

# The Contribution Of Gated Communities To Urban Development In Greater Cairo Region, New Towns.

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## 1. ABSTRACT

Gated Communities are a powerful idea that has the potentiality to make deeper changes in our cities. they showed a wide spread in all local, Arabia and international levels, which raise an important question, Do Gated Communities introduce a better solution that can solve the problem of GCR new towns or not?. From the first look, the answer seems yes, comparing Gated Communities with contemporary good urban form theories of development, tell that according to their physical appearance, they share many features. Some argue that both respond to the same fears and concerns about the contemporary city; both reflect a popular search for civility, character, and authenticity in the urban environment and a reliance on surveillance for social control in the contemporary city (Christopherson 1994).

So residents, planners, developers, and authority thought that changing urban form from open to gated could be a solution for contemporary problems, like safety, sense of community and other. This research argue that Gated Communities rather than be the solution it become part of the problem. Gated Communities socio-spatial characteristics cause a number of development problems and negative impacts on the social and spatial fabric of new Egyptian cities. The purpose of this research is to examine the contribution of Gated Communities to urban development with especial reference to GCR new towns.

**Keywords:** Gated Communities, GCR, Development Evaluation Indicators.

## 2. METHODOLOGY

In order to discuss the main argument of this research, the study need to answer the following: First, to define Gated communities unique socio-spatial features, and define the way they impact social and spatial form in cities. Second, to discuss these socio-spatial features with reference to theories of successful social, spatial and public life. Finally, to discuss these socio-spatial features with reference to GCR unique circumstances. These evaluation reference serve as criteria to evaluate and examine gated communities contribution to urban development.

### 3. INTRODUCTION

Gated Communities witnessed a wide spread in all local, Arabia and international levels. The expansion of Gated Communities in Egypt began in the early 1980s along the beaches of the Northwest coast. Since the mid-1990s a similar development has been observed around Cairo. Gated Communities in Egypt become a mass trend in new towns urban developments, The research documented more than 450 Gated Communities until 2010, which are located in different parts of GCR new towns.



Fig. (1): Gated Communities flourishing inside GCR new towns, source (Researcher)

Municipality	Total Area	GC with residential uses	GC Area (Per m2)	GC Area (per feddan)	GC are per total area
New Cairo	643000 Fdn	220	197038399.99	47000 Fdn	7%
El Shourook		35	6614007.9	1575 Fdn	
El Obour		2	2351657.76	560 Fdn	
El Sheikh Zayed	9200 Fdn	50	18111495.11	4312 Fdn	46%
Six October	67000 Fdn	159	81732320.22	19460 Fdn	29%
Total		466	612418800	72900 Fdn	

Fig. (2): GCs in each municipality (Researcher)

### 4. DEFINE GATED COMMUNITIES SOCIO-SPATIAL CHARACTERISTICS

The purpose of this part is to define Gated communities socio-spatial characteristics, and define the way they impact social and spatial form in cities. Snyder argued that developers use different design strategies to make Gated Communities acquire their unique nature of splintering community from the city, and isolate particular social groups. First: Boundary Physical barriers around communities serve several functions, they create visual screening, permit privacy, define property, and limit access (Grant 2004). Second: street network patterns that are most commonly inward oriented especially cul-de-sac. Third: Land-use pattern: Grant (2002, 2004), argued that mixed uses are rarely occur in Gated Communities.

Gated Communities explicitly resists difference and relies on single land use type mostly residential. Carmona (2003 :181) argued that, "all over the critics of the functional zoning, market conditions are generally necessitated the mono-functional areas. Because developers and property owners demand to develop their property in its highest and best possible use, so it is caused to reduce the secondary uses". Fourth: Housing type pattern, developers always seek to separate different housing types apart from each other so as to control services, amenities, and maintenance of who are the same social and financial standard. These features reflect the design goal to benefit of control and privacy as well (Blakely and Snyder1998).

These features differentiate Gated Communities from any other un-Gated Communities, not only in their impact on inner structure but also in the way they impact their adjacent area, and the way they are collectively impact the overall urban fabric of the city (Ghonimi et al., 2010-a). And of course this should differentiate Gated Communities from Un-Gated Communities in their impact on urban development. The following part introduces a multi spatial level analysis, in order to reveal, the way these features impact socio-spatial change and continuity in urban structure, so as to examine their impact on urban development.

#### **4.1. The Impact on Micro Private Community**

This part intends to explore the way in which Gated Communities features impact on micro urban form.

##### **4.1.1.Spatial Patterns**

Gated Communities are private property for collective use, they usually try to isolate them self out from their broader city context, so they reinforce spatial isolation with physical walls and cul-de-sac as a common inward oriented street network pattern. This enable them to turn inwards and not to the external streets, and reduce their relation, connectivity and continuity with their broader urban fabric, and increase isolation from everything else, (Ghonimi, 2010-a).

In Gated Communities, the open spaces and the common services are (streets, parks, footways etc.) as well as a lot of common facilities (public libraries, swimming pools, schools etc.) are owned, managed and regulated by a self-governing private organization.

##### **4.1.2.Social pattern**

Gated Communities have gates, not only to control access but also to mark social status. Gated Communities are the dream of suburban which encourages the elite (upper and especially upper-middle classes people) to prefer to stay and invest in a closed areas on the urban periphery(Landman2003). Le Goix (2007) used the concept of club economy as an explanation to the homogeneity of Gated Communities and its relevant impact on the segregation inside urban fabric, he equalized Gated

Communities with the fashion of private clubs that has selective club membership, that have private provision of collective goods and services, the developers and buyers with level of services and amenities that fits a homogeneous set of tenants. Hence Gated Communities leads to an implicit selection of the owners through life style and price and exclude any other from the privatized area.

## **4.2. The Impact on Adjacent Public Community**

This part intend to visualize and illustrate the way in which Gated Communities features imprint its impacts on adjacent urban form.

### **4.2.1.Spatial Fabric**

Through the formulation of internal pattern, Gated Communities remove interact with its boarder city. Gated Communities physically isolated out from its context, hence it creates inaccessible bockets, super block or islands inside urban fabric, that cut the continuity of urban fabric. They exclude public access of adjacent area resedints and segregate them from each other, (Ghonimi, 2010-a).

### **4.2.2.Social Fabric**

Gated Communities are closed area with homogenous social group that are closed of the entire spatial and social fabric of the city, which not only widen the gap between different social groups but also break the connection with adjacent Gated and Un-Gated areas, even they were of different or the same housing type, which could weekend the socio-spatial fabric of the city.

## **4.3. The Impact on City Structure**

This part intend is to visualize the ways in which these socio-spatial features are collectively reflected to reshape the socio-spatial features of public and private realms of the city.

### **4.3.1.Spatial Fabric**

The urban fabric is the physical form of towns and cities. By closing off a large number of neighborhoods, the existing road network and spatial structure of city are severely affected and transformed form public road network to a structure of super-block. Large areas are now changed into isolated and inaccessible super-blocks, with little resemblance to the original fine-grained urban form.

Gated Communities creates brockets inside urban fabric, that destructs the continuity and connectivity of urban fabric. A new macro pattern appeared on macro level known as divided city, or city of walls (Ghonimi, 2010-a). Low (1996) In "Imagining and Theorizing the City" conceptualized various types of cities among them, the divided city and the fortress city. She argued for the divided city that are evoked due to hidden barriers of race and class, unequal distribution of culture capital and social capital. And the fortress city, that not only due to uneven distribution of city space, but explicitly by using explicit barriers, through the privatization of certain spaces for the purpose of certain groups excluding unwanted.

#### **4.3.2.Social Fabric**

The social fabric of the city witnessed a relevant transformation according to the previous illustrated spatial fabric transformation. As spatially specific areas are isolated and inaccessible, noting that social aspects of these areas are characterized with mainly specific single housing type, a relevant impact of social discontinuity and segregation that have hint the social fabric of the city, therefore, Gated Communities not only have an impact on the urban form and functioning, but also on the social behavior of people, which will be discuss and criticized in the next part. Le Goix argued that Gated Communities are characterized with homogeneity in socio-economic class (Le Goix, 2007), in addition they tend to locate within a consistent social environment, within the same kind of middle and upper-class neighborhoods. Moreover, they create puffer zones of choices make it located in areas of middle and high class (Le Goix, 2007). This widen the gap between different socio-spatial areas increase socio-spatial segregation.

### **5. DEVELOPING INDICATORS FOR EVALUATING GATED COMMUNITIES:**

These specific socio-spatial features and conditions should be discovered on the ground of theories, and local context, their impact on spatial and social fabric of the city should be criticized and evaluated. Consequently given the aim to evaluate the impact of gated communities socio-spatial features and conditions on the social fabric, spatial fabric and urban life of the city, this paper intend to criticize these features and conditions resting on two evaluation reference, theories of successful spatial fabric, social fabric and public life of the city. And evaluation reference to local context environmental, social, and economic unique characteristics.

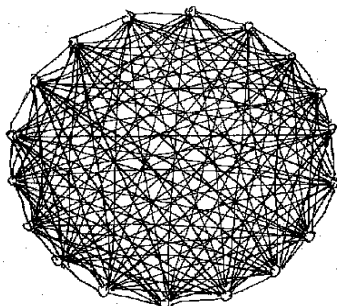
#### **5.1.1. The Successful Spatial Fabric**

Salingarous (2003) in " **The Fractal City**" argued that there are different types of cities, each contain entirely different degrees of urban life, and that the life of a city is directly dependent upon its matrix of connections and substructure, because the geometry either encourages or discourages people's movements and interactions, they are disconnected, in a separate sense. He argued that the distribution of the sizes of urban components and connections can define fundamentally different types of a city. He defined the concept of fractal city which is the difference between living city and un living city. The key idea is the existence of linked structure at all scales in a hierarchy, from the very large to the very small, Fractals have another key property that of coherence and self-similarity, he argued that the spaces between buildings are a fractal structure on the scale of the city itself. Enlarging block size and constructing smooth walls without entrances are anti-fractal actions.

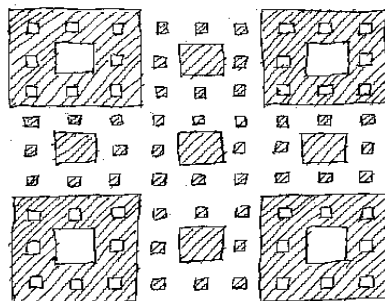
Moving to Christopher Alexander (1961) in *"A City Is Not A Tree"* he cited that City is not a tree. He argued that there are different ways of collecting a large collection of small systems like cities parts, among them the tree model and the lattice model, both of them structure of a sets. when these small parts interact with each other and make co-operate by inner binding force that are called a system. when the structure is a system it is called a semi-lattice, rather it is a tree. He argued that a living city is modeled by a mathematical semi lattice, in contrast to a dead city, which is modeled by a tree. A semi lattice has a vastly larger number of internal connections than a tree of comparable size has. Not only are there many connections in a semi lattice, but there is a great variety of them; by contrast, trees have unique connections. To be livable, we must advocates a return to more traditional and natural states of place-creation, a place must generate a sense of belonging in its users, participatory, self-created.

Moving to John Minette (1975) in *"As the City is not a Tree... it should not be designed as a System"* who argued that As Christopher Alexander (1966) argues that much of people's dissatisfaction with the modern city stems from their artificial organization into hierarchical groupings of facilities which, he suggests, are based not on the way people use the city, but on the way designers conceive the process of design and apply it to the design of a city. He argued that all activity systems are linked to each other, these links provide the framework of constraints and potentialities with in which agency work so the design for these links is the planner field. He argued that planners should concern with the positive design of public areas and resources as overlapped with public-private systems and linked to activity systems.

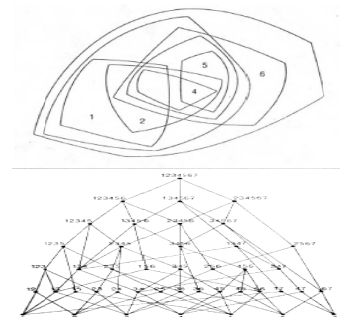
Moving to Jan Jacobs (1961) in *"The Death and Life of Great American City"* who cited that "Neighborhoods that worked best had no beginnings or ends. A major part of their success depends on their overlapping and interweaving"( Jacobs ,1961). She questioned the use of borders, criticizing that not borders that can made a neighborhood but the activities going on in the streets. Borders often creates barriers and defeated the cross uses occurring between the neighborhoods and the districts (jacobs, 1961, p.264).



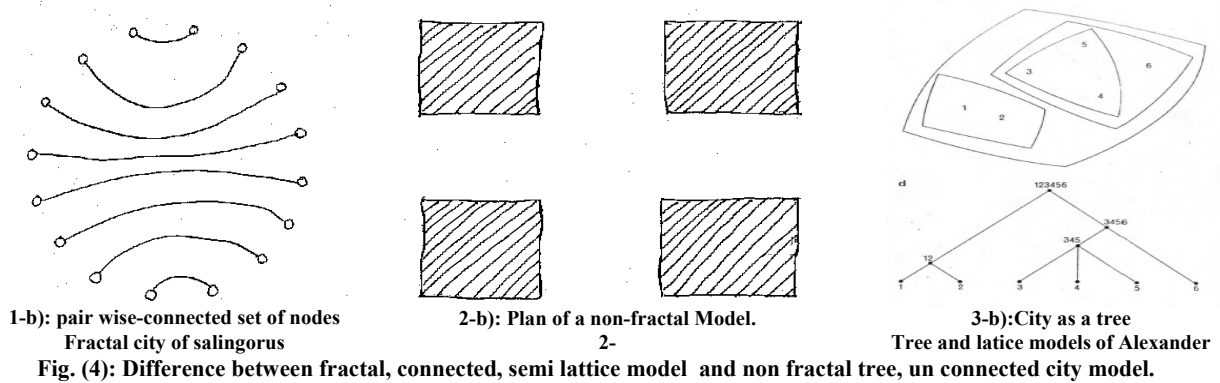
1-a): completely-connected set of nodes.



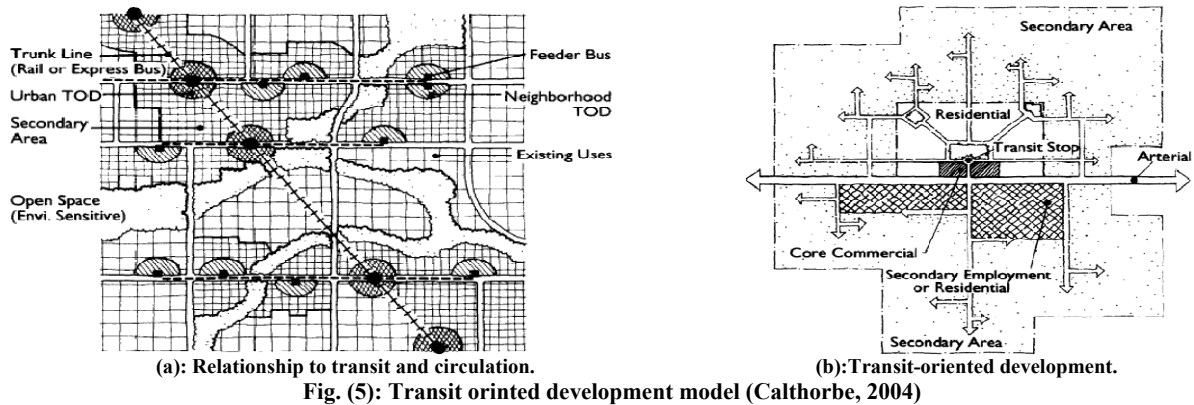
2-a): Plan of ordered fractal model.



3-a): City as Semi-Lattice



Moving to Peter Calthorpe (2004) in "*The Regional City*", who developed the concept of transit oriented development, considering the corridors as the most important element, they are the edges and connectors of the region's centers, neighborhoods and districts. They come in many forms, from natural to manmade corridors. He argued that Human-made corridors are important to the quality of life within a region roads, and that transportation systems have always provided the fundamental structure of human habitat in cities.



If the scope of successful spatial fabric that could enhance the relation connectivity and continuity between city parts, stressed the importance of being part of a city and make pressure on the public domain so as to enhance urban development, so they put different criteria for achieving strong spatial fabric represented in: reject low-density, segregated, fragmented and single-use and housing type development, rather embrace compact, integrated and mixed-uses and housing types settlements. encourage blurring boundaries as a primary public spaces between neighborhoods (Jacobs,1961), Depend on linked structures from the very large to the very small, multilayered transportation network, sufficient fine grained infrastructure to facilitate choices (salingours, 2003), promote transit and more compact urban form, and mixed use and walk-able neighborhood (calthorpe, 2004), and promote continuous fabric, (Lynch, ).

And if Gated Communities are turned inward using physical barriers to intend isolation and segregation from the city, and dividing them self's to a homogeneous groups that restrict face to face contact among

citizens, resulting in a social segregation; then Gated Communities are not achieving these criteria and have no design reference in these theories. Accordingly, Gated Communities build weak spatial fabric.

## **5.2. Successful Social Fabric**

Better understand of the social impact of Gated Communities can be explained by discussing Putnam's concept of social capital. Putnam (2000) introduced the idea of social capital, it is used by analogy with other forms of economic capital, as it is argued to have similar benefits. He states that "social capital refers to connections among individuals social networks and norms of reciprocity and trustworthiness that arise from them" (Putnam 2000, 19).

This definition always hinted towards a much broader, understanding of the social ties that might produce co-operation, involvement, reconcile difference and trust. It could indicate the strong or weak ties in social networks hence indicate the strong or weak social fabric. Interaction enables people to build strong communities, to commit to each other, to mesh themselves into a complex social fabric, and to knit the social fabric (Moobela, 2003). There has been considerable evidence that communities with a high level of social capital are more likely to benefit from lower crime figures, better health, higher educational achievement, and better economic growth (Goldberg, R. 2006 :16).

Moving to Jan Jacobs in "*The Death and Life of Great American City*" she argued for the importance of diversity in public life of the city, it is the most effective place for socializing future generation, and for exchange and contact of knowledge, experiences, and information with other diverse social groups. which also could perpetuate trust and unity. She sees diversity as the key factor of success of a city: the variety of commercial activities, cultural opportunities, inhabitants, visitors as well as the variety of tastes, abilities, needs and even obsessions are the engine of urban development. She argued that urban diversity provides a more favorable environment for economic development than urban specialization. Economic development should be understood as a result of innovations. (Jacobs, 1961, p 137).

Moving to Alan Berube (2005) in "*Mixed communities in England: A US perspective on evidence and policy prospects*", he argued that if people are more socially and economically integrated it is easy to avoid the concentrations of deprivation that could limit the life chances of people living within them beyond their own personal circumstances, it is easy achieve greater success in improving key public services outcomes (e.g. crime, health, education) improve school performance, or reduce health inequalities, and it is easy to avoid entering cycle of decline especially for low income homogeneous communities.



Moving to Mark Granovetter (1983) in "*the strength of weak ties: A network theory revisited*", who argued that more numerous weak ties can be important in seeking information and innovation. Cliques have a tendency to have more homogeneous opinions as well as share many common traits. This homophilic tendency was the reason for the members of the cliques to be attracted together in the first place. However, being similar, each member of the clique would also know more or less what the other members knew. To find new information or insights, members of the clique will have to look beyond the clique to its other friends and acquaintances.

If the scope of successful social fabric stressed the importance of inclusionary social process between diverse housing types, and could enhance connection between city parts residents even they were of similar or diverse social groups and put these criteria for achieving strong social fabric, represented in reject social cohesion and segregation, exclusion and separation and rather embrace integrated and inclusionary community that encourage social diversity contact. It encourage mostly varied, mixed and high density housing type, they are public property for collective use; available shared public life (facilities, urban space, services, and walk ways); Easy network to facilitate connection and interaction between different city parts; and diversity of housing types, to insure the interaction between diverse housing types.

And if Gated Communities lack the inclusionary process of diverse housing type, lack the required diversity, remove public life from public domain, and cut the connection between different parts of the city; then Gated Communities are not achieving these criteria and have no design reference in these theories. Accordingly, Gated Communities build weak social fabric.

### **5.3. Successful City Life**

Jan Jacobs in "*The Death and Life of Great American City*" argued that Free public domain (walkways, services, facilities) that cuts across the private property line to generate a common ground where knowledge and wisdom could be shared and cross fertilized, thus facilitating the public over the private. System of human networks depends on interaction, cross fertilization, creative exchange, and a flow of ideas to enrich its knowledge base. This requires interaction and chance encounters in an interactive domain maintaining a network where an individual's knowledge and experience couple/augment/refine/ redefine another individual's knowledge and this continues as a circular system.

Moving to Lyn H.Lofland in "*A World of Strangers: Order and Action in Urban Public Space*", who argued that a city could be arranged to promote positive tolerance, she argued that cities that socially worked best must have co-existing of strangers, well-used public spaces and a strong public realm and positive tolerance. There are five aspects for positive tolerance; first, do not segregate diverse people into

homogenous enclaves and are forced to settle whatever conflicts arise among them without recourse to centrally imposed instruments of order; second, encourage people to master the complexity of the urban environment to move through it with a high degree of safety; third, enhance build community closest to the actor (the home, the immediate neighborhood) are secure; fourth, encourage people to control the character and quality of their contact with diverse others; five, promote certain demographic characteristics, that generate a capacity for tolerance (p. 240).

She argued for the importance of having public spaces that connect diverse social groups, and strangers, so people learn and practice how to deal with others, she argued that there are many circumstances where a person does not know how to do so because of his low level of knowledge of the coding. this could contribute for the social capital of the city. she argued that the more fluent in the symbolic language a person is regarded as "street smart" or as a "city person, the easier one can move through and live among strangers, They are people with a high tolerance toward diversity.

Moving to Richard Sennett in "*The Fall of Public Man*", about the contribution of the public man in the public space. He argued the contemporary trend in disappearance of public character, as a reaction to the change of the function of the public man. The public man has lost the language of public participation with other diverse community levels, and tend to isolate himself from the public domain, and stayed in enclaves.

A public man is a man who lives in the public. Typically, he is a constant feature of the public spaces, such as a sidewalk, a park, a plaza. He lives and thrives in public life. He is one constant of the dynamic changing urban scene. He notices others and others notice him. He holds information about the public spaces and the public life around him. He can be helpful to others who seek and need the information. As a constant to the evolving changes of the public language, the symbolic meaning, and the node of the information flow, he provides the continuity and the stability of urban public places and the public realm (Napassakorn pongsmas, 2004 :39). Thus, Sennett's contributions lie in his conceptual linkage between urban public spaces and vital social life through the life, the roles and functions of the public man.

If the scope of successful life of the city stressed the importance of public realm, and its role in the interaction and change between city parts residents especially between diverse social groups, and put these criteria for achieving this aim presented in first, Public spaces and strong interactive public realm (Jacobs, ); second, coexisting of strangers (Mark Granovetter, 1983; H.Lofland); third, Public man (Sennett); fourth, exchange through will connected public transportation network, fifth, available shared public life: (facilities, urban space, services, and walk ways) on the boundary of the community; and finally easy network to facilitate connection and interaction between different city parts.

And if Gated Communities First oriented to private domain and neglect public life and public domain, second cut the connection between different parts of the city and Finally remove any uses or activities from the public domain, hence fail to make public spaces in the city as to be safe and livable for movement; which make people who have alternatives of walking and biking to avoid being in the public domain of the city, dividing them self's to a homogeneous groups that restrict face to face contact among citizens, resulting in a social segregation. Then Gated Communities are not achieving these criteria and have no design reference in these theories. Hence Gated Communities build weak public realm and negatively impact public life of the city.

## **6. GATED COMMUNITIES FROM LOCAL PERSPECTIVE**

### **6.1. Gated Communities from Environmental Perspective**

GCR new towns have been developed in the eastern and western desert which are considered as an arid region. GCR new towns as arid zone have their special features which characterize its climate and soil form. Where there is a high mean duration of sunshine, minimal rainfall, high level of solar radiation, excessively high temperature, water scarcity and deficiency of suitable land for agriculture (El-Zamly 1994, p.47).

The main goal of climatic design, on a macro and micro level, is to reduce uncomfortable environmental conditions created by extremes of heat and dryness, Reduce resources consumption, (water, fuel). Urban fabric to be Planned in narrow streets, using compact urban form and Plan close proximity of urban services and daily functions within walking distance, so as to provide maximum shade to Protect from solar radiation, allow minimum reflection in streets and open spaces and minimize indirect solar radiation to avoid heating the air,(Golany 1978), and to provide relatively cool and break stormy winds, but allow through-ventilation and adequate natural lighting. And finally Include green areas of plants around and within the settlement to provide shade and cool air and to stabilize the soil, with taken in mind to limit these green area so to reduce water consumption.

**To summarize**, the scope of environmental design in GCR that could enhance development is to be compact form with short distance buildings, services, and in walking distance so reduce resources consumption and reduce polluting the environment. **On the contrary**, Gated Communities in micro scale are in low density with large sprawled areas of lands, with separated large distanced buildings, segregated separated services, and not on walking distance, so commuting depends mainly on private cars and consume more frequent long distances trips that consume more commute time and fuel. In addition, large open spaces with no shaded spaces mostly include large green areas and golf course, which increase more

water consumption. Whereas Gated Communities in macro scale create sprawled and separated large distances areas between micro communities inside the overall city fabric, which consume more time and resources in commuting. **Accordingly**, when comparing these supposed socio-spatial characteristics from environmental point of view, with what Gated Communities Urban Form; yields that a great division and gap between both of them. Accordingly, Gated Communities do not regard environmental requirements.

## 6.2. Gated Communities from Social Perspective

Socio-cultural characteristics are the second principle that has to define the appropriate patterns of urban development. religion, culture aspects, social aspect, and Egyptian people preferences, all constitute the socio-cultural factor. To determine the appropriateness of new development patterns in Egypt, a general review of the social situation must be made. Traditions, religions advice that the peace and stability of society depend on good social relations amongst the members of society. especially the relation between the rich and the poor. The good relation between neighbors comes from large interest in the neighbor right, or in Arabic "*Hak El Gar*" which is some kind of a social contraction between neighbors. When looking to Gated Communities from Islam Perspective, Islam stressed neighborhood right.

"أَهُمْ يَفْسِمُونَ رَحْمَةَ رَبِّكَ نَحْنُ قَسَمْنَا بَيْنَهُمْ مَعِيشَتَهُمْ فِي الْحَيَاةِ الدُّنْيَا وَرَفَعْنَا بَعْضَهُمْ فَوْقَ بَعْضٍ دَرَجَاتٍ لِيَتَّخِذَ بَعْضُهُمْ بَعْضًا سَخِرِيًّا وَرَحِمَتْ رَبِّكَ خَيْرٌ مِّمَّا يَجْمَعُونَ" الزخرف : 32

In Tabari's interpretation: "To use someone in someone else service means to serve each other and help each other to benefit and utilize each one the other. If they were all peers and equals in all circumstances, no one would do any service or offer any help to anybody else. This would eventually lead to the ruin and corruption of the world's order". Islam endeavors to bring the poor near the rich, rather than to incite them to quarrel. This is to ensures the contraction between them, and raise the poor social and economic conditions to the rich. which raises another concept of inviolability of the neighbor, or in Arabic "*Hormet El Gar*". The poor neighborhood right for his rich neighbor is not to attack him or criminally act against him, and on the other hand the rich neighborhood right for his poor neighborhood, to help the needy and give them El Zaka. Accordingly, Islam seek to protect both and safeguard the poor class from eradiation of the rich by means of a revolution of the poor; and block the channel leading to class hatred and make it possible for springs of brotherhood and solidarity to gush forth. On contrary to the communism proposes them to abolish the rich class in favor of the lower social class.

Egyptian people often prefer streets, buildings, neighborhood, and even the city, is filled of life and activities, stressing concepts of „ulfa“, „lama“, „wanass“, these concepts mean making social contract, and sense of community and safety. Ghanam, argued that The key difference between authentic neighborhood and non authentic neighborhood (Ghannam 2002, Abd El khalek 2009)).

According to Ghanamm (2002), Egyptian people prefer "wanas" that refer to people preference of having streets, buildings, and neighborhoods that are abundant with life and activities, thus be safe over those quit, empty, not inhabited or used by people thus scary and unsafe areas, just like streets at night.

According to Ghanamm (2002), Egyptian people prefer "Ulfa" that refer to familiarity and intimacy created through the gradual rootedness in a specific place over a long period of time. Which based on gaining knowledge of others, place each other, know each other, and being able to place them. As a result, people see themselves as willing to sacrifice for the benefit of their neighbors and help the needy and this leads to a sense of community (Abdel khalek 2009).

According to Ghanamm (2002 p.80), Egyptian people prefer "lama" that encourage people to live and feel the satisfaction that comes through gathering people into one place. Also to gather variations of the same root or to mix with people below one's status. It indicates the mixture of a heterogeneous population that brings the good and the bad together.

Also Egyptian people often prefer The spread of commercial uses along circulation spines and among residential uses is a normal aspect for conventional Egyptian cities (Elsadik 1992), the public extended commercial axis, which spread across many parts of the old Cairo city, just like (Talat harb street, Ibrahim El Lakani street, Abas El Akad street, Gameat El Dowal EL Arabia street, and other many examples of public urban spaces, they prefer this rather what is imposed of post-public spaces, which are privatized, restricted, or controlled.



A: Masr El Gdeda



B: Abas El Akad street



C: West El Balad

Fig. (6): The importance of public spaces for Egyptian people

Beside, Public spaces represent an important part of political life of Egyptian people, for example, we can remember the role of public urban spaces in achieving revival and revolution of the nations along history, starting from Ahmed Orabi, passing through different stages until recent 25 January revolution that explore the role of El Tahrer Square.



Fig. (7): The role of public domain in political life of Egyptian people (El Tahrer square).

**To summarize**, the scope of successful Social design in GCR new towns is to ensure the relation between neighborhoods, especially between the rich and the poor, compact mixed urban form that are abundant with life, compact short distance buildings, services, in walking distance, public domain with commercial axis and public spaces.

**On the contrary**, Gated Communities in micro level: depend on homogeneous community that lack diversity, and strive for exclusion of the poor. Whereas, Gated Communities in macro scale, on one hand, are spatially segregated that divide and cut the continuity between neighbors society residents, on the other hand, are socio-spatially segregating that widen the gap between the poor and the rich. Gated Communities center their plans on high class on the cost of low class, using exclusion through housing caused polarization and social exclusion, also restriction of development to the rich and neglecting the requirements of the poor.

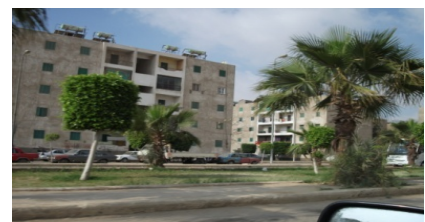
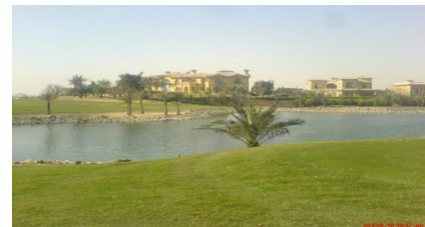
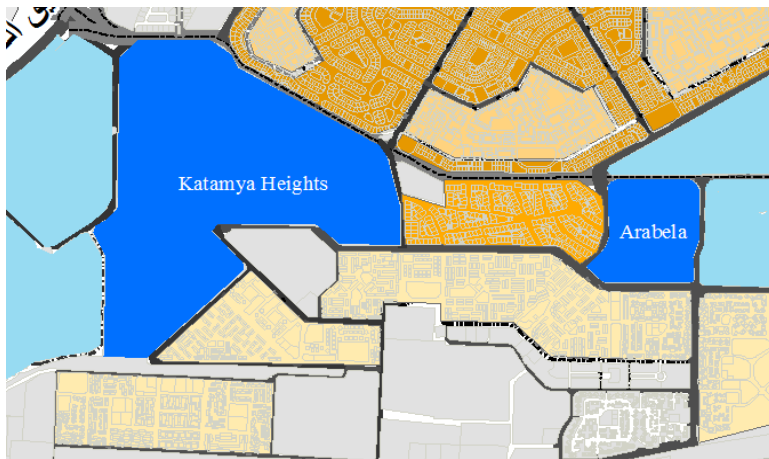


Fig.(8): Social segregation between the rich and the poor.

**Furthermore**, Gated Communities in macro scale tend to diminish public realm, leading to dividing urban form and massive trend to enclosing large areas of land inside the city, turned to just walls with no use, and with no public urban spaces, which weak concepts of "ulfa", "lama", "wanass" that are socially rooted in social fabric of Egyptian people, creating city of walls. This negatively impact on the liveability of the city; isolating public streets from its life, and converting it to merely some zones and walls, that motor paths have penetrated it.



Fig. (9): Contemporary image of New Cairo city, (city of wall).

This negatively impacts on the liveability of the city; isolating public streets from its life, and converting it to merely some zones and walls, that motor paths have penetrated it. It has the ability to diminish public space, which was a place for interaction between the nations and the states, and replacing it with post-public spaces, that loses the democratic role of previous public spaces through history. Also, dimensioning of public spaces cause disappearance of mix and interaction between diverse public residents, and prohibit them from participation in public life.

**Accordingly**, when comparing these supposed socio-spatial characteristics from social point of view, with Gated Communities socio-spatial characteristics; yields that a great division and gap exist between both of them. Accordingly, Gated Communities do not meet the social requirements of Egyptian people..

### **6.3. Gated Communities from Economic Perspective**

Economic characteristics are the third principle that has to define the appropriate patterns of urban development. To determine the appropriateness of new development patterns in Egypt, a general review of the economic situation must be made. Looking to equitability of urban growth, revealed that as Egypt is a developing country, that are characterized with low resources, and as G.C.R new communities constructed to decentralize the concentration of population in Cairo, to provide housing for all the community residents, where the residential structure of the city is composed of relative percentage of low, mid and high level social classes.

If economic growth should consider the equitability of resources distributions, citizen participation, access to services, and concern for all members of the community. So examine the affordability of Gated Communities with residents economic conditions reveal that gated urban form is unaffordable, inequitable and inefficient in its distribution of economic resources and create housing imbalance. This can be explained in three parts as follow:

The first: Gated Communities developers control gated area and can exclude the free rider, which make Gated Communities inaccessible for public community, then it is inefficient in its distribution of resources.

The second: Gated Communities increase the housing prices inside the community, since developers provide goods such as clean air, green spaces, water supply, recreational facilities, urban spaces, and streets facilities; which are in case of un-Gated Communities the state is the responsible for step in to provide these goods. This make Gated Communities residents bay double taxes for having these goods, the first for the state and the second for the developers who bear excess over cost for these goods in each residential unit; accordingly this impact the value of housing market increases housing cost, so Gated

Communities become not affordable for the average Egyptians, it is mainly restricted for the rich. This can be explained through the following two examples:

The first example in "Mubark housing projects" that are constructed to provide the needed housing units with  $63 \text{ m}^2$  for low income people, but as the developers are permitted to gate these communities, they started to add different landscape features, amenities, and different goods, and start to add their cost on the housing unit cost, the matter that make these communities convert the supply of housing from being affordable for low income residents, to be unaffordable. A clear example in Degla Gardens and Degla Palms, the price of these units exceed the affordability of who they are supposed to be developed for them. The price of these units reach about 150,000 pound around  $2400 \text{ pound/m}^2$ . Which are comparing with other housing units in un-Gated Communities would not exceed 60,000 pound around  $1000 \text{ pound/m}^2$ .

The second example in Arabela Gated community in new Cairo city, the prices of the community about Villa with plot area  $2000 \text{ m}^2$  and building area  $2250 \text{ m}^2$  around 45000000 pound, around  $22500 \text{ pound/m}^2$ . Which exceed what is supposed in other Gated Communities just like " Patio" in new Cairo with plot area  $600 \text{ m}^2$  and building area  $550 \text{ m}^2$  around 3250,000 pound around  $5400 \text{ pound/m}^2$ . Which exceed what is supposed for a similar area in un-Gated Communities, "Hai El yasmeen" with plot area  $600 \text{ m}^2$  and building area  $500 \text{ m}^2$  around 4000 pound/ $\text{m}^2$ . This explain how Gated Communities units cost are higher according to the provided goods facilities, amenities and green area, and how their housing units are much higher than any similar housing unit in un-gated community. This make Gated Communities are not affordable for all community residents.

The third: Gated Communities impact the housing market prices of its adjacent area. Gated Communities tend to impact the property values of the surrounding area that increase housing value and restrict the affordability of its adjacent area to a higher class residents. A clear example in Arabel, where the cost of housing unit in adjacent area around  $5500 \text{ pound/m}^2$ , which exceed what is supposed for a similar housing unit located in a large distance from Arabela, "Hai El yasmeen" around  $4000 \text{ pound/m}^2$ .

Gated Communities, cause social exclusion for the poor and low income classes from the Greater Cairo region' (GCR) new towns. This exclusion through housing in turn has contributed inability to accommodate more than 9% of its anticipated interim population targets at 2008 (Bayomi, 2009).



Due to Gated Communities the immigration to new communities become the first choice for the rich, where they can found and attractive life for them, and the immigration for low income people become restricted, which impact the overall process of urban development for all the community.

The matter that explain why the region of Greater Cairo only includes a limited number of middle-class families. In 2003 alone, these companies put some 60,000 housing units on the market, villas and apartments of standing. Where will all these rich families come from?. It has become obvious that the number of luxurious dwellings in these Gated Communities is exceeding the actual demand by far which has recently resulted in stagnating and even declining prices (Denis, 2006). Gated Communities are unaffordable for low class groups, they are become disabled to access to a housing market that make them excluded from housing. So Gated Communities exclude the poor from the city.



Source: Ministry of H.U.U.D, 1999 AND NUCA, 1986, 1995, 1999, 2005

Fig (3): the ultimate allocated residential area for each socio-economic class by hectares by 2007

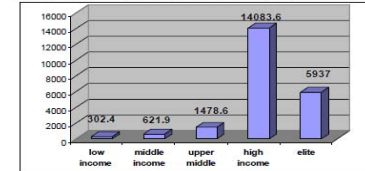


Fig. (10): the ultimate allocated residential area for each socio-economic class (Bayomi, 2009).

Accordingly, if we plan to use the Gated Communities to solve the population growth, and redistribute the demographic density and to minimize the inhabitant concentration in big cities, they would fail before beginning (Toman, 2005). That threatened the aimed plans for new towns urban development. Accordingly, Gated Communities do not meet the diverse residential requirements of Egyptian people.

## 7. CONCLUSION

This paper introduce some evaluation indicators to facilitate the examination of the impact of gated communities on urban development. These indicators reflect the underpinning socio-spatial impacts of gated communities on spatial and social fabric of our cities. These indicators are derived from two evaluation references, the first theories of successful spatial fabric, social fabric, and public life; and the second from local environmental, social, economic unique circumstances of GCR.

The paper reveals that Gated Communities have no design reference in theories of successful spatial fabric, social fabric, and city public life. Also the research revealed that Gated Communities are not suitable for development in a unique context like Egypt, they are not compatible with environmental, social, and economic context. Gated Communities socio-spatial features have a deep impact on spatial and social fabric of our cities, accordingly they have a deep negative impacts on urban development. Gated Communities appeared in two distinctive ways. The first in their impact on micro scale that reflects good urban form theories in their aim to achieve sustainability, livability, healthy community, as a way

for curing the public provision of goods, and the contemporary problems of sense of identity and community in our cities. The second in their impact on adjacent community.

There is a need for revision of using these patterns, and a need for design regulation tools to control their growth. Municipality should put strict urban legislation that take in consideration the impacts of gated communities on the achieved development for all community, rather to change all the time in order to meet private sector interests, benefiting a small group of people with detriment of the majority of the population and affecting public actions.

## 8. REFERENCES

- Alexander, C. (1965) "A City Is Not A Tree", Architectural Forum, Vol 122, No 1, April 1965, pp 58-62.
- Bayoumi, W.N.A. (2009) The Tale of the Unsettled New Cairo City-Egypt: A Review for the Implications of the Adopted Privatization and Laissez- Fair Policies on Excluding the Poor from its Housing Market, Young Academics Network Vienna.
- Berube, A. (2005) "Mixed communities in England: A US perspective on evidence and policy prospects" Joseph Rowntree Foundation.
- Berube, A. (2005) "Mixed communities in England: A US perspective on evidence and policy prospects" Joseph Rowntree Foundation.
- Blandy, S., Lister, D., Atkinson, R. and Flint, J. (2004) Gated communities in England Final report of the Gated Communities in England 'New Horizons' Project.
- Calthorpe, P. (1993) "The Next American Metropolis": Ecology, community and the American dream. Princeton Architectural Press: New York, USA.
- Calthorpe, P. (2003), "The Regional City", time saver - standards - for urban design, p. 1.5-1
- El-Zamly, H.A. (1994) Arid Zones: A New Trend in Planning Education, Cairo University Cairo-Egypt.
- El-Zamly, H.A. (1999) Arid Zones: A New Trend in Planning Education, 2nd International Symposium, Planning Education in the 21st Century: Past Experiences and Future Responses Faculty of Urban and Regional Planning- Cairo University Cairo-Egypt.
- Ghonimi I., Alzamly H., Khairy M. and Soliman M., 2010, "Against the great divide between theory and practice: Gated Communities versus urban livability", Corp.
- Ghonimi I., Alzamly H., Khairy M. and Soliman M., 2010, "Understanding and formulating gated communities inside Greater Cairo new towns urban fabric", 46th ISOCARP Congress, 19-23 September 2010, Nairobi, Kenya.
- Jacobs, J. (1961), The Death and Life of Great American Cities, New York: Vintage Books, 1961.
- Landman, K. (2004) "Gated communities in South Africa: Comparison of four case studies in
- Kuppinger, P. & College, M. (2004) 'Exclusive Greenery: new gated communities in Cairo', City & Society, vol. 16, no. 2, pp. 35-62.
- Lynch, Kevin. 1981. A theory of good city form. Cambridge: MIT Press.
- Minette, J. (1975) "As the City is not a Tree... it should not be designed as a System", planning outlook new series, volume sixteen.
- Salingarous (2003) "Connecting the Fractal City" In: 5th Biennial of towns and town planners in Europe, Barcelona, Spain.
- Sennett, R. (1977), " The fall of public man", Cambridge: Cambridge University Press, 1977.