



SPATIAL-PHYSICAL INEQUALITY WITH EMPHASIS ON INFORMAL SETTLEMENTS IN TWO IMPORTANT METROPOLISES OF ISLAMIC WORLD (COMPARATIVE STUDY OF TEHRAN AND CAIRO)

Seyed Jalalaldin Faraji^I, Zhang Qingping^{II}, GholamReza Kazemian^{III}, Saman Valinoori^{IV}

^IFaculty of Landscape Architecture, Nanjing Forestry University, Nanjing, China, Email: f.jallalfaraji@yahoo.com

^{II}Faculty of Landscape Architecture, Nanjing Forestry University, Nanjing, China, Email: qpzh@njfu.edu.cn

^{III}Faculty of Public and urban management, Allameh Tabatabai university, Tehran, Iran, Email: Kazemian@atu.ac.ir

^{IV}Faculty of Geography and urban planning, Kharazmi university, Tehran, Iran, Email: svalinoori_tmu@yahoo.com

ABSTRACT: In today's world which has turned into an arena for increasing development of urban spaces, a sort of spatial-structural inequality can be observed in urban places of the world particularly in developing countries which has manifested itself in special formats and symbols. This study surveys and analyzes the spatial-structural inequality phenomenon in two metropolises of Islamic world- Tehran and Cairo. It tries to explain the mechanism by which these spatial inequalities appear as well as differences and similarities of their effects. In this study informal settlements are selected as a component which particularly implies spatial-structural inequality. The goal of this study is recognition of spatial pattern of formation of unequal and contradictory spaces in these two metropolises. The approach of this research is descriptive, analytic and casual-comparative.

Data is gathered by documentation study, field study and other qualitative methods of research and finally the structural similarities and discrepancies in the both metropolis was studied and the results have presented in tables format and GIS maps. Our results show that emergence of inequality in both metropolises can be justified and explained from political economic point of view. Spatial-structural inequality in Cairo is caused by diffusion and spread of capitalism thoughts after Second World War and economic reforms in a seaside metropolis. The spatial-structural inequality in Tehran is the as a result of inevitable invasion of modernization thoughts and a sort of monoculture economy dependent on petroleum. The manifestation of spatial-structural inequality in both metropolises is anomalistic settlements which might be seen inside and in fringing areas of the city. These types of settlements are spreading increasingly.

KEYWORDS: inequality, spatial-structural inequality, informal settlements, Tehran, Cairo

1. INTRODUCTION: Metropolises, which are introduced as the largest and the most complicated human artifacts by Jean Gottman, show geography of inequalities in all social, economic and spatial-structural aspects. Nowadays these metropolises mostly belong to developing world and they are bold and visible in Islamic countries, especially, Middle East region which might be the claimant of longest continuous evolution history of urbanization (Castelo). Although Islamic ideology always emphasizes justice and equality, while it accepts differences, Islamic metropolises considerably engage in spatial and social inequalities. Spatial inequality is spatial manifestation of social differences and inequalities in provision of opportunities for achieving welfare. It is related to heterogeneous distribution of income and other factors of welfare in different places. Spatial inequality in cities reduces social and economic interactions between various income groups of the city, as a result economic mobility and creation of social networks are restricted (1). In Cairo as capital of largest Arab country and one of the prominent political and cultural centers of Islamic world, spatial-structural inequality is tangible and a great number of its population live in slums. In Tehran, capital and mega city of Iranian urban system, living in informal settlements is still under discussion as a factor of social inequalities and sensible manifestation of spatial-structural inequality. It is considered as a disputing and disturbing subject. This study aims to analyze and understand the reasons of spatial-structural inequality in two metropolises of Islamic world with emphasis on informal settlements. It analyzes the mentioned regions by presenting GIS maps.

2. RELATED WORK: Inequality has been the most sophisticated social phenomenon and this sophistication is due to its antiquity and universality. It has been noticed by great thinkers and theorists. One group of experts considers inequality as inherent characteristic of civilization and development. They believe in social and political legitimacy for inequalities in the society. They believe that history from ancient times to present is distinguished by unequal development of various regions (2). The other groups condemn inequality and try to obtain equality due to different and sometimes antithetic reasons (3). In Marx's point of view, private property is the main factor which causes inequality between people. Max Weber believed that inequality would not exist if there is no background of authority, domination or discipline. Emil Durkheim (3) considers differences in intelligence, proficiency and competence as roots of social inequalities. Vilfredo Pareto (3) considers inequality as a method for social balance. Some of analysts believe that inequality is based on differences that are imposed by society on their behavior with other people. In Zimel's (4) point of view, emergence of inequality is a result of division of labor or discrimination which is caused by monetary economy and its elements; rationality and frugality (4). Neo Liberals believe that wealth distribution in the world is moving toward equality and balance comparing to previous decades and number of people who live in poverty is decreasing; whereas, leftists believe that there is no evidence for decrease of inequality and poverty. They say that inequality is increasing drastically (5).

Different thinkers have investigated social inequality phenomenon as well as its spatial manifestation in the form of contradictory urban spaces. These thinkers, who belong to various branches of sociology including Liberalism, Radicalism, Structuralism, expansionism, have particularly investigated informal settlements. Nasiri (6) proposes weakness of governments, lack of political stability, lack of long-term and comprehensive planning, lack of transparency in rules, ethnic and racism quarrels and high rate of immigration as reasons which result in increase of poor regions inside and in suburban of African cities including Cairo (6). In an article entitled as "urban inequalities, a threat for social security in Tehran", Nasiri et al (7) stated that poverty and deprivation is tolerable but inequality threatens the social security. Mentioning inequalities in Tehran and concentration of poverty in some regions especially those with informal settlements and threats of this issue, they invite officials and executives to apply suitable policies and execute them properly (7). As a part of literature we should mention an article by Khaled Adham (8) entitled as "globalization of Neoliberalism and new regions in Cairo". In his opinion, polarization of society into rich and poor groups is a result of Neo-Liberalism and globalization economic policies. He believes that unequal development of facilities and services exists in all societies which have accepted free market ideology (8). In fact together with creation of socially unequal regions in cities due to unequal access to facilities and opportunities, people's spatial choices creates places which can be called unequal and unbalanced spatial-structural domains in city (Fig I).

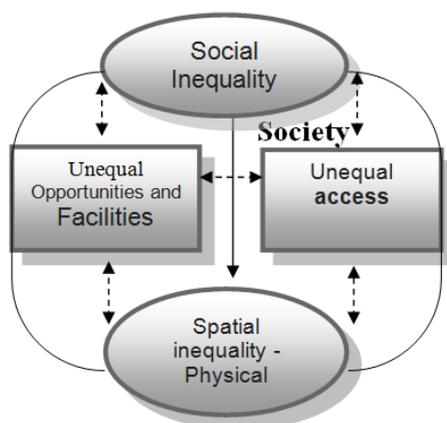


Fig I- Conceptual model for emerging spatial inequality and its interactions with social elements **Source:**

Author

Considering literature one may infer the main principle which states inequality has different aspects and definitions from various points of view among which there is not a specific criterion for recognizing inequality; however, residences and places which people choose for their comfort and settlement is a symbol and criterion for inequality in societies. Similarly, type of residences and their placement in the city as well as city management perspective on position of these residences regarding providing services, is evaluated as a proper criterion for detecting these inequalities. Therefore, this study concentrates on spatial-structural structure of residences in two important metropolises in Islamic world; Tehran, capital of Iran and Cairo, capital of Egypt.

3. HOW SPATIAL-STRUCTURAL INEQUALITY EMERGED IN CAIRO

3.1. HISTORICAL EVOLUTION: To understand how spatial-structural inequality formed in Cairo city we need to take a look at its social and political changes because creation and continuity of contradictory and unequal urban places are consequences of these evolutions. Today's Cairo is established by Fatemian in AD 969 (9) and so it is not indebted to Pharaohs or Coptic. In Ayoubian era the city obtained more open space because of destroying part of its rampart remained from Fatemian era and it became an Egyptian metropolis as the capital of government. Thus, the glory of Cairo belongs to Ayoubian era; nevertheless, its importance in Fatemian era should not be underestimated (10). In the Mamalik era when Egyptian Imperialism was dominating Mediterranean, Cairo developed and glorious buildings were constructed in the city. As Gobineau says, everything is dominated by memory of Mamalik in Cairo. When Ottomans conquered Cairo it started to wane. In 1798 politics, authority and novel techniques invaded Cairo together with Napoleon and Cairo was taken into modern world. In the period of Ismael Pasha (1879-1863) so many infrastructures were constructed in European style and opening of Suez Canal provided an opportunity for European powers to influence Cairo. During the continuous presence of Britain which continued until the end of first World War no sign of a city with unequal regions could be observed. But after the second World War Cairo started its rapid development. Heterogeneous urban development and informal settlements started to form at this time when migrants, who were damaged from Israel and Arabs war, came to the Cairo from cities around Suez Canal. This rapid urban growth and its structural manifestation have been continuous since then. Population of Cairo multiplied in a relatively short time span. It increased from 2.59 million in 1947 to more than 19 million in 2012 (Table I).

year	population	Population from Egypt %	Urban area population
1947	2.233	11.9	2597000
1960	3.807	14.7	4156000
1966	5.08	16.9	5385000
1976	6.805	18.5	7067000
1986	9.312	19.3	9312000
1996	10.17187	17.3	13.22
*2014	15.206	18.02	8250000

Table I. Cairo population growth 1947-2014 Source: [(11),(12)*]

This unprecedented growth of population, which a great portion of it is the result of migration from surrounding villages and cities, has demonstrated itself as spatial-structural inequality in Cairo.

4. POLITICAL CHANGES AND STRUCTURAL EFFECT OF THEM ON CAIRO: Great Cairo metropolitan region includes Cairo, Jizeh, Shohba, Alqaymah, five small cities, 10 villages and outskirt and farmland regions. Additionally, new cities 10 Ramadan, 6th of October, 15th of May and Alsalam are placed in this region (13). In other words, great Cairo is disproportionately divided between three governments of Cairo, Jizeh and Qualibia which are known as three northern cities (11). Cairo, which is extended in an area larger than 400 square kilometers, has experienced an explosive and worrying growth in the recent 50 years which is a short time in comparison with its ancient history. In the beginning of Second World War Cairo was restricted to its traditional crust including historical core of the city and areas extended to the historical city which is called downtown nowadays. After war ended economy of Cairo started to make progress as a result of the Allies' generosity. Infrastructures such as roads, bridges, water, sewer system and power grids were unprecedentedly developed.

In 1974 economy of Egypt improved due to increase in petroleum price. On the other hand new opportunities were provided for Egyptians in countries which were getting rich such as Iraq and Saudi Arabia and other **petroleum owners** middle eastern countries. This caused an incredible economic demand in different classes of Egyptian society. Consequently, cities received an influx of migrants and informal regions started to develop. After only a few years, almost 80 percent of residential units which were added to Cairo were illegal. This made government to impose a construction ban in farmlands. This law hardly affected control of informal activities (14).

To avoid high population density in the city, the government passed 1956 and 1970 comprehensive plans to maintain the city in its constructed borders. They tried to lead the population overflow into new cities which were commonly built in the surrounding desert lands. They adopted multi-core city approach to create new cities in a style similar to London and Paris. These new towns had their own basic economy and they were not dependent on metropolis. In the southern part of the Cairo three new cities were established; Albadr, Alghobour and 6th of October.

But urban problems of Cairo such as overcrowding, shortage in number of houses, weak infrastructures and damages to the environment resulted in preparation of new comprehensive plan of Cairo in 1981 and its approval in 1983.

1983 comprehensive plan was supposed to lead population to new towns built in fringing desert lands and maintain the city inside a green belt. However, analysis of satellite images reveals that more than 200 hectares of farmlands have been converted to urban use between 1986 and 1989. It seems that main obstacle to realization of comprehensive plans in Cairo was rapid and unplanned urbanization which resulted in development of illegal constructions and slums (11).

Since 1990 when Egyptian economy accepted Liberal model, a great number of urban planning control policies were replaced by plans based on market economy such as selling lands to private sector and principals of estates. As a result, political and economic circumstances for development of Cairo changed and the basis of property speculation, economic rent and unplanned development of city was provided which was emerged as spatial-structural inequality in the city.

5. INFORMAL SETTLEMENT, MANIFESTATION OF SPATIAL-STRUCTURAL INEQUALITY IN CAIRO: Informal settlement can be a dynamic demonstration of methods and strategies that are employed by citizens against sudden and fast changes in societies. Rapid and unbridled urbanization in last four decades of Egypt has led to compulsive development of cities and spread of informal settlements; residential places which are believed to support 12 to 17 million people which is 40-50 percent of urban population of Egypt. Although informal settlements are a common and dominant phenomenon in all cities of Egypt, they are more dense and considerable in Cairo (15).

There are residences which are built in complete contrast with urban rules and plans. Most of farmlands encountered use conversion without obeying separation rules¹, issuing permit² and title registration. These changes has revolted morphology of Cairo (15)

Now more than 60 percent of informal settlements of Egypt are in Cairo (Tab II). These residences include blocks as large as 9450 hectare. In some regions the density is more than 800 people in each 4200 meter. Another obvious characteristic of these regions is insecurity. Lack of suitable organization, narrow access networks, shortage of open spaces or public places for service applications and fine zones can be mentioned as other problems of these regions. As an example Beyt-Al-Naser may be mentioned, which is in the suburban of Cairo (16).

Different concepts of informal settlements, illegal residences, squatting regions, slums, waning regions and so on are utilized instead of each other and without a precise definition. However, in 2006 65 percent of residents of Cairo were living in informal settlements and now they constitute 70 percent of urban population. Moreover 28 percent of constructed residential units between 2003 and 2008 were located in informal regions

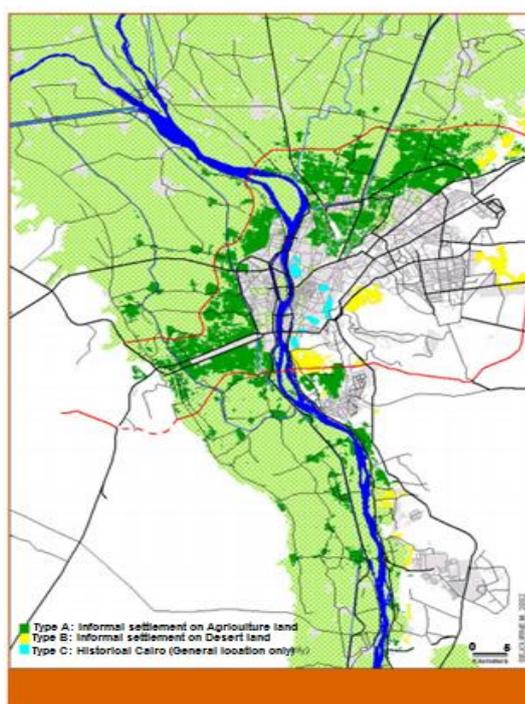


Fig II-Spatial distribution of informal residences in Cairo **Source:** (19)

year	area square km	population million
1950	6.7	0.4
1977	45.7	2.7
1991	106.9	6.3
2000	140.1	8.3
2006	-	10.7

Tab II. Estimation of population in slums and the area of slums in Great Cairo 1950-2006 (17)

Three cases out of 30 largest slums of the world are in great Cairo with more than 8 million people. This is a serious and dangerous issue. We can say that Cairo is an informal city with strips of formal parts. Informal settlements spread in vertical and horizontal axis around Cairo. They are formed in private farmlands, governmental desert lands, outskirts cemeteries and illegal tall building³ around the central and historic core of the city (Fig II) (18).

Populated slum around Cairo with millions of people clearly demonstrates spatial and social-economic inequality in Cairo metropolis. Spatial-structural inequality and accumulation of wealth in Cairo is relatively better than other cities in developing countries; nevertheless, the western part of Cairo is a developed region with all facilities needed for a perfect life while there are many slums in regions such as Almarq, Alshouhaba, Alqaymah, Lelvara. The western part of Cairo which is organized and developed by electrical group of Ahmad Behjat is called dreamland (8).

General speaking informal regions are a place for poor people. High illiteracy and unemployment rates, seasonal jobs, domination of labor in informal sector of economy, child labor, the environment dangers, epidemic diseases, narrow routes between streets, death of infants, lack of privacy and unhygienic circumstances are characteristics of these regions. Although inhabitants of these regions have incomes which are a few Ponds more than poverty threshold, a person who lives in such situation is undoubtedly considered as a poor one (15).

6. TEHRAN:

6.1. STRUCTURAL AND HISTORIC EVOLUTION : Formation of spatial-structural inequality in Tehran has had its own procedure. To understand and explain it, one should study its transition from a small village full of plane trees and gardens in north of Shahr-e- Rey in Safavi era to a huge capital with more than 8 million people in modern era.

Tehran assigned as capital of Iran in 1751 with 15000 people. Gradually it started 20th century with spatial-structural variations resulting from modernization. It was a city with 160000 inhabitants and area of 200 hectares, with limited streets which usually were built for pedestrians. These circumstances continued till the last years of 19th century. Then, ancient walls of the city were destroyed and it started to grow in all directions, subsequently, its population and area became 8 and 5 times larger, respectively. Twelve gates used to connect the city with outside regions and new places were designed in the city (20) Changing the role of Tehran from Qajar's capital to the major center of Iranian industry in Reza Shah Era caused a population boom in this city. 48 factories out of 182 major factories of country were located in Tehran. This fact changed population of Tehran from 250000 in 1930 to 1 million in 1956 (Tehran Metropolis Atlas). During 1921-1961 the concept of fringe changed due to destruction of gates and filling of moats. Moats of Tehran were filled to develop the city and slum-dogs settled in developing southern part. Poor regions formed in surrounding areas of southern gates; such as Qar, Doulab, Qorasan and Qazvin. As Tehran was the center of country in the modernization procedure during 1951-1961, it remained the major destination of immigrants. In this decade the city did not have legal borders so with increase in population and new regions, its borders expanded. This procedure was accompanied with growth of social differences in various districts and regions of the city. Formation of regions such as Southern Shahbaz, Javadieh, Nazi Abad, Dolat and Bisim between 1951-1961 was the consequence of low income migrants. Increase in migration as well as housing critics in 1951s resulted in an increase in tenancing. Therefore, housing pattern of different classes of society became completely diverse as well as regional differences. In this period of time labor regions were more or less developing consistent with the city; while residential regions which belonged to middle class; such as Narmak, Tehranpars (in the east), Gisha and Shahr-Ara (in the west) and Yousef-Abad and Behjat-Abad (in the north) formed separated from main body of the city and in the next step of development were merged in the city. Two effective and prominent events occurred in 1961s. Formation of metropolitan region around Tehran is the first event and preparing a comprehensive plan for structural

development of the city in 1968 was the second event affecting expansion of suburban in the region. Tehran metropolitan region, which formed from 1961s, encountered with spread development of informal settlements from its beginning steps. However, from the beginning of 1951s the portion of migration in population growth decreased. This fact could be observed specially in Tehran.

After Islamic revolution, control and supervision system for city development was ruined and labors and low income class of society became more powerful. As a result, fringing areas surrounding the city came into its formal boundaries. The area of the city became twice as previous and there was an influx of low income people to southern and eastern parts of the city to possess lands and build houses. House possession rate increased form 53 percent of families to 64 percent in the beginning years after revolution. Almost half of residential units in this time span were built without municipality permit.

In 1981s informal settlements far from the city played an important role in settlement of poor people. Population of informal districts and regions increased from 1 million to 2 million in one decade; at the same time whole population of metropolitan region increased 2.5 million people. 40 percent of this increase of population belonged to fringing inhabitants. After Iran- Iraq war, labors and low income groups of people as well as lower income portion of middle class families established new satellite cities in suburban of Tehran and the government had to recognize them. During 1991 -1996 8 new towns were recognized in Tehran metropolitan region. Five towns were informal settlements. Almost 19 percent of metropolitan region population in 1996 settled in more than 10 cities (which 9 of them were changed to city in 1951s) and 72 towns (which were considered as villages in 1996 despite having a population more than 10000). This resulted from growth of informal settlement in Tehran region after Islamic revolution(Fig III) (21)

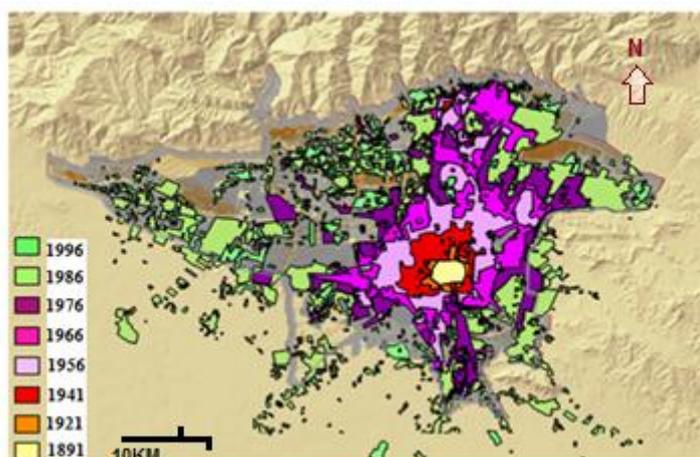


Fig III. Tehran physical spatial transformation in history Source: Atlas of Tehran Metropolis

The increasing and unprecedented growth of Tehran is confirmed with its population. Its population changed from 1.5 million in 1956 to 8.2 million in 2011. These huge population spectrum definitely need residences to settle (Tab III) and (Tab IV).

Year	Population	Growth Rate%	Population of Iran%	Urban Area population
1956	1560934	5.5	8	1600000
1966	2719730	5.1	10.5	2806000
1976	4530223	2.9	13.4	4869911
1986	6058207	1.3	12.2	6993013
1996	6497238	1.3	11.3	10343965
2006	7711230	-	11.07	13281858
2011	8293140	1.07	9.06	12183391

Tab III. Population growth of Tehran between 1956-2011 Source: (22)

territorial name	population million	% of the total population	area (sq km)	population density(per sq. km)	internal territorial
Tehran megacity	8.2	63.11	750	10.933	22 zones and a central municipality
Tehran city region	12.25	91.18	16.700	793	12 township about 30 distract, more than 50 urban area
Tehran province	13.3	19	18.909	703	Tehran Governor

Tab IV. Various territories of the city and the region in relation to Tehran(2006)

7. INFORMAL SETTLEMENT, SYMBOL OF SPATIAL-STRUCTURAL INEQUALITY IN TEHRAN:

Informal settlement is a metropolitan issue demonstrating weakness of social-economic structures (23). This phenomenon in Tehran metropolitan region is generally formed by purchasing, constructing or renting house in informal market outside the legal territories of the city and the share of informal settlements inside the city has decreased considerably. This phenomenon is always expanding itself. It introduces itself to other urban regions through different factors including improper hygienic situation, organic transportation systems, which reproduce themselves based on personal ideas and without organization in places far from urban public services, and dense districts far from welfare facilities.

Growth of informal land and house market provided basis for growth of informal settlements in this metropolis. Percentage of informal settlements from whole population of the region was 5, 11, 19, 25 and more than 32 respectively in 1956,1986,1996,2006 and 2011.

We can mention that in 1996 about 2 million people of Tehran urban region were inhabitants of cities or towns which were either informally developed and transformed into cities or still considered as informal villages or towns. Statistics show that during four decades (1966-2006) population of legal territories of Tehran has multiplied by 2.5 (it changed from 2.27 to 7.5 million). Meanwhile population of the rest of the cities in Tehran province has multiplied by 7.5 and it reached to 13 million. So it may be stated that share of Tehran city from population of whole province, which was 79 percent in 1966, has decreased to less than 60 percent in 2006. It means that migrants are attracted to suburban regions (24).

According to census performed in 2011, urban population of Tehran reaches about 11 million because a part of Tehran province was separated and transformed to a new province (22). Although it shows a decrease comparing to 2006, it does not demonstrate any difference in populational situation of Tehran urban region.



Fig IV. Spatial distribution of informal settlements in Tehran metropolises **Source:** author

Distribution of informal settlements of Tehran between 1976 and 2011 reveals that the radius of settlement is expanding around this city. Firstly, these residences formed in the south-western part of Tehran and beside city exclusion and near to industrial regions of Tehran-Karaj road. In the next decade with increase in number of fringing inhabitants, informal land market grew in south-western part of the region and the number of informal settlements increased in this region (inside and outside of city exclusion). At the same time growth of some informal towns started in connection routes of south-eastern part of Tehran. During 1986-96 and finally until 2011, main concentration of informal settlements remained in south and south-western part of Tehran. Moreover, the growth of these settlements

continued in east and south-eastern part as well as western part in the fringes of Karaj Highway and even in further radius between Karaj and Abyek. So in south western or southern sector of Tehran-Karaj connection rout, huge population centers formed (such as Islamshahr which used to have a population of 50000 in 1976 and now its population is more than 500000). After accumulation of population and increase in price of land and house, low income class of people established new population centers in the form of informal settlements. Seyylements such as Akbar-Abad, Malard, Pakdasht, Hasan-Abad, Bagher-Abad and Soltan-Abad were suburban centers which are transformed to cities in recent years (25) but they are still a center for informal settlements (Fig IV).

The most known pattern for spatial inequality in Tehran is the dichotomy between north and south which was established in Naseri era. During Pahlavi era (specially the second Phalavi), the spatial gap between north and south deepened. In addition some other patterns formed; such as concentration of poverty and inequality in town center, heterogeneity which resulted from merging village fabrics into Tehran city, creation and extension of old urban fabric, suburbanization and formation of informal settlements. After Islamic revolution, informal settlement expanded in Tehran. In this era intra city dichotomy decreased but inequality between center and surrounding parts of the city increased (26).

In contrary to fringing areas with informal settlements we may mention some regions in Tehran which are completely opposite. Zones number 1, 2, 3 with districts such as Aferanieh, Aghdasieh, Kamranieh, Ajoudanieh and Elahie are examples of these places. The price of house in these zones is about 3400\$ per square meter; whereas, it is about 340-670\$ per square meter in regions such as Javadieh and Rahahan (Econews 2011). The price of house in suburban particularly regions with informal settlements such as Kahrizak, Deh Abbas, Saleh Abad, Malard, Ahmad Abad, Ghale Neo, Ghani Abad, Akhtar Abad, Ramjin are Behnam Soukhteh are much less than the mentioned amounts.

We should not ignore the fact that in formal regions of Tehran and even in the northern part of it which is more wealthy, some informal settlements might be seen; however, as they does not consist of considerable population does not attract so much attention. Additionally, some of these regions cannot be considered as informal settlements yet they can be mentioned as regions with low quality residences. To exemplify we can name IslamAbad district in zone 2; Golshan and Shemran No in zone 4 and Atabak and KuchakTappeh in zone 15.

With this knowledge we can understand this spatial-structural inequality and know its consequences so that we can face the issue with deeper cognition.

8. STRUCTURAL DIFFERENCES AND SIMILARITIES: According to aforementioned observations following points can be stated regarding spatial-structural inequalities of Cairo and Tehran:

1. The first noticeable issue regarding these two metropolises is their geographic location. Both of them are located in a desert or semi desert lands. As a result shortage of farmlands and extension of desert lands with low fertility should be noticed because the growth of population and informal settlements is considerable in higher fertility lands in both metropolises and particularly Tehran. This will destroy these farmlands and harshly demonstrates spatial-structural inequalities. One of the most important issues regarding spatial-structural appropriateness in a city is selection of the best places for settlement and avoiding constructions in farmlands as they are savings for the future of cities. This important issue is not considered in these two cities and it is destroying the cities gradually and is the basis of spatial-structural inequalities in these cities (Fig. V).

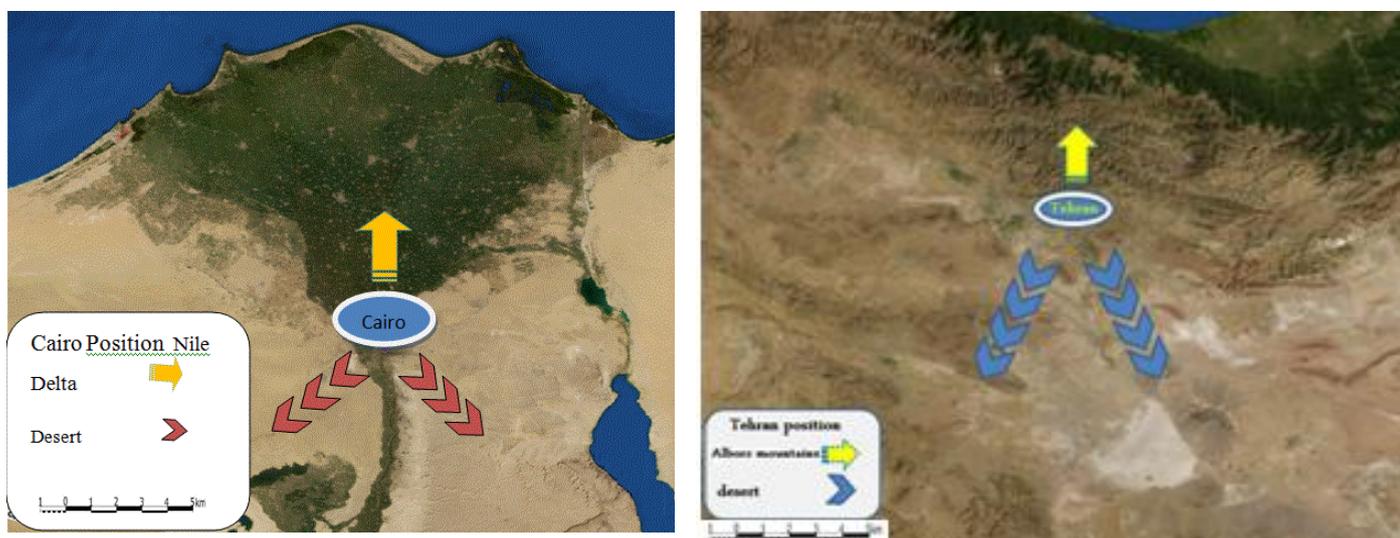


Fig V. Geographical location of the two metropolitan Tehran and Cairo

2. The location of informal settlements in these two metropolises is another prominent issue which should be mentioned. According to the maps most of these settlements are located outside of legal and service territories of the city. They are mostly scattered in surrounding agropolises in south and southwest part of the city which makes service providing problematic because the municipality does not feel responsible for providing services for them. This will cause many problems for this people and is the basis of spatial-structural and social inequalities in these regions. As mentioned before there are some regions inside formal territories of Tehran which are considered as informal settlements but there are negligible comparing to informal settlements in south and southwest of Tehran. They are even included in maps but they do not attract attention due to their small area. In contrast, informal settlements in Cairo are inside the city and its service zone so it is easier to provide services for them comparing to Tehran informal regions; however, from spatial-structural point of view, they create a paradoxical, unequal and inconsistent atmosphere which is unpleasant for urban society. On the other hand the extent of informal settlements in Cairo is much more than Tehran which makes service providing even harder (Fig VI).

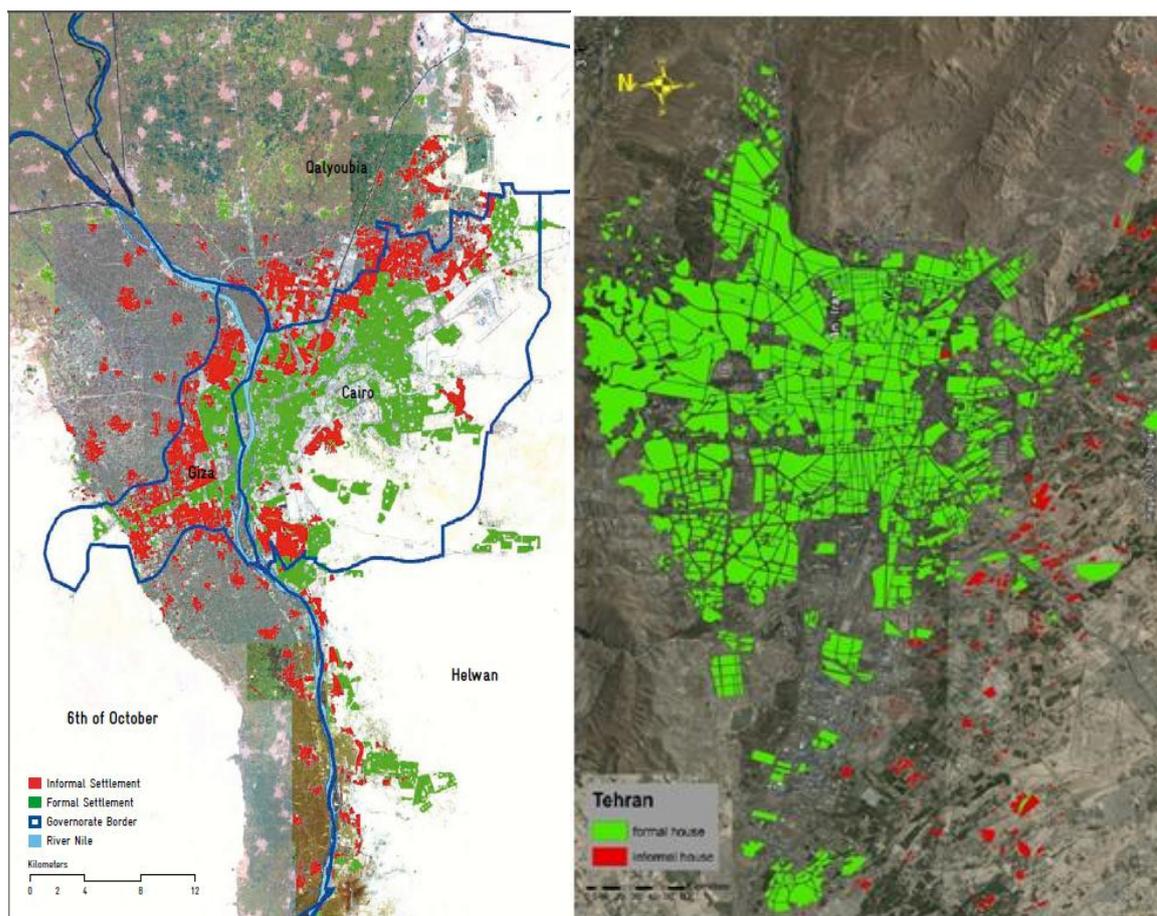


Fig VI. Formal and informal settlements within two metropolitan Tehran and Cairo Source(27) Source: author

3. Another issue regarding emergence of deep spatial-structural gap in these two metropolises is immigration. People migrate to these two capitals from different cities. Most of migrants are low income class of society or job seekers who are attracted to informal settlements because they do not have enough income to afford formal ones. As a result spatial-structural inequalities are increased. This factor is getting more sensible and its effect on formation of informal regions is being magnified.

4. Employment as crucial necessity of society is another factor influencing expansion of informal settlements. These two metropolises are centers for industries, service and manufacturing jobs in country. This has resulted in polarization of urban system, expansion of spatial-structural conflicts and consequently social conflicts. These inequalities are shown nationwide and caused more influx of people to these cities.

5. New towns are developed around both cities to lead and organize population overflow of these two metropolises. Unfortunately, new towns are extending conflicts and spatial-structural inequalities in surrounding areas of these cities; because these towns are transformed to places for settlement of people who are too poor to afford a life inside these metropolises and are obliged to settle in these towns. This means that a group of people are separated from other parts of the city which will affect their lives. Moreover, these towns have caused more informal settlements to emerge. These new informal settlements are supplied by main cities; Tehran and Cairo. To exemplify we can mention settlements around Parand or Hashtgerd in Tehran and Ay yek Shrouk or Madina Alnour around Cairo. These new

informal settlements have extended the range of spatial-structural inequalities over the service area of main city and have aggravated spatial-structural inequality problem for urban managers.

9. CONCLUSION: Although spatial-structural inequality is a universal phenomenon, it is more visible in developing world metropolitan regions. In this study we surveyed the procedure of forming spatial-structural inequality in two metropolises of Islamic world, Tehran and Cairo, from political, social and economic evolutions point of view with emphasis on informal settlements. The results show that this procedure is similar for two cities and it can be understood and explained from political economic perspective. Cairo has a brilliant history in art and architecture. It has always been the symbol of Egypt, yet it was restricted to its traditional crust before the Second World War and it had not experienced considerable development. After World War, influence of capitalism thoughts of Allies and their generosity provided Cairo with increasing development comparing to other cities. This development provided the basis for increase in migration rate and population growth. Informal settlements and slums surrounding the city, which include more than 70 percent of city population, are inevitable consequences of this unbridled population growth.

Tehran does not have a long history; nevertheless, it is not without identity and history. In Qajar era Tehran had a gradual growth and a coherent and harmonious fabric. It used to follow traditional fabric of Islamic cities. Since 1951 when Pahlavi era started it changed its role rapidly which caused its population growth to be more than national average. After inevitable invasion of modernism to Iran in the beginning decades of Pahlavi, Tehran did not developed so much but emergence of petroleum as the main axis of Iranian economy (which eliminated need for agriculture) and high flying plans for developing the capital, prepared the situation for migrants to start their movement to Tehran. These made urbanization prior to urbanism. With new political-economic evolutions, social changes showed themselves in settlements, living style, rapid urbanization and a new fabric in the city started to grow. In this period of time Iranian-Islamic cities formed three separated parts from structural perspective: A. revolted traditional section B. new planned districts C. suburban with informal settlements (28). As we go through Pahlavi era we can see growth of informal settlements and consequently expansion of spatial-structural inequalities. Spatial-structural inequality in both metropolises can be seen in the form of informal settlements inside cities or in fringing areas of cities. They are in the format of low quality settlements and even slums. In Tehran this spatial inequality is merged by economic and social inequality. It matches the slope of the city; when we move from northern part of the city to southern parts this inequality becomes more tangible. In contrast in Cairo, informal settlements are scattered on both sides of the Nile in either desert lands or farmlands. They do not obey a regular pattern. Efforts made in two cities to control population growth and avoid city expansion are very similar. Design and preparation of comprehensive urban plans, which are occasionally imperfect, unfinished and inefficient in both cities, as well as the policy of establishing new cities around metropolis are examples of these efforts. It is seen that despite different natural basis and different functionalities these two cities have similar destiny. They face increasing spatial-structural conflicts which needs officials' attention.

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