounding regions since the exploration of oil till now (20th and 21th century)

Oil exploration in Persian Gulf hinterlands was one of the most important historical turning points in development of the southern hinterlands and port of Iran. After the decline of Qajarieh and in the early years of the formation of Phalavi, the attentions to ports were political and military which was due to political requirements of the time (the end of World War II, armaments and geopolitical rivalry of European governments). As a result, there was more attentions paid to naval and military forces, and Khorramshahr and Shapoor Ports transformed into military and settlement base for navy (Mojtahed-zadeh, 1996: 556). After achieving the absolute power in 1925 and aiming to create a powerful central government, Reza Khan concentrated on necessity of modernization and financial, administrative, economic, military, educational reforms and improvement of business through building roads and railways (Alam, Dashti and Mirzaei, 2014: 61-86). Building the Trans-Iranian Railway Line¹, which connected the south of Iran to its north, was the greatest infrastructure activity of the government in 1930s (Sodagar, 1987: 269). With the outbreak of World War II, this rail axis served the Allies and their military purposes (Bayrami, 2009: 156-173). For the first time, the connection could make the role of northern ports more prominent. After World War II and emergence of new economic powers, the condition of northern ports of Iran underwent considerable changes. With the increase in oil export, foreign exchange earnings of Iran raised over time. In this situation, hinterland cities and ports of Khuzestan especially the City of Ahvaz and Abadan, Khorramshahr, Shapoor Ports boomed increasingly because of their location within the area of oil exploration, production and processing. In 1946, the issue of regular planning in economic system of the country was taken into consideration; and in 1948, the first development program of the country was prepared. Following

1- The connection of Shah (Torkaman) port in east-south of Caspian Sea to Shapoor (Imam Khomeini) port in the shore of Persian Gulf.

nationalization of the oil industry at the beginning of 1951 and radical raise in foreign exchange earnings which come from the export of petroleum, the government's approach changed from a balanced development into an unbalanced development of regions. In fact, with the increase in oil income and government's less dependence on tax, a comprehensive top to down planning system which was based on expert advice and sectional policies was formed.

With the increase of oil income, the state more powerfully tended to influence spatial planning system. In this line, the government based the concentration of its national-regional planning system on the Theory of Growth Pole. During the third program (the Third 5-Year National Development Plan), the required space for capital investment growth and increase in domestic and foreign capital investment profit was created through spending half of the cost for the development program on non-productive affairs. During this program, as the private sectors showed no interest to work in the industry section, the majority of industrial activities (by direct and indirect governmental investment) were concentrated in Tehran and its surrounding. In the following, hasty and ill-considered implementation of agrarian reform program played important role in the downfall of traditional agricultural production system, emigration of villagers, private sector's growth and expansion of industry and services in the cities. In the fourth program, continuation of the trend of industrialization and establishment of small and big industries especially in surroundings of Tehran and other metropolitans, the trend of polarization of industry and services were accelerated. During the Third and the Fourth National 5-Year Development Plans, almost 11.5 Billion Dollars was earned through selling oil. This money was injected to the dependent economy of Iran; and the government assumed the responsibility of 48.3% of fixed capital of society (Mashhadizadeh, 2007: 77). The Fifth Development Plan, similar to the fourth one, emphasized on industrialization and according to

multiple increase in oil income, huge budgets were allocated to economic infrastructure network of the country and then to the housing and building sections. In this program, for high profit of building construction, the activity of the developers increased; and land speculation and assuming it as goods brought about problems and obstacles in urban system.

Following the reduction of outputs in agricultural section and increase of income from created employment in building section and prevalence of land speculation and so on, the demand for food stuffs and other consuming and luxury materials increased; with exorbitant increase of import, consumption pattern ruled over cultural and economic environment of the society (Mashhadizadeh, 2007: 82). Studies show that, in year 1976, Tehran included almost 4.5 million people which were 13.5% of total population of the country. Yet, Tehran alone attracted 40% of big industries with 65% of total industrial investment and 70% of industrial output value. During this time, Tehran turned into a great economic pole and continued its growth despite the concerns of the planners (Kamrava, 2007: 58). Pre-revolutionary development trend of Tehran Metropolitan Region was as such that its surrounding regions in local, regional and national scales fully served the capital. As a result, borderline cities and ports (as the main entry-exit gateways of goods) mostly converted into exporting ports for oil-mineral raw materials and the most accessible path to gain foreign exchange earnings for the government; and import needs of the country, especially the capital, were often provided through these ports and boarder points. In the five programs before the Iranian Islamic Revolution, considerable investments was made for upgrading ports and establishing new wharfs but development of these infrastructures was in fact to increase oil export, import goods and to strengthen the military status of the country in the Persian Gulf.

With the Islamic Revolution and implementation of justice-seeking

policies¹, new wave of immigration to Tehran started (Kamrava, 2007: 78). The imposed war of Iraq against Iran in 1980s and migration of large number of refugees of Khuzestan caused Tehran Province to have the largest share of immigrant and Khuzestan Province the largest share of immigrant (Zanjani, 1992: 210). After the war, politicians made plans to import capital flows for reconstruction and development. Therefore, the 1th official postwar cultural, social and economic Development Plan (DP) was approved by the parliament. In the first program report, almost 15% of total state funds were allocated to transportation and roads (Iran's Management and Planning Organization, 1989: 74). This amount of fund was in practice spent on accomplishment of Trans-Iranian Railway Line by the government. With the opening of the railway, Bandar Abbas linked to other metropolitans especially Tehran (Iran Railways Company, 2015: 14) through rail connection. Since the second half of the 19th century, goods transit and supply chain was completed through Bandar Abbas to Caucasus-Russia, Turkey-Eastern Europe and Turkmenistan-central Asia; and Bandar Abbas (ShahidRajaei Port) landing became the main commercial-transit port of Iran. Also in the second half of the 1990s, with exploration of gas resources in Sothern Pars region, Assaluyeh turned into one of the most important gas exporting ports. In 2001, with opening of Rostamkela-Amirabad port railway, this port also turned into the largest harbor pole for the transit of goods in the northern shores of Iran. With the establishment of this harbor, transit corridor of north-south was formed around the axis of Amirabad to Shahid Rajaei Ports. With increase in oil income and volume of goods import, the purposeful development of transit ground corridors, development of commercial ports and regulation of supporting activities in hinterlands was emphasized for the first time in the 4th post-revolution DP. Since the planners did endogenous industrialization and created sustainable revenue sources during this plan, large section of these purposes was

1- Policies like free grant of land and housing to the poor in surrounding lands of Tehran.

fulfilled during this plan¹. During the 4th DP, with the sudden onset of raise in oil price from \$30 per share network in 2003 to \$150 in 2008 (Rahimi, 2003), foreign exchange income from the sale of crude oil with increasing growth reached from \$53.83 billion in 2005 to \$74 billion in 2010 (Yaqubi, 2016). In the recent years, increase in foreign exchange incomes led to increase in import goods. This highlighted the necessity of using well equipped containers and also depot and storage spaces for containerized goods in southern ports especially in Shahid Rajaei Port and its hinterlands more than ever. In fact, since 2000 to 2006, there was 35% of growth in the amount of exchange in ports of Iran, which signifies a turning point in harbor industry of Iran. Such a rapid growth in operation of work with containers especially after 2002, besides increase in the foreign exchange incomes, was mostly the outcome of getting started of international north-south corridor that connects Indian Subcontinent to Central Asia and north Europe via Iran (Sayareh and A. S. Noor al-Amin, 2009: 45-54).

In this regard, planners of the 5th DP adopted strategic views towards ports and considered the influential role of hinterlands in their spatial development. In this plan, the subject of dry ports was first introduced into the country's official literature of planning (Iran's Management and Planning Organization, 2010: 92). Stunning raise in oil income directly influenced harbor exchanges in a way that in 2011, Shahid Rajaei Port with 46% of growth moved from 72th place to 44th². Taken together, these conditions caused the planners to pay attention to national, regional, local and joined hinterlands³ in order to provide required space for supporting,

1- Purposes such as the opening up of Bafg-Kashmar-Mashhad railway and shortening of south to north-east corridor in year 2005; opening up of Shiraz-Esfahan in 2009; opening up of Zahedan-Bam line in 2010; and accomplishing west to east corridor and getting connected to east-Asia markets

2- ShahidRajaei Port at a glance, <http://shahidrajaeport.pmo.ir/fa/p14/p22> last accessed 27 August 2016 [in Persian].

3- Joined hinterland area refers to spatial contiguous area in ports; so that the given area is directly connected to harbor area or is located in close distance to that.

producing, re-exporting, transit, storing and purposeful distribution of goods beyond northern and southern shores of Iran. Since the immediate area of the ports provided the most available contiguous development space for ports, physical development of the ports was often on the agenda of planners and policy-makers. In the recent years, due to the decline in oil revenues, the care for endogenous and purposeful development based on existing capacities of the country has been increased more than ever. In this regard, master plans for coastal management, ports and hinterland or foreland nodes development have been prepared¹. Most of these plans are in the form of investment policies and incentive packages for free² or special³ economic zones. These regions are locating in frontline of spatial flows and interactions and are established to take advantages out of the capacities of Iran's ports in endogenous and export-oriented production development. Despite the attempt of the country's planning system to develop these productive areas and nodes, the dependence trend of the government and people on oil income has been as such that these regions have failed to realize their purpose of establishment. In fact, current performance of the majority of these regions in economy, tourism, transportation and storing scale, or in other words, in import-oriented production and services, have been declined, and in the best situation, have been changed into regions for the basic industrial and mineral products (refinery, petrochemical site, steel and aluminum manufacturing).

According to the statistics and the occurred process in pre-revolution years, Tehran Province and Tehran Metropolitan Region still received the

1- For example Master Plan of Iran's Commercial Ports or Iran's Integrated Coastal Zone Management Plan

2- Free zones in Iran include Qeshm and Kish Islands; and inland areas such as Aras, Chabahar, Anzali, and Arvandand Maku.

3- Special economic regions in Iran as joined hinterland include ShahidRajaei port, Mahshahr Petrochemical zone, Bushehr, Amirabad and southern Pars zone (Asaluyeh). Also regional and national hinterland includes inland regions such as Sirjan, Bam, Salafchegan, Yazd, Shiraz, Lorestan and Birjand.

largest share of population, services, industry and capital flow among other regions and cities of the country. In 1991, Tehran Province allocated 15.3% of GDP, which in 2012 with considerable rise reached to 24.53% and still is the first rank (Table 4). According to the data, Tehran with considerable upward movement compared to the last 20 years, and with 9% of increase, produces almost $\frac{1}{4}$ of total gross production. However, population share of this province out of the total population of the country was 16.7%, which indicates that its production and services capacity is more than its population share.

Table 3: Evolution of domestic gross production in 9 provinces of Iran

Province	Rate of gross production in 1991 (rank among 24 provinces)	Rate of gross production in 2012 (rank among 31 provinces)	Share of the province out of total population of Iran in 2012
Tehran	15.3% (1)	24.53% (1)	16.19%
Khorasan	9.6% (2)	5.46% (4)	8%
Isfahan	9% (3)	6.99% (3)	6.47%
East - Azerbaijan	8.4% (4)	3.62% (6)	4.93%
Khozestan	7.6% (5)	10.38% (2)	6.04%
Fars	5.9% (6)	4.76% (5)	6.10%
Sistan - Baluchestan	1.7% (18)	1.37% (20)	3.41%
Hormuzgan	1.4% (19)	2.46% (11)	2.12%
Bushehr	1.1% (22)	3.58% (7)	1.39%

The provinces of Khorasan, Isfahan, East-Azarbaijan and Fars had considerable decline in GDP. The interesting point is the occurred changes in the share of the provinces locating in the southern shores of the country (including, Khozestan, Bushehr, Hormuzgan, Sistan-Bluchestan). Bushehr Province stood at the 22th rank (among 24 provinces) in 1991 regarding national gross production; with the share of 3.58%, it moved to 7th rank (among 31 provinces) in 2012. However, the population share of this province was only 1.39% of total population of Iran. Exploitation of gas resources in South Pars and development of petrochemical industries in Asaluyeh region as well as physical-infrastructure development of ports of

Bushehr Province can explain such exponential leap. During these years, because of petrochemical and oil resources development and raise in foreign exchange incomes coming from crude oil and refinery-petrochemical production export, Khuzestan Province played incredible role in the increase of gross production of the country and gained the second position. Hormuzgan Province, , experienced a rapid growth over the past quarter century to turn into a gateway for non-oil export/import and gaining influential transit role in north-south corridor; and consequently the share of this province in national gross production increased remarkably. National gross production by Sistan-Baluchestan, however, significantly decreased over these two decades; in a way that, this province with 3.41% percent of total population of the country had only 1.37% of the share of national gross production. Its rank dropped from 17th (among 24 provinces) in 2004 to 20th (among 31 provinces) in 2012. In addition to activity and capital concentration in Tehran, statistics show that, in year 2014, this province enjoyed the highest concentration in equipped road and rail infrastructures and services and welfare supporting. According to the statistics, in Tehran Province, 65 km per 100km suburban routes is in the form of freeway and highway, 30 km of which is equipped with light; it has also 32.9% of utilities complexes per 1000km. regarding all these three cases, the province stands as the first rank. Tehran again stands in the first place regarding indexes such as the rate of passing and traveled passengers from the origin provinces and also the number of active road police stations and road emergencies and rescue stations (Iran's Ministry of Roads & Urban Development, 2014: 26-50)¹. This shows that this region still remained attractive for Iranian residents in terms of living, investment, transit and increasing production, for the quality of its urban equipment, concentration of infrastructures, administrative and political centrality, accumulation of

1- Iran's Ministry of Roads & Urban Development, statistic year book of roads and transport information, Tehran, 2014, 26-50 [in Persian].

capital and services

Energy-rich (khuzestan and Bushehr) and transit (Hormuzghan) provinces of Iran enjoyed the highest growth rate in national gross production, along with the capital during past 20 years; since they prepared the way to increase in export and foreign exchange income for the capital, and paved the way for import of goods to the center. During the same time, Sistan and Baluchestan Province had negative growth in national gross production compared to other provinces due to being remote and neglected in the corridor and transit network of Iran. Taking together, these findings show that after supplying oil in Iran, Tehran was increasingly accumulating population, capital and services. The condition caused that this metropolitan region to have the largest share of concentration of production, distribution and services in spatial structure of the country. Ports, on the one hand, satisfied financial and currency needs of the capital through exporting oil production, and supplied import goods for the capital (for the purpose of consumption, production and services). Table 4 outlines the basic concepts and important topics of the third era in order to obtain its summarized theme.

پژوهشگاه علوم انسانی و مطالعات فرهنگی
پرتال جامع علوم انسانی

Table 4: Basic concepts, categories and theme obtained from historical texts about the relation of ports with surrounding regions in the third era

Basic concepts	categories	theme
Oil exploration in local hinterland regions: easy income resources for the government	Absolute political and economic independence of the central government from non-governmental production and gradual dependence of people to government	
Gradual independence of government from tax and production activities of residents and gradual enlargement of governmental organizations		
Inflation and unrestrained accumulation of financial capitals in the capital and emergence of speculation crisis in physical-spatial structure of Tehran		
oil ports and energy ports in Iran aiming at direct export of oil productions: reduction in degree of dependence to regional and local hinterland regions	Increase in geographic importance and performance power of ports in spatial structure of the country	Pole-oriented hinterland spatial structure based on single-product export (oil), comprehensive import and transit of goods
Development of defense and military role through ports		
Exponential increase of foreign exchange incomes from oil sale and ports' turning into great gateways for containerized import of goods		
Tehran's turning to political, economic, service, welfare and financial pole	polarization of Tehran and promotion of its situation in spatial structure of Iran	
Mass immigration to Tehran resulted by implementation of renewal policies (agrarian reforms, development of industries in metropolitans and increasing import of consumption goods and etc.)		
Construction of railway corridor of north to south in the country and considerable increase in the pace of goods flow	Enhancing transit role of Iran in world supply chain	
Improvement in the geopolitical status of Iran in world chain of goods supply and transit: development of railway and road corridors in spatial structure of the country		
Assigning no active role to non-oil and non-transit ports and lag of local and regional hinterland areas	Care for local and regional hinterland regions after their role in spatial structure of Iran was diminished	
Low and incongruous growth of free and special economic zones with export-oriented production policies: the function of majority of nodes changed to the landing places for import goods, storing and montage products		

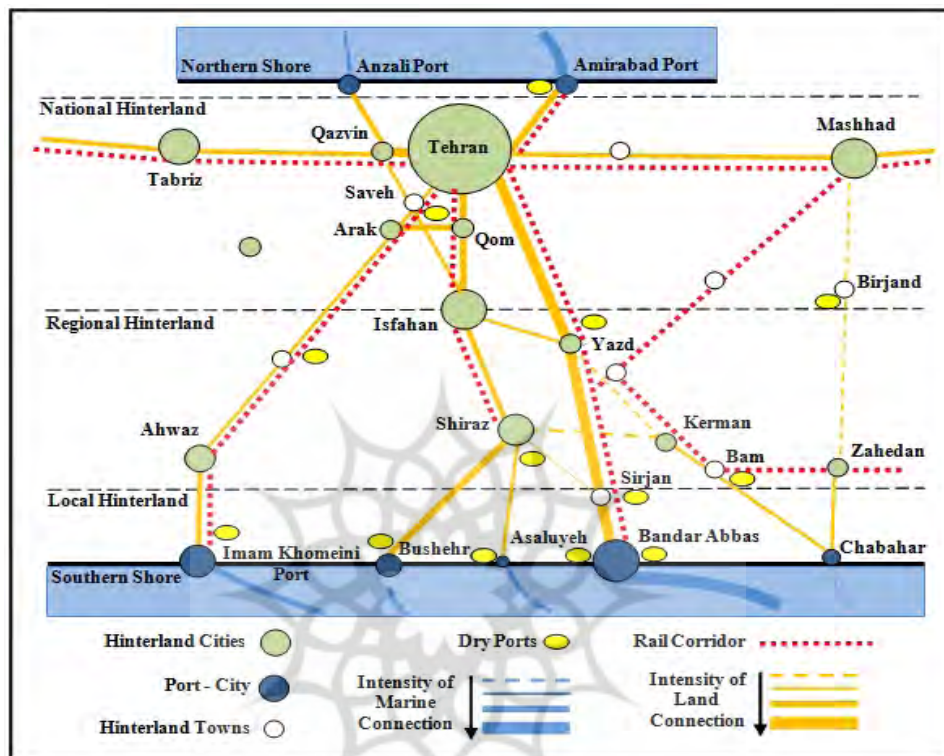
Data analysis in the third era

To explain and interpret this table, it should be said that oil exploration was highly influential in the evolution of land use and activity space in cities and also in basic changes in spatial structure of Iran. In fact, with the exploration of oil in the country, direct net incomes increased over time. As a result, instead of the government to be depended on citizens' activities and production, the citizens' economy relied on the allocation of resources and oil incomes. Ports turned into oil export stations to add to the government's required foreign exchange incomes. Henceforth, unlike to the past in which there was an interwoven system of hinterlands involved in the chain of goods supply and export, with the gradual omission of supporting role of local hinterland regions and production role of national and regional hinterland regions, production organization of the country were able to do without them. Corridor relation of ports and the capital increased spatial flows between these two nodes. The flow of goods and capital injection to the capital turned it into economic pole; and rapid increase of industrial outputs, social and production services according to the gains resulting from scale and concentration led to the rapid urbanization in Tehran. Increased demand for residing in Tehran, on one hand, and excessive concentration of population and capital in this city, on the other hand, attracted the capitals towards land and housing speculation markets. Such residential concentration followed services and industrial concentration. Development of movement corridors and infrastructures and improvement of transportation ways resulted in the formation of scattered and self-grown residencies in metropolitan region of Tehran and in proximity to industrial, production and service centers. Along this, the main center of Tehran was converted into the area of growth and formation of high-rise buildings with commercial, service and administrative uses. In return, through process of decentralization, part of activities and services were transferred to other centers in metropolitan region level; this strengthened the trend of divergence, sprawl, population dispersion and the related activities. On this basis many industrial centers (large and small) and

transportation and storing areas were moved to the surrounding of Tehran Metropolitan. The same spatial structure was formed in other metropolitans that were influenced by growth pole pattern; however, use-activity space progressed in independent form in other local and regional hinterland cities that was not under influence of new planning system and evolved relations between port and the capital.

In sum, we can explain the pattern of spatial flows in this era as core-periphery and the form of spatial structure as core-corridor¹. This structure has in fact been influenced by the world capital system in which the nature of demand-supply and goods flow gives formation to the spatial structure of countries with single-product economy (such as oil). This has led to automatic influx of manpower from surrounding areas to the center and created exogenous development pattern that is based on the structure of capitalist system. In this line, ports as the nodes that serve the main poles, on the one hand, earn required foreign exchange income for the capital through selling crude and synthetic oil resources; and on the other hand, through supplying import goods required by the centers and growth poles (especially capital) and carrying through equipped corridors, supply their necessary raw materials and resources for consumption, production and services. With the increase in import volume, the demand for storing space and goods depot in ports increases. Today, dry ports as local and supporting nodes for storing goods have been propounded in spatial structure of the country. These dry ports, through application of incentive policies by the government, have become a conductive ground for industrial production; although, they have long to go to achieve their proper industrial and production status (Fig. 4). Maybe, giving more power and widening the circle can better reveal the domination of Tehran on other regional centers such as Mashhad, Isfahan or Tabriz.

1- Core-corridor: in this pattern, corridors end in a main pole through surrounding nodes and the main distribution of goods and capital is taken place through this pole.

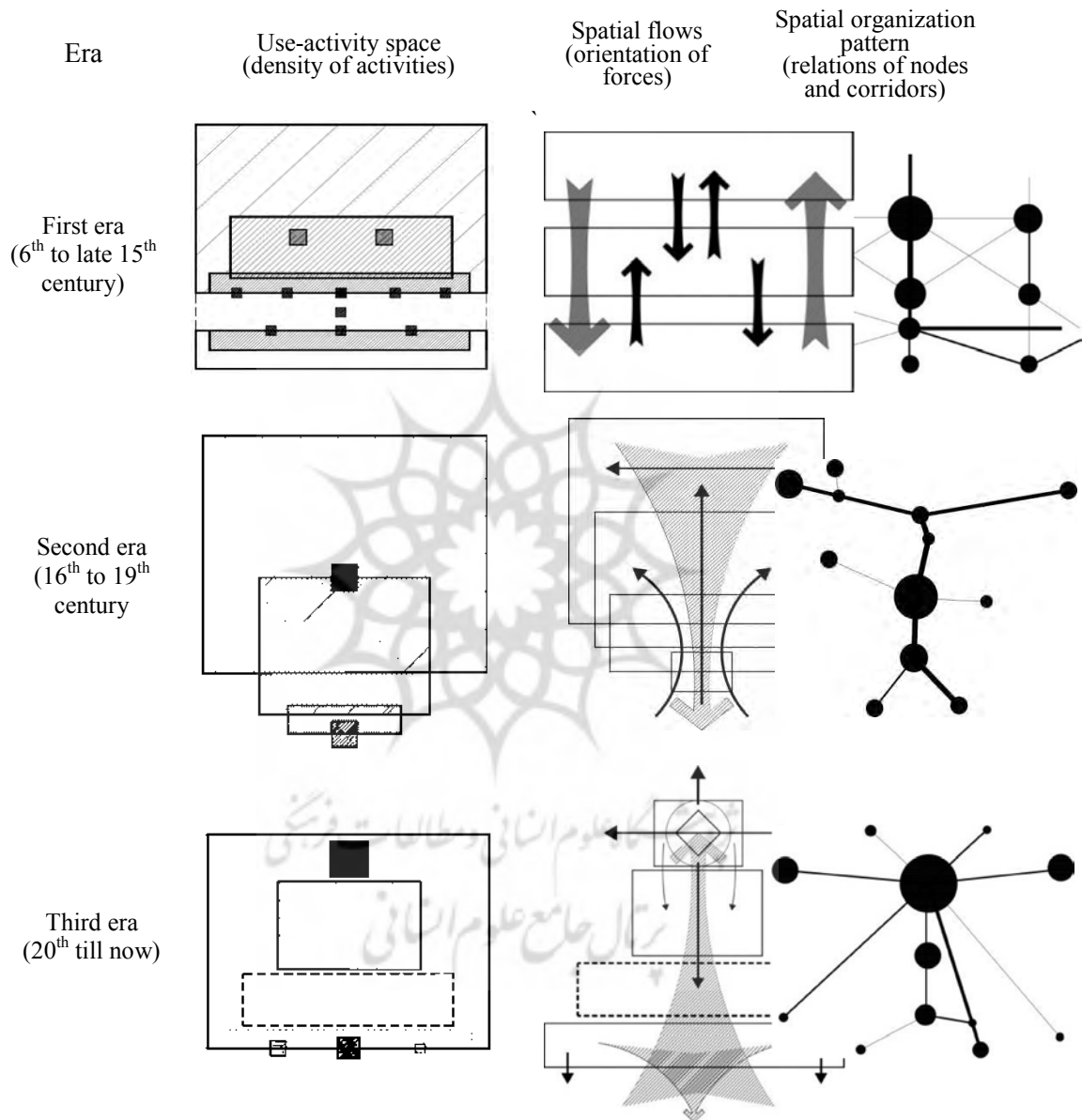


پژوهشگاه علوم انسانی و مطالعات فرهنگی
 پرتال جامع علوم انسانی

shipments. In this era, spatial flow between nodes and the area was based on mutual and equivalent interaction; it created balanced system of dual flows in spatial structure of the time. In sum, we can say that the pattern of spatial organization in this era was as semi-network in which majority of used areas and nodes involved in multiple, horizontal and equivalent relations with each other. In thesecond era (16th to 19th century), spatial structure of the country was formed based on hierarchical relations, and national hinterlands gain important role in spatial system of production and distribution of goods. In this era, considerable connection, dependence and cohesion was created among ports and regional, local and national hinterlands through a planned and endogenous process; in a way that raw strategic export materials (silk) were supplied in broad and organized way in national hinterlands and in agricultural areas and garden lands. In other national regional hinterland cities, industrial production use and silk production processing increased. Isfahan city as the economic-political capital regularized the country's affairs and as supporting and trading pole provided service for merchants. Local hinterland cities often had (welfare and security) supporting role for commercial caravans; and ports acted as import/export gateways for the country. Thus, it can be said that thespatial structure of Iran in this era was based on inclusive and endogenous production, in which the government and residents worked together for more production of goods and capital. On that basis, the spatial organization pattern was formed in radial form.

With exploration of oil at the beginning of the third era (20th century till now),spatial structure of the country underwent radical changes; so that the government felt no need for public production and activity synergy; and through crude oil export, it chose the easiest way to gain revenue. With the power of world capitalist system, Iranian governments' dependence on oil incomes increased and planning system of the country was formed based on oil revenue and exogenous economic policies. Tehran attracted capital flow to itself due to the concentration of economic and political organizations there.

With adopting the policy of Growth Pole, polarity of Tehran in financial, production, economic and services affairs increased more than ever. However, the shortcomings of endogenous production system brought about land and building speculation for Tehran. This strengthened the relation of core-periphery and caused many industrial and service activities to be concentrated in urban region of Tehran. Ports also were divided into two types: those which were active to export energy (oil, gas and petrochemical production) and the others that paved the way for increasing flow of importing goods to the Capital and other growth poles. In this situation local and regional hinterlands have not had considerable role in spatial structure of the country. Today, with increase in the volume of imported and transit goods in the hinterlands, supporting nodes and dry ports are established to be able to properly manage this process. Although, the majority of these regions have been converted to the places for storing, trading and logistic activities, what is evident in spatial structure of this era is the discrete and independent relation between hinterlands. In other words, there is not any considerable cooperation between hinterlands and ports for purposeful exporting of goods. In these days, the majority of ports in Iran are delivering their services directly to Tehran through road and rail corridors unlike the previous times that it was based on the relation between the local and regional hinterlands. Thus, it can be claimed that the dominant pattern of spatial flows in the third era is based on core-periphery system with the accumulation of human, goods and capital flows in the pole (Fig. 4). In other words, in this era, the political, spatial and economical geography relied on the political and economic decisions that were concentrated in the capital. Accordingly spatial planning in the local-regional hinterland about habitats, activities and distribution of services depended on the capital decisions in the national hinterland. Finally, as a proposal, this research can be continued about optimization of connections between Iranian southern ports (especially Chabahar port), the Hinterland and Foreland in the supply chain of global business network.



References

- Alam, M.R., Dashti, F., Mirzaei, B. (2014) Iran's modernization program in Reza Shah Pahlavi era, *Journal of Social History Research* 4, pp 61-86 [in Persian].
- Al-qasimi, B. M. (1999) Power struggles and trade in the Gulf, 1620-1820, unpublished PhD thesis, Durham University.
- Axworthy, M. (2011). Nader Shah and Persian Naval Expansion in the Persian Gulf, 1700–1747. *Journal of the Royal Asiatic Society (Third Series)*, 21(01), 31-39.
- BaniAbbasian-e-Bastaki, M. A. (1960) History of Jahangirieh Bani Abbasian in Bastak, Tehran: Kavian [in Persian].
- Bastani Parizi, M. E. (1983) Politics and Economics in the Safavid Era, Tehran: Safi Ali-shah [in Persian].
- Bayrami, S. (2009) effects and social consequences of Iran's occupation in August 1941, *Journal of Historical Studies*, 27, pp. 156-173[in Persian].
- Bosworth, C.E. (2016) Sirāf, in: P. Bearman, Th. Bianquis, C.E. Bosworth, E. van Donzel, W.P. Heinrichs (Eds) *Encyclopaedia of Islam*, Second Edition, http://dx.doi.org/10.1163/1573-3912_islam_SIM_7063, last accessed 8 September 2016.
- Boucharlat, R. and Salles, J.-F. (1981) the history and archaeology of the Gulf from the fifth century BC to the seventh century AD: a review of the evidence, *Proceedings of the Seminar for Arabian Studies* 11, 65–94.
- Chardin, J. (2012). *Travels in Persia, 1673-1677*. NY: Courier Corporation.
- Dameshqi, Sh. M. (2003) Elites of the era, the wonders of the land and sea, Trans. by M. Tabibian, Tehran: Farhangestan-e-Adab-o-Honar-e-Iran [in Persian].
- Daryae T. (2003) the Persian Gulf trade in late antiquity, *Journal of world history*, 14, 1-16.
- Floor, W. (1988). Commercial conflict between Persia and the Netherlands 1712-1718. University of Durham, Centre for Middle Eastern and Islamic Studies.
- Floor, W. (1999) The Bandar Abbas – Isfahan route in the late Safavid era, *Iran*, 37, pp. 67 – 94.
- Gyselen, R. (1997) Economy In the Sasanian period, In *Encyclopedia Iranica*, Vol. VIII, Fasc. 1 (1997), pp 104-107.
- Hoseini-e-Fasaei, M. H. (2003) Naseri Brochure of Fars, Tehran: Amirkabir Press [in Persian].
- Ibn- Athir (1987) Comprehensive history, Edit by M.Y. Al-raqaqah, Vol 7, Beirut: Dar-ol-kotob-ol-elmiah [in Arabic].
- Ibn-Balkhi (2006) Brochure of Fars, Tehran: Donya-ye-Ketab [in Persian].
- Ibn-Miskawayh (1997) Experience of Countries, Trans. by A. Monzavi, Tehran: Tous[in Persian].
- Iran's Management and Planning Organization (2010) the fifth cultural, social and economic development program, Tehran: Iranian Administration of Law and Regulations [in Persian].
- Iran's Ministry of Roads & Urban Development (2014) statistic year book of roads and transport information, Tehran [in Persian].
- Iran Railways Company (2015) statistical year book of rail transport, Tehran [in Persian].
- Issawi, Ch. (1983) the Economic History of Iran, Trans. by Y. Ajand, Tehran: Gostar deh [in

- Persian].
- Jamalzadeh, M. A. (1956) *Economy Condition of Iran*, Berlin: Kaveh [in Persian].
 - Kamrava, M. A. (2007) *Introduction to contemporary town planning in Iran*, Tehran University Press [in Persian].
 - Le Strange, G. (Ed.). (2013). *Don Juan of Persia: A Shi'ah Catholic 1560-1604* (Vol. 6). Routledge.
 - Lukonin, V. (1983) *Administrative Institutions during the Parthian and the Sasanian Period*, in: E. Yarshater (Ed), *the Cambridge History of Iran*, Cambridge, 681-746.
 - Mandelslo, J. A. V. (1667) *Travels into the Indies*, in A. Olearius, J. Davies, J. A. v. Mandelslo (Eds), *The Voyages & Travels of the Ambassadors from the Duke of Holstein, to the Great Duke of Muscovy, and the King of Persia*, London, the first book, 3-18.
 - Marashi-e-Safavi, M. (1983) *collection of histories*, Tehran: Sanaee [in Persian].
 - Mashhadizadeh, N. (2007) *an analysis of urban planning characteristics in Iran*, Tehran: Iran University of Science&Technology Press [in Persian].
 - Mojtahed-zadeh, P. (1996) *selected documents of Persian Gulf*, Tehran: Daftar-e-Motaleat-e-Siasi va Beinolmelali [in Persian].
 - Mojtahed-zadeh, P. (2000) *The Persian Gulf: countries and boundaries*, Tehran: Ataei [in Persian].
 - Moqadasi, A.M.A (1982) *the best divisions for recognition climates*, Trans. by A. Monzavi, Tehran: Sherkat-e-Moalefan-o-Motarjeman [in Persian].
 - Niebuhr, C., & Heron, R. (1792). *Travels through Arabia and other countries in the East* (Vol. 2). R. Morison and son.
 - Oldham, C., Ross, E., Stodart, R. (1936), *the Journal of Robert Stodart*, *Journal of the Royal Asiatic Society of Great Britain & Ireland* 68, pp 715-716.
 - Parsadoost, M. (2002), *King Tahmasp I*, Tehran: Sherkat-e-Enteshar[in Persian].
 - Rahimi, M. (2003) *Ominous year for oil*, <http://donya-e-eqtesad.com/news/500090> last accessed 27 August 2016 [in Persian].
 - Samarqandi, A. (1906) *Itinerary of Samarqandi*, Tashkent: Uzbekistan Academy of Science [in Persian].
 - Savaqeb, J. (2004) *The role of Isfahan in the economy of Safavid era (Shah Abbas I)*, in: M. Dehqan-nejad (Ed.), *Isfahan and Safavid state*, volume 2, Isfahan University Press [in Persian].
 - Savory, R. (2007). *Iran under the Safavids*. Cambridge University Press.
 - Sharifi-e-Mehrjardi, A. A. (2013) *Textile Art in Yazd in Safavid era*, *Chideman Visual Art Magazine* [in Persian].
 - Sayareh J. and Noor al-Amin, A. S. (2009) *Future of Containerization in Middle East – Methods of Increasing Contribution of Iran*, *Iranian Journal of Marine Science And Technology*, No. 49, pp 45-54 [in Persian].
 - Sodagar, M. R. (1978) *Development of capitalist relations in Iran, 1925-1961*, Tehran: Pazand [in Persian].
 - Tavernier, J. B. (1990) *Voyages of Tavernier*, Trans. by A. Nouri, Tehran: Sanaee [in Persian].
 - Vosoughi, M.B. (2005) *the history of the Persian Gulf and its bordering territories*, Tehran: SAMT [in Persian].
 - Whitehouse, D. (1971) *Siraf: a Sassanian port*, *Antiquity*, 45, pp. 266-267.

- Williamson, A. (1972) Persian Gulf Commerce in the Sasanian Period and the First Two Centuries of Islam, *Journal of Iranian Archaeology and Art* 9 & 10, 142-151[in Persian].
- Wilson, A. (1987) *the Persian Gulf*, Trans. by M. Saeidi, Tehran: Entesharat-e-Elmi-va-Farhangi [in Persian].
- Yaqubi, M. (2016) what happened to the world's oil in the last ten years? The trend of oil price and the revenue that Ira earned,
- <http://www.khabaronline.ir/detail/409791/Economy/political-economy> last accessed 27 August 2016 [in Persian].
- Yaqut Hemavi (1996) *Culture of countries*, Beirut: Dar-ol-ehya A-toras-ol-arabi [in Arabic].
- Zanjani, H. (1992) *Population and Development*, Tehran: Center of Studies and Research about Urbanism and Architecture [in Persian].
- Zarkub-e- Shirazi, M. (1971) *Brochure of Shiraz*, Tehran: Bonyad-e-farhang-e-Iran [in Persian].

