

TRADITIONAL ARCHITECTURE AND GENTRIFICATION IN KUMASI REVISITED

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Abstract

The crave for property and land for commercial as well as civic purposes has resulted in gentrification of old traditional buildings and public open spaces in the Central Business District (CBD) of Kumasi. This has been seen by many as an enhancement of the urban environment. The paper presents a follow-up study of traditional architecture and gentrification processes conducted along the Odum Precinct, Adum- Kumasi in 2005. The aim of the study is to access the impact of gentrification on the traditional architecture of the CBD of Kumasi. This study adopts qualitative methods to revisit and explore gentrification at the Odum Precinct and some principal streets of CBD of Kumasi. The study in 2005 revealed amongst others that the quest for local inhabitants to acquire and retain affordable housing in the CBD was threatened by the increase in rental prices and property value thereby increasing the plight of the low income earners in the CBD. The study revealed that a large number of the local inhabitants who happened to fall in the low income group were displaced to peri-urban areas of Kumasi. Again it was found that the gentrification processes involved complete demolishing of the traditional buildings rather than refurbishing or remodeling them and highlighted on the gentrified Kumasihene's Palace.

Keywords: *Traditional Architecture; Gentrification; Central Business District; Peri-Urban; Kumasi.*

1.0 INTRODUCTION

In 2005, Adarkwa and Oppong investigated into gentrification, use conversion and traditional architecture in Kumasi's Central Business District, by using the Odum precinct as a case study. The study revealed that desire for high income returns moved residents to rent out their properties to private investors who would mostly renovate, refurbish and remodel them for commercial purposes with eventual displacement of residents. According to Adarkwa and Oppong (2005), gentrification may not be occurring but at a very fast pace in Ghana; however, it is still occurring in many settlements in pattern which has not yet been studied extensively to give a clear understanding of its form and dynamics. Most buildings affected by the process of gentrification were traditional courtyard houses basically of Odum in the Central Business

District of Kumasi. These existing traditional courtyard houses which exemplified the rich Ashanti culture and history appeared to be fading away by the gentrification practice. There is therefore a clear loss of traditional building identity in respect of their form and function in the Odum precinct. The main reasons for gentrification according to residents as reported by Adarkwa and Oppong (2005) were for commercial, aesthetic, and restoration although the study found out that commercial (economic) reason dominated.

There has always been the necessity to answer numerous questions pertaining to cultural values, history and housing, especially in design and construction of buildings. Hackworth and Smith (2001), examined the process of State involvement in gentrification as a means to generate revenue. Smith (2006) asserts that gentrification and urban redevelopment are the structure of the capitalist mode of production and that it is a small part of a restructuring of urban space which is part of the wider economic restructuring necessitated by the present economic crisis. Vandergrift (2006), further claims that gentrification is synonymous with displacement.

1.1 Gentrification Recapitulated

Slater (2011) argues that "gentrification commonly occurs in urban areas where prior disinvestment in the urban infrastructure creates opportunities for profitable redevelopment, where the needs and concerns of business and policy elites are met at the expense of urban residents affected by work instability, unemployment, and stigmatization". Gentrification is a relatively current form of urban development that involves the social, economic, and cultural transformation of historically disinvested urban neighborhoods (Phillips et al. 2014). Gentrification, the means of neighborhood change that results in the replacement of lower income residents with higher income ones, has changed the character of hundreds of urban neighborhoods in America over the last 50 years (Kennedy and Leonard, 2001). According to Redfern (2003), gentrification is simply "a process of transition," implying an expected process, which presents an understanding that sets itself apart from the automatic criticism that often accompanies the word gentrification. Van Criekingen and Decroly (2003), also describe gentrification as a process sometimes labeled 'yuppification', the metamorphosis of deprived inner-city neighborhood into new remarkable residential and consumption areas brought up by a new class of highly skilled and highly paid residents, typically business service professionals living in small-sized, non-familial households- that results in displacement of the neighborhood initial population. As generically defined by Adarkwa and Oppong (2005), gentrification refers to a physical, social, economic or cultural phenomenon by which core city neighborhoods are converted into more affluent middle class communities through renovation, remodeling or refurbishment and which mostly result in rise of property value and the relocation of the poor.

From the foregoing, one theme running through the definitions of gentrification is displacement. As stated by Biro (2007), displacement occurs when households have to move involuntarily from an area. Wyly and Hammel (2004), Atkinson (2002) and Redfern (2003) are of the view that the positive effects of gentrification come at the expense of displaced citizens. The end results in medium or high city building, increase in purse of property owners, but leaving a boundary

between the low-income residents and the investors. In stabilizing decisions on gentrification, involvement of national leaders is crucial. One may ask: what has been the concern of government and community leaders on the issue of gentrification? Phillips et al. (2014), demonstrated with health impact research data and policy analysis contributed by the Alameda county public health department, on a claim that gentrification has been a nostrum for towns and cities with emphasis on government policies which led to gentrification and brought about inequitable development.

Phillips et al. (2014) explain gentrification as an option by the private sector through private development that target the needs of new, higher income residents over existing residents, make the individual movement of more well-off into older urban neighborhoods, the public sector paves the way. Biro (2007) concludes that a clear understanding of the positive and negative effects is important in order to justify or condemn gentrification. "Gentrification is a double-edged sword; it is often a productive by-product of revitalizing city neighborhoods, but it can impose great costs to certain individual families and businesses, often those least able to afford them" (Kennedy and Leonard, 2001). Guerreri et al. (2010) refer to the phenomenon where rich in-migrants push up rent prices causing displacement of poor residents as "endogenous gentrification". Even the economists who argue against gentrification admit that displacement is hard to measure (Biro, 2007). Uitermark et al. (2007) report the emergence of gentrification as a global urban strategy as clearly noticed in most Dutch cities and not the local government's measure to strengthen its tax base or developers pursuit of profit. According to Uitermark et al. (2007), gentrification is also not the housing demands of a new middle class and that state-led gentrification is an effort by a coalition of state actors and housing association at generating social order in disadvantaged neighbourhoods as practiced in the Netherlands. Gentrification is used to pacify tension and to reduce concentrations that pose a problem of authority. The movement of middle-income groups into low-income areas creates overwhelmingly negative effects, the most significant of which is the displacement of low in-come groups (Atkinson, 2002). Walks and Maaranen (2008) have reported a relationship between the timing of gentrification, changes in income structure and shifts in immigrant concentration and ethnic diversity in Toronto, Montreal and Vancouver from 1961 to 2001 with a conclusion that gentrification in these cities was followed by declining and displacement, rather than improving levels of social mix, ethnic diversity and immigrant concentration within affected neighbourhood. The foregoing arguments justify the assertion that: gentrification splits concerns amongst policy makers, researchers and commentators alike (Atkinson, 2002).

1.2 Gentrification and Displacement

The process of spiky re-urbanization is the driving force behind gentrification and displacement which in effect, are indication of the scarcity of quality urbanism (Florida, 2015). Biro (2007), explains that the end results of gentrification may increase physical properties and amenities, improves the quality of schools, and lowers crime rates. Low income residents may find opportunities to bridge the income gap while achieving self-improvement and greater standard of

living. Apart from high income return to investors and property owners, the traditional architecture and historical significance are highly affected. As reported by Kennedy and Leonard (2001), longtime neighbors can take very different positions on gentrification issues. This could be affirmed by members of a community who would stand firm on their rights against any gentrification above their expectations. According to Lang (1982), majority of the cost and benefits of gentrification should be made known to the stakeholders involved. Levy et al. (2006) indicate that the indigenous people finds it difficult to live in gentrified areas due to increase in rents. Growing urban inequality coupled with increase in demand for housing are some factors affecting increase in rents (Feldman, 2014). Furthermore, gentrification-related displacement become a hindrance when housing price increase putting a risk on lower-income households to push out or prevented from moving into certain geographic areas, and this along with restricted economic opportunities (Feldman, 2014). Displacement preventive strategies are influenced by a number of factors including intensity of the housing marketing, local political climate and local organization capacity. Displacement seem to be a critical component of gentrification, however a study conducted by Ingrid et al. (2011) show that the consequences of neighborhood change during gentrification do not appear to be as dire as many assume especially for the original residents. The next sections present the study area and data collection strategies / methods as well as data analysis and discussion. The last section presents conclusions and recommendations.

2.0 STUDY AREA AND DATA COLLECTION METHODS

As indicated earlier this is a follow up study of gentrification at the Odum precinct by Adarkwa and Oppong (2005). The study area (Odum Precinct) is located within the CBD of the Ashanti regional capital, Kumasi. The Odum Precinct is bordered by the Guggisberg road and Bogyiwa Street on the East, Prempeh II Street on the North, Stewart Avenue on the West and the State Transport Company (STC) on the South as shown in Figure 1.



Fig. 1 Aerial view of CBD of Kumasi with the study area (Odum) edged red.

Source: Adapted from Google Earth, 2016

This study used the mixed methodology. Surveys, interviews and photographs were used as strategies to obtain data from respondents in the study. Photographs of old buildings that have been gentrified brought reminiscence to the respondents who have lived in the study area since the early 2000s for useful information. A total of about 168 buildings were counted covering an estimated area of eight acres with about 93% redeveloped into commercial facilities. The remaining 7% are for residential purposes with relatively low population density of 40 persons per acre as compared to the 2005 study of 60 persons per acre.

The following landmarks were found at the study area:

- i. The Adumhene's Palace (maintained)
- ii. The Palace and Mausoleum of the Akyempemhene of Odum (part gentrified)
- iii. The Ramseyer Presbyterian Church (maintained)

From the survey, the Odumhene's Palace and the Okyeamehene's Palace have been well maintained with part of the Akyempemhene's Palace partly gentrified. The Kumasihene's palace has been gentrified with a seven-storey building for commercial purposes. In order to make an accurate comparison with the previous study done in 2005, buildings in the study area were categorized into four types from which samples of each building type were selected for the survey as shown in Table 2.

3.0 DATA ANALYSIS AND DISCUSSION

Thirteen households and seventy-one residents were interviewed respectively as compared to the previous study of 24 households and 120 residents by (Adarkwa and Oppong, 2005). Table 1

shows the classification of building types for the study which include gentrified buildings (under construction), gentrified buildings (completed), buildings to be gentrified and buildings not to be gentrified with figures showing the trend of gentrification for the past decade.

Table 1: Classification of buildings

Types of Buildings	Number of Buildings		Percentage (%)		Number of Household Interviewed		Percentage (%)		Number of Residents Interviewed		Percentage (%)	
	2005	2016	2005	2016	2005	2016	2005	2016	2005	2016	2005	2016
Gentrified buildings (under construction)	20	13	19	7.76	3	3	12.5	23.1	18	4	15	5.6
Gentrified Buildings (completed)	17	138	16.2	82.1	6	4	25	30.8	29	27	24.2	38
Buildings to be Gentrified	66	12	62.9	7.16	14	4	58.3	30.8	70	30	58.3	42.3
Buildings not to be Gentrified	2	5	1.9	2.98	1	2	4.2	15.3	3	10	2.5	14.1
Total	105	168	100	100	24	13	100	100	120	71	100	100

Source: Adarkwa and Oppong (2005) and Field survey, February, 2016

From Table 1, 82.1% buildings have been gentrified. This compared with previous study of 16.2 percent shows an increment of about 67 percent. Phe and Wakely (2000) are of the view that gentrification is not basically designed to cause displacement rather, there is only a change of preference when high income residents move in and low income residents move out in the neighborhood. Buildings under gentrification were also counted to be 13 in number with a percentage of 7.74 while about 12 have not been gentrified. The respondents claim that land value at the Odum precinct is at a mean rate of about GHc350, 000.00 which is relatively very high in Ghana. This has led to the development of storey buildings beyond four-storey with elevators for commercial purposes which have eventually reduced the population density. This is confirmed by the total households in gentrified buildings (53.9%) and the total residents interviewed in gentrified buildings (43.63%) which is low with regards to the total buildings gentrified (89.84%). Displacement is apparently reducing the households while the buildings increase especially with the number of storey for commercial purposes.

3.1 Buildings under gentrification

Adarkwa and Oppong (2005) recorded about 20 buildings which were under gentrification as compared with 13 in this survey. It indicates that construction continues due to gentrification take place frequently and these buildings are completed within three years. About 23.08%

households of buildings undergoing gentrification (Figures 3 and 4) were interviewed. It was revealed that the gentrified buildings under construction (Figure 4) started two years ago while those in Figure 3 started earlier.



Fig. 3. Two multi structures under gentrification opposite the Akyampemhene's palace along the Guggisberg road Source: Authors, 2016



Fig.4. some buildings under gentrification along the Guggisberg road Source: Authors, 2016

3.2 Buildings (candidates) not yet gentrified

These are old and traditional buildings which have stood the test of time. They are candidates for gentrification as the respondents indicated in Figure 5 that, “the Accra house” and “Edward Nassar” buildings are on the verge of being gentrified. Figure 6 clearly shows an old residential building with a new design on a bill board ready to be gentrified. From the survey, nearly 10% of the buildings have not been gentrified. The 2005 study reported about 62.9% of buildings which were yet to be gentrified. A clear comparison indicates an additional gentrified building of about 52.9% in the last decade. There is still high possibility of the rest being gentrified considering their location and future income returns for the owners.



Fig. 5. The Accra house and Edward Nassar building not gentrified along Guggisberg road; Source: Authors, 2016



Fig. 6. A residential house along the Guggisberg road on a brink of gentrification showing the new design on a bill board; Source: Authors, 2016

3.3 Buildings not to be gentrified

It is significant to conserve and value our culture, tradition and history and architecture's contribution to culture cannot be over emphasised. In an interview with respondents, nearly 2.98

percent of old buildings were reported not to be gentrified. Typical example is the Ramseyer Presbyterian Church building within the precinct as shown in Figure 7.



Fig. 7. Ramseyer Presbyterian Church building not to be gentrified; Source: ramseyerpresby.com

This construction of this building begun in 1907 by the Basel missionaries led by Rev. Ramseyer. On completion of the chapel, it was named Ebenezer Presbyterian Church. However, after the death of Ramseyer on the 6th of August, 1914, a decision was made to immortalise his memory during the moderatorship of Rev. C.E. Martinson. It is characterized by post and beam reinforced concrete with burnt brick wall, mezzanine floor and wooden trusses. The interior wall is well finished with polished wooden panels which controls sound reflections. This unique pre-colonial architectural style with extensive use of traditional materials shall not be gentrified as confirmed by stewards of the church in an interview.

3.4 Gentrified Buildings



Fig. 8. The Kumasihene's Palace Source: Adarkwa and Oppong, (2005)



Fig. 9. Kumasihene's Palace gentrified Source: Authors, 2016

A recommendation was made by Adarkwa and Oppong (2005) to conserve the Kumasihene's Palace (Figure 8) to help serve as a land mark within the city. However, Figure 9 captured during the field survey shows a gentrified building contrary to the earlier recommendation.

3.5 Reasons for Gentrification at Odum Precinct

From the survey, 76.2% of the buildings had been gentrified for economic reason. Respondents thought it wise to take advantage of the high land value and therefore agree with commercial

developers to take over. Another reason for gentrification is the lack of maintenance of the traditional buildings by owners due to litigation among extended family members over ownership rights and responsibilities.

Table 2. Respondents' reasons for gentrification

Reasons for Gentrification	Number of Buildings		Percentage (%)	
	2005	2016	2005	2016
Purpose Built (Commercial)	1	3	1	1.79
Economic Reasons	80	141	76.2	83.93
Restoration / Maintenance	9	11	8.6	6.55
Aesthetic / Attraction	15	13	14.2	7.73
Total	105	168	100	100

Source: Adarkwa and Oppong (2005) and Field survey, February, 2016

Increase in family size according to respondents called for maintenance and restoration which increased from about 9 residences (8.6%) in 2005 to about 11 residences (6.55%) in 2016. Although there is a reduction in family sizes, there is an increase in number of buildings due to the higher increase in economic preference. This, therefore, shows a level of desire for maintenance and restoration by some of the buildings such as the Adumhene and Akyampemhene's Palaces as shown in Figures 10 & 11. From Table 2, about 1.79 % of the buildings are built for the purpose of commercialization as compared to previous study. There is an increase in the desire for gentrification with economic reasons being the majority (76.2%) in 2005 as compared to (83.93%) in 2016. This shows an increase of 7.73% over a decade.



Fig. 10. Adumhene's Palace being conserved
Source: Authors, 2016



Fig. 11. Akyampemhene's Palace being conserved
Source: Authors, 2016

3.6 Sources of Funds for Gentrification

About 53% of gentrification at the Odum precinct is financed by private developers and this confirms the study conducted by Adarkwa and Oppong (2005) which indicated majority 41.6% funds by private developers (Table 3). This is followed by funds from corporate bodies (company initiative) forming about 15.38% as against 8.3% in 2005. Funding from family and landlord initiatives which used to form about 16.7% each in the past decade has reduced to

7.69% in 2016. This implies that private and corporate participation is gradually taken over building finance in the CBD of Kumasi.

Table 3. Sources of funds for gentrification

Source of Funding	Number of Buildings		Percentage (%)	
	2005	2016	2005	2016
Private Developer	10	7	41.6	53.86
Family Initiative	4	1	16.7	7.69
Corporate Initiative	2	2	8.3	15.30
Landlord Initiative	4	1	16.7	7.69
Neutral (prefer private developer)	4	2	16.7	15.38
Total	24	13	100	100

Source: Adarkwa and Opong (2005) and Field survey, February, 2016

3.7 Displaced and Relocation

The survey revealed unavailability of accommodation for residents displaced especially the low income. The low income group form a majority 61.97% of the displaced as against 70% in 2005. However the family members displaced has increased from 10% in 2005 to 21.13% in 2016 which indicates that the landlords (high income) currently vacate the land entirely for the new development either through outright sale or build-operate-transfer (BOT) system. The middle income tenants are the least displaced with 16.9% as they are able to rent the few apartments available as shown in Table 4.

Table 4. Classification of Displaced using Income Groupings

Classification of Displaced People	Number of People		Percentage (%)	
	2005	2016	2005	2016
Low Income (Tenants)	84	44	70	61.97
Middle Income (Tenants)	24	12	20	16.9
High Income (Owners)	12	15	10	21.13
Total	120	71	100	100

Source: Adarkwa and Opong (2005) and Field survey, February, 2016

It was revealed through interview with respondents that the displaced relocate to towns in and around the Kumasi metropolis such as Kwadaso, Santasi, Mamponteng, Ayeduase, Kwamo, Ejisu among others which lead to sprawl of the city with its accompanied challenges.

3.8 Effects of Gentrification at the Odum Precinct

Residents showed great concern about the security of the precinct. About 80% of the gentrified buildings are for commercial purposes. Workers come during the day time and leave for their various homes outside the CBD during the night. Previously, when more residents used to live within the CBD, some kind of security was prevalent in the area. Currently, with this current

situation where the place is mostly quiet, it is unsafe to walk alone the major streets of the precinct, especially at night. Also, the traditional and old buildings being pulled down destroy the historic architecture of the precinct. The Aseda House, as indicated in the Adarkwa and Oppong (2005) study, was constructed with extensive glass façades. Some recently gentrified buildings including "The Glory Plaza" and "Dufie Towers" indicate a new trend of cladding material (glass and alucoboard) for the façades as shown in Figures 12 and 13.



Fig. 12 Extensive use of glass and alucoboard in "The Glory Plaza" Source: Authors, 2016



Fig. 12 Extensive use of glass and alucoboard in "Dufie Towers" Source: Authors, 2016

Adarkwa and Oppong (2005) recommended a proper selection of building materials which are environmentally friendly and welcoming for human settlement. However, this recommendation seems not to have been considered by property developers as they continue to engender multi-storey buildings with glass in the Odum precinct due to increase in land value and economic activities.

4.0 CONCLUSION AND RECOMMENDATIONS

In this paper, we present a direct follow up of gentrification in the Odum precinct in the CBD of Kumasi which was carried out by Adarkwa and Oppong in 2005. This paper concludes that about 90% of both the old residential and traditional buildings found in 2005 are no more existing and those which were susceptible to gentrification as recorded in 2005 have been gentrified notably the Kumasihene's Palace which could have been conserved as a landmark building for generations. The skyline continues to change predicted by Adarkwa and Oppong (2005) and almost all traditional building materials (Compressed earth blocks with cement- sand rendering and wood) have given way to the use of modern materials some of which are incongruous to tropical condition but may be aesthetically pleasant such as glass curtain walls, alucoboard and tile cladding.

This paper recommends the institution of a policy frame work to mark some traditional buildings as landmarks within the city. This paper advocates a concerted effort by city authorities and all stakeholders towards gentrification since its positive effects of economics and aesthetics cannot be over emphasised.

REFERENCES

- Adarkwa, K. K., and Oppong, R. A. (2005). Gentrification, Use and Conversion and Traditional Architecture in Kumasi's Central Business District- Case Study of Odum Precinct, *Journal of science and technology*, vol. 25 no. 2.
- Atkinson, R. (2002). Does Gentrification Help or Harm Urban Neighbourhoods? An Assessment of the Evidence-Base in the Context of the New Urban Agenda. ESRC Centre for Neighbourhood Research, CNR Paper 5. Available at: http://www.urbancenter.utoronto.ca/pdfs/curp/CNR_Getrification-Help-or-.pdf- Accessed on 5th February, 2016.
- Biro, J. (2007). Gentrification: Deliberate Displacement, or Natural Social Movement? *The Park Place Economist*: Vol. 15 . Available at: <http://digitalcommons.iwu.edu/parkplace/vol15/iss1/12>. Accessed on 1st April, 2016.
- Feldman J. (2014). Gentrification, Urban Displacement And Affordable Housing: Overview And Research Roundup, <http://journalistsresource.org/studies/economics/realestate/gentrification-urbandisplacementaffordablehousingoverviewresearchroundup#sthash.3hvqHp4Y.dpuf>. Accessed on 8th April, 2016.
- Florida, R. (2015). The Complicated Link between Gentrification and Displacement, <http://www.citylab.com/housing/2015/09/the-complicated-link-between-gentrification-and-displacement/404161/>. Accessed on 9th April, 2016.
- Guerreri, V., Hartley, D. and Hurst, E. (2010). Endogenous Gentrification and Housing Price Dynamics. NBER Working Paper No. 16237, July 2010
- Hackworth, J. and Smith, N. (2001). The Changing State Of Gentrification, *Tijdschrift voor Economische en Sociale Geografie*, Vol. 92, No. 4, pp. 464–477. <http://neighbourhoodchange.ca/wp-content/uploads/2011/05/Hackworth-Smith-2001-Changing-State-of-Gentrification.pdf>. Accessed on 10th April, 2016
- Ingrid, G. E. ,O'Regan, Katherine M. (2011). How Low-income Neighborhoods Change: Entry, Exit and Enhancement. *Regional Science and Urban Economics*, Vol. 41 Issue 2.
- Kennedy, M. and Leonard, P. (2001). Dealing with Neighborhood Change: A Primer on gentrification and Policy Choices, A Discussion Paper Prepared for The Brookings Institute Center on Urban and Metropolitan Policy, USA. Available at: <http://www.brookings.edu/~media/research/files/reports/2001/4/metropolitanpolicy/gentrification.pdf> Accessed on 5th February, 2016.
- Lang, M. E. (1982). *Gentrification amid urban decline: Strategies for Americas Older Cities*, Cambridge: Ballinger.
- Levy, D. K., Corney, J., Padilla S. (2006). In the Face of Gentrification. Case Studies of Local Efforts to Mitigate Displacement. The Urban Institute, Metropolitan Housing and Communities Policies Center, 2100M Stree, NW, Washington DC 20037.
- Phe, H. H. and Wakely, P. (2000). Status, Quality and the Other Trade-off: Towards a New Theory of Urban Residential Location. *Urban Studies*, 37 (1), pp. 7-35.
- Phillips, D., Flores, L. and, Henderson, J. (2014). Developing without displacement. Resisting Gentrification in the Bay Area. A multi-racial, grassroots organization building community leadership to achieve justice for low income San Francisco and Oakland residents), USA. Available at: <http://www.acphd.org/media/343952/cjic2014.pdf> -Accessed on 6th February, 2016.
- Redfern, P. A. (2003). What Makes Gentrification 'Gentrification'? *Urban Studies*, 40(12).

- Slater, T., (2011). Gentrification of the City. The New Blackwell Companion to the City. Edited by Gary Bridge and Sophie Watson, Blackwell Publishing Ltd
- Smith, N. (2006). Gentrification and Uneven Development, *Economic Geography*, 58 (2), pp. 139-155. <http://rohcavamaintenant.free.fr/usb%20key%20fahriye/gentrification/neil%20smithgentrification%20and%20uneven%20development.pdf>. Accessed on 7th February, 2016.
- Uitermark, J., Duyvendak, J. W. and Kleinhans, R. (2007). Gentrification as a government strategy: social control and social cohesion in Hoohvliet, Rotterdam. *Environment and Planning A* 2007, Vol. 39, pages 125-141.
- Van Criekingen, M. and Decroly, J. (2003). Revisiting the Diversity of Gentrification Neighborhood Renewal Process in Brussels and Montreal. *Urban Studies*, 40(12), 2451-2468.
- Vandergrift, J. (2006). Gentrification and Displacement. "Urban Altruism". Calvin College. Available at: <http://www.calvin.edu/~jks4/city/litrevs/gentrification.pdf>- Accessed on 6th February, 2016.
- Walks, A., Maaranen, R. (2008). The Timing, Patterning & Forms of Gentrification & Neighbourhood Upgrading in Montreal, Toronto, & Vancouver, 1961 to 2001. Research Paper 211, Centre for Urban and Community Studies Cities Centre, University of Toronto.
- Wyly, E. and Hammel, D. J. (2004). Gentrification, Segregation and Discrimination in the American Urban Systems. *Environment and Planning*. 36 (7), pp. 1215-124.