# History of Commercial Development in Dhaka and the Spatial Significance of Spontaneous Retail Growth

## Dr. Nasreen Hossain

*Associate Professor Department of Architecture Bangladesh University of Engineering and Technology, Dhaka*

***Abstract:*** *This paper attempts to explore the evolutionary changes in the retail growth in Dhaka City. Within different stages of historical growth, how the socio-economic forces and the changing spatial configuration of the city shaped the spatial structure of retail growth remains the main investigation of this paper. Based on the reviewed literature of Dhaka's Historical growth and a computer based analysis 'Space Syntax', the key factors have been discussed in this paper are; (i) a brief historical overview of the retail growth process in Dhaka, (ii) the changing socio-economic and political conditions influencing the spatialization of this growth process and pattern and (iii) an understanding of the global spatial structure of the city and the spatial significance of the changing retail areas in context through 'Space Syntax' computer based technique. The study identifies the influence of socio-economic and spatial variables on the changing retail environment in Dhaka and the spatial outcome of the process. The findings suggest that, the spatial aspects of accessible location are the prime concerns in changing and shaping the urban retail land uses in Dhaka. This paper leads to a new level of understanding of the way that urban retail land uses and their unplanned spatial distribution at city scale interact as social and spatial mechanisms in the global context of the city.*
***Key Words:*** *Historical Evolution, Dhaka City, Spontaneous Retail Growth, Space Syntax, Integration core, Global Urban System, Socio-Spatial,*

## I. Introduction

Cities are products of the changing circumstances, culture, societies, politics and economy of their origin and growth. The commercial activities in a city are as old as the city. The explanation of urban spatial forms and their social meaning requires an investigation of the continuing forces that shape cities within the process of urban evolution (Mumford, 1970). Retail plays a key role in urbanisation in three regards: firstly, as a high value land use it is a driver in the economics of urban land prices, and so of the spatialization of other land uses; secondly, it acts as a major attractor land use and affects patterns of urban activity and space use; and thirdly, specifically in developing nations, retailing often offers the first form of employment for rural migrants arriving in the city. Its spatialization is thus critical to the evolution of socio-economic structures during the process of rapid urban growth. These, to the western observer often symbolise a chaotic spatial organisation of urban retail growth in the urban street grid. There remains quite a lot of prejudice attached to these developments; as Mitchell has stated that the apparent complexity of the social phenomena frequently bespeaks a lack of theoretical concepts available for their analysis (Mitchell, 1966). But, in reality, the apparent chaos of the urban market place in developing countries is more apparent than real (Paddison, Findlay and Dawson, 1990). This paper stems from a belief that there is a gap between perception and reality in this debate due to a lack of empirical studies into the nature of their spatial patterns and social relations. The apparent complexity in these dynamics draws attention to the need for a systematic investigation of the spatial and locational distribution of retail clusters in different stages of historical growth of Dhaka city. The following sections reviews the evolutionary changes in the retail growth in Dhaka and the socio-economic process shaping these spatial changes within the historical growth process of the city.

### 1.1 Urbanisation Process and Evolution of Commercial Growth in Dhaka

The history of Dhaka as a town dates from at least four hundred years ago and in different periods of history the city expanded due to significant developments in trade and commerce. Thus the pattern of urban commercial development in Dhaka can be best understood by taking a brief overview of the stages through which the city developed historically. Dhaka faced six major phases of socio-economic and political change during its development. The present discussion will mainly concentrate on the periods between 1947 to the present time. These represent an extensive growth of commercial development in Dhaka with the process of urbanisation. The following sections attempted to explain these stages of urban commercial development in Dhaka through different historical stages of growth (Figure 1,2,3 & 4).

**Pre-Mughal Hindu Period (Before 1608)**

Before the Mughals came to power, Dhaka was a small Hindu trading centre (Ahsan, 1991) lying between the Dhulai Khal and the Buriganga river. The old city consisted of a few Bazaars including Lakshmi Bazaar, Bangla Bazaar, Shankari Bazaar, Tanti Bazar etc. along with a few localities of craftsman and businessman such as Patua-toli, Kumar-toli etc. (Dani, 1956). The Market centre is thought to have been near the Bangla Bazaar. According to Dani, the main business area in this period was in Sadar Ghat and Victoria Park. In the later part of the 15th century, under the twelve Bhuiyans, the growth of the Munawar Khans Bazaar near the Nawabpur Road suggests that there was an extension of commercial activity into this area (Ahsan, 1991). The Bazaars developed spontaneously in a linear pattern facing the streets along the residential localities locally known as mohollas. Like most of the other Indian cities Dhaka had narrow irregular streets and the bazaars developed along them. In fact, each maholla or locality was developed around a bazaar or market place, hence Dhaka was once called a city of " Bahanna Bazaar-o-Tippanna Goli" (52 markets and 53 lanes).

**Mughal Period (1608 - 1764)**

During the Mughal period, the needs of administration and defence coupled with flourishing commercial activities led to Dhaka's growth. From a suburban town Dhaka became a metropolis (Khan and Atiquallah, 1965). The administrative centre was located in the old fort area (present central jail). This served as the nerve centre of the city, and the adjacent market places and the surrounding residential mahollas follow the well-established pattern with winding roads. Close to the fort was the present Chawk (market square) Bazaar area, developed as the principal market centre (Chowdhury and Faruqui, 1991) Bakshi Bazaar and Dewan Bazaar served only the higher-class people. The Chawk Bazaar located beside the river Buriganga provided the convenience of water transport and being rich in merchandise it served both the upper class and lower class residential areas (Islam, 1996). Owing to its commercial importance for a great variety of commodities like the famous 'muslin' cloth, pottery, arts and crafts products, Dhaka carried on a prosperous business with Southeast Asia and Europe (Hossain, 1995).

**The Rule of the East India Company (1764 - 1857)**

With the fall of the Mughal Empire in 1707, Dhaka experienced a sixty-year period of disorder, unrest and political instability. The Capital of Bengal was shifted to Calcutta in 1757. The administrative change caused a decline in trade and commerce even though Dhaka continued as an important eastern centre. The invention of the spinning machine in England further reduced Dhaka's commercial activities. In 1764 the political domination and the administrative control of Dhaka were taken over by an English trading company, the East India Company. Most of the trade and commercial activities were carried out in the enclosure of Chawk during this period. There was a broad road round the open Chawk surrounded by shops.

**British Colonisation (1858 - 1947)**

Under the British rule, Dhaka went through vast physical changes (with no definite plan) instead of expanding the old Mughal town. This transformed medieval Dhaka into a modern city (Ahmed, 1986). The state Railway was opened and a rail line was laid through the city to connect it with areas outside Dhaka. The building of a new town started beyond the railroad in Ramna (Ahsan, 1991). However the historic core consisted the lower class residential quarters whereas the high-class residential areas were settled near Victoria Park (Islam, 1996). Unlike the irregular road pattern of the old city, a grid pattern of roads was introduced in the newly planned residential areas in Gandaria and Wari (Chowdhury & Faruqui, 1991). A significant event for the city of Dhaka was the foundation of Dhaka University in the vicinity of Ramna in 1921. The Chawk Bazaar gradually changed its identity from a retail centre to a wholesale centre. New retail activities were extended towards the north along Nawabpur Road and Islampur Road to serve the British bureaucrats (Ahsan, 1991). In 1905, Bengal was divided and Dhaka was chosen as the capital of the eastern part of Bengal (Islam, 1991).

During the Mughal period, the needs of administration and defence coupled with flourishing commercial activities led to Dhaka's growth. From a suburban town Dhaka became a metropolis (Khan and Atiquallah, 1965). The administrative centre was located in the old fort area (present central jail). This served as the nerve centre of the city, and the adjacent market places and the surrounding residential mahollas follow the well-established pattern with winding roads. Close to the fort was the present Chawk Bazaar area, developed as the principal market centre (Chowdhury and Faruqui, 1991). Bakshi Bazaar and Dewan Bazaar served only the higher-class people. The Chawk Bazaar located beside the river Buriganga provided the convenience of water transport and being rich in merchandise it served both the upper class and lower class residential areas (Islam, 1996). Owing to its commercial importance for a great variety of commodities like the famous 'muslin' cloth, pottery, arts and crafts products, Dhaka carried on a prosperous business with Southeast Asia and Europe (Hossain, 1995).
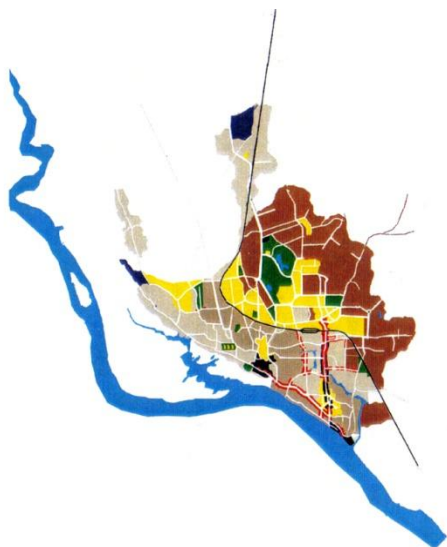
Retail Land Use

Figure 1: Land use map of Dhaka City – 1952          Figure 2: Land use map of Dhaka City – 1962
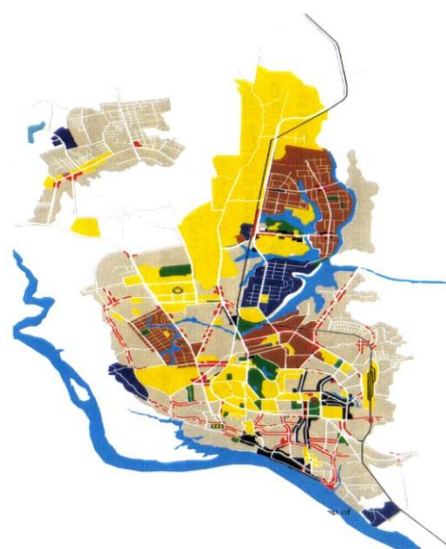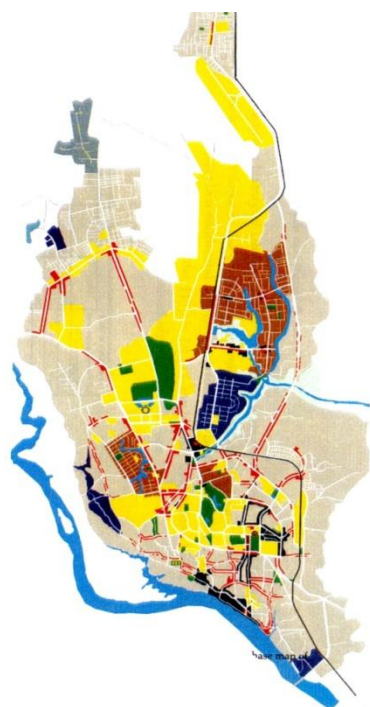          (Source: Hossain 2001)                                      (Source: Hossain 2001)

**Pakistan Period (1947-1971)**

        In 1947 Dhaka became the provincial capital of East Pakistan after the British Colony achieved its independence. The influx of migrants from India following partition caused a 103% increase in population. Dhaka's area increased from 6 sq. miles in 1947 to 25 sq. miles in 1962. Thus, rapid expansion of the city began in 1947 with the increase of population (Haq, 1991). The number of industries grew from six in 1957 to a hundred in 1962 (Ahsan, 1966). Administrative, commercial and residential need increased with the increasing urban growth, which resulted in a massive growth of the city (Nilufar, 1997). The city expanded mainly towards the north. Dhanmandi (paddy fields) lying towards the northwest fringe of Dhaka were turned into a residential area. Mirpur road formed an axis and highlands on either side were occupied up to Mohammadpur and Mirpur. The highland on the north-east and north west of Ramna was occupied for residential use. However, all these developments happened within a spontaneous process, without any formal planning. Then in 1956 the government formed Dhaka Improvement Trust (DIT). It started planning in a piecemeal manner: the industrial district in Tejgaon, the first shopping centre - Dhaka New Market in Azimpur, staff housing in Motijheel, high class residential area in Dhanmandi. However, all these developments created an unmanageable situation and so a Master Plan was eventually prepared by consultants in 1959[i] on behalf of DIT. The DIT developed several high-class residential towns such as Gulshan (1964), Banani (1964) and Uttara (1965). A number of new shopping centres were also constructed to serve these new residential areas such as; Baitul Mukarram and Stadium shopping arcade in Gulistan business area, Gulshan North and Gulshan South shopping centres. In the mid 60's the railway line was shifted and the track was transformed into a wide road connecting the new extended and the old parts of Dhaka. In fact, the expansion of the bulk of population during Pakistan period created a large group of middle class and upper class population enhancing the importance of the business centre. The traditional business area in Old Dhaka proved to be inadequate to cater for Dhaka's increasing commercial needs. Thus from the traditional nucleus, the position of the  commercial area was pulled in the direction of the newly planned modern core of the CBD in Motijheel-Gulistan area. However, the conversion of the original Eden Girls College into the provincial secretariat Pakistan blocked the expansion of the Gulistan business area (Ahsan, 1991). The racecourse and Ramna Park adde to the blockage. On the contrary the development of New Market enhanced the growing commercial importance in and around Azimpur area. The development of New Market also influenced the growth of private retail business centres  in this area. Gausia market started in 1965, is the first among them. A new link road was created from the immediate west of the Ramna Park to Mirpur road to connect the Southeast and northwest parts of the city. Thus retail trade areas were projected towards the north western parts of the city through this road. It was named New Elephant road as it bisected the Old Elephant Road at the middle. Moreover being located in close proximity to New Market, the western part became the site of rapid and spontaneous growth of shops. However, the Chawk, Patuatoli and Sadar Ghat remained the traditional business centre, serving only the old part of the city (Ahsan, 1991).

Retail Land Use
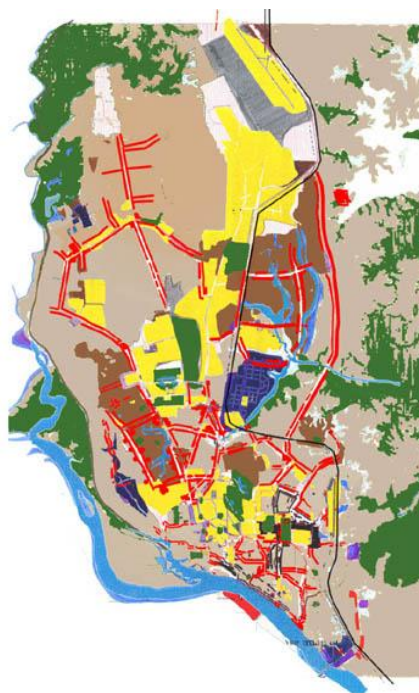Figure 3: Land use map of Dhaka City – 1972          Figure 4: Land use map of Dhaka City – 1995
(Source: Hossain 2001)                                        (Source: Hossain 2001)

**Bangladesh Period (1971 - 2014)**

In 1971, following the war of liberation Dhaka became the capital of a new nation, Bangladesh. The city emerged as the most important and influential centre of all national activities including trade and commerce. Once Dhaka was called the 'City of Mosques' and also the 'City of Gardens' (Siddiqui, Qadir, Alamgir & Huq,1990). The recent trend of haphazard growth of innumerable retail centres has transformed Dhaka into a 'City of Shops' (Hossain, 2001). With the rise of population pressure the highlands towards the North came to be occupied. No serious effort has been undertaken to develop a planned city (Nilufar, 1997). A detailed study on urban planning was undertaken in 1981 but it was not manifested at all. However, a new Structure Plan has been (1992-1997) formulated for the capital city (Urban Area Plan 1995-2005), but it has yet to be implemented. Thus, Dhaka has grown according to socio-economic demand within a process of rapid urbanisation since independence as explained in the following sections.

**1.2    Socio Economic Factors influencing the growth of Retail areas in Dhaka**

Retail plays a key role in urbanisation in three regards: firstly, as a high value land use it is a driver in the economics of urban land prices, and so of the spatialization of other land uses; secondly, it acts as a major attractor of pedestrian and vehicular movement and so affects patterns of urban activity and space use; and thirdly, specifically in developing nations, retailing often offers the first form of employment for rural migrants arriving in the city. Its spatialisation is thus critical to the evolution of socio-economic structures during the process of rapid urban growth.

The Following fdiscussion would give a brief overview of the socio economic forces affecting the spatial growth of retail land use in Dhaka city.

**Changing Land Use Pattern**

The landscape of Dhaka city has gone through rapid alteration along with the economic and political change. With the growing upper and upper middle class residential areas, the retail trade areas also expanded towards the northern part of the city (Ahsan, 1991, Hossain, 2009). Although the major commercial buildings in the 1980's were still concentrated in the Motijheel area, the activities of CBD became defused (Ahsan, 1991). The land use map of 1972 (Figure: 3)  and 1995 (Figure : 4) shows that the administrative buildings and commercial areas have extended from the historic core to northwards. With this changing land use pattern, the shopping areas were dispersed from Gulistan (the planned business area) to a number of shopping streets as Gulistan became the centre for political functions (Ahsan,. 1991:). Thus, new business centres towards the north near the New Market area, Elephant Road, Mag Bazaar, Mouchak, Farmgate and Gulshan and Uttara started to

flourish being located close to the planned residential areas residential areas. The city's rapid and uncontrolled growth has been further emphasised by extensive rural to urban migration (Islam, 1996, Hossain, 2001). The government sector could not cope with the increasing demand of urban growth thus the private sector has responded. An extensive growth of shopping centres started to develop through private initiative. In the absence of any planned zoning policy, the majority of the retail centres attempted spreading out in tentacles following the major routes through the upper and middle class residential areas using the street level frontage to form a ribbon pattern of development. The other popular trend is the clustering of enclosed shopping centres at nodal points which take advantage of accessible locations. According to Dhaka City Corporation, in 1983 the total commercial area of Dhaka was about 1500 acres. This has become nearly four times larger by 1995 [Hossain, 1995).The situation is unthinkable at present context of Dhaka's ambivalent urbanization.

**Changing Land Value and Retail Growth**
The urban history of Dhaka through the different stages of growth has identified retailing as a potent force in the changing economics of land use and land value (Hossain, 2009). The growth of retail activity in a residential area has been found to be the main factor in the growth rate of land values (Sayeed, 1986, Nilufar, 2010, Hossain, 2001). In Dhaka, the highest land value always centred in the CBD areas and the value remained highest for office use. However, the residential areas changing into commercial areas have shown a higher rate of increase in land value than the commercial areas. For instance, the naturally grown central retail area ie. the New Market area and the surrounding residential area of Dhanmandi have experienced the highest increase with 12000% of the value between 1947 to 1965 . While in CBD, the rate of increase is only 2421% of the value over the same period (Ahsan, 1966). Consequently, contemporary Dhaka represents a mixed land use pattern, like the indigenous core of the old part of the city.

**Migration and the Growth of Informal Sector Retailing**
In the global context, the urban growth rate in Bangladesh is affected mainly by rural to urban migration which shows a rate of 5.31 (% of the total population) per annum in 1960 to 10.43 in 1980 - which is the highest rate in Asia (Murtoza, 1987). Dhaka the capital city has experienced a 74% population growth during the period of 1974-81 mainly due to rural to urban migration (Islam, 1996). In 1991 the city accounted for 26% of Bangladesh's urban population (Amin, 1991) Due to this high urban growth rate the city has been faced with the consequent problem of meeting the demands of employment. Thus, Dhaka like other developing cities is very much dominated by the presence of a huge informal sector which contributes to over 75% of all employment's in the city (Amin, 1991). Out of this, construction, transportation, wholesale and retail business accounts for 85% of employment; among which retail sector covers 22% (Islam, 1988). The informal retailing activity is characterised by a large number of small entrepreneurs consisting of the migrants in main (Islam, 1996). Among the local garment manufacture and trade is an important activity which involves a large group of hawkers for selling clothing and other items within a shopping area (Hossain, 2004). An extensive and uncontrolled growth of informal hawking activity has therefore occurred within the shopping areas which provide an easy employment opportunity for the migrant urban poor in Dhaka city.

**1.3     A Framework for the Study**
The previous discussions have shown that a complex socio-spatial process along with the locational advantage has influenced a shift of the retail areas at different stages of historical growth. The spontaneous growth process of the retail areas seems to have some hidden spatial order in their distribution pattern along the urban grid of Dhaka city. However, this study attempted to investigate the configurational properties of retail growth from both a social and a spatial viewpoint. Therefore, this research employed 'space syntax' theory and computer generated method for the investigation of socio-spatial relations (Hillier and Hanson, 1984). Moreover, the study seeks for a spatial understanding of the retail growth at global scale of the city. Therefore, 'space syntax' method has been applied here as an appropriate technique for this fine scale analysis of urban spatial form.

**1.4  Methodology**
Space Syntax is a set of descriptive technique for representing, quantifying, and modelling spatial configuration of urban form. An axial map is basically different from the street map in that it express the importance of sight and so the representation join two road along the same axis in to one and breaks one curvilinear road into a number of connected road. The axial maps are used in Space Syntax method as the basis for deriving a series of measure of the properties of the configuration of the street grid. Integration is a first order measure to understand global spatial order of an urban system.

Integration is a global measure in that every axial line is assign a value which characteristic its relation in terms of connectivity to all other line in the grid, thus provide a global index of relative integration and segregation for that line relative to all others. It describes the average depth of a space to all other spaces in the system. This measures used in Space Syntax analysis would give preference for the selection of integrated paths as a part of the global syntactic structure of the city. A syntactic analysis through the street grids of the study area would show the morphological character of that area and the choice or preference levels of different streets in purely spatial term. However, Space Syntax technique primarily measures space, with the addition of supporting elements like socio economic aspects. Thus, it provides a unique, evidence-based approach to the planning and understanding of urban areas. An analysed axial map represents integration values for every line ranging from the most integrated to the most segregated line, divided into five integration bands from red, orange, yellow, green and blue. Thus a line representing red in an axial map represents the most integrated line and blue the segregated one. Collectively the red lines shows the integration core of the street system. This study aims to identify the growth pattern and spatial significance of spontaneous retail developmens in various historical stages of growth of Dhaka city as described in the following section.

## II. Evolutionary Changes In The Morphology Of Dhaka And The Spatial Significance Of Retail Growth In The Global Urban Context

A brief historical overview has highlighted the fact that the retail growth in Dhaka has evolved and changed according to the dictates of political, social and economic considerations. However, it is not yet clear whether the changes were also based on some spatial or functional logic. The integration analysis of Space Syntax methodology will explore the way in which urban growth brought about changes in the configuration of the urban grid and the spatial significance of the study area in the global urban context of Dhaka city. By superimposing the retail land use pattern on the integration maps of Dhaka city (Figure, 6), this study will attempt to identify whether the spontaneous retail growth patterns follow any spatial logic or significance in their overall distribution in the urban grid. However, this part only focuses on the period since 1947 during which Dhaka has experienced rapid and uncontrolled urbanisation. The analysis is done only considering the global integration measure to see the changing spatial pattern of retail growth and the study area from a global perspective of the city's growth. The analysis is carried out by using the axial maps of Dhaka city from 1952 to 1995 following different stages of its historical growth.

A detailed Space Syntax analysis of the old part of Dhaka city investigates the spatial structuring of the commercial areas in the urban grid. The analysis shows that in 1952 the global integration core in old part of Dhaka always accommodated the major bazaar areas. The existing old city to the south and the growing new city towards north were connected through this integration core. The roads forming the integration core contained the major administrative, and commercial buildings. The core also linked Dhaka University, the most important academic building at that time. This study showed that that the old city had its own global structure which was different from the new part of the city. The most globally integrated lines in the old city picked up the commercial streets of old Dhaka (Figure: 6).

The 1962 map of Pakistan period shows a total segregation of the old city from the global integration structure of the whole city. The global integration core has shifted to the geometric centre of the city. Most of the highly integrated lines were within the new part of the city. The global commercial core shows a shift in spatial significance from the old part to the new part of the city and corresponds to the relocation of the retail areas. The pattern of integration highlighted the importance of Dhaka University and the shifting pattern of the retail growth from Gulistan towards the New Market area, i.e. the central market area at that period.

By 1972, the retail areas show a gradual growth pattern from the New Market area towards the northern parts of the city. The suggestion that the retail centres are growing at important nodal points and along the major roads of the city is further supported here by the fact that the retail growth has followed the highly integrated lines of the global integration core of the city with the centre in the study area.

By 1995, as a total structure the city seems well balanced with integrated parts at the physical centre and segregated parts towards the periphery. The global integration core consists of two reverse wedges which coincide with the functional core comprising three major thoroughfares of the city towards the north. The integration core is inclined towards the west, excluding the old city and the CBD outside. Thus the retail trade areas always gained tremendous spatial significance in the global urban context of Dhaka at different time period of the growth of the city.

One of the important outcomes of the syntactic analysis is the strong correspondence between the location of the retail growth and the global integration core of the city throughout the period. The commercial centre systematically declines in importance with each subsequent stage of growth. The integration analysis shows that in the middle stages of the study period (1947 to 1973) the global core shifted from the old city to the Gulistan area, and in more recent stages it has again shifted its focus towards the central market area. The spatially integrated hence accessible location, the changing land use and land value pattern and the growth of

middle class consumer groups and informal retailers due to migration factor, have all enabled a spontaneous and rapid growth of retail in Dhaka.



Retail Land Use

Figure 6: Axial map of Dhaka showing the unplanned retail growth along the integration core in 1952, 1962, 1972 and 1995. (Source: Hossain, 2001)



### III.     Conclusions

This study has shown that retail centres in Dhaka are growing mainly along the major accessible routes in the city though they seem to have grown spontaneously in the residential areas as is evident through a review of the different successive stages of historical growth of the city. The syntactic analysis has investigated the spatial significance of the apparently chaotic distribution of spontaneous retail developments in Dhaka. The retail developments have grown along the integrated streets in the global context of the city in all stages of historical growth process. The spatial significance of the retail areas have been also proven through their highly integrated locations with the shifting core of commercial areas in the city in different stages of historical growth. Due to their spatial growth along the integrated road network and the integration core, they grew along the most accessible locations though in an unplanned way and therefore they represented a dense growth along the globally integrated and major thoroughfares of the city. This spontaneous growth is enhanced by the rapid urban growth of the city. To meet the demand of the growing urban population, the retail areas seemed to grow within both an unplanned and spontaneous growth process which is a common scenario in developing countries. However, in spite of their unplanned nature of growth the retail areas in Dhaka seemed to generate within a social and spatial logic of global urban system of the city.

## References

[1]     Ahsan R.M.; (1991); Changing Pattern of the Commercial Area of Dhaka City; Dhaka Past,Present & Future;  in Ahmed.S. U. (Ed.);The Asiatic Society of Bangladesh.

[2]     Ahsan, R. M.; (1966); The CBD in an Eastern Context; A Case Study of Dacca; Master's Dissertation; LSE;University of London.

[3]     Ahmed, S.; (1986); Dacca: A Study in Urban History and its Development; London Centre for South Asian Studies, School of Oriental and African Studies.

[4]     Amin, N.; (1991); Dhaka's Informal Sector and its Role in The Transformation of Bangladesh Economy;  In Sharif Uddin Ahmed (ed.); Dhaka Past Present Future; The Asiatic Society of Bangladesh.

[5]     Chowdhury, A.M., and Faruqui, S.; (1991); "Physical Growth of Dhaka",  In Sharif Uddin Ahmed (ed.); Dhaka Past Present Future; The Asiatic Society Of Bangladesh.

[6]     Dani, A.H.; (1956); Dacca: A Record of its Changing Fortune. Dhaka: Asiatic Press.

[7]     Hillier, B. And Hanson, J.; (1984); The Social Logic of Space; Cambridge University Press; Cambridge, New York, Port Chester, Melbourne, Sydney.

[8]     Hossain, N.; (1996); Shopping Centres in Dhaka City; Unpublished Case-Study Report; The Bartlett School of Graduate Studies, University College London, Uk.

[9]     Hossaain, N.; (1995); Establishment of Design Criteria for Fire Safe Shopping Centres in Dhaka City; Unpublished Master's Dissertation; Bangladesh University of Engineering and Technology; Dhaka.; Dhaka

[10]    Hossain, N.; 2009, Benign or Exploitative and Space - The Changing Pattern of Shopping Development in a Rapidly Developing City Dhaka, Bangladesh; Paper Published in the Proceedings of the 7th International Space Syntax Symposium Stockholm: KTH, 2009.

[11]    Hossain, N.; 2001, The Socio-Spatial Structure of 'Spontaneous' Retail Development in Dhaka City; Unpublished PHD Dissertation; Faculty of the Built Environment; Bartlett School of Graduate Studies, UCL; London, UK.

[12]    Hossain, N.; 2004,The Social Logic of Spontaneous Retail Development in Dhaka; Protibesh: Journal of the Department of Architecture,BUET.; Volume 9, No. 1. July-2004.

[13]    Islam, M.N.; (1991); The Political Role of Dhaka; Khan, Atiquallah; (1965); In Sharif Uddin Ahmed (ed.); Dhaka Past Present Future; The Asiatic Society Of Bangladesh.

[14]    Islam, N.; (1996); Dhaka from city to megacity ; Urban Studies Programme; Department of Geography; University of Dhaka.

[15]    Islam,N.; (1988); Urbanisation and Shelter: Need for a National Strategy.

[16]    Karim, A.; (1964); Dacca The Mughal Capital. Dhaka: Asiatic Society of Pakistan.

[17]    Mitchell, J. C.; (1966); Theoritical Orientations in African Urban Studies; in Banton, M. (Ed.); The Social Anthropology of Complex Societies; Tavistock; London

[18]    Mumford, L.; (1970); The Culture of Cities; Harcourt Brace Jovanovich, Inc.; New York.

[19]    Nilufar, F., (1997) "The Spatial and Social Structuring of Local Areas in Dhaka City -  A Morphological Study of the Urban Grid with Reference to Neighbourhood Character within Naturally-grown Areas." Unpublished Doctoral Thesis; Unit for Advanced Architectural Studies; The Bartlett School of Graduate Studies, University College London, University of London.

[20]    Paddison, R., Findlay, A.M., and Dawson,J.A.,(ed.); (1990); Retailing Environments in Developing Countries; Routledge; London.

[21]    Siddiqui, K; Qadir, S.R.; Alamgir,S. And Huq,S.; (1990); Social Formation in Dhaka City; Dhaka University Press Ltd., Dhaka.

[22]    Murtoza; (1987); Rural-Urban Migration in Bangladesh: Cause And Effect.

---

[i] The areal coverage of the plan of greater Dhaka (consisting the central city and other municipalities and immediate rural areas) was of 320 sq. miles [Islam, 1964: 4]. The purpose of the Master Plan was to establish planning principles rather than to lay down a detailed, inflexible scheme [Report on the Draft Master Plan for Dacca, 1979: 4]. In fact, in the Master Plan the major land use pattern and the transport network was decided. The plan remains the basis for development planning by DIT, though it has never been substantially updated [DMAIUDP, Final Report'; 1981; Vol.2. p-7].