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DESIGN OF NEW SHOPPING CENTRES

IN

HISTORIC CITY CORES

A

DISSERTATION PREPARED FOR A

MASTER IN ARCHITECTURE

BY

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SESSION 1987

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PREFACE

A. ACKNOWLEDGEMENTS

Thanks be to GOD for everything He gave to me: willpower, health and wisdom. Thanks again and again: you are the all powerful. You give and you take as you wish though nobody can tell why.

I am greatly indebted to the Algerian Government for the Grant which enabled me to reach this stage of education and study.

I wish to thank Mr. John Yarwood, my present supervisor for helping and sustaining my interest throughout the period of research.

I wish to thank all the staff of the Mackintosh School of Architecture, especially Mr. Tony Vogt, Director of Graduate Studies, and Mr. B. Edwards.

I wish to thank all those who helped me in achieving this work including Mr. Dave Cash from Building Design Partnership and Mr. John Evans MSC DipL Arch RIBA and my friends for their help.

I dedicate this work to my family and especially to my parents.

I am indebted to the compentence of the typist, Judy Pickering.

Finally I wish my work will be useful for all people.

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B. SCOPE OF THE DISSERTATION

The scope of my dissertation presents a <u>study of shopping</u> <u>centres inserted in a sensitive urban texture where the</u> quality of historical vestiges is highest.

- 1. The dissertation consists firstly of definition of shopping centre and looking at the original idea of the shopping centre throughout the history and its evolution.
- 2. Secondly, it consists of a look at the most important commercial factors affecting the success of a shopping centre and describing the basic components which constitute the shopping centre.
- 3. Thirdly, it analyses two different types of shopping centres in two different cities, each one presenting its own architectural character.
- 4. Fourthly, from previous sections I have drawn up a conclusion of some important points to take into consideration for architects, designers and planners during planning and design procedure to stress in order to get a successful result respecting the environment character of the area and the city in general.
- 5. Fifth, consists of a design project in Glasgow central area.

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C. SUMMARY

The first chapter is a brief introduction to the original idea of the shopping conception by looking back to the Eastern bazaars and the 19th Century shopping arcades in the U.K. By giving some description regarding their layout as well as describing the factors acting as a major ingredient influencing their conception in general terms such as climatic conditions, and defining the shopping centre as one element in the texture.

The second part is basically describing the evolution of the shopping centre's conception in three distinct stages which are as follows:

- the centres of the first stage (open mall)
- the second stage centres (enclosed mall)
- the third stage centres (multi-level centres)

The next step consists mainly in classifying all types of shopping centres into three main categories and introducing the problems of out-of-town shopping centre development in the U.K.

The aim of the first chapter is particularly to give a clear idea for the reader to understand as quickly as possible the historical background of the shopping centre development.

The second chapter is divided into three distinct parts. The first part is mainly, looking and trying to explain the most important commercial factors which have a direct influence in attracting people more and more to the shopping centre as a place for retail.

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The second part is essentially focused on describing planning and architectural components which constitute the shopping centre in design terms and their characteristics in relation to each other.

Also, trying to present fire safety and its impact in designing as well as introducing some U.K. regulation applied in this kind of development in order to keep the place safe for the shoppers as well as ensuring safety for the environment in case of fire.

The third part consists of looking at the developer's and Local Authority's role in making the shopping centre happen.

The third and fourth chapters consist of the case studies which are the most important sections in the thesis, supporting the previous chapters. The two examples are analysed deeply in visual terms, presenting photographs with comments and criticisms and in each case drawing up a conclusion. The two shopping centres are as below:

- 1. Carlisle Lanes Shopping Centre
- 2. York Coppergate Shopping Centre

The reason for taking these two examples is mainly because each one represents a particular type of shopping centre. For example, the Lanes shopping centre is from an enclosed shopping centre group. The Coppergate shopping centre is included in the group of open mall shopping centres. Each of them has its own characteristics, different from the other one in terms of appearance in relation to

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the urban environment where it is located and inserted.

The fifth chapter presents the conclusion of the whole thesis, leading to some important recommendations for the future concerning the inserted shopping centre design in a sensitive environment which planners, architects and designers are obliged to take into consideration, otherwise we will loose our heritage in the near future.

The final chapter essentially consists of a proposal scheme with a detail study in terms of planning strategy towards the central area of Glasgow and the site analysis adding the proposal scheme with an urban design brief explaining the whole points which I mentioned before in the fifth chapter.

D. GLOSSARY OF TERMS USED IN THE DISSERTATION

<u>Shopping Centre</u>: A shopping centre is a planned shopping complex under one central management, leasing units to individual retailers with a degree of control by management who are responsible overall for the centre.

Bazaars: Bazaars are solid buildings with arches and gates at each end. Their streets are covered in order to protect users from the heat of the sun. Their layouts are generally rectangular shape, with straight streets lined with shops on both sides. Bazaars remain in hot countries.

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The Shopping

Suq or Souk:

Mall:

Arcade:

Shopping arcades as a separate building type were developed in the early years of the 19th Century. They are now an accepted form of a covered passageway with shops on one or both sides, whilst above are either skylights or fully glazed roof. The shops are usually individually owned.

It is a market place in Muslim countries. Generally it is either a covered or semi-covered urban place which is considered as the main meeting place for people in the city.

The mall is the main element setting the scene and also providing at the same time safe, relaxing comfortable, easy to flow circulation for shoppers between entrances and shops in shopping centres.

Catchment Area:

Area expressed in terms of distance related to travel time and population served by the centre.

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*<u>Department Store</u> The most complex shop type, offering or <u>Magnet Store</u>: full service throughout a full range of specialist merchandise and services, including restaurants, food halls and franchise operators. Minimum sales area 20,000m².

<u>Small shop or</u> A shop with a sales floor area not <u>small unit</u>: exceeding $280m^2 \rho$ er floor or not more than three floors.

<u>Plaza</u>: Traffic free pedestrian precinct serving the retail units.

- *<u>Supermarket</u>: Mainly self-service food and convenience store, trading with a limited range of non-food items occupying not more than 15% of sales area. Sales area usually between 1000m² and 2500m² with a minimum area 400m².
- *<u>Superstore</u>: Single level self-service store offering extensive range of comparison and convenience goods, with sales area minumum 2500m² and GLA 5000 - 7000m².

*<u>Hypermarket</u>: A store operated by a single retailer handling a wide variety of convenience and comparison goods, food and nonfood. Usually of such a size that it

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^{*} Definition from Beddington, N. 1982 (p.xiii).

has to occupy a site on the city periphery.

 GLA:
 Gross Leasable Area: Total enclosed

 floor area occupied by retailers.

 BDP:
 Building Design Partnership

 ICSC:
 International Council of Shopping

 Centres.

INTRODUCTION

In the city core we can find shopping facilities which are old and remind us of the past civilisation, such as shopping streets and markets where food and all commodities were bought and sold. Bazaars, markets, souks and high streets are the traditional core of countless communities. They are a place in which to meet as well as to shop: a focus in fact for much of a town's commercial activities. Though high streets are ingrained in most countries' way of life, marketing methods and the range of goods available are actually altering at such a confusing pace that future shopping developments must also reflect and anticipate these radical changes.

One solution is the enclosed shopping centre, currently an important and rapidly-speeding feature of the international retail scene. This is a breed of shopping development with fully covered malls, doors at all points of public entry to the mall and some form of climate control throughout the public areas.

The shopping centre in various forms has proliferated all over Europe, often as a result of large rebuilding of war-damaged city centres, and in Australia and North America where the green-field, out-of-town shopping complex, often combined with community facilities, provides comprehensive buildings for the new style car owning shopper. In the U.K. progress has been slower; there are some enclosed centres in operation all fairly small by international standards.

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According to Clive Darlow's book, Enclosed Shopping Centres, 1972 (pp.11,12),

"The U.K. inventory of completed enclosed centres includes two pioneers - the Elephant and Castle (London) and the Bull Ring (Birmingham); eight 'Arndale' centres at Poole, Stretford, Crossgates, Nelson, Bolton, Middleton, Wandsworth and Doncaster; a small but interesting centre at Northfield (Birmingham) another at West Bromwich. Combined, these enclosed centres probably serve trade areas which in total amount to serve 10% of the U.K. population."

Critics of the first pioneer enclosed centres overlooked the fact that neither were in locationsoriginally intended for shopping development. Nor was there any previous experience of the new concept among retailers and developers. The latest centres, however, give ample proof of the lessons learned and they compare now favourably with their foreign counterparts.

It is hard to foresee if and when some of the more dramatic forecasts regarding the new technology movement on office and retailing functions come through. If the city centre is to become the new urban focus, how will the functional and physical changes that take place to arrest the proliferation of vacant floorspace or to convert vast structures to some other use? What significance will they attach to that more important ingredient of the city centre which is the architectural vestige? The last point is related to this in the sense that it concerns the long term changes in the role of the city centre from being essentially a hub of commercial activity to one that fulfils a greater cultural expression and symbolises the values and tastes of future generations.

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<u>CHAPTER ONE</u>

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SHOPPING CENTRES MOVEMENT

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CHAPTER ONE

SHOPPING CENTRE MOVEMENT

1.1 DEFINITION OF SHOPPING CENTRE

Shopping centre is a term which is frequently used simply to signify a group of shops.

From John A. Dawson's book titled "Shopping Centre Development", he points out that shopping centre is defined as:

"A group of architecturally unified commercial establishments built on a site which is planned, developed, owned and managed as an operating unit related in its location, size and type of shops to the trade area that the unit serves. The unit usually provides on site or associated car parking in definite relationship to the types and total size of the stores." (Dawson, J.A., 1983, p.1)

The definition serves as a general description of a shopping centre.

The function of the shopping centre is not only expected to be a retail market as it was in thepast but nowadays they have a social and cultural function which goes parallel with the main activity which is commercial. For example, they provide an agreeable and comfortable meeting place for the users, as well as catering more for the cultural and recreational needs of the people by adding cinemas, night clubs, restaurants and so on. So this idea has occurred recently in order to maximise the use of these kinds of centres in all ways, or in other words, developers, planners and architects want the centres to serve the community.

This definition of a shopping centre draws attention to

management as an integral part of the whole concept; the character of each centre is affected by the management methods used.

Location, size and type of shops are usually carefully controlled in the new shopping centres, so as to maximise retail sales for the tenants.

The definition above also stresses the relation of a centre to its trade area. Shopping centres have always been designed in relation to a catchment area.

1.2 HISTORICAL PRECEDENTS

There were two interesting precedents for the modern shopping centre, namely the Eastern Bazaars or suq and the nineteenth century European shopping arcades.

1.2.1 Eastern Bazaars

In historical sources one of the earliest covered bazaars still functioning nowadays is in Aleppo. It has existed since the twelfth century, but over time and with new developments, it grew and developed on its original site.

According to Prof. Mustafa Cezar's book, the description of the bazaar is,

"The roof of the Aleppo covered bazaar is formed of domes and vaults; its central part consists of two streets of considerable length and several other rows of streets run parallel to or near the eastern end of these main streets. These side streets are narrower than themain streets and about one third of their length." (Cezar, M., 1983, p.73.)

There were two essential reasons for the development of

a covered bazaar in Aleppo area; the first reason was due to its importance as a trade centre, secondly the city was already an important settlement during the middle ages era.

In the period of the Ottoman Empire and by the Ottoman administration which were always selected with special consideration for the city's importance, so the city has been settled by large Turcoman tribal communities since it was the attractive part with the Northern Syria in the level of trade and it served the large commercial needs of its hinterland.

Aleppo was therefore famous not only as an old Moslem city, but it assumed the special character of an important Ottoman trading city in the second half of the 12th century, because the Ottoman governors and administrators were aware of the stringth of the Aleppo in the period of the Mamelukes. For this reason they build many of their buildings for commercial purposes. So the city of Aleppo owed its commercial character to its bazaars and markets. Between 1609 and 1618 the Aleppo Bazaar was described as follows:

"Aleppo is filled with markets and bazaars. But the Grand Bazaar (Suk-U-Sultani) has a total of There are many wealthy people 5,700 shops. there. All kinds of goods and valuable merchan-dise can be found in these bazaars, which are all solid buildings with arches and gates here and there. These gates are shut by night-watchmen who shut these gates at sundown and light numerous candles inside. As most of the haus and bazaars have lead covered roofs they are not affected much by the heat of the summer; their interiors are cool even in the month of July. All their streets are watered by water-carriers, and for this reason customers do their shopping comfortably. The streets of Suk-U-Sultani as well as those of other quarters are all paved in the European manner; these streets are kept clean day and night."

(Cezar, M., 1983, p.77.)

There are other covered bazaars in Damascus, in Syria from Pre-Ottoman times, and in Baghdad. This bazaar is shorter than the covered bazaars of Aleppo and Damascus. The character of Baghdad Bazaar's layout is a rectangular shape, with straight streets lined with shops on both sides and having a gate at each end.

Obviously there are architectural differences between Turkish bazaars and Arab ones. For example, the Jerusalem Bazaar had the problem of lighting which was not given proper attention and the arrangement of shops is different from the Turkish one. The shops in the Jerusalem bazaar are rather dark rooms, connected with the covered street only by means of doors. It is quite probable that the covered bazaar idea emerged through man's need to protect himself from the heat of the sun, so he opted for covered streets lined with shops in permanent shopping areas.

In Jerusalem in the period between 1099-1187 there were a series of vaulted arcades or suqs.

An account of the 12th Century describes the arcade in Jerusalem.

"A covered street vaulted over, called the street of herb, where they sell all the herbs and all the fruits of the city and spices. At the top of the street is a place where they sell fish. And behind the market where they sell fish is a very large place on the left hand where cheese, chicken and eggs are sold. On the right hand side of this market are the shops of the Syrian gold workers." Mackeith, M., 1986 (p.9).

The importance of Jerusalem as a location as a meeting place for East and West, explains greatly the success of the venture, but ideas and goods moved slowly westwards to change and sometimes to improve the quality of life in emerging European kingdoms. The Eastern arcade, Bazaar or Souk remained firmly in the Middle East.

1.2.2 The Arcades in the 19th Century in the U.K.⁽¹⁾

Arcades in Europe were long, narrow corridors providing a series of easily covered pedestrian thoroughfares. The first arcades in Britain were also developed to follow similar plan forms, for example the Royal Opera Arcade, London, ran the length of the theatre site and was a covered entrance corridor.

There are simple corridors or groups of corridors in L-Y-H shapes and more rarely there are central light wells within a block of development.

The street patterns in the central area of 19th Century towns often followed the routes established in the Middle Ages or even earlier, and the system of land tenure and the relatively small scale of building projects, ensured that generally it continued to survive in its medieval form. Therefore, as towns expanded and new buildings were erected, one great benefit of that pattern of building for the developer of arcades was that maximum use could be made of old alleys and narrow roads. In Bristol, for example, the

⁽¹The information in this section is from Mackeith M., 1986, (pp.65-70).

lower and upper arcades were created over well known and frequently used short cuts, between the middle of the city and the housing areas. Following that idea of using busy pedestrian routes, some entrepreneurs created their own by taking advantage of sales of land and buildings in order to acquire a favourable trading position, which linked two busy streets with such a financially attractive use as a market.

The shopping arcade, however, was enormously popular and a fashionable means of buildings and managing retail units during the last quarter of the 19th Century.

1.3 RECENT HISTORY OF THE SHOPPING CENTRE

1.3.1 Introduction

Having reviewed early precedents of shopping activities, it will be of interest to consider their more recent history.

The history of the shopping centre illustrates one of the ways planners have attempted to link physical design to social reform. With the development of sophisticated technology in actual buildings and with the increase of population and higher living standards, design for shopping centres has become complex and specialised. Thus the development is still developing in numerous directions.

The shopping centre was developed in North America. The U.S.A.² being the main supporter of this idea, has produced successful centres with new trading techniques and this concept has spread internationally to all continents

² Beddington, N., 1982 (p.xi).

and countries, of course, with the adoption of their local conditions, social or climatic.

In this kind of complex and new building there are no standard solutions. Each project will need its proper or its own thought and research in all terms such as the link between design, technical detail and operational policy, so each project has its own problems to be solved.

The shopping centre must have its own style or image to define it in the public mind as quickly as possible. Without the style the shopping centre will remain the boring repetition of a standard conception. With style and attractiveness the shopper will be pleased.

The history of modern planned shopping centres goes back to the beginning of this century. Their growth, however, was modest in the 1920's and 1930's when a few centres were opened. It was an American J.C. Nicholas in his theoretical studies who aimed to build a whole town around the plaza shopping centre, he believed that increased trade would help build up a town centre and borrowed from the English garden city ideal in designing the plaza.³ In particular, he used its efforts to integrate residential development with the environmental amenities by using his centre with the biggest and most dominant features which were previously used in down-town department stores.

His residential development grew from the original ten acres tract to an area encompassing 5,000 acres. He incorporated 10 neighbourhood shopping areas, with the goal

³ Gilette H., Autumn 1985 (p.449)

to provide easy access to everyday necessity. This was in Kansas City, Missouri.

From origins such as these, modern shopping centres developed in this century have developed through three stages:

1.3.2 The Centres of the First Stage

This stage lasted until the nineteen fifties in America and Europe. The principle of design was that malls of the centre were open to the weather, with canopies related to the shop fronts.

These established two characteristics which were not to change.

The first of these was size; a number of suburban growth areas in the U.S.A. had regional centres with leased areas in excess of 100,000m² with a parking ratio ranging from 4 to 8 car spaces per 100m² which produced overall site areas for the centres of over 40 hectares.⁴

The second characteristic was the separation of the various forms of circulation.

Pedestrian shopping streets were separated from traffic areas and goods service bays from general parking in contrast to the old urban centre. Although shopping centres varied greatly in the number and types of amenities and conveniences they offered, they quickly attracted the attention of the users.

⁴ Information from Gosling D/Maitland, 1976, (p.31).



Fig. (1.1). Old Orchard Shopping Centre, Illinois, U.S.A.

Main level plan. Architects: Loebl, Schlossman Bannett and Dart.

Key

Scale 1/4000

1	Ward's TBA
2	Ward's Department store - 4 levels
3	Marshall Field department store (4 levels)
4	Office building
56 78	Bank Parking Mall Shops

The best American example of this period is the Old Orchard, at Stokie, Illinois with 111,000m² provided on a site of 38 hectares. See fig. (1.1).

The ideas pioneered in America were adopted in Britain.

In the 1940's immediately after World War II there was a period of great hope and vision in the U.K. There was a feeling that past faults could be corrected after the large destruction of many U.K. cities.

A platform was provided from which to undertake a review of the role of the city centres. Planners and architects were stimulated by an optimistic wave and their vision of the future to create new cities rather than to recreate the old ones. As Cullingworth points out:-

"To rebuild the city (Exeter) in the old lines... would be a dreadful mistake. It would be an exact repetition of what happened in the rebuilding of London after the fire and the results, in regret and lost opportunity will be the same." Lindsay, J.W., 1985 (p.10).

1.3.3 The Second Stage Centres

The second stage of their evolution was mainly in the design of the malls. The enclosure of the malls marks a fundamental change in the whole development of the centres.

For developers it means that the section of the capital costs for which they will not directly gain rental is greatly increased. Particularly in the field of service costs, a large volume of landlord's space is heated and air conditioned, which means a large increase in maintenance or service charges. Even the relation between malls and shops is changed dramatically. Instead of being an open space



North Park Shopping Centre, Texas, U.S.A.: Main level plan. Architects: Harell and Hamilton. Fig. (1.2)

Scale:1/4000

KEY

Service station	7	Titche · TBA
Twin Cinema	8	Mall
Penney's department	9	Shops
store - 3 levels	10	Nieman-l
Penney's TBA Titche - Goethinger		departme 2 level:
department store 3 levels	11	parking
	Convenience Centre Twin Cinema Penney's department store - 3 levels Penney's TBA Titche - Goethinger department store	Convenience Centre Twin Cinema 8 Penney's department 9 store - 3 levels 10 Penney's TBA Titche - Goethinger department store 11

- Goethinger
- Marcus
 - nent store s

between buildings it is now a covered central area. This change has a great influence upon the first stage centre's conception.⁵ It has a big impact upon building form, i.e. the width of the cross section of shop, mall, shop would be about 100m, so that the 500,000m² surface of smaller shops would require a mall about 500m long. With such conditions the results of the arrangement was L-shape which was the one of the classic form of the development in this period. A good example is North Park Centre, Texas. See fig. (1.2).

1.3.4 The Third Stage Centres

The introduction of a second mall level in balance with the first, is the most common factor in the third generation of centres.

A new centre of 150,000m² GLA occupies perhaps 14 hectares with the building itself at 6 cars per 100m² so it requires another 26 hectares for car parking. With ancillary buildings, road junctions and inefficient parking layouts in the irregular areas between site and building perimeter, the total land-take will be probably about 50 hectares.⁶ When the stage 3 centres were beginning to come on the drawing boards, it is reflected in an article by Laurence J. Israel, of the architectural firm of Copeland, Novak and Israel. He proposes that,

"where the one storey shopping centre is no longer economical, as it is now in many regions, the multi-

⁵ Information in this section is from Gosling D./Maitland B., 1976, (pp.32,33).

^o Information in this section from Gosling D./Maitland B., 1976, (pp.37,39,40).

storey centre is its logical and perhaps inevitable successor." Gosling D./Maitland B., 1976 (p.37).

The third stage centres were not confined to such tiny sites and their level solutions generally comprise just two levels of shopping equally served by car parking. This is simply achieved on a site with a steady cross fall by feeding the parking areas on the higher land into the upper mall on one side of the building and vice versa.

This pattern is seen in an early 1967 example at Sun Valley in Concord, California where the site was 42 hectares, the addition of a second car parking level in order to reach the 6 cars per $100m^2$. The form of the centre is linear, with a magnet store at each end and one in the centre. Because of the double-level arrangement however, the central mall length is kept to 335m. See Fig. (1.3).

The increase in the number of magnets is a common feature of the third stage, being the reflection of the general tendency towards the 150,000m² GLA figure without a corresponding increase in the size of the individual department store. (See fig. (1.4).) Also, one of the most important elements of any shopping centre for success is to establish the right balance of retailers and the really big attractions. The major magnet which is in some way recognised by a big department store such as John Lewis, etc. These stores have wide trading names which continue to give them great benefit from national advertising.

There is then a general tendency of development which brings the design problems of the down-town and out-of-town



Fig. (1.3)

Sun Valley, California, U.S.A.: Upper-level plan (top) and lower level plan Architect: Avner Nagger


Fig. (1.4) The most effective locations for magnet shops.



centres close together. The changing preoccupations of the last ten years are charted in the technical literature of the period. The Architecture Record devoted a second issue to shopping centres, with particular attention to a group of new stage 3 projects. This article effectively summarises the evolution of the species:

"In 1966 thenew forms have come a long way from the street of stores, to the asphalt-encompassed sprawl of the open mall, to the roofed enclosed rectangle of the early air-conditioned mall, to the culmination of the horizontal concept of the single building on the fringes of open country serving both city and surrounding regions." Gosling D./ Maitland B., 1976, (p.47).

1.4 TYPE OF SHOPPING CENTRES

By the mid-1950's three main types of shopping centres had been recognised by the developers, architects and planners. The three types are:

- 1. Neighbourhood centre
- 2. District centre
- 3. Regional centre or the main centre

The three tiered hierarchy has become one of the established truths of modern urban geography and this classification has remained in common use despite the subsequent development of many centres which clearly do not fit any of the three categories. In the past this general grouping was sufficient to indicate the size of the shopping centre, its geographical location in the urban framework and its built form.*

However, shopping centres did not acually fall into

^{*} Information in this section is from Dawson, J.A.1983 (p. 17).

just three clear groups, but rather arranged themselves in a continuous range from the smallest centre to the greatest centre with a big catchment area.

So the catchment area is never too important in economic terms but may not define the centre's location or its form. For this reason new descriptive terms have appeared.

Regarding the location the new terms are: Down-town, In-town, Out-of-town, Suburban, Greenfield and Integrated Shopping Centres. The invention of new names became necessary when the central area ceased to be inevitable, terms descriptive of the centre's form such as pedestrianised, multilevel, covered and closed were invented.

1.4.1 The Neighbourhood Centre

The main function of the neighbourhood centre is to provide a range of convenience goods and personal services. Sizes of centres range from 3,000 to $10,000m^2$ GLA with typical centres around 5,000m² and the total site area varies from 1 to 4 hectares.

Car parking space is provided, the number of spaces varies from 20 or even less to several hundred if the centre is larger. The assumed catchment area or population is 2,500 to 40,000 people within a six minute drive and in general it is assumed that consumers visit the nearest centre.⁷

The term neighbourhood centre is widely used outside

⁷ Information in this section is from Dawson, J.A., 1983, (pp.17-18).

the U.S.A. although in Europe neighbourhood centres differ in detail from the American centres, but the basic concepts and functions are similar. In general these are reinforced by the planned presence nearby and sometimes within the centre, such as primary schools, libraries, etc. Residential accommodation may be provided within the overall centre structure in the upper levels. In Britain, public housing is frequently included in the centre.

The development of the neighbourhood centre planning is to instil civic pride through physical design. Clarence Perry said that the planned neighbourhood centre,

"with its physical demarcation, its planned recreational facilities, its accessible shopping centres and its convenient circulatory system all integrated andharmonised by artistic designing would furnish the kinds of environment where vigorous health, a rich social life, civic efficiency and a progressive community consciousness would spontaneously develop and permanently furnish." Gillette H., Autumn 1985, (p.450).

The neighbourhood centre is a widespread shopping centre type but there is a variety in the detail of the form as well as in its developments. The success or failure of the individual centre depends largely on the commercial ability of the tenants and of course in the precise location of it. The idea of location differs from planners to the commercial developers. For planners, their favourite position for the centre tends to be in the residential area. But the commercial developers prefer sites at intersections on major roads which are on the edge of residential blocks.

In the case of planners views are mainly to solve common problems between centres and neighbourhood in terms of:

- solving the problem of public transport
- the location can be successful, providing that the centre is accessible to the local catchment area (walking distance)
- creation of unity between residential area and the centre in terms of design, as well as by producing residential development within the centre.

For commercial developers their aim is to attract the car owner to the centre, by producing more car parking space. Taking advantage of location in order to expand the centre to be upgraded to a large centre by addition of more floorspace to the existing scheme.

1.4.2 District Centre

The district centre offers a greater depth and range of merchandise for shoppers in all assortments such as clothing sizes, colours, styles and prices than does the former centre.

The district centre serves from 40,000 to 150,000 people, it has a site area of 4 to 12 hectares and GLA of $10,000 - 30,000m^2$. In this kind of shopping centre there is usually a greater variety of shop size than the neighbourhood centre. In the smaller centre with a GLA up to $10,000m^2$, the tenant mix tends to be similar to that of a large successful neighbourhood centre and this success can put the neighbourhood centre in the grade of district centre by the addition of $1,400m^2 - 5,000m^2$ extension.

Many district centres have been developed this way of

course with the addition of a residential development close to the first development or with a change in traffic on nearby roads.⁸

The district centre was a strong feature of American suburban shopping centre development in the north-east cities in the 1950's and 1960's.

New development of district centres is still taking place. It is providing a great opportunity for the regional developers to prove themselves before moving to larger projects.

This new development is typically American. It is not well developed in the other countries.

In Europe for example, a few district centres have been built usually in association with the planned decentralisation of metropolitan regions. Around Copenhagen and Stockholm for example, such centres operate successfully.

1.4.3 The Regional Centre or Main Centre

The regional centre has a typical GLA around 40,000m² within a range from 3,000m² to well over 100,000m² with a few North American centres having over 200,000m² of GLA. Location for such centres, which need a catchment area over 150,000 people are at freeway and motorway intersections.

The out-of-town centres have become an important feature of American retailing since the Second World War. They are usually the result of an investment by a developer

⁸ Information in this section is from Dawson, J.A., 1983 (pp.22,23).

who builds a group of shops, a large parking space around the whole centre and the facilities needed to attract shoppers arriving in their own private car.⁹

Each centre usually contains at least one shopping mall similar to the traffic free pedestrian precinct. And the circulation system in which the different types of traffic customers, cars, service vehicles and pedestrians are provided. Extensive car parking is provided for up to 2,000 customers' cars.

In the 1940's the services provided such as play lots for children with the centre and in the 1950's the regional shopping centre added a range of special features, including fireworks, band concerts, and square dance in order to attract people more and more. In an article for "Chain Store Age", Gruen (1948), suggested that comprehensively planned centres could become, "Market places that are also centres of community and cultural activity". Gilette H., 1985, (p.451).

Stressing the importance of separating pedestrians from automative traffic, Gruen also emphasised the importance of physical amenities, such as the small kiosks with outdoor seating which he has introduced to his project and, he claimed, it would thus become to its customers:

"more than just a place where one may shop, it shall be related in their minds with all activities of cultural enrichment and relaxation. Gilette H., Autumn 1985 (p.451).

⁹ Information in this section is from Dawson, J.A., 1983, (pp. 23-24).

1.5 <u>THE PROBLEMS OF OUT-OF-TOWN SHOPPING CENTRE</u> <u>DEVELOPMENT IN THE U.K.</u>¹⁰

Retail change cannot be viewed in isolation from other socio-economic activities. The growth of new shopping developments and the decline or modification of existing shops not only influences the overall retail structure and consumer behaviour: the location of these activities and their use frequently conflict with other land uses and threaten the efficient functioning and amenity value of both the urban and rural area.

It can be seen that problems associated with out-oftown shopping centre development in the U.K. have received considerable attention in the planning process, reflecting a long tradition of physical planning. These in turn reinforce various cultural attributes concerning the orderly growth of settlement, its separation and the maintenance of community identity, preservation of agriculture, the amenity value of the countryside and minimising the conflict between urban and rural lifestyles and value. There are three broad issues and these are briefly discussed below:

a. Protection of the countryside

The opponents of out-of-town centres on the grounds of spoiling the countryside constitute a very varied group. Professional organisations, including planners and local government politicians have generally not taken any overall stand. But at that level most proposals are likely to raise objections from these two areas. However, planners and

¹⁰ Information in this section is from Gayler, H.J. 1984, (p.53). 22

politicians invariably express the objections in terms of the wider issues:-

- The out-of-town centre dispenses urban functions.
- Encourages decentralisation of activities and longer journeys.
- Threatens the function and physical separation of town and country and weakens the concept of selfcontained balanced communities and viability of existing town centres.
- Loss of agricultural land and d**£**struction of countryside.

b. Traffic Hazards¹¹

A major concern when considering out-of-town shopping centres has been the extent to which the extra traffic generated by the centre would be detrimental to the existing highway network, conflict with other activities and cause an overall loss of amenity.

The local planning authority has the responsibility to assess the impact the centre will have and whether the road network both in the immediate area and in the centre's major trade area is capable of carrying the increased traffic. Traffic not only related to shoppers' cars but also the workforce at the centre and the commercial vehicles serving the various stores. The first aspect for the local planning

Informations in this section are from Gayler, H.J., 1984, (p.61).

authority to look at is that the access routes to the new development havesufficient capacity to take both existing traffic and additional shopping traffic in the peak flow periods. A second aspect concerns the problems of actual entrance and exit. It may be that surrounding roads are quite capable of taking the extra traffic volume, but function situations and right hand turns, for example, into the site can cause queuing on access routes, congestion and thus inconvenience to existing traffic and increased accident rates.

c. Site characteristics

An out-of-town shopping centre proposal raises a number of issues which can best be classified as site characteristics. In some instances local planning authorities are faced with issues where the development is not disputed but some factors may directly or indirectly affect other urban activities.

The following identify the more important concerns here:

- <u>Servicing Implication</u> - The development of an outof-town centre can influence the effective use of existing services. Further services which must be considered are the major public utilities of water, sewers, gas, electricity and telephone.

- <u>Car parking</u> - The provision of adequate car parking at an out-of-town centre to meet peak demand is in fact a servicing problem. On the other hand the extensive amounts of surface car parking that accompany such centres have led

to one more of many environmental issues, therefore the need to treat this issue separately.

- <u>Visual intrusion</u>. A final aspect is that the outof-town centre constitutes a visual intrusion. It could however, offend the eye of those who live in adjacent residential areas or those who enjoy in some way the rural amenity. An out-of-town centre is probably such a contrast from what existed on the site before or compared to adjacent land uses.

1.6 CONCLUSION

The problems discussed above led most European states including Britain to concentrate on city centre locations for major shopping projects.

The increase of traffic and its problems in the 1950's and 1960's resulting in the call for pedestrianised shopping, led to an international movement towards the planned centres.

The centre would have convenient car parking, but not vehicular traffic within the centre, attractive landscaping with a high amenities standard, restaurant, sports centres, cinemas and so on, all this together with long opening hours, produce profitably trading conditions.¹²

This was the typical out-of-town American centre of course; these aims were adopted and applied in British cities.

In Great Britain, early attempts at rebuilding the town centre were less successful, such as Plymouth, Portsmouth and Bristol were built with shops on both sides of wide traffic streets with no appreciation of the significance of

¹² Information in this section is from Beddington, N., 1982, (p.3

shopping sites.

The first substantial planned covered shopping centres in Britain were the Elephant and Castle in London and the Bull Ring in Birmingham. The first centre can only be described as a failure due firstly to its sitting on an inaccessible site with a forbidding exterior. The Bull Ring is successful and is deemed to be an economy version of the American centre. These latter were sophisticated and high quality design, attractive and comfortable in a sense of surroundings and convenient access for shoppers and servicing areas.

However, it was a start and much was learnt from it in such a large field. Many centres were subsequently built. For example, fifteen new shopping centres were opened in the U.K. in 1980 (from a report published by Hiller Parker and Rowden, June 1981)¹³. These centres are visualised as a total concept planned centre with a precise calculation for demand and the need of the population in the best location of course, related to catchment area.

In the planned centre, accessibility is the main ingredient required although its level varies greatly according to the importance of the location in both types; greenfield site or in the city core.

Since the prime sites are virtually fixed in the central area, this means that similar uses compete for the same location, resulting in such groupings of similar or

¹³ The information is from Beddington N. 1982 (p.5).

complementary uses in the same area.

There are also some factors displayed by retail establishments in the central area:

- a space requirement
- b orientation towards particular consumer groups
- c site consideration, such as being located on or nearby heavy pedestrian flows.

In addition there are other basic points.

- 1. Accessibility to a large enough magnet store
- 2. The transportation system, or network focusing on the city centre. I mean the bus stop, bus station, and railway station, underground, and this point directly helps the first point.

Therefore until nowadays, the answer to where to locate shopping centres within the city region has been the city centre.

CHAPTER ONE - REFERENCES

Beddington, N. (1982) I	Design for Shopping Centres. University Press, Cambridge, England.
Cezar, M. (1983). <u>Typic</u>	cal Commercial Building of the Ottoman - Classical Period and the Ottoman Construction System. Published in Istanbul - Turkey
Dawson, J.A. (1983).	Shopping Centres Development. Published in U.S.A. by Longman Inc. N. York.
Gayler, H.J. (1984). <u>Re</u>	etail Innovation in Britain. Published by Geo. Books Regency House, Norwich, England.
Gilette, H. (Autumn 1985	5). The Evolution of the Planned Shopping Center in Suburb and City. Journal of American Planning Associa- tion. Vol: 51 - No. 4.
Gosling, D./Maitland, B.	(1976). <u>Design and Planning of</u> <u>Retail Systems</u> . Published by Architectural Press. G. Britain.
Lindsay, W.J. (Dis. 1985	5). The City Centre. An Assessment of Change. Department of Planning. Glasgow School of Art/Glasgow University.
Mackeith, M. (1986).	The History and Conservation of Shopping Arcades. Published by Mansell Publishing Ltd., London.

CHAPTER TWO REVIEW OF SHOPPING CENTRE DESIGN AND IMPLEMENTATION

2.1 <u>INTRODUCTION</u>

The previous chapter reviewed the history of the shopping activity. It included a general picture of the contemporary shopping project.

This chapter now examines shopping centres as regards:

- Commercial factors affecting the success of a shopping centre.
- Planning, architectural and other technical design issues.
- Role of the developer and Local Authority.

2.2 <u>COMMERCIAL FACTORS AFFECTING THE SUCCESS OF A</u> SHOPPING CENTRE.¹

One of the most important requirements of any shopping centre is to establish the right balance of retailers.

It is no use, for instance, attracting four supermarkets to a shopping centre. There needs to be a spread of retailers offering a wide range of goods and services and an aim to achieve the maximum total sales volume by controlling the size, shape and location of all tenants.

So, by carefully selecting and controlling tenants' floorspace requirements and influencing their individual locations within the centre, the developer can easily create

¹ Information in this section is from Corporation of Glasgow 1974 (pp.11-12).

a centre which generates the maximum amount of interest for shoppers.

While a convenient distribution of shopping centres is an obvious factor in planning for the shopper, the combination of types of shop in any one centre must also be taken into consideration because it influences the prices and variety of goods within the centre which are important to the shopper.

The increase of large setf-service units has undoubtedly resulted in an ability to retail goods at a lower price than in traditional types of retail and this shift of retail patterns is to the benefit of the shopper.

The price of goods is not only determined by the scale of operations but it is affected by the influence of competition. This can be destroyed by a monopolistic trading situation, such as a single organisation with a 100,000 to 200,000 square feet store, could dominate retailing in a major part of the city or even a region.

The existence of a store with an aggressive policy can influence the level of prices within its whole trading area. The hypermarket and superstore operations tend to combine convenience and durable retailing in order that both of them attract more customers.

As a result, competition does not need necessarily to be provided by an equivalent store but needs more of a combination of a large supermarket and a range of specialist durable goods shops. So the variety of goods is three dimensional; it includes:

- variety in types of goods
- the quality of goods
- choice of items within any one range

The city centre is the best example of the combination of the three factors.

A Planning Policy Report, prepared by Glasgow Corporation (in February 1974) said that experience elsewhere has shown that small independant traders have successfully established themselves and their success has been due to the shopper's desire for variety. But such growth creates problems due to pedestrian flow, vehicular conflict and other traffic difficulties or even from a visual point of view.²

In my opinion there is one more ingredient which is very important in influencing consumer interest that is mainly the integration of other facilities with larger shops such as the facilities which have an educational character such as a library, and a social character (banks, post office etc.). So those activities help to attract shoppers because most of them use this variety of facilities.

2.3 PLANNING, ARCHITECTURAL AND OTHER TECHNICAL DESIGN ISSUES.

This section reviews firstly town planning and secondly focuses upon specific architectural problems.

 $[\]frac{2}{1974}$ Information in this section is from Corporation of Glasgow, 1974 (p.13).

2.3.1 Town Planning

The basic problems concern how to accommodate major new development within an existing context in visual, social and economic respects. The factors of planning considerations are:-

- 1. Residential layout in relation to the shopping centre and pedestrian links.
- Relations to other shops shopping centres and other centres of attraction.
- Surrounding road network and public transport facilities.
- 4. Relationship to existing buildings in the neighbourhood.
- 5. Need to integrate public services into the centre.
- 6. Pedestrian flow in the existing town centre, present and future.
- 7. Integration of car parking within the area in order to meet the needs of the population. This point is very important in visual terms.

In a work concerned with urban design, it will be appropriate to concentrate particularly upon two matters, as follows:

2.3.1.1 Integration of new shopping centres into existing Townscape and built-form.

As far as the overall planning of enclosed centres in urban areas is concerned, the planner has to aim for a total integration of the centre within the surrounding urban structure, particularly when the project is in a small town

or in towns with a high histroic and architectural interest. This point is very important and we will see it in the next chapter in detail.

Meanwhile there are many key problems which are related to the townscape such as the built-form. Even the fragmentation of the city fabric was compounded by certain physical characteristics of new urban building projects.

It seems to some observers that the scale of this implementation, has modified the traditional built form to such a degree that its integrity was threatened in a new way.

The city has always been formed and renewed in increments of varying size but in the past that variation was comparatively modest with a certain common framework of plots, blocks and streets.³

Nowadays, however, the scale of implementation of the urban project has enormously increased.

The phenomenon is graphically illustrated by the plans before and after the construction of the Eldon Square and Arndale Shopping Centre developments in Newcastle and Manchester.

In the Illustration (2.1), we can notice that there is a change of built-form. Street patterns are changed dramatically. Even exceptionally radical reshaping of the central area by the insertion of huge building mass, dismissing the notion of scale integration.

² Information in this section is from Davies, R.L./Champion, A.G., 1983, (p.61).

In the two large central area projects not only is there a dramatic jump in the scale of building but again patterns of frontages and outlook have been turned inside-out.

In the case of Eldon Square (Newcastle), the square is the most vital open space in the city and the planning aim is to ensure the development as a live core to the shopping area, contrasting with the environment of the shopping malls, which are enclosed and air conditioned.

The integration of the square has been achieved by maintaining an external walkway, providing effective access and ensuring that there are visual links between the mall and the square, Fig. (2.2), Fig. (2.3).

In the case of Manchester, the designers took the shopping centre as a self-contained project, dismissing visual links with the outside, concentrating just on internal conception. See fig. (2.1), Fig. (2.4).

In response to the fragmentation of the city, the most important task of urban design was seen to be the conservation not just of particular buildings, but the whole townscape. For example, at Carlisle, proposals for commercial development in the Lanes area has been an issue for 20 years, during which time several of the frontages which conservation groups argued should be retained have fallen down.

In current proposals of Building Design Partnership (B.D.P.), See fig. (2.5), these elevations are reconstructed as frontage to new buildings hidden behind, providing an interesting acknowledgement to the sentiment and value attributed by people to the continuity of another urban





Eldon Square Centre, ' Newcastle before development

Arndale Centre, Manchester, before development





Eldon Square Centre, Newcastle, after development Arndale Centre, Manchester. after development

Fig. (2.1).

2.1). <u>Comparative plans before and after the</u> <u>development of Eldon Square Centre</u>, (Newcastle) and Arndale Centre, Manchester.



Fig. (2.2). Eldon Square, Newcastle-upon-Tyne 36



Air view of model of Eldon Square Centre, Newcastle. Fig.(2.3).



Street level



New buildings



ARA!

Covered pedestrian circulation

Vehicular Circulation



Witny Grove over

Service level

Fig. (2.4). Arndale Centre, Manchester



context. I examine this example in detail in the next chapter.

2.3.1.2 Urban Design Theories.

Now it can be argued that there have been many attempts to frame a coherent urban design philosophy by the definition of both the elements of the system and their rules for association, that is both a vocabulary and a grammar. In the past the attempts have failed to meet these criteria, they have have concentrated on defining the vocabulary of the city as did Kevin Lynch (1960), "The Image of the City", with his famous study identifying paths, edges, nodes, districts and landmarks as the fundamental elements of urban design. Or as did Gordon Cullen (1961), in "Townscape" analyses, studying the sequential nature of the experience of towns and hence their underlying grammar.

Three recent theories, though very different, provide a consistent formal solution which might supply a way forward. The first is that developed by Melville Dunbar for Essex County Council and contained in the Essex Design Guide. In effect the Guide reconstruct a vernacular language, defining its grammar and vocabulary as appropriate to 2 conditions, rural and urban. The intention is thus to take the principle of urban design control beyond both the rigidly restrictive of Brasilia and the somewhat loose formulations of city

⁺ Information in this section is from Gosling D./Maitland, B. 1984, (pp103-117).

character in San Francisco in order to recreate the conditions of a sincerely creative tradition and then refining from them a universal language of design.

The second theory of design, that of Rationalist School, is their model for study which is the traditional 19th Century European cities, with their pattern of streets, squares and quarters, providing "desirable models of collective life", purification of their contextual associations could then be reapplied to specific conditions. For example, Robert Krier's project for the centre of Leinfelden and Leon Krier's project for Echternach, both proposed monumental systems of public spaces of this kind across the fabric of existing towns.

The third theory, principally written by Christopher Alexander (1977), which he claimed to base on observations of existing urban forms; thus historical dependence is absent from his point of view for what he describes as a "Pattern Language".

"These patterns can never be "designed" or "built" in one fell swoop - but patient piecemeal growth, designed in such a way that every individual act is always helping to create or generate these larger global patterns, will slowly and surely, over the years make a community that has these global patterns in it". (Davies, R.L./Champion, A.G. 1983, p.72)

These three urban design theories then illustrate the widespread ideas now current. They are all sustainable as coherent formal systems, and in addition all three have a great deal to say about the relationship of the formal system to the reality they serve.

2.3.1.3 <u>Physical Characteristics: making use of</u> Topography⁵

The topography needs special examination. The determination of levels must allow visibility. For example, if the centre is situated relatively low the surroundings, the roof scape will need careful handling as it will be a major design element. But the situation will be relatively simple if cut and fill can be balanced.

Landform is a very important factor to be taken into account when relating buildings to a site. It affects the visual and functional relationship between buildings and the site. Generally, it is easier and more economical to locate a building on a relatively level site than on one with sloped or irregular form. The building layout can be much more flexible on a level site; it can be integrated into its site by extending outward in a number of directions.

As the ground surface becomes progressively steeper, it becomes more difficult and expensive.

There are three techniques for sitting a building on more gentle slopes (3 to 8 percent) as illustrated in Fig. (2.6).

The first method is to terrace the ground to simulate a flat site. The uphill portion of the site where the building is to be located is excavated and filled in on the downhill portion to create a level base for the building.

The second is where the slope becomes steeper, retaining

^b The information in this section is from Booth, N.K. 1983, (pp.153-157).

walls may need to be incorporated on the uphill and/or downhill side to minimise the amount of cut and fill required to establish the level terrace, in addition retaining walls help minimise site disturbance.

The third way the building can be related to a sloped site is by a split-level first floor; with this conception part of the building structure functions as a retaining wall, as shown in the bottom of Fig. (2.6).

Generally the steeping technique is successful for expressing the influence of the slope and making the building appear integrated with the natural relief of theslope.

On steeper slopes (10-15 percent), the split-level method may be taken one step further so that there is an entire story difference between the uphill and downhill side. Many other variations can be developed through site planning and architectural design by which apparent disadvantages of site topography can be turned into positive advantage. In this case landform can help to create a separation between vehicles and pedestrian flow on two different levels as shown in the top half of Fig. (2.7).

One last concept for sitting a building on a very steep slope is to support the building structurally above the lower ground level as illustrated in the bottom half of Fig. (2.7). This concept, while costly, is appropriately used in locations where the site is either too steep or sensitive. Also, this conception lends to dramatic architectural solutions with a portion of the building coming over the site.



44

Slopes 3 to 8 percent



2.3.2 Architectural and other Technical Design Issues

The centre as defined is a building type on its own, and the architect will be concerned in the early stages of a project. Layout of the centre will depend on a variety of factors, among them - character of the open mall.

- The open mall width

- covered walkways
- the closed mall
- design character of malls and the centre
- external elevation design
- vertical circulation
- car parking
- landscaping
- fire and safety

2.3.2.1 Character of the open mall

The mall is the main element sitting the scene.

The design of an open mall needs full attention in providing an indiviual character of the open mall centre. This is co-ordinated with the street furniture, soft and hard landscaping, lighting, and signing. The basic characteristic of an open mall is pedestrianisation in a planned shopping area, the provision of attractive public areas offering relaxation with seating, refreshment and all other facilities available. The shape, design and dimensions of the malls are totally variable.

2.3.2.2 The Open Mall width

The width is very important in terms of dimension as well as its relation to the shopfront. Thus a minimum width for minor and connecting malls could be 5.6m but this dimension may result in them finding themselves totally covered by the canopies.

In the U.K. there is a recommendation in the fire code that the width of the mall should not be less than 5m, in order to minimise the risk of fire jumping from one shopfront to the opposite shop. The main mall may need a width of more than 13m in order to create pause areas, kiosks, planting and sculptures, etc., but this could impede the convenience of shoppers and reduce patronage.⁶

2.3.2.3 Covered walkways:

They are a very important feature of the open mall centre. The design of a canopy offers a big opportunity to the designer to create a design feature. There may be a problem of canopy design because of the width of the mall. The height of the canopy is related to the average height of glass in a shop front which is approximately 2.75m from pavement level. A further constraint on canopy design takes on consideration of fire brigade access. In the U.K. fire brigade vehicles require a minimum clearance of 3.6m⁶ See fig. (2.8) and fig. (2.9).

^o Information in this section is from Beddington, N. 1982, (pp.17,20,21).



Fig. (2.7) Some examples of Covered Walkways in Open centres



Fig. (2.8) Some examples of Covered Walkways in Open Centres

2.3.2.4 The closed mall

There is evidence that a new open mall centre may not significantly increase pedestrian traffic flow due to its open character to protect people from changing weather.

A new closed mall centre provides a dramatic increase of pedestrian flow. This is the complete building concept where traders and shoppers are protected within an enclosed and controlled climate envelope.

The enclosed mall may be the focus for social occasions such as play, exhibitions, refreshment etc., as well as forming the circulation routes between shops, in climatic conditions, whether hot or cold. So the centre becomes a retreat where the public can enjoy comfortable environment conditions.

This type of centre may range in size from a small specialist or neighbourhood utility centre to a vast project of many acres. An enclosed shopping centre without perimeter shops facing the street can be closed after hours and consequently offers protection against vandalism and theft - one of themore recent escalating dangers to retailers, but this may lead to serious circulation, visual and townscape problems in existing towns. In addition, special decorative features, play sculptures, fountains, landscaping are desirable and must be integrated into the design.
2.3.2.5 Design Character of enclosed malls and the centre

As I said previously, the height of malls and their width are the major design elements. Also contributing to the mall character will be the constructional system selection of materials, the colour combinations, lighting levels and the features and furniture to be incorporated into courts and main malls.

There are also many differing opinions on the climatic control to be provided in the public areas of the closed shopping centre and these opinions are related directly to the geographical climate, regulations governing health, escape and other considerations of fire precautions and energy conservation. It will also be related to the type of lighting.

Recently the designers have been thinking how to solve the problems of energy conservation and how to go back in design of the malls in such a way to avoid temperature control, with use of major natural lighting.⁷

The problem of natural lighting in architectural terms is a problem to be solved, but there are obviously many physical ways to achieve the solution, for example, by using diffusers under roof lights in the form of suspended ceiling features, by reduction of mall windows under deep canopies protecting them from direct sunlight, by clear storey glazing, the design of profile of the roof, the height of malls and also orientation.

 $^{^{7}}$ Information in this section is from Beddington, N., 1982 (p.23).

2.3.2.6 The External Elevation Design

This will have a serious visual impact on the surrounding environment in redevelopment central or peripheral to town or suburban areas.

Within a conservation area, or historic town the imagination is needed to insert this modern conception without on the one hand destroying the existing environment or on the other hand losing the strength of the new centre.

This can be done by using scale very carefully in terms of elevation treatment. For example, there is a single storey shopping centre development in Peckham, South London. It comprises a superstore and 17 shop units, vaulted shopping mall with an atrium, there will be a surface for car parking and the architect will have detailed the scheme in red and yellow brick to complement existing buildings in the area and will have attempted to compose elevations using traditional Victorian features. (Architect's Journal Apr. - June 1985). (P.40).

Also, there is another example in the inner city shopping mall. The shopping is situated in the Grand Avenue in Milwaukee. A new life was given into an existing historic building by using a multi-level glazed arcade to the rear facade of four adjacent buildings with pedestrian bridges on both ends related to the Boston store and Gimbels. (Doyle, D., Jul.-Dec. 1983 (pp.38-40).)

Reference to a design in the vernacular of the surrounding townscape may help to insert new buildings successfully into the fabric of an old historic town centre. I think at the same time if such insertion is successful it will give a new

breath to the city centre on a big scale in both commercial and preservation of the heritage of the particular place as well as the conservation of the old townscape.

Since modern architecture is free from historical references it was impossible to work with; so where did planners and architects turn? The answer is precisely to another strategy which is vernacular architecture, in a way to look for architectural ideas based on the actual buildings of a locality or a region and I think it will become an answer in the sense that the vernacular comines the best of both worlds: it is both conservative and radical, pragmatically based in experience but a source for new architectural solutions. To make this idea clear, I will refer to an article which was written by Richard Guy Wilson in the Architecture Review - November 1986. He said:

"Architects turn to the vernacular to re-establish contact with the fundamental nature of building and to re-create a basic architectural form." Wilson, G.R. 1986 (p.77).

He said also the questions that must be asked are: why do architects turn to the vernacular? What have they seen or defined as the vernacular? and how do they use the vernacular? He said: "For many architects the words vernacular and nature are synonymous. Vernacular is nature, or the nature of architecture, it is a return to the roots or fundamentals, uncontaminated by an academic overlay, whether classical, the Beaux Arts or Modern".

2.3.2.7 Vertical Circulation

Vertical circulation in a multi-level centre is as

as important as horizontal circulation. Escalators, lifts and staircases must be strategically placed and readily identifiable to invite shoppers onto the various levels, with minimum obstruction and without creating "dead-leg" areas.

a. Escalators and passenger conveyors

The provision of escalators for shopping centres has its own problems. It is as well to review the options and limitations. However, from a practical point of view 1m width is really necessary in shopping malls to allow shoppers with packages and/or children, or two people together, to mount or descend the escalator.

The smaller escalators are useful more for individual units and shorter distance of travel. Escalators by their nature form a visual barrier but this can be minimised by use of a glazed balustrade to the upper half of the escalator. Alternatively, they can be aggressively designed to indicate access routes, say, by setting them across instead of along the circulation route and using the balustrade as a directional indication to encourage vertical movement.⁸

b. Lifts

Lifts will be required in all multi-level centres which cannot rely exclusively on escalators. Small lifts are no use in shopping centres; it is better to have a few adequate capacity lifts than a large number of small ones.

The transparent lift in a glass cage can be an interesting feature in terms of vision as well as decoration

⁸ The information from this section is from Beddington, N., 1982, (p.27).

in designing the mall. But the conventional bank of lifts with enclosed shaft is a difficult design feature to make inviting, and a visible interference. It is therefore likely to be sited in a subordinate position from the circulation routes. Lifts should be large enough to carry trolleys, pushchairs and invalid chairs. Ideally, during busy periods, they are manually operated by an attendant and fully automatic during quiet times. In a multi-storey centre it is likely that goods lifts are essential and the fire brigade will request that a goods lift be available for firefighting. It will need to be of adequate capacity and carrying load.

All forms of vertical access are integral with the design and planning of the centre and the specialist manufacturer and consultants concerned with its provision should be consulted at briefing stage.

2.3.2.8 Car Parking

Many alternatives are open to theplanner regarding parking facilities. The design of car parking for a shopping centre is very specialised. So the various factors that the planners need to consider in trying to make a decision on which system would bestbe suitable for a particular development are:

- whether it is necessary to link the new with future or existing car parks.
- whether it is possible to combine servicing with car parking.
- the cost of each system per car parking space.
- the likely pedestrian flows from the car park to other places in the town centre.

The location of car parking in shopping centres also depends greatly on the surrounding road system, site topography, on the other developments in the area, on land costs. For shopping centres two types of car parking must be provided whatever the local situation: long-term for employees and short-term for shoppers in separate areas. The maximum distance between shopper's car, or public transport pick-up points and principal shops should be not exceed 200m.⁹ Tony Kouba said,

"meeting Los Angeles minimum parking requirements is not enough, particularly if the centre has several fast food stores. To attract repeat customers, nothing gives a centre a bad name faster than inadequate parking and shopkeepers are starting to consider these factors in leasing decision". Kouba, T. Jul.Dec 1985 (pp.43-44).

Multi-storey car parks can easily, without design control, dominate the centre and destroy its character in terms of design and scale. Multi-level covered car parks for shopping centres will in particular require adequate supervision and should be related to the control room in order to deal with congestion at peak periods and other problems. In case the supervision is very poor or does not exist surely visitors to the centre will lose valuable shopping time. Also the trolley bay should be taken into consideration by separation from car parking spaces. In all car parks, good maintenance is required.

It is likely that the fire brigade will request that a good lift be available for fore-fighting.

^{\vee} Information in this section is from Darlow, C. (1972), (p.80).

2.3.2.9 Landscaping

Landscaping is a very important element which must proceed in the closest integration with site planning, architectural design, especially design of pedestrian areas. Landscaping should never take the character of external decor limited to the additionof a few trees here and there. Landscaping should be as a contrast to the man-made structure and include the conservation of existing natural features such as trees, rock formation, water bodies in the site.

These elements can add a good impression to the centre when it is seen from the surroundings or even from the nearest feature of the centre, namely car parking. There are two major types of landscaping in the shopping centres, hard and soft. Both of them are situated outside in the open air and within the closed mall.

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a. Hard landscaping

Hard landscaping concerns several pavements, roads, retaining walls, steps, changes of level, ramps and integration of escalators gently into the floorscape. It must also incorporate design of guardrails, balustrades, etc. and the siting and design of street furniture, kiosks, lamp standard, litter bins and signs. The main thing in hard landscaping is the choice of materials so it must be durable and weather resistant and easy to wash down.

In addition the materials used have to be easy to replace in case of damage. Hard landscaping can be used very effectively to assist the function of the centre and

will form the aesthetic interest by producing fountains and sculptures. Also the use of hard landscaping has a great effect to break the monotony of the floorscape.

b. Soft landscaping

Soft landscaping in the open mall shopping centre will have to take into consideration specific constraints; for example, trees must not obscure shop frontages, vistas, signing or other important features. Planting in pedestrian areas must be designed to look attractive in all seasons and at the same time it can protect the surroundings from traffic noise.

In enclosed centres most conditions still apply but there are additional considerations, among them the suitability to interior scale and condition. Soft landscaping also needs careful and specialised attention during the establishment period, for example with the use of artificial flowers and plants because this kind of decorating element is very dangerous and can cause a fire in the mall.

2.3.2.10 Fire safety

Fire safety involves two considerations - safety to life and protection of property. Methods of protection of property are mainly specified by insurance companies. Safety to life deals mainly with construction, spread of flame, means of escape and prevention of the spread of fire and facilities for firefighting. The above points apply mainly to covered shopping centres. Open shopping centres are as a general rule to be considered as individual unit buildings.

Architects designing an open shopping centre must ensure that each unit complies with the relevant provisions as regards periods of fire resistance, means of escape, flame spread, separation between shop fronts.

As mentioned previously, canopy heights, and widths of an open mall must be adequate for entry of fire fighting vehicles. In the case of enclosed shopping centres, the problem becomes very complex and among these problems are:

(i) The means of escape from large and often complex buildings, and the enclosed shopping centre is considered as one building with a high risk.

(ii) The large size of the building which is a component of a series of smaller uses of different sizes and fire risks all together produce an unusually high potential fire risk.

(iii) The provision of adequate primary systems for dealing with an outbreak of fire and in particular the handling of the large amounts of smoke which will be quickly produced and prejudice the safe evacuation of the building.

a. Means of Escape

The principle of means of escape is the facility to reach a protected point, i.e. one protected from smoke and fire within a given time. Means of escape provisions in enclosed centres must be of very high standard. But as a fire certificate is required for the complex as a whole,

the Fire Precautions Act comes into play and the fire brigade will need to be satisfied concerning the proposals and moreover will not issue the certificate until completion. A carefully co-ordinated alarm system will be needed in a shopping centre. Alarms from various zones of the complex will be activated by smoke. (Information from Beddington, N., 1982 (p.88).

b. Smoke Control

Smoke control in a closed mall shopping centre has been and is the subject of much research.

Smoke control with smoke ventilation is not a constituent of controlling or extinguishing a fire but is designed as a method of providing safe escape routes for the occupants and also to clear access for fire fighting.

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"In the case of multi-storey car parks or enclosed car parks in basements, artificial ventilation must be provided if more than one third of the area of the enclosed walls is solid." (Darlow, C. 1972, P p.128.)

In large developments alternative escape routes should always be provided and the maximum distance between protected zones has to be agreed with the fire offices, but generally they cannot be more than $30m^{10}$ Another factor to consider is that protected zones should provide escape from buildings without the person who is escaping having to pass through unprotected zones on his way to the open air outside the buildings.

Regarding storage within shops and service areas, all retailers should keep their refuse within the confines of

¹⁰ Darlow, C., (1972 (p.128)

1. When the smoke from a shop fire enters an unventilated mall, the moving smoke layer at a high level, which moves faster than the people escaping, displaces clear air in the directions arrowed.

2. When the high level smoke hits the end of the mall it is drawn back at low level along the mall towards the original fire. This confuses people escaping into, rather than away from the source.

3. In an open ended mall however, much of the smoke escapes, some is drawn in by the wind at low level.

4. By introducing screens at high level at intervals = along the length of the mall, reservoirs can be formed to contain the smoke which is then vented out through smoke exhausts.

5. In the shop, the rising smoke mixes with incoming air until it enters the single storey mall where it is drawn at high level towards the two-storey section. It rises past people on the balcony at first floor to high level in the twostorey mall where it can be evacuated.

6. In the above arrangement there is a spillage of smoke, particularly for people on the first floor. By forming_ reservoirs and well defined smoke ducts the smoke can be contained more easily.





The principal threat from fire in shopping centres is from smoke, particularly in the malls, where shoppers automatically tend to head, even when alternatives means of escape are available.







5' 61 their own premises or service area. Large retailers such as department stores and larger supermarkets, would normally consider the storage and disposal of their refuse separately from that of the remainder of the centre. Smaller shops usually store their refuse at the rear of their premises in a suitable, isolated, fireproof enclosure accessible to the service area. Wet and semi wet rubbish should be temporarily stored before collection in containers which can easily be cleaned and disinfected and should be constructed of metal, plastic or glass fibre.

The last section will explain very well the phenomena of smoke inside the mall and its movement in different cases of shopping centre malls. (See fig. (2.10).

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2.4 THE ROLE OF THE DEVELOPER AND LOCAL AUTHORITY

In a paper to the International Council of Shopping Centres, 1978 by Jean Louis Solal, he said,

"To solve the problem of the down-down shopping centre there is a need for the joint efforts of all the disciplines of knowledge; architects, sociologists, engineers, economists, political scientists, the support of Government at all levels, along with the organisation and management skills which private developers alone can provide to give entrepreneurial drive, competence, dynamics and credability to any project. Since urban problems are a compound of physical, social, economic and political elements there is a need for an overall concept plan which will focus on the aspects of planned space use relationships, and accessibility. The private businessman or shopping centre developer cannot do this concept planning all by himself." Beddington, N. 1982 (p.83).

We should study the role of the developer because his primary role is to make the new centre happen and to assemble the finance, land, tenants and professional and building skills in such a way that a complete shopping centre would be produced by a certain date.

Since the developer is uniquely concerned with all stages of the shopping centre life, a catalogue of his activities describes also the process by which the centre is brought about.

The Local Authority could act as a developer, that means retaining firm control over the architecture and could ensure that the overall development meets with its wishes.

The first stage: site selection, will be concerned not only with the disposition within the area of interest but its highway system pattern of growth, availability of land and all these ingredients must be related to the intentions of the department store and their plans for expansion in the area concerned.

The project may start with a developer or Local Authority looking for a site or a site looking for a developer. He will of course provide by his expertise within the total design concept, shells of shopping units for tenants who will be responsible for shop frontage finishes and internal fitting out.

In the case of a redevelopment the site may have to be assembled by negotiation with a number of different freeholders and may include alteration to existing road patterns.

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Public inquiries and public participation exercises may have to be held and the whole process of site acquisition may be a lengthy and complicated one resulting perhaps in irregular boundaries and retention of certain existing features or buildings. It may be that major or subsidiary mains services running through the site may have to be diverted. Where diversion is inevitable this will have a very significant effect on the cost programming and phasing of the contract, involving a long process of negotiation and execution.

CHAPTER TWO - REFERENCES

Architect's Journal (Apr.Jun. 1985). Vol. 181, No. 15.
Beddington, N. (1982). Design for Shopping Centres. University Press, Cambridge, England.
Booth, N.K. (1983). Basic Elements of Landscape Architectural Design. Published by Elsevier Science Publishing Co. Inc. Amsterdam, The Netherlands.
Corporation of Glasgow, (February 1974) - Planning Policy Report on Shopping.
Darlow, C. (1972). Enclosed Shopping Centres - Published by Architectural Press. London.
Davies, R.L./Champion, A.G. (1983). The Future for the <u>City Centre</u> . Special publication No. 14 published by Academic Press. Inc. New York.
Doyle, D. (July.Dec. 1983). <u>Perspectives</u> . Progressive Architecture, Vol. 64, No. 12.
Gosling, D./Maitland, B. (1984). Concept of Urban Design Published in U.S.A. by Martin's press, N. York.
Kouba, T. (July.Dec. 1985). Progressive Architecture, Vol. 66. No. 10.

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Wilson, G.R. (Nov. 1986). Learning from the American Vernacular, The Architecture Review.

CHAPTER THREE

<u>CARLISLE SHOPPING CENTRE</u> <u>LANES</u>_

CHAPTER 3. CARLISLE SHOPPING CENTRE

THE LANES"

3.1 HISTORIC BACKGROUND

The importance of Carlisle is due to its location; it serves a wide rural hinterland, the largest cities or towns being Newcastle, 58 miles to the east, Glasgow 97 miles to the north and the Lancashire industrial belt over 90 miles to the south.

The ancient settlement was founded on an easily defensible site at the confluence of the Eden and Caldew, with a commanding view of traffic crossing either river.

Carlistle was rebuilt by theNormans and developed gradually from Medieval times until the 19th Century when the railways came which brought great prosperity and growth. Since this period Carlisle has continued to expand as a market town and a local manufacturing centre. What is therefore worth noting is the degree which the present city contains vestiges of the past.

All cities have buildings and features to help people to read their past; Carlisle has its share: the Castle, the Cathedral, the Museum, the Old Town Hall and later Georgian and Victorian buildings.

The principal shopping area in Carlisle is centred around English Street, Scotch Street and Lowther Street. Many people feel that the Lanes are a significant part of their heritage.

The Lanes are reputed to be medieval in origin, but

but evidence is not conclusive. The lack of firm evidence suggests that while the Lanes portray a medieval pattern to be seen in settlements elsewhere, it seems likely that they originated in Elizabethan times developing behind frontages to principal streets within the walled town. By the end of the 17th Century, this had become the most densely built part of Carlisle.

The early 1800's was a period of intense pressure for growth of settlements throughout the century, caused by rural depopulation and industrialisation. Restriction on the physical extension of a town by either the presence of a wall or grazing rights on unenclosed fields, or both, led to the use of every spare piece of back-land being used to build long rows of back-to-back houses.

The working classes in Carlisle lived almost in "lanes" or passages between principal and secondary streets. Many of these lanes were entered by a covered passage and some were closed at one end, forming a cul-de-sac. Their width in general was a few metres.

It had been asserted that from nine to ten thousand persons in Carlisle reside in the lanes, courts and alleys so situated. Some of the cottages are in single rows, but more have the back-to-back arrangement.

These houses had one mommon stair to several tenancies, many of these tenements are faulty in all their means of ventilation; either the windows do not open, or only one "pane" or square can be opened, this does not allow for any regular change of air, and consequently ventilatton is most imperfectly carried out.

Over the years, many dwellings were pulled down and replaced with small businesses, car parks and other uses.

Many buildings of the 19th century remain; their present structural conditions are very poor.

In summary, the historical significance of the Lanes seems to lie not so much in the buildings as in their form, layout and scale, and the frequency of east-west lines movements. (See Fig. (3.1.)

Carlisle City Council earmarked the site of the lanes development in 1954 and the first scheme was prepared in 1959. However, this initial scheme was fairly limited in extent and it was felt by the Ministry of Housing and Local Government that the scheme was not sufficiently comprehensive to warrant a loan sanction, particularly as the proposals tended to perpetuate the obsolete layout of that part. Because, after York, Carlisle is the most important Roman city in the north of England and voices were raised in both secular and professional circles that this characterful town should not have its scale destroyed or its visual unity mutilated. As a result the council decided to extend the development area in a more comprehensive redevelopment in a way to cover a major site. In 1961 consultants were appointed to advise and prepare a draft scheme. This was approved in 1965 and was included in a development plan in 1968.

However, in 1970, owing to changing economic circumstances, the company felt unable to continue and because of restrictions on capital expenditure and government financial

Historical Development of th. Lanes



1.1570



2.1746







5.1977

- Extract from an "Anclent Plan of the City of Carlisle", 1570.
 Extract from a "Plan of the City of Carlisle", originally proposed to show the position of Ustreries erected by the base of Cumberland, 1746.
 Extract from a "Plan of the City of Carlisle and Places Adjacent", 1794.
- 4. Extract from a "Plan of Part of the City of Lixtract from a "Plan of Part of the City of Carlishe", from the Reports of Superintending Inspectors of the General board of Nealth, 1850. 5. As the area is today.

3.1794

Historical Development of the Lanes

Fig. (3.1)

policy, it was felt that the redevelopment should be postponed and the confirmed compulsory purchase order was allowed to lapse.

In 1973, a revised scheme was approved by the Council, following the appointment of Laing Development Co. to undertake a scheme as well as following pressure from local conservation groups, however, it was decided to suspend negotiations with Laing.

Under the current legislation, the Council decided that the city of Carlisle should develop its own central area and a number of planning and estates consultants were interviewed to seek the most effective team to proposa and implement a scheme tailored precisely to Carlisle's needs.

In 1977, Donaldsons and Building Design Partnership (BDP) were jointly selected to carry out a study of the Lanes area.

Over a preliminary 6 months period a planning study was done as proposals were formulated. They were tested across a wide public's comments whose opinions were taken into consideration.

Three options emerged as a possible way forward. There was a clear wish to preserve the character of the city and as a result the three options varied from a simple action proposal to a comprehensive scheme for the whole area which retained to some extent the scale of the old buildings and even the shape of the Lanes.

3.2 TOWNSCAPE

The centre of Carlisle has retained a human scale and

coherence which was lost in many other towns and cities.

The town hall square is undoubtedly the heart of the city, the focal point for a variety of uses. The townscape is the art of relationship of buildings and elements in the urban scene, and the sensitive pedestrianisation of the square has successfully knitted together many different elements in order to form a space which is used day and night. (See Fig. (3.3.)

The Town Hall Square slopes slightly down in a northerly direction and takes the eye to many views which consist of many elements of great individual interest. For example the facade of No. 77 Scotch Street with a balustrade above the cornice and broken pediments above the windows, reputed to have been built in 1720 for the Jackson family. (See fig. (3.3).

There are several vistas from the Square to the north along Castle Street to the east of the Cathedral, and along Scotch Street where the visual punctuation were presented at intervals of three and four storey brick built buildings. English Street is the major southern approach to Town Hall Square. It widens, then narrows and opens out into the Square. The Georgian buildings are predominantly three and four storeys, with variations in width, height, colour and materials.

Scotch Street has a long time been the main approach to the Town Hall Square from the northern part of the city. Buildings flanking the road are mainly three storeys high. The continuity of the street frontage is ensured by this



variation in the height of the buildings as well as the unit width of the plot.

Bank Street is another approach to the square from the Western side. The street is comparatively recent with late 19th Century buildings in brick work. Also, the elevations on both sides of the street are three storeys high. The vista towards English Street is determined by modern shop fronts as well as the Midland Bank's location which helps in some way to bring thepedestrian flow to the Town Hall Square and acts as a visual pivot.

3.3 CAR PARKING

There are two continuing problems recognised in the 1975 "Carlisle transportation system". They are mainly the difficulty for local south-north traffic circulation by passing through the city centre and the lack of provision of car parking in certain parts of the city centre.

There was a recommendation in the transportation plan for 800 parking spaces by 1986. Originally some provision was to be made on the present bus station site, butthe opportunity was seen for provision in the Lanes in conjunction with the proposed shopping redevelopment scheme.

People involved in designing shopping schemes were supporting the idea of providing a car park in the Lanes area, but probably at multi-storey level in order to help the city centre needs, bearing in mind the traffic system with the best location giving easy access.

In addition to car parking the question of roads movement is important to situate a car park, for example;



Fig. (3.3). Movement in the Central Area of Carlisle

West Tower Street is a single carriageway road two lanes in each direction, forming the principal access to the site from a grade-separated interchange on the inner ring road.

Scotch Street is two-way and also has pick-up and set-down stops for bus passengers. The future policy is likely to reduce the volume of traffic through restriction of access to buses and vehicles to give better conditions for pedestrians and servicing from Scotch Street to the shopping development area should therefore be kept to a minimum.

English Street is closed to traffic except for vehicles requiring access to premises and buses which can pick up and set down there. Lowther Street forms part of the inner ring road and will be the principel service access road to the site.

The Lanes are generally not much used by pedestrian flow, however Globe Lane and Grapes Lane are well used because of their layout running in the direction east-west to relate the bus station which is located opposite Grapes Lane and the Town Hall Square in the other end of the former Lane. Scotch Street is an important pedestrian route and its wide pavement is adequate for any increased flow, leading from Town Hall Square to the Market and the civic centre. (See fig. (3.4).

3.4 CONSERVATION AND BUILDING CONDITIONS

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Conservation areas are designed to preserve the character of areas of special architectural or historic interest and in 1968 the council declared three conservation areas in the city centre.

The committee felt that designation of an overall conservation area would give greater protection to part of Carlisle "whose architectural character and street layout reflect strongly the historic development of the city, and give it its distinct individuality", so the preparation of the scheme would preserve and enhance the character and appearance of the whole area, as well as encourage property owners to improve and maintain their property. But in Carlisle there is little doubt that existing conservation boundaries are inadequate to protect its heritage. So in general there are two major factors to be considered.

Firstly, designation of a conservation area means that listed building consent is required for the whole or part demolition of any building, within the area and it does not matter if it is a listed building or not. In parts of the city centre there are many unsatisfactory older buildings which require demolition. Secondly, the major criteria for designation is whether or not an area can be considered of outstanding interest. Certainly Carlisle's city centre can be considered outstanding.

For example, the Town Hall Square frontage is outstanding in its townscape contribution of the Square as well as the frontage of Bank Street which is also

significant. (See Fig. (3.5).)

- Building Condition and uses:

A survey of building and ground conditions in the Lanes area was carried out during early September 1977. Essentially the work consisted of an external survey from the ground and from some upper storeys and roofs, as well as internal checks. So the main conclusions of detailed comments and findings of the buildings survey are as follows:

a. Most buildings are affected by varying degrees by differential settlement.

b. There is a general lack of maintenance of buildings, particularly away from the main frontages due to 1) the juxtaposition of buildings, 2) uncertainty about the future redevelopment of the area and 3) occupation by retailers and other economic concerns reliant on low overheads who cannot afford to invest in improvements.

c. buildings between Drovers Lane and East Tower Street are generally sound.

d. All the buildings in the back-land development from East Tower Street to Old Grapes Lane have come to the end of their useful life. Some have recently been demolished. Some shops on the north side of Globe Lane are in poor conditions.

e. Many buildings on Scotch and Lowther Street have a limited future lifespan and certain elements of buildings are in an unstable condition.

f. The listed buildings on Scotch Street are in very



poor condition.

g. Buildings in English Street are in fair to good condition except for three or four buildings.

h. Buildings in Bank Street and the upper part of Lowther Street are in good condition.

The site is substantially flat from East to West and sloped to the north slightly. New buildings on the site assumed to comprise a mixture of one and two storey cross wall construction on a domestic scale, and one, two and three storeys framed construction for large stores and car parks. (See Fig. (3.6), Fig. (3.7) and Fig. (3.8).)

3.5 SITE AND DESIGN CONSIDERATION

a. <u>Site</u>

There is a domestic scale concerning the architecture of The Lanes which should be respected by appropriate design of new buildings, mostly concerning height of the buildings which will not exceed three to four storeys.

In the site itself there are few buildings of real merit and of high architectural quality and those buildings are confined to the periphery. Some of them are located in Scotch Street, Lowther Street and Bank Street.

Within the site, for example in Globe Lane and the northern edge of Grapes Lane are suggestions of a high character which might be recreated if new development could be sufficiently in the same scale as in the past.



Fig. (3.5). Building Condition in The Lanes Area



Aerial view of Carlisle town centre from the Southeast, 1977.

Fig. (3.6). The Original Lanes



Fig. (3.7). The original Lanes

According to Mr. Dave Cash, of BDP, the most interesting facade which we were looking at carefully is along Scotch Street because it is a facade of great character and townscape value, fronting Town Hall Square and, he adds, that without question they are the most important buildings architecturally in the area. It is true and difficult in such an area with its complexity to represent the vernacular architecture, but some future architect and developer may find a very simple solution by utilising the vocabulary of the local architecture, including, like a human scale, narrow elevation widths, pitched roofs and sometimes providing a high building in order to create punctuation points in the level of the facade and utilising the main material fitting in with the whole area such as red brick, red sandstone.

To complete this question of integrity, David Ives' article in Estates Gazette, July 5 1986 states that,

"There was clearly a wish to preserve the character of the city and although there remained a hard core who were against any form of development, the consensus was that an extension of shopping facilities was badly needed provided that it was in keeping with the environment."

And he did explain that there were,

"Constraints imposed by the need to preserve the integrity of the city as a whole provided the greatest challenge to the developer of the Lanes."

b. Design Considerations

The layout of the Lanes itself dictates some criteria to be taken into consideration. Firstly, to preserve as many of the traditional medieval lanes running east-west as possible. Secondly, the requirement that the main lane which is Globe Lane should be retained in its exact route

and with its exact dimensions. Thirdly, flexible design for the second important lane which is Grapes Lane. Fourthly, the connection of the two principal lanes in some way to create a good vista within the middle of the site, as well as preservation of several minor lanes to be used as entrances to the service areas. (See Fig. (3.9).

3.6 EVOLUTION OF THE SCHEME

Option A

Frontage shopping on Scotch Street and housing and car parking in the Lanes.

The first approach to the site by designers was as follows:

a. There should be no major shopping scheme in the Lanes.

b. The Lanes pattern should be re-created with new housing development.

The purpose of option A is that shops on Lower Scotch Street would be serviced from the front. Car parking maximum of 130 spaces would be provided at surface level north of Laws Lane and north of Grapes Lane where existing buildings would have to be demolished for this purpose. Additional land would have to be aquired north of Globe Lane in order to provide housing around a small park - which could allow circulation east-west as it was in the past. Dwellings would be for students, single and two person households and the elderly. (See fig. (3.10).



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Fig. (3.9). Design Consideration
Option B

Major shopping areas and a multi-storey car park south of Globe Lane and other uses north of Globe Lane. Option B aims to:

- a. Solve comprehensively the problems of the area.
- b. Locate major shopping in the most valuable part of the site.
- c. Provide a large car park to help city centre needs as well as those of the site.
- d. Give a balance of uses, by including housing or some other non-commercial use north of Globe Lane.

What they did in this scheme is: to situate a group of retail units between Globe Lane and Kings Arms Lane based on 2 major stores and a supermarket. There has been considerable interest from local and national traders wishing to be considered for a new shopping centre of this type, but the site indicates that:-

- 1. A multi-storey car park located close to new shops is a vital ingredient in any major new scheme.
- 2. A main pedestrian route would attract shoppers from Town Hall Square through Lowther Street at the Bus Station.
- 3. A north-south mall would link the main stores and 20-25 shop units - across Globe Lane and through a housing area to a proposed multi-storey car park alongside East Tower Street.
- 4. Globe Lane would become a more important pedestrian route.
- 5. Housing would be in a similar form to that in option A,





Housing area Shops and housing above Car parking Shops area Pedestrian area

- Service road
- Fig. (3.10) Option A

giving recognition to the pattern of the Lanes.
6. Servicing of the scheme would be at ground level, basement servicing has been discounted on grounds of cost and upper-level servicing for two reasons: cost and aesthetic.

7. A small area would be acquired south of King Arms Lane facilitate servicing of the proposed large store and would provide opportunity for rear service to existing properties on English Street.

For the northern part of the site they did provide a car parking with at least 300 spaces by taking advantage of the site levels to reduce building scale. The principal access would be from East Tower Street (not shown on plan). A secondary access was at a high level from Lowther Street. The location of the car park is ideal in terms of traffic but does not give the proximity to shops sought by retailers. Other non-commercial uses were considered for the area between the carpark and Globe Lane. (See fig. (3.11).

Option C

Many schemes for the Lanes have been discussed and discarded over the past 17 years. It is now very important that the Council decides on a course of action, after hearing public views, and proceeds quickly to implementation.

The basic principles of the scheme are as follows: a. A group of retail units between the major Lane, Globe Lane and Kings Arms Lane, with two major stores and a number of retail units.



Fig. (3.11). Option B

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- b. A superstore or department store is located in the north of Globe Lane with car parking above for 400 cars.
- c. To rebuild Globe Lane as it was in dimension with introducing small retail units on the ground level and the upper level with dwellings.
- d. Partially or totally rebuilt listed building existing on the site.

In this scheme some criticisms were made mainly about the roofscale of the car parking and the street scene. By more discussion about Option C, addition of some facilities such as a library were added and the conservation area was extended. See Fig. (3.12) and Fig. (3.13.)

This recommendation (for Option C) caused some unease among residents because they feared this monumental solution. Also, it did give a great opportunity to the designers to recommend a mixture of uses in order to encourage life and interest in the middle of the Carlisle City.

The new library and houses above the shops were integrated carefully in the scheme.

The designers did respect the constraints imposed to preserve the integrity by recreating on their exact alignment two of the beloved footways of Globe and Grapes Lane. They have built to their original width and covered with a high lightweight glass roof. Together with a central link, New Lane, they converge on a central square which contains trees and seats. In the western side of the Lanes the decision was to create English Street and Scotch



Fig. (3.12). Option C Ground Floor Plan



Fig. (3.13). Option C. First Floor Plan

Street in the same architectural character.

The ground floor shops and the two and three storey dwellings above express a variety of forms and materials shop by shop.

In East Tower Street they tackled another problem which is the multi-storey car parking. They decorated the facade by using ornamental grilles in order to soften the impact of the usual black openings. The multi-storey car parking roofscape is flat but the designers did introduce slated canopies in some places in order to ensure the integration of the scheme into its surroundings.

The library is located at first, second and third floor levels on the north side of Globe Lane. There is also a dramatic view in both directions in and out of the library through large screen glass at the intersection of Globe and New Lane.

3.7 VISUAL ANALYSIS

The method which I have adopted for this analysis is mainly explained in two major points which are as follows:- 1. External views

2. Internal views

1. External Views

By External View I mean to explain the relation which exists between the new development and its surroundings in a visual term.

2. Internal Views

By this I mean how the new development is treated internally in relation to its surroundings. Is there any visual expression which explains this relation between outside and inside?

As we know, the variety in frontage design within the same urban fabric character, the hierarchy of openings, the vertical and horizontal exphasis, the rhythm of the facades can offer a visual enjoyment, surprise and a series of variety of unexpected visual change in one area. The elements which create this are expressed by three basic elements:-

a. Visual anticipation

It is explained by delaying the exposure of the important image. But the anticipation can be reinforced by other elements such as smells, emission of light or noise, etc.

b. <u>Visual excitement</u>

It is explained by urban furnitures such as sculptures, columns, towers, which act as focal points or landmarks. These elements can help to identify in some way the sense of direction.

c. Visual terminations

Visual terminations are the elements that close vistas; they generally occur at T-junctions and offer visual anticipation in lateral directions. They are usually buildings as they are the most important vertical elements in forming and determining spaces. Visual terminations could act as points of reference or landmark and could give a sense of

enclosure to the space where one can feel a secure environment.

These basic elements of townscape such as excitement anticipations, punctuations, enclosure and scale are necessary to make a centre structurally legible, significant and exciting. Other elements such as landscaping, urban and street furniture could accentuate the image of the environment.

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Fig. (3.19) Facade of the shopping centre along Scotch Street presents the three essential elements of the facade treatment; height, unit width, colour and material. Successful combination between those elements.



Fig. (3.20). Old facade and the new facade along Scotch Street. In respect of unit width, height and vertical emphasises, a good integration is presented.



New shopping centre facade, the wall surface treatment, small shop units at ground level, housing above. A good visual excitement in Fig. (3.21). the facade.



Fig. (3.22).

A view from The Town Hall Square showing new and old facades treatment with the presence of all factors giving a good visual termination to the whole area.



Fig. (3.23). View from Town Hall Square showing the importance of the existing buildings' character of the area. Roofscape, vertical emphasis and the height.



Fig. (3.24).

Town Hall Square as a landmark with the richness of the existing buildings facade treatment give a visual termination of the whole area.



Fig. (3.25, 3.26). Views of the facade along Scotch Street of the existing buildings, showing the principle of the old street function on one hand and the mixture between material and colour in addition to the special treatment of the market entrance on the other hand giving to the designer inspiration to use this kind of treatment for shopping centres entrances.





Fig. (3.27). Bank Street facade, showing mainly the facade height, vertical emphasis, material and the Bank which act as a landmark in the end of the street giving a good visual excitement to the street.



Fig. (3.28).

View from Lowther Street showing the Library roofscape on the top in relation to the existing building roof treatment in a way to create a visual integrity of the facade.



Fig. (3.29).

Rhythm along Lowther Street facade by a special treatment of the multi-storey car parking roofscape.



Fig. (3.30) View showing the variation in height, unit width, material, roofscape, in relation to the existing building treatment along Lowther Street.



Fig. (3.31, 32) Internal views showing one of the most important Lanes (Globe) running east-west relating to the two main streets (Scotch and Lowther) with its visual particularity in the level of its roofscape, floorscape and small unit shops facade treatment.





Fig. (3.33) Internal view in Globe Lane with the presence of visual punctuation and the production of vernacular architectural elements of the past.



Fig. (3.34) Another internal view in Globe Lane showing decoration features and brickwork along the Lane.





3. Fig. (3.36a)



Fig. 3.36b). Internal views from the second important Lane (Grapes) running east-west parallel to the Globe Lane relating Town Hall Square and Lowther Street showing the central square with its specific treatment both with the presence of landscaping and roofscape. In addition to the small unit shops, floors Fig.(3.36b). Internal views from the second important Lane (grapes) running east-west parallel to the Globe Lane relating Town Hall Square and Lowther Street - showing the central square with its specific treatment both with the presence of landscaping and roofscape. In addition to the small unit shops, floorscape and visual anticipation, termination at central square with the new Lane.

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Fig. (3.36c) Internal view in the New Lane relating the Globe to Grapes Lane showing a big visual termination, construction details, walkway above and the mixture between hard and soft landscaping.



Fig. (3.36d).



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Fig. (3.36e)

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Fig. (3.37) View showing the most important entrance of the centre and the entrance of servicing area by using different conception of the arch form to differentiate visually between the entrances.



Fig. (3.38). View through Archgate showing the service area underneath the main department store on the northern part of the centre as well as the brickwork.



Fig. (3.39). View through Archgate showing the service area from Lowther Street. It shows the difference of floorscape treatment between the pedestrian route, servicing area and vehicular street.



Fig. (3.40a) Three different views of the same service area in the southern part showing the multi-use of the space as car parking for staff and service area feeding the new centre and the existing shops of Bank Street, as well as the rear facades of both new development and existing buildings.



Fig. 3.40b) Another view of a servicing area showing the treatment of the entrance which is repeated every time in the schme by producing an archgate for every servicing area giving in visual terms a differenciation between the different entrances.



Fig. (3.40c) The multi-use of servicing area such as a car park for the staff working in the shopping area.



Fig. (3.41) Same entrance and existance of multistorey car parking through an archgate, treated differently from other entrances.



Fig. 3.42) East Tower Street multi car parking facade with its vertical and horizontal emphasises treatment present and presents a boring visual rhythm of the facade.



View showing the roofscape and the Scotch Street elevation as the most important elements to integrate the new development into the whole urban fabric of Carlisle City. Fig. (3.43). Model.

3.8 SUMMARY

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In my opinion Carlisle Shopping Centre is very successful.

If we look carefully at the design, we notice that many old design characteristics of the past were taken into consideration, by preserving the two lanes running eastwest connecting the two main streets limiting the site, which are Lowther Street and Scotch Street. Also, the architects provided an excellent idea of covering them with glass in such a way as to give them another visual importance as well as to protect shoppers from the climatic conditions and to remind people that the two important Lanes are kept as they were before in terms of direction and dimension. In addition the architects provided many old construction details in order to support the original idea. For example, provision of hard and soft landscaping into the alleyways.

The new Lane which was created by architects within the site is mainly to connect the two principal Lanes, Grapes and Globe, is a good idea because they thought about pedestrian flow as well as creating a visual anticipation inside the centre. They also provided many walkways above the new Lane in order to join the upper levels together as had existed on the site before, but with a special treatment (see fig. (3.36c). An excellent element which I cannot give any criticism to is the treatment of the Scotch Street facade. Even Mr. Dave Cash of BDP told me that it is the main element which we were looking at with an open
eye because of the importance of The town Hall Square as well as the other buildings' frontages.

The continuity of the facade of Scotch Street exists with a high level of rhythm, by using different materials, colour and by introducing approximately the same vertical emphasis, same window shape and dimension, which gives it a real look of the immediate environment. Even when we look towards the multi-storey car parking from Scotch Street, we cannot recognise it because the architect has introduced a very clever, expensive solution to roofscape the multi-storey car parking by using a series of pitched roofs over the car park as well as introducing the library with the same treatment in order to keep the rhythm of the facade. (See fig. (3.43).

The central square is located in the middle of Grapes Lane, crossing the New Lane. It is a good idea to create such an urban space for people but I disagree with the architect in its conception. First of all the shape: if it was a regular square it would be better than the actual square shape because it breaks the direction in the whole scheme; secondly the glazed system of the whole square gives a sensation of an enclosed space so that if the architects had covered just the shops' frontages and left the rest of the square open it would be a good solution by making an urban space in the whole building mass and also would retain the past open lane to a certain extent. Also, with the visual relationship of this new square to the existing square would create a nice vista along the half of Grapes Lane and I think what would reinforce this idea is

that the two squares are situated on the same visual axis.

Servicing areas are very well situated in the whole of the scheme; there are three principal servicing areas each one being isolated from the other and they are concealed from general view and even the accessibility is very easy. See layout plan. I think the architects thought about this very carefully in terms of separation between pedestrian flow and servicing and also the service courtyard which is located behind Bank Street in the actual estate serves both new shopping centre as well as the other shops which are located along Bank Street and it is used as car parking for the staff of the centre. (See Fig. (3.40c), so it has a multi-use.

Along East Tower Street I did notice a real sadness, because of the multi-storey car parking. I think the architects thought about this facade and they introduced some vertical emphasis and another kind of window in the facade just to break the monotony but I think that they did not succeed in achieving what they were thinking about. (See fig. (3.42).)

In my opinion, there is an important point which is worth mentioning - that the front division of the layout along Scott Street and Lowther Street with a sensitive division of small units in order to reserve the past unit width, and the reason for this division the architects know its consequence upon the treatment of the elevations or in other words the architects wanted to get back to the same elevations rhythm. If we look carefully at the plan we can see this clever solution by using the unity

width in a variety of forms. So the architects did repeat the initial unit when the space required it and when the space required a large unit, they multiplied the unit two times or more. But for the rear plan, the architects used a free plan conception because the space required this kind of treatment. See Fig. (3.21), Fig. (3.25) Fig. (3.26) and Fig. (3.44).



Listed building

Past unity width Actual unity width interior footpath

Fig. (3.44). Layout of Carlisle Shopping Centre Unity width division.

CHAPTER THREE:					
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1.	David Ives,	"Estates Gazettes" (July 5 - 1986) <u>Shopping Centres - The Lanes, Carlisle</u> <u>A story of Endeavour</u> . Vol. 279 (pp.18, 19).			
2.	Review - Sh	opping Lanes (October-December 1985). <u>The Lanes, Carlisle City Centre</u> <u>Redevelopment - Reprinted from</u> <u>Concrete Quarterly</u> 147.			
3.	Building De	sign Partnership and Donaldsons (December 1977). <u>City of Carlisle Scotch</u> <u>Street/Lowther Street. Report 1.</u> An Interim Report to Carlisle City Council.			

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4. Building Design Partnership and Donaldsons (April, 1978). City of Carlisle - Scotch Street/Lowther Street. Report 2 In consultation with officers of the City Council.

CHAPTER FOUR

YORK SHOPPING CENTRE _COPPERGATE_

CHAPTER 4. YORK COPPERGATE SHOPPING CENTRE

4.1 BACKGROUND OF COPPERGATE SITE

Shopping centre developers struggling manfully to live down their image of "desecrators of British City Centres", are facing up to their trickiest challenge at present.

At the invitation of York City Council, six developers have presented detailed proposals - each proposal drawn up by a consultant architect for the 1.4 hectare site. Concerning the architecture of the site for the new development - it is a human scale and this character should be respected, especially in such a city with its great architectural character and street layout reflecting directly the historical development of the city, so of course the preparation of the new scheme would preserve and enchance the main character and the appearance of the whole area.

The site is situated on the edge of the River Foss and close to Clifford's Tower and limited from the north side by both streets, Piccadilly and Coppergate, from the west by Castlegate and the site wraps round several listed buildings and a church. (See fig.(0.0).)

The site is owned by the Council and most of it is under temporary usage as surface car parking. A thousand years ago Coppergate site was the site of a Viking settlement when the area was by then occupied by a disused chocolate factory and then came up for new development. The York Archeological Trust was keen to mount a big digging operation and it was confident that there would be

Viking remains waiting to be uncovered.

4.2 DESIGN CONSIDERATION

Concerning the guidelines for the new schemes, the Council Planning Department has specified how much accommodation developers should provide as well as requesting that a large department store should act as a magnet for a collection of smaller shops.

It recommended about 300 car parking spaces preferably underground as well as a number of residential units which were requested. It was recommended that buildings should not exceed three storeys high.

The Council also suggested that the medieval church of St. Mary's, now a heritage centre, in combination with a neighbouring group of trees could form a focus element or an urban open space for the public.

4.3 EVOLUTION OF THE SCHEME

The six developers were as follows:

- 1. John Laing: Architects; Building Design Partnership The scheme is a shopping mall which sweeps around a wide tree-filled courtyard below a translucent canopy. Flats at third level face each other across an oblong plaza. The developer also was ambitiously planning to rebuild the neighbouring cinema as a part of the new development proposal.
- 2. <u>Builders Amalgamated Company</u>: Architects: Ketley Goold and Clark. Two shopping malls intersect at a tree filled courtyard



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Existing building

Historical building

Fig. (0.0). Site location. 132

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which is submerged.

The courtyard is lined on one side by a department store with receding floors and on the other side by gabled units with bay windows.

3. French Kier Property Investments: Architects: Booth Shaw and Partners.

An expansive square is bordered by a snaking terrace of three and four storey buildings. Articulated facades and a variety of dormer windows make up the architectural style.

- 4. <u>Shepherd Developments</u>: Architects: Trevor Wilkins and Associates. Two narrow winding malls intersect in a tree-filled courtyard with sunken amphitheatre. Architectural style is provided by irregular forms and varying heights and walls are punctuated by a large glass area.
- 5. <u>The Arrowcroft Group</u>: Architects: Gordon Behoy and Partners. Three shopping malls in the form of partially enclosed arcades provide views to the church. Building forms are characterised by tiled pitched roofs.
- 6. <u>Developers Wimpey Property Holdings</u>: Architects: Chapman Taylor and Partners. The scheme by Chapman Taylor and Partners has emerged as front-runner against five competing designers. The designer has taken into consideration some important factors in designing such as the character of York with its particular scale and enclosure.

The designer will create a new urban square in such a way to retail existing trees and provide a setting for St. Mary's Heritage Centre.

The scheme provides 13000ft² of retail area in shops of varying size and 23 residential units over the shops. Concealed car parking for 300 cars is located above the main department store, enclosed in brick elevations with pitched roofs.

All ramp accesses have been concealed from general view and blended into the overall architectural concept. The Underground Museum is to display the Viking remains which the York Archeological Trust is excavating on the site. It is approached through a shop unit and descent made by lifts and staircases.

4.4. VISUAL ANALYSIS

1.	Spatial organisation		plans
2.	External views	-	photographs
3.	Internal views	-	photographs

1. SPATIAL ORGANISATION

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Existing buildings

Shopping basement

River Foss

Fig. (4.1). Basement Plan



Fig. (4.2). Ground floor plan





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Fig. (4.4). View from Coppergate Street showing the link between the new development and the old existing buildings. It also shows both visual anticipation on the north part and visual termination at the end of the street.



Fig. (4.5). External view showing the importance of the tower as a focal point in determining a good vision of the street direction, at the same time giving a very good visual termination and a high enclosure for the street itself. 138



Fig. (4.6). Fine different elevation conception in the same street with respect for height and unit width, providing a good vision.

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(Fig. (4.7). A view taken from Clifford's Tower showing the integration of the new development within the area, by considering the roofscape as a key element.

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Fig. (4.8). View taken from Tower Street showing the impact of colour and height in terms of integrity.



Fig. (4.9). View showing the ratio between building heights and street width, at the same time the new development acts as a visual termination of the street.



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Fig. (4.10). External view showing the importance of the Tower in the area as a landmark seen from different sides.

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Fig. (4.11). View from Coppergate Street showing the main entrance of the centre as well as many important factors such as heights, material, construction details and roofscape.



Fig. (4.12). View showing mainly the link between the old and new buildings with the introduction of detail brickwork and the same decorative elements as the old one.



Fig. (4.13). Contrast between the old existing building with its high quality and the poor quality of the new building in visual terms. This is produced mainly by the size of the new scheme.

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Fig. (4.14). View from Tower Street showing visually the dominance of the car parking in some way as the car parking destroys the environment by its scale and its position in the upper level.

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Fig. (4.15). Visual dominance of the car park and destruction of the main function of the shopping centre by the huge scale of the roof.



Fig. (4.16). Monotony of the facade treatment, dominance of car parking and the rear pedestrian circulation.



Fig. (4.17a) External view showing the car park facade fronting Piccadilly Street with its horizontal and vertical emphasis upon the facade treatment.

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Fig. (4.17b). Big visual impact of car park's facade treatment upon the whole scheme.



Fig. (4.18a). Two views showing mainly the visual destruction and dominance of the car park facade treatment upon the whole scheme.



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Fig. (4.18b)



Fig. (4.19). External view showing the rear facade of the centre and the morphology of the site in concealing the service area from general view. :



Fig. (4.20a). Two views from different places showing the importance of Clifford's Tower as a landmark and focal point in the area. It presents a visual excitement from the new scheme on the southern side. -

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Fig. (4.20b)

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Fig. (4.21). Internal view taken from Castlewalk showing the Central Square and the presence of vehicles in the - pedestrian area.

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Fig. (4.22). Real use of pedestrian walkway with the presence of high visual anticipation determining the enclosure of the space.

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Fig. (4.23). Internal view showing the visibility of All Saints' Church Tower as a landmark from the Central Square. The visual excitement is highly presented.



Fig. (4.24). The visibility of the central square from outside with the preservation of the trees as an important element in the square to diffuse its character.



Fig. (4.25). Special treatment of the Central Square as an urban element by landscape and canopies protecting people and shop frontages in bad weather conditions and the attraction of the space for users.



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Fig. (4.25). Internal view showing the importance of Jorvick Museum in attracting people and the use of construction material in providing a very interesting detail in wall surface and showing the variety of treatment of the building.

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Fig. (4.27). The role of St. Mary's Heritage Centre in defining the urban space as visual termination and giving it a big importance by the variety of architectural style.



Fig. (4.28). The presence of canopies, visually define the square form and provide a protection for shoppers. On the other hand canopies emphasise clearly the edge of the open space.

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Fig. (4.29). View showing the contrast between vertical emphasis of the old building and the new one.

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Fig. (4.30). Internal view showing the construction detail, brickwork, signs' importance, floorscape and the depth of the canopies.

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4.5 <u>SUMMARY AND CRITICISM</u>

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The problem with the scheme of this sort of complexity is mainly how to visually integrate such a large new building into a townscape made up of smaller buildings, varying in size, use and date.

The solution adopted here is to make the new building appear to be a cluster of smaller ones.

So the architects or the designer followed the old system of the street pattern in order to respect the width of the existing streets. I think it is one point to look at very carefully the integration of a new building in visual terms with the whole surroundings. In addition the old existing buildings on the site dictate in some way the shape or thelayout of the scheme in general and can also play a big role as landmarks for the new development. For example, the St. Mary's Heritage Centre did give an idea of the central square as its role in visual determination from the outside. The influence of the existing cinema in the eastern part had its own influence upon the scheme's shape.

As well as the space with its morphology between the cinema, the new building and other existing buildings on the north side, it did define another open space which is used mainly for servicing the area. In visual terms this space is concealed from general view. The location of the site near the River Foss had its influence upon the shape of the scheme.

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The roofscape was regarded by designers as a key

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element in the design by producing a pitched roofscape over the whole scheme. Also the variation of height was related directly to the shops below and the location of the car parking. This variation in height has a visual effect upon the rhythm of the facade, particularly in the northern and western part of the scheme. But if we look carefully at the roofscale layout of the whole scheme we can divide it into two parts:

The first part is where the car parking is located. It looks very large and does not fit in with the whole surroundings. The second part is where the small shop units and housing are located. They look like the old units or like the existing units in terms of size as well as the shape.

But the architects did use a special material, particularly red brick and red pantiles, with some areas of slate roof and rendered wall in order to integrate the whole scheme within the old urban texture. I think it is a good idea to provide such a solution for such projects on such a site. Generally speaking, the people are more attracted by this kind of material and it reminds them of their heritage which existed in the area before.

Also, architects used some construction details in a way to preserve the vernacular architecture which is very important in terms of vision as well as in terms of decoration. So decorative detail in the form of brick quoins round opening is produced and there is also a mixture of hard and soft landscaping which gives at the same time a good treatment to the public space and attracts

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people to use the space. See fig. (4.25), fig. (4.26) and fig. (4.27).

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In my opinion when we look to the project there is a point which annoys me in terms of vision, namely the situation of car parking in the upper levels.

It breaks the importance of the scheme in terms of facade treatment. It also breaks the rhythm which exists in the environment, particularly with the large windows and its visibility from all sides.

Secondly, the car park dominates with its location the main function of the shopping centre which is commercial. I think if the location of the car parking was in the lower level or in other words in the basement it would be better to ensure a good appearance as well as a good continuity in the facade. See fig. (4.15), fig. (4.16), fig. (4.17a), fig. (4.17b) and fig. (4.18a). The second criticism which I have noticed in the scheme is essentially the treatment of the central courtyard which is the most important element in the whole scheme. This is very successful in terms of using the canopies just around the courtyard, not only to protect the shoppers from bad climate conditions but also to determine an exact square form of the courtyard (see fig. (4.25), fig. (4.28), and fig. (4.30).

In addition, the clever use of frontage canopies énsures a better view from both sides. Imagine that the central courtyard is covered with glass: the view would disappear and then we could not see the most important aspects of the environment and buildings, such as All

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Saint's Tower and other buildings.

The third criticism which I think is worth mentioning is the location of servicing areas. In general, servicing areas have to be concealed from general view and to be separated from pedestrian access. So in thisproject the architects did this very successfully in the north side. But the second service yard which is located in the south part is exposed to public view.

The lorries have to go across the main pedestrian access and also its location reflects upon the treatment of the facade. (See fig. (4.18a) and fig. (4.18b).

In this example, I did mention an important point in general and now I would like to explain it in detail.

The client unit width was well done in the northern part with a division of the layout into small units as occurs in the surrounding buildings (as it was in the past).

This unit width was very well related to the height of the buildings which give a good treatment of the facade and a good rhythm along the shopping walkway situated on the north part and on the west where the housing units are integrated to the scheme. See fig. (4.31). But in the other part of the scheme, this unit width is not taken into consideration. I think there are many explanations; firstly it might be thought that the function and the location of the open space required a large open facade in order to be seen from outside as well as to attract shoppers.

Secondly, it might be thought that a department store needs a very open facade and entrances from the

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open square must be distinctive and inviting, with strong incisive signing indicating the extent and dominance of the store. Thirdly, it might be related to the grid size, because of the location of the car parking in this part on the upper levels.

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Existing building New development Pedestrian circulation

> Fig. (4.31). Layout, Coppergate, York, showing unity with division. 160

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Coppergate Shopping Centre, York	The site is very important due to its location near important historical buildings. The target is particularly to encourage tourism in the area in addition to the commercial feature and the Viking Museum.	The segregation exists between pedestrian and vehicular mainly within the new develop- ment. But in general there is some conflict between them outside the scheme.	The centre is very visible because there are many important landmarks and historical buildings such as St. Mary's Heritage Centre, Clifford's Tower and the River Foss.	The centre is accessible because the centre itself contains the Archeological Museum and also the location of the ground car park which is situated nearby in addition to other commercial areas.
Lanes Shopping Centre, Carlisle	A good choice of the site in the middle of the city. The target is to redevelop the town centre with an important commercial feature and to give again a liveness to it.	The segregation between pedestrian and vehicular move- ment exists with a high level. The car parking location is very clearly chosen.	The centre is visible due to the existence of some landmarks in the area and the good treat- ment of the entrances, in addition to the presence of historical space and buildings such as the market and the Town Hall Square.	Accessibility is well done by preserving the two important lanes (Globe, Grapes) running east-west connecting the two important streets, bus station and railway station which bring people from different parts of the city.
v	<u>Planning</u> Considerations	Circulation Movement	Visibility	Accessibility

4.6 <u>SUMMARY OF CARLISLE SHOPPING CENTRE AND</u>

COPPERGATE SHOPPING CENTRE, YORK

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	Lanes Shopping Centre, Carlisle	Coppergate Shopping Centre, York
Design Principles	In this shopping centre, the designers did preserve many design principles in a way which integrates the new development within the area by respecting the height of the existing buildings around the scheme, colour and unit width.	The architects did provide some important elements to the scheme such as the Central Square as well as respecting the dimension of the walkway, the height of buildings, conserving existing trees in the square.
Magnet Locations	The magnets or the main departments stores in Carlisle Shopping Centre are well located; each one is at one end and this distribution gives a good pedestrian move- ment inside the centre ment inside the centre push and pull system. Also, the distance between the importants magnets is well respected.	The magnets in Coppergate Shopping Centre are very close to each other. I think this conception is related directly to the existing shops which can act as a magnet in most cases.
Servicing Arrangements	There are two different arrangements of servicing in this centre. The first one is located in the basement, inte- grated with the car parking which serves the magnet by lifts. The second arrangement is at ground level and there are two separate areas, one serves the small unit shops and the second	In Coppergate Shopping Centre there are two different arrangements for servicing; like the Carlisle Shopping Centre - one at basement level and the second at ground level. At ground level one is well situated in terms of vision, the second is badly located because there is a lack of separation between pedestrian and vehicular services as well as its

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म ध	Lanes Shopping Centre, Coppergate Shopping Centre, Carlisle York	serves the second magnet with influence upon the facade a multi-use such as a car park treatment. for staff. Generally in terms of vision they are concealed from general view.	The solution adopted in this example is multi-storey car parking is located in the example is multi-storey car barking is located in the upper levels with a pitched roof. But in terms of vision it breaks the car parking by housing, library and small unit shops, also by using a pitched roof system in the upper level in order to integrate it with the surrounding.	In Carlisle Shopping Centre, the designers were aware of the unit width because they know it is width because they know it is preserved just on one side of very important in such a development on such a site, so development on such a site, so they preserved the unit width, particularly along Scotch Street in relation of course to the space required a large facade.
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Landscaping	Lanes Shopping Centre, Carlisle	Coppergate Shopping Centre, York
Landscaping	Landscaping is provided on a big scale into the public space, especially in the Square and the two important Lanes, to make them very attractive. Also, the vernacular Architecture is provided in the same spaces in order to create some vistas within the scheme.	The existing trees were preserved in addition to producing both hard and soft landscaping to the main open public square as well as producing some brickwork in the facade to remind people of the decoration system which existed before.

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CHAPTER 4: REFERENCES

- 1. Building 1980 January 18) Vol.238, No. 7122(3). p.14).
- 2. Building Design (June 20, 1980), (p.7).
- 3. Architect's Journal (1980 June 18), Vol. 171, No. 25, (p.1189).
- 4. Collin Davies Building (1984 May 27), Vol. 246, No. 7327(4), (p.11).
- 5. Nadine Beddington (1982). Design for Shopping Centres, University Press, Cambridge, England. (pp.140-143).

<u>CHAPTER_FIVE</u>

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<u>CONCLUSION</u>

CHAPTER 5. CONCLUSIONS

The most important points which I want to stress in integrated shopping centre design are:

- 5.1 Planning Consideration
 - 5.1.1 Circulation Movement
 - 5.1.2 Visibility
 - 5.1.3 Accessibility

5.2 Design Principles

- 5.2.1 Location of the magnet
- 5.2.2 Servicing Arrangements
- 5.2.3 Car parking
- 5.2.4 Unit width
- 5.2.5 Landscaping
- 5.2.6 Signing and graphics

5.1 PLANNING CONSIDERATION

The choice of the site is a very important element for both planning and shopping centres. That means we have to choose the correct site with an open eye, because from the perfect choice we can recreate other constraints which make the project workable both economically and in terms of design. For example, if we want to attract people more and more to an important area, which we consider from the beginning is the heart of the city with its specific character in terms of architecture and commercial features so we must take into consideration the two main factors which are as follows:

5.1.1 Circulation Movement

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Circulation movement is not less important than the others to determine the main location of the features of the centre. This ingredient has a big influence at the design level. The most important ingredients here are:-1. where is the best location of the main magnet stores? 2. where is the best location of the car parking?

According to my previous case studies, it seems that car parking location is very important in such a new development.

It can easily destroy the environment as a result of a bad choice of location and treatment.

Also, the notion of segregation between vehicular and pedestrian circulation is required in the new development. I stress this point because the most successful centres employ separation between vehicular and pedestrian movement. Some uses (notably shops) cannot survive without concentrated pedestrian flows. But to get concentrated pedestrian flows, we need extra magnets, facilities like large stores, compact markets or large car parks, which attract large numbers of pedestrians. Also, thelinking streets must be carefully designed to get maximum benefit from the pedestrian flow, making them as narrow as possible in order that users can see goods displayed on both sides and people can easily cross from one side to the other. I believe if the designers of a new shopping centre development reach this point, the result will be positive and the centre will probably be attractive and people

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will feel the sense of free circulation and security from the motor-car.

5.1.2 Visibility

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Visibility is also a very important element in designing the centre, particularly in a sensitive urban texture and it is related directly to the site because if the topography of the site is situated relatively low to the surroundings, then the structure of the roofscape will be a major design element and need careful handling.

In addition, the introduction of some essential landmarks are very useful to make the centre visible to the users and certainly these elements can be an advantage to help the designers to produce a very visible centre within the existing urban fabric.

Also, the location of a new development near the most important existing buildings with their special historical religious and commercial character could be helpful to attract people to use the space. For example, in my previous case study, Coppergate Shopping Centre in York, the new development is located near many existing buildings such as Clifford's Tower, St. Mary's Heritage Centre and the Viking Museum which gives to the Centre a certain importance in the town, as well as maximising its visibility.

It is very important to take care and protect these elements of great interest in order to give a real image of the city. Even the open space can play a big role in developing the image of the new development within the

area, or in the city as a whole. In addition, of course, the treatment of the scheme itself can be a major landmark and aesthetic element in the existing urban fabric.

5.1.3 Accessibility

Accessibility means how people can reach the site without difficulty. This means the site must be well situated with regard to the important focal points of transportation such as bus station, railway station, underground system and even the most important bus stops. In this case those elements can give a higher opportunity for pedestrians to frequent the centre at any time without problem. The existing pedestrian shopping streets can also present an opportunity to give a higher accessibility to the centre.

For example, a new development may be a continuation of a shopping street and the main focal point for it.

The existing car parking could be also a source of pedestrian flows towards the centre. So the conclusion is that people will enjoy the scenery along the shopping streets which existed before as well as in the new development. Also, one can divide a shopping trip into two principal steps which are as follows:

Firstly, shoppers can begin their shopping trip from the shopping street and will finish in the main commercial centre or vice versa.

It is very important to mention another point which helps pedestrian flow across to the new development by closing temporarily a few streets to vehicular traffic

and this can be done just during the weekends as well as during the main holidays where people go to commercial centres more frequently.

5.2 DESIGN PRINCIPLES

Political and economical points have a big influence on the designers and may become very ocomplicated in the first stage of briefing. It is necessary to create the best circulation of shoppers through the new development in relation to existing shopping streets, car parks,, bus station and other points of pedestrian access.

It is no less important for such a new development to take into consideration the existing pattern in layout, the direction of the alleyways or footpaths, their width, their original treatment, even producing some of the architectural vernacular of the original site or the local area. Also one may take into account the roofscape of the surroundings and the floorscape as well as use of the same construction materials (or their equivalent). It is also important to heat the entrances with a special handling in order to mark them.

5.2.1 Location of Magnets

The location of the most important features of the centre which attract shoppers are the magnet store. Also, we have to look for continuity of shop frontage along the mall in order to attract shoppers to use them. We have to be aware of the distance between the main magnets and not to exceed 90-120metres* from each other, and from any *(From Responsive Environments, by Bentley, p.33).

existing pedestrian concentrations, to make the flow between them available to other users which need it. The idea of the maximum spacing due to the old out-of-town centres which have long corridors without exciting visual features which could break this long distance between the main magnets. In other words, there is a lack of interior public spaces and vistas inside the centre and the lack of large meeting places in the most important functions within the principal malls.

By this means the designer can control patterns of icirculation which can be very useful, particularly to the development inserted in the existing urban fabric.

It is very important to look as well to the old magnets which exist before implementing the new development, because these existing points of focus can act at the same time as magnets for the new scheme, or they can act as generators of pedestrian movements. See fig. (5.1), fig. (5.2), fig. (5.3).

5.2.2 Servicing Arrangements

Once again according to my case study one of the first decisions to be made before a scheme design is the means of service access.

There are three possible arrangements:

1. If malls are at ground level on a flat site, service bays may be a ground level. Service vehicles can then deliver directly to the rear of the shopping units and it is the simplest and the most economical in terms of construction. It can be wasteful of

space mainly on the tight urban sites and also if badly planned may cause a conflict between shoppers and service vehicles. In visual terms it may not be acceptable at all, unless the service areas are concealed from general view. With spacious courtyards, it can play a double function as well by including parking for staff of the centre. (See fig. (5.4). The second means of service access can overcome these problems by running the service road below the mall level, serving basement shop stores which are linked by stairs or lifts to the units above. The problem in this second possibility is mainly the expensive mechanical ventilation to the basement and the requirement of a high headroom for lorries, so this possibility is found generally very expensive and inflexible. In visual terms it gives a good design solution mainly for the elevation treatment.

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3. The third possibility overcomes the disadvantages of the basement servicing by location on the roof top. However, in structural terms this solution suffers from the heaviest load for vehicles and storage rooms on the top. There is also an advantage that vehicular areas are naturally ventilated. But this means the roofscape may seem ugly in the existing fabric because the roof is a key element in the design. So this possibility may be adequate, but in this case the sales space is restricted due to the additional columns which are strengthening the structure of the



The effective range of magnets is 90-120m (1-2) - magnets must be located at such distances from each other.



(5-6). Position shops, and other uses needing heavy pedestrian flows.

Fig. (5.1 Location of the Magnet Diagram

Source: Responsive Environment by Bentley (p.33).





Fig. (5.3). Coppergate Shopping Centre, York. Diagram of Pedestrian Circulation.

Key '/////, Storage :::::: Sales Goods ---> Shoppers movement



The simplest and most economical solution, but can lead to conflict between shopper and service vehicles and diminishes the approaches.



Servicing at basement level has a structural logic with the weight concentrated at the lowest level, but calls for a higher storey height and presents ventilation problems.



3. The roof access overcomes the disadvantages of basement access but places the heavy loads on top storey and makes the sales area less flexible.

Fig. (5.4). Three alternatives of servicing arrangements.

Source: Building Update - Retailing 1. AJ 13 May 1981 (p.918). building required by the weight of storage and lorries.

In my opinion the most acceptable solution to the location of the service areas in an existing fabric could be at ground level, hiding it will buildings and it is preferable to be near the car parking in order to limit the vehicular circulation to one side. This will ease the circulation of trolleys on the other side.

5.2.3 Car Parking

The car parking is a very important element in designing a shopping Centre. It may be a problem, particularly in a very sensitive historic environment.

It is preferable to locate the car parking so that it will be a source of pedestrian flow for the shopping centre as well as to locate it near the main road in order to ease the accessibility. There are three possibilities to locate the car parking in the existing urban texture. See fig. (5.5). In visual terms it is very important to hide the car parking as much as possible by other commercial units and other social or cultural functions so as to save the character of the area.

It seems to me a good example is the Carlisle Shopping Centre. But in the Coppergate example, the location of the car parking in the upper floors is not a good idea in terms of appearance.

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1. First possibility to hide a multi-storey car park by shopping at first level and housing at upper levels.



 Second possibility to hide a car park at ground level by a mixture of functions shops, housing and offices.



3 Possibility to hide car parking at basement level

Fig. (5.5) Three alternatives of car parking arrangements.

5.2.4. Unit Width

If we want to integrate the new shopping centre into the existing urban site then shop unit width is an important This has a direct influence upon the rhythm of the matter. facade. For example, when we look at the elevation treatment of the old urban fabric, broadly we can notice that there is a notion of unit width which is repeated many times in the same facade and gives to a certain extent unity to It is very important to work with this characthe facade. ter in order to achieve unacceptable coherence in the whole facade of the new development. For example, if we look very carefully to the Lanes Shopping Centre, we find this principle of design mainly along Scotch Street. The architects used approximately the same unit width which xisted before but the unit width is not enough. We have to relate it with the unit height. That it because when we look to the facade we see it in three dimensions. So the height of a unit depends on the unit width. I think in the old urban fabric height goes from three to four times the length of the basic unit width (including roofscape). Ignorance of this point breaks the rhythm of the treatment of the facade.

Vertical and horizontal emphasis:

The vertical and horizontal emphasis have also got a great stress upon the facade treatment. So we have to respect in some way the opening size and shape of the existing building. In addition it is preferable to use the same material with the same original colour in order to achieve the target of giving the new development a

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historic character in supporting the integrity with the surroundings.

In other words, the elevation is to be integrated with the surroundings with the same varied rhythm.

We have to treat the wall surface with varied materials and this variety of texture gives at a first step the character of the element itself and at a second step gives the character to the whole street facade.

5.2.5 Landscaping

Imaginative use of landscaping materials can do much to improve the appearance, both inside and outside the centre. Good landscaping can also add to the general atmosphere of the interior and significantly improve the general impact of the centre on shoppers. The approach roads and surface car parks can be softened by using carefully plants and trees.

Material for paving needs to blend in with the whole project in terms of texture, scale, colour etc. There are more basic factors to take into consideration such as:

- 1. Maintenance durability and cost
- 2. Appearance in terms of texture and colour
- Operational characteristics, such as safety, sound absorption and light reflectivity.

Turning now to the interior of the shopping centre, the materials as a design principle are best if there is not too abrupt a difference between external and internal paving surfaces. Ideally, the same materials should be used throughout with other materials used to indicate

special functions such as steps, slopes, focal points, display areas, etc. The problem of plants inside shopping centres: broadly the same environmental rules apply to planting inside buildings as apply to planting outside: drainage, irrigation, room to grow etc. All these apply but there are two further important considerations: daylighting and feeding. It is better to provide containers of varying depths to allow scope for some large and spacedemanding species.

Many of the more interesting plants, however, are sensitive to such things as changes in temperature, to rough handling, to draughts and to lack of light. With these, locations need choosing particularly carefully.

5.2.6 Signing and Graphics:

It is beneficial if the graphics designers can be appointed at the same time as the other consultant in the first stage of design. It is worthwhile for architect as well as everyone else involved in theproject to appreciate the essential function of graphics and signing.

It establishes the language of directions. The giant sign advertises the presence of the shopping centre. Also, these signs are extremely interesting and should not be dismissed as a vulgarity. It could advertise the presence of the centre by producing architectural elements to the centre itself.

There are many ways of explaining the centre; one solution is to offer illuminated plans clearly showing all functions and units on their various levels and circulation routes.

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To be successful these must be positioned and easily examined, clearly legible and related to actual physical circulation routes. It is preferable to have a threedimensional lettering and signs at right angles as well as parallel to the mall.

I think one of the best ways of emphasising just how important this point is, is to look at and compare signs in some existing shopping centres.

<u>CHAPTER SIX</u>

DESIGN PROJECT IN GLASGOW

CHAPTER 6: DESIGN PROJECT IN GLASGOW

6.1 PLANNING STRATEGY: GLASGOW CENTRAL AREA

From the City of Glasgow District Council Central Local Plan there are many political recommendations towards this area.

6.1.1 Housing

Housing allocation policies and the operation of the housing market has its affects on the elderly, single, yo young and disabled in relation to the central area, should be reviewed, including sheltered housing. In this matter one and two person accommodation will be encouraged by Glasgow District Council, housing for families with young children will generally not be encouraged, particularly adjacent to heavily trafficked streets or where the site environment is restricted in terms of open space. Hostels for homeless adults situated in the central area will be encouraged, as well as with a view to assessing their needs.

The relation of housing accommodation to the present site, in my opinion is one opportunity to create a group of housing on the site in relation to the shopping centre on one hand to integrate them within the central area and on the other hand to create a shopping centre with the multi use function, commercial and social. Good examples to give are the Carlisle and York Shopping Centre, both of which are successful in the integrity of housing with the commercial function as well as their success in terms of

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design, mainly in terms of visual integration.

6.1.2 Transportation

The central area of Glasgow needs a good transportation system in order to ease the circulation of people inside and outside. So, opportunities for improving rail services and facilities will be encouraged where they are likely to enhance accessibility to the area, in order to reduce the traffic jam within the area.

In the same way bus services and facilities will be encouraged as for the same reason.

The pedestrian movement should be improved by the completion of the Buchanan and Sauchiehall Street precincts, and footpath connections between Argyle Street and St. Enoch Stations in association with St. Enoch shopping development, south of Buchanan Street.

In concrete terms the relationship of this point to the present site is mainly to give an idea about the connection of pedestrian flow between the main source of transportation such as Queen Street Railway Station, Buchanan Bus Station and the underground according to the site position and in the same way to give in general terms the main entrances a good location in relation to all factors which I introduced before, to give an easy accessibility not only for pedestrians but also for vehicular access at the same time without creating a conflict between them.

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6.1.3 Conservation

It is very important to talk about conserving existing conservation in the central area and there are many recommendations to be continued and encouraged by Glasgow District Council. As well as works to listed buildings, buildings within the conservation areas require special care in order that their special character will be well preserved. It is necessary in the same way to control the design and siting of street furniture, works to road and pavement surfaces, exterior painting in the main streets, lanes and new works to pedestrian streets throughout the boundary. In the map's conservation areas there are two big parts which show the size of the existing and proposed conservation areas as well as the location of the present site for a shopping centre which is located at the end of the two parts of conservation areas. See fig. (6.1). So according to the site location, I think the most important point to be emphasised is to secure in some way the environmental quality in the proposed site for a new development by retaining maybe the grid-iron layout, building line and continuity of frontage, diversity of building style, height and relationship between vertical and horizontal elements of main facades.

There are many factors which have a great importance to take into consideration for theproposed site, in order to create a complete unity. Among these factors, careful design consideration should be required for the frontages of roads in particular, the ground floor of the new building should perhaps receive careful design

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Fig. (6.1). Conservation area. Glasgow Central area.

attention to fit in with the whole character and secondly, materials and colours for both new buildings and alterations should be appropriate in type.

6.1.4 <u>Retail Services</u>

The recommendations in the central area of Glasgow are based on Buchanan Street, Sauchiehall and Argyle Street, which will be designed mainly for prime shopping.

The major new development incorporating substantial shopping floorscape are proposed for:

The site fronting St. Enoch Square, extending eastwards to Stockwell Street and a site to the North and East of the junction of Sauchiehall Street and Buchanan Street. Also continuous retail frontages will be achieved along theprime shopping streets, such as Buchanan and Sauchiehall Street. (See Cullen's proposal and fig. (6.2).)

In addition to shopping activity in the junction of Sauchiehall and Buchanan Streets, the development contains a part for a concert hall or for leisure services. In the level of tourism, if we compare Glasgow with Edinburgh we can see that Edinburgh attracts holiday makers; most visitors to Glasgow come only for business or family reasons, that is because of its poor performance, its image puts people off and themain reason is because in Glasgow things are distributed throughout the city, rather than concentrated in easily accessible areas. So from here to attract people (mainly tourists) to Glasgow, they have to create a tourists' landmark and

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and improve the image of the city.

In this matter Cullen's proposed improvements of the environment, together with other improvements by the addition of St. Enoch's shopping, South Argyle Street, which is actually under construction and the Scottish Exhibition Centre which to a certain extent transforms the image of the city. However, in this case the target should be to build a clear positive image of the city as a place to visit; as an attractive location for business and as a centre of an area offering an attractive quality of life. This crucial problem is not for Glasgow only, cities everywhere have this problem in all dimensions, such as impossible traffic and car parking conditions, declining population and loss of employment, etc. The problem in the central area is how to create the atmosphere and liveliness. Generally there are many ways in which a city like Glasgow can confirm this sense of atmosphere and liveliness; this can be done by improving a social cohesion of a major function of the city. By this I mean to create a good balance between social function and cultural in the same area and to give a wide choice to people who use them without loosing this balance or in other words, the creation of multi-use spaces in the same area by improving good accessibility in order to give the city an open character and as a result Glasgow can become a market place for urban contacts.

I think the principle of Cullen's proposal is one way to make Glasgow city centre an attractive urban fabric



Fig. (6.2). Cullen's proposal for the Central Area, Glasgow.

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for tourists as well as for the local community.

Buchanan Street is the only street that has some potential factors such as spark and liveliness in connection with Sauchiehall and Argylle Streets. It is the only area which is actually pedestrian and relates to the southern part with the norther part of the essential shopping streets.

In addition to the western part of Buchanan Street lies Blythswood new town and the merchant city is to the east. These two internal precincts have a specific character and give Buchanan Street a great potential by its location between them. On the other hand the atmosphere of the River Clyde to the south is the counterpoint to the dominance of Buchanan Street. From this we can draw key elements which are the vital polarisation of Buchanan Street flanked by its strong precincts and the river-side counterpoint.

6.1.5 Buchanan Street strategy

The street slopes up towards its northern end where a new civic space commending the street is suggested. At the lower end where Buchanan Street meets the riverside chain, the creation of a popular focus in the shape of Enoch's Yard is proposed (see. Fig. (6.3.)

6.1.5.1 Enoch's Yard:

Enoch's Yard is envisaged as a popular complex which combines all the activities a tourist, visitor and the city needs. It includes somewhere to meet, keep appointments, office space, information bureaux, travel agencies, bars



Fig. (6.3). Buchanan Street Strategy.

The creation of new developments at either end, which will define the spectrum of activity and atmosphere that a great city generates. and restaurants, sauna, exhibitions, market, banking, cinema and post office etc. Every city needs one centre like this. The local point for these functions is seen as an "urban village". The village would comprise modest buildings forming linked courtyards providing a network of access points with freedom to rest or to leave.

6.1.5.2 Gordon Square

In the length of Buchanan Street, it is possible to locate the centre of gravity of the street that is due to the distance which is nearly half a mile long and this punctuation will improve its scale and humanity. Cullen's proposal thought that the ideal place for this visual change is where Gordon Street runs into Buchanan Street and this leads across the central axis through the two arches to Stirling's Library which commands the axis of course to the merchant city through Ingram Street. The key points to be done in this square in the ground level of the existins buildings can be modified in order to include restaurants and cafes which have seats outside in the same way as Covent Garden in London.

6.1.5.3 The New Square:

A new square should form the cultural focus of the city and there is a clear opportunity for a direct relationship to be established with the university and there are also opportunities for the relocation of new buildings to vacant buildings.

A concert hall and new shopping development have already been suggested for the area; the square could be

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developed around them. The existing buildings of the Royal Scottish Academy of Music and Drama, shortly to become vacant with the construction of its new premises, and these buildings could be converted into a prestigious hotel and conference centre, which would add to the new square an attractiveness. The development is on two principal levels. At ground level there is pedestrian access under the square to Monk Street and shopping beyond. In this protected area it is intended to provide not only access to the upper buildings but also to shops, restaurants and bars. At the same time the development concept is in two different ways, the ground level is protected, busy and crowded while the upper deck is open to wind and sky in an all-weather scheme.

6.1.6 Summary

Implementation principles:

The strategy seen for the development of services in Glasgow and the City Centre's role in it will not only have a major impact on employment factors within the coming years but will lay the foundations of its economics future. So the implementation must be characterised by:

1. Commitment to the vision:

The proposed initiatives will not provide an immediate solution to Glasgow's problems but developing a new strategy of economic role for the whole city, revitalising the city centre and altering people's poor perceptions of Glasgow, might take many years to see the signs of success.

2. A series of projects, not a master-plan:

A consideration taken for service development or for the city centre would be inappropriate or not suitable at first, but the implementation must be flexible enough to cope with new factors as they arise. Projects need to be given freedome in order to decide the right solution for a particular project and to encourage other opportunities to be identified.

3. Emphasis on quality and professionalism:

To build confidence, to be responsible and convince the community to determinate the success, Glasgow must be seen to be committed to excellence. Buildings, for example, should be designed to international standards, advertising and marketing programmes should be highly professional.

4. Active involvement of business community leaders:

Business community leaders can also directly or indirectly provide financial and managerial resources, according to the city interests and its well-being.

Formal business organisations will have an important role to play in such a new development to raise the importance of Glasgow as a city and in particular the city centre as a part of it.

6.2 SITE ANALYSIS

For the site analysis and according to the planning strategy, there are four points which seem to me to be very important to explain before starting the design proposal of the shopping centre. These points are as follows:

6.2.1 Pedestrian Flow Sources:

The site is located near the main sources of pedestrian flow, such as the underground one in Buchanan Street. The second is in Dundas Street near Queen Street Railway Station.

Queen Street Railway Station is another important source of pedestrian flow, particularly for the site as well as for the whole central area. The next source of pedestrian flow is the Buchanan Bus Station on the north of the present site.

Secondly, the most important source of pedestrian flow for the site proposed for the new development is mainly the existing pedestrian precinct which is called Sauchiehall Street, with its particular importance within the whole central area. Of course, there are many secondary desire lanes which are no less important than Sauchiehall Street. Those secondary desire lanes are from Strathclyde University from the northern part of the site which is destined for residential area, as well as from other parts of the city through Bath, Renfrew and Cathedral Streets etc. See fig. (6.4).

From the pedestrian flow analysis, I find that there are three important elements to locate theimportant magnets within the site as well as the main small shop unit frontages. See fig. (6.5).

The first location of the magnet could be near West Nile Street and this location could be justified by the three pedestrian flow sources from the northern parts and the western flow from Sauchiehall Street and the existing

multi storey car parking which can play as a push of pedestrians to the magnet. By this location I want to give a lot of importance to the eastern end of the existing shopping street, and at the same time it can be a visual demarcation for the street.

The second important magnet location could be in the same area as the first one in such a way as to attract people to use the open space between the two magnets in relation also to the concert hall which I believe would be in the southern part of the site near Queen Street Railway Station and the underground system.

Concerning the small unit shops: They could be located at two important points of the site. The first is along Renfrew Street, due to the important pedestrian flow from Buchanan Bus Station or I would explain it by the principle of push andpull which I mentioned in the previous section. So this notion exists in this part of the site with a high level in addition to the flow which comes from other parts of the city.

The second important location for small unit shops could be just in the middle of the site in order to attract and invite the people from the southern sources of pedestrian flow to use the new development and also to define the desire lanes which people used with them as access to Buchanan St. Bus Station, Queen Street Railway Station and to the Sauchiehall Street. As a result, from the magnets' location, small unit shops and pedestrian flow, I think it is a good idea to create and link all



Fig. (6.4). Pedestrian flow.



Fig. (6.5). Concentration of pedestrian flow

these points with Buchanan Street with open squares which will act as a heart of the new development as well as an open urban space for the whole central area such as George Square and of course with a different character.

6.2.2 Vehicular Circulation

Once again, the site is actually occupied temporarily as a car park, which means the site is accessible from all sides in addition to being surrounded by many important streets heavily crowded by vehicles such as Cathedral, North Hanover and Renfrew Streets. As a result I find that there are two points where I can locate the car parking which will be accessible easily from the nearby streets, such as North Hanover Street and Renfrew Street. (See fig.(4.6).)

I think that according to the vehicular circulation system, the North Hanover Street is the important access for vehicles due to the presence of the railway cutting which has many positive points.

Firstly, it can help to locate the car parking on the basement level, solving technical problems such as air conditioning and the heavy load of the cars. On the other hand, this location can help to achieve a good separation between pedestrian and vehicular conflict.

In visual terms it can also help to avoid the destruction of the surroundings which have a good architectural and visual character in the other parts of the site. It opt for this solution to locate the car parking as well as the servicing arrangement on the basement level in order to



Fig. (6.6). Vehicular circulation.

minimise as much as possible its destructive visual impact for the whole area which I mentioned in my previous conclustion in the section on servicing arrangements and car parking position in the sensitive urban texture.

The second place to locate the car parking could be in the north part of the site: that is because the accessibility for vehicles is easy from Renfrew Street, but there is an important factor which cannot help to locate the car parking because of the pedestrian flow from Buchanan Bus Station and to achieve the notion of separation between pedestrian and vehicular circulation will not be achieved at all.

This part could be a good position for the servicing area which can feed the main magnets which I mentioned before. Servicing area location, I think is better to be on the basement level, as well in order to avoid circulation conflict and also to conceal it from general view. The distribution of food can be done by using the trucks and elevations or by using technical means.

Concerning the southern part of the site, in my opinion there is no possibility to locate car parking there because of the surrounding character on one hand and the pedestrian flow from Queen Street Railway Station and Buchanan Street pedestrianisation on the other hand.

6.2.3 Morphology of the site

The majority of the site morphology is flat, mainly in the northern part of it. The site slopes slightly to the south giving good views towards Queen Street Railway Station

and Buchanan Street. In the eastern part the site is quite uneven with the presence also of the railway cutting which is the real constraint on the site on both sides, producing pollution and noise as well as in visual terms presenting a big physical gap in the site. It might have a big influence on the treatment of the project due to its width and depth, as well as its length in the site. See fig. (6.7a) and fig. (6.7b).

In addition to the site the old street patterns exist and indicate even the plot size and shape. One of the remaining streets is the bridge which has a big influence to orientate the pedestrian flow to use the new development and it might be a very important footpath to bring people to use the open urban square which I mentioned before and we will see it in detail in the next section.

Within the site there is an important factor to be aware of. It is the Cathedral Street site which runs eastwest, cutting the site in two parts. As a result, this street could bring many constraints to the new development. I think there are three possibilities of solving the problem and each solution has many disadvantages.

The first possibility is to close the street for vehicular circulation and this could bring another important problem which is the over-circulation to other streets like North Hanover and Renfrew Street.

The second possibility is to create an over footpath relating the two parts together and this solution could also bring a visual problem along the street, or to opt for underneath circulation system which obliges the introduction





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of small shop units in order to create a continuity of space for the users, which I think is a good idea.

The third possibility is to allow public transport to use the street or to close the street temporarily for all traffic during the shopping peak periods or in other words to give the street a multi-use. But this solution is not really an architectural solution.

6.2.4 Environment analysis

The environment contains many important buildings with a high architectural quality and some of them can act as landmarks for the new development to make it very visible.

The high buildings located in the eastern end of Sauchiehall Street, I think, can act as a landmark not only for the new development but also for the existing shopping street by its height and its architectural treatment. The high buildings of Strathclyde University and the commerce department which are located on the south-east of the site can also act as a landmark due to their architectural character.

Queen Street Station roofscape,I think, is no less important than the previous buildings in character, so it can act as an important architectural element into the whole environment in addition to its function. The presence of the underground system entrances in the middle of the street I find, act the same way as the street furniture and can play a big role in defining the character of the streetaand in some cases give the impression that the street is destined for pedestrian flow.

The character of the street could also act as a landmark. As a result for example, the site has two main shopping streets which have a big importance in the whole central area in retail level and even in architectural level. As we know from the previous study the intersection of the two shopping streets will be the new development and these streets will give a great importance to the scheme and vice versa. We will see these factors in the next section in detail.



Fig. (6.8). View showing east end of the Sauchiehall Street facing the site as well as the actual use of the site as car parking.



Fig. (6.8b) The dominance of the high building on the east end of Sauchiehall Street which on the east end of 2. can act as a landmark. 206



Fig. (6.10). The variety of heights on the west end of the site as well as the buildings' estate.



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Fig. (6.11). View showing the impact of the multistorey car parking on the environment as a source of pedestrian flow.



Fig. (6.12). View taken from the site showing the Buchanan Bus Station as a major source of pedestrian flow, and showing the actual use of the site.



Fig. (6.13). View showing the past street patterns, the easy accessibility, the morphology of the site and the poor architecture of the Buchanan Bus Station on the left hand side. 208



Fig. (6.14). Two views showing the morphology of the site and the mixture of style in the eastern side.

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Fig. (6.15).



Fig. (6.16). The visual impact of the bridge and the railway cutting on the site.



Fig. (6.17).

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Queen Street Railway Station and the high building of Strathclyde University presents a visual contrast on the environment and both of them act as landmarks at the same time.



Fig. (5.18). Two views showing the Queen Street facades with their different heights, and the different treatment presenting a visual excitement on the environment.



Fig. (6.18b).



Fig. (6.20). A view showing the underground entrance in the middle of Buchanan Street, acting in the same way as visual street furniture by the vertical sign.



Fig. (6.21). A view taken from Cathedral Street showing the building estate on the south side of the site.



Fig. (6.22, 6.23). Two views showing Buchanan Street buildings' character in both height and unity width.



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Fig. (6.24). A view from the bridge showing the mixture of different buildings in terms of facade treatment, their height and their unity width.

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Fig. (6.25). The visual dominance of the skyline by the Queen Street roofscape.



Fig. (6.26). The presence of the railway cutting gives an important visual constraint on the site by its depth and its width.

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6.3 BRIEFING

The design of a place affects the choice people make at various levels. The environmental pattern in Glasgow Central A_r ea is shown in fig. (6.3.1). The layout of it has a grid-iron system dividing the whole area in block units. Nearby the area of the proposed site for a shopping centre there are four squares, namely George Square, Blythswood Square, Exchange Square and Church Square. Each one has its own character. For example, George Square is frequented by people using it as a meeting place and for celebration of national and religious festivals.

Blythswood Square is not frequented by people and it is occupied by greenery. Exchange and Church Squares have different conceptions in design. The main shopping streets are located in two separate positions. Sauchiehall Street is on the north side and Argyle Street is on the south side. Both of them are joined by a perpendicular street called Buchanan Street; together they form a Z shape.

The site is very accessible and has a big impace on the area by virtue of its situation near the main source of pedestrian flow from Queen Street Railway Station, Buchanan Bus Station, the underground and the two main shopping streets, Sauchiehall and Buchanan Street.

The second element which is very important, I shall call the limit of "Quarter of intervention". This should relate to the site in such a way as to create a good urban design solution.

The quarter of intervention is limited on the north side by the motorway acting as an edge to the area. From the east

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and west sides it is limited by two important vehicular streets. The first street is West Nile Street and the second is North Hanover Street. From the south the quarter of intervention is limited by George Square, the Church Square and George Street joining them together. See fig. (6.3.1.)

The third point concerns the main axes. The urban designer may work with them to find a cohesion between the proposed scheme and the existing layout in the first stage, before going into detail. Two principal axes are mainly used to create a continuity of Sauchiehall Street, preserving the grid iron direction and also following the pedestrian desire lines. The second axis is used mainly to create a visual continuity of Buchanan Street, giving the best position for the open urban space for both ends of the important streets (Sauchiehall and Buchanan Streets). This also gives to the open space a particular character in terms of function as well as in terms of design. (See fig. (6.3.2), fig. (6.3.3). The next point will cover the key issue in making the place and the new development responsive. I shall call this the interconnection of spaces. The interconnection of space is very important in a network of design, because the grid-iron layout does not provide this character according to the roads system which divides the space into different block units; each one plays its role apart from others.

In my proposal, I introduced this character by introducing the system of covered walkways which plays a multifunctional role: firstly, ensuring the connection of

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spaces together; secondly, protecting people from bad weather conditions; thirdly acting as an edge for the open space, stressing the frontages importance and giving an aesthetic character to the scheme. This character is ensured in the scheme by the creation of two levels in the square itself, producing a visual relationship between the upper level and the lower level. (Fig. (6.3.4).

Legibility is an important factor in design. For example, in the traditional cities major places seemed visible and important for people, because of their relationship to the most important public buildings. Physical form and activity patterns must be related in order to achieve legibility.

It is possible to develop a sense of the physical form of a place by enjoying just its aesthetic level. Also, it could be enjoyed just be observing patterns used. But the best way is to connect both of them. The lack of legibility seems a problem, mainly when we compare the modern part of the city with the traditional one. See fig. (6.3.5).

In my proposal, I tried to respond to both factors (i.e. physical form and activity patterns) in such a way as to make it very legible. I have taken the advantage of the two important shopping streets which respond already to both the previous factors. Connecting them by an open space which will act as the heart of the new scheme (as well as the whole central area) provides a physical landmark. (See fig.(6.3.6) to fig. (6.3.9).)

The reinforcement of the square's concept is achieved by introducing a physical element in the centre covering

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the lower square developing a visual relation between outside and inside. The inspiration of this concept is taken from the Exchange Square treatment in Glasgow central area. (See fig.(6.3.1).)

The scale is very important. I have tried to create a human scale throughout the scheme by using different types of street proportion. In this proposal, some visual barriers are inserted depending on three major factors, which are as follow: Building form, length of the street or vision from a distance and visual termination.

Concerning the service area arrangement and car parking -I locate them in the basement level, taking the railway cutting as an advantage in hiding them from general view. The purpose is to avoid the destruction of the environment and to achieve separation of pedestrian from vehicular flows. See fig. (6.3.10), fig. (6.3.11).

- Description of the layout of the scheme.

- Basement level plan. Fig. (6.3.10).
 Car parking, servicing areas, store areas, small shop units and pedestrian circulation.
- Ground level plan. Fig. (6.3.12).
 Two magnets (Department stores), small shop units, concert hall and new proposal for Buchanan Bus Station.
- 3. First level plan. Fig. (6.3.13). Magnet stores (Department stores), small shop units, concern hall, Buchanan Bus Station and housing units.
- 4. Second level plan. (6.3.14).Magnets (Department stores), small shop units, concert

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Fig. (6.3.1) Actual street pattern and quarter of intervention

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hall and housing units.

Third level plan. Fig. (6.3.15).
 Library, exhibition hall and housing units.

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Fig. (6.3.1) Actual street pattern and quarter of intervention

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One space leads to the next

Interconnection is important in the design of the network of spaces.



Grid Layout

Limited range of space types.

Spaces are isolated so the lack of interconnection appears by street corridors.



Proposed Scheme

- 1. Interconnection of spaces in the proposal scheme is ensured by using covered walkways.
- 2. Interconnection of sub-spaces within a large square.
- 3. By malls of different types.



Traditional cities worked well in terms of legibility, places that looked important were important. The biggest open spaces were related to the most important public facilities. The buildings which stood out from the rest were those of greatest public relevance.



The modern city legibility is made worse because important public buildings and publicly-irrelevant private ones often look alike.



Fig. (6.3.5). Legibility.


Fig. (6.3.6). Proposed scheme contains an important open space. Trying to develop as much as possible a clear sense of the physical form of a place, in both aesthetic and functional terms. It is important to introduce a good permeability to the space permitting a visual relation between inside and outside.



Fig. (6.3.7). The treatment of open square is very important to give the scheme a good visual richness, and orienting people to the use of the spaces.

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The treatment of walkways has a big potentiality in defining its edge and giving the square a sense of enclosure.





Section A-A -



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Section B-B

Fig. (6.3.9). Section through the Central Square Showing the central element and the covered walkways. 229



Interest can be created in pedestrian precinct sitting areas by changes in paving pattern, which also define paths and routes without the need for barriers.



A compact and pleasant group of items of furniture in an open space creates interest and provides a focus of attention.



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Fig. (6.3.11). Diagram of the basement level.

(Car parking and service areas location and goods distribution from the rear)



Fig. (6.3.12) Ground level plan



Fig. (6.3.13) First level plan







Fig. (6.3.15). Third level plan



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APPENDIX

THE TRADING AND MANAGEMENT CONCEPT

"The Lanes", Carlisle - Shopping Centre

In considering the form and layout of the development, the task from a commercial point of view was to evolve a plan which would satisfy the demand of retailers for either new or increased space in Carlisle and to provide the space of shopping recommended by Donaldsons in their study. This identified the need to provide an additional 20,000 sq. metres of gross retail area. It was considered that a development of this size would be large enough to satisfy the demand for additional space up to the early 1990's, but would not be of such magnitude as to damage the existing city centre.

The strategy adopted was to encourage retailers not already represented in Carlisle and so enhance the status of the city as the sub-regional capital of the North-West of England and South-West of Scotland. The aim of the development was to claw back a considerable proportion of the trade lost to competing centres such as Newcastle, some 60 miles to the east of the city. The basic cause of the problem was simply a deficiency of key traders in the city, particularly in the durable goods sector. This lack of an adequate range of shops was allowing other centres to attract Carlisle's legitimate catchment population. This latter factor itself was then contributing to the erosion of Carlisle's commercial strength, creating to a degree a vicious circle. Carlisle thus urgently needed new retail development.

With this background in mind, early discussions were held with the three major retailers, British Home Stores, C and A and the Cumbria Co-Operative Society, who were to

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form the main anchors of the development. Agreement was achieved with these retailers and it is interesting to note that both C and A (Modes) and the Country Store (Cumbria Co-operative Society) who had acquired land with the Lanes area now have their stores in approximately the same locations. In addition to these stores, provision was made also for a large food based store which would provide the anchor for the northern end of the development and complement the existing covered market.

Whilst agreement was being reached with the three main traders, detailed design porceeded on the remainder of the scheme. The requirement of the superstore operators had to be met and a range of smaller stores and shops had to be provided within the development which would enable a wide variety of retailers to be attracted to the city.

Outline planning permission was granted in 1979 and the Compulsory Purchase Order for the remaining land required was confirmed in 1980. The city Council were so confident of the future commercial success of the proposals that it decided to act as its own developer.

This meant that it could retail firm control over the architecture and could ensure that the overall development met with its wishes.

The route adopted was to enter into a lease and leaseback arrangement with a funding institution. Following a financial competition the General Accident Fire and Life Assurance Corporation were appointed as financial partners. In marketing the unit shops an overall strategy was devised

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to encourage new retailers into Carlisle and give selected local and specialised traders an opportunity of aquiring premises within the development. Of particular significance was the early agreement with Mothercare in respect of a large unit to the north of the scheme fronting Scotch Street. The overall result in trading terms has been very satisfactory with a large range of retailers being attracted to the development. The majority of the retailers are related towards fashion and durable goods, although specialist traders including a bookshop, specialist foods, a coffee shop and wine bar are also included.

In respect of the housing, all twenty-seven units have been sold. The sale price achieved is considerably in excess of that envisaged and the flats and maisonettes have proved to be extremely popular.

The centre is managed by Donaldsons on behalf of the City Council to ensure a high standard of cleanliness and maintenance.

The Council decided at an early stage that the Lanes should remain open twentyfour hours a day to ensure that the development is fully integrated into the city centre.

Car parks and service areas are closed at night. The Lanes remain private but the Council has entered into a "walkway" agreement with the County Council to ensure that the police are enabled to patrol the area as part of their regular duties. This, together with the low profile of security provided as part of the management service has ensured that the centre has remained free of vandalism. The incidence of willful damage and graffiti has been negligible, a reflection of the high standard of management

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and finishes and theoverall pride of the city in the development. Early fears in respect of security and other problems have not been realised; although provision has been made for the enclosure of the centre at night this has so far proved to be unnecessary.

The opening of the library and the completion of the second phase in early 1986 has been an extremely satisfactory development both in architectural and trading terms. Furthermore, the completion of the Lanes is proving to be a powerful catalyst to further retail and tourist oriented developments within the city.

FACTS AND STATISTICS ABOUT "THE LANES", CARLISLE

Developer

The City of Carlisle

Funding Institution General Accident Fire and Life Assurance Corporation Designers Building Design Partnership Architects, Preston Office Engineers Quantity Surveyors Graphics Landscaping Architects Donaldsons Development Joint Letting Agents Consultants Project Co-ordinators Property Management General Contractor John Laing Construction Northern region Area of the Scheme 2.10hectares (5.20 acres) Fine Fare (55,000sq.ft.) Large Stores British Home Stores (61,700 sq.ft.) Cumbrian Co-Operative Society (52,250sg.ft.) C and A Modes (24,000sq.ft.) 46 Number of unit shops 290,000 sq.ft.(24,45m²) Gross internal area of shopping Number of car parking spaces 514 27 Number ofhousing units 30,000 sq.ft.(2,600m²) Gross Area of County Library 1,900sq.ft.(160m²) Public Toilets £11.8million Total building contract value

LANDMARKS IN THE CITY

A city today is a vast conglomeration of buildings put together for the convenience of mankind for carrying out a great range of activities. To do so he has to move about within the city. How does he find his way around? He can of course, clutch the A-Z hunder his arm but that really gives one no sense of what a place feels or looks like. If asking directions to somewhere you are told, "third right, second left, straight on at the intersection and the third right again". That is much more difficult than being told "at the corner you will see a large red brick building". In other words landmark buildings create a sense of identity, location and indeed a sense of space in a city.

There should be a natural urban sky then to these landmarks relating both to the vehicular and pedestrian scale in time. To do that they need to be no further spaced apart than at half mile intervals in all directions.

There are many instances where the whole is greater than the parts. There are countless streets where no no buildings are of any great architectural merit but the street itself is well worth keeping. The homogenous nature of such a street is generally achieved by a sympathetic, although not necessarily identical, use of scale, massing, style, materials, colours and texture.

However, the sentence needs a full stop and streets need colours with some kind of hinge to achieve the transition to the next street, square or whatever. There is a current failure of nerve in architecture following the collapse of themodern movement and a general feeling that

anything that is demolished is replaced by something worse. A problem in creating new landmarks is always a need for sensitive infilling on certain sites but there are also times when the architects have to stand up and be counted.

It is inevitable that any firm architectural statement will not please all of the people all of the time. Solutions to similar problems in the past, e.g. Harrods, Selfridges and Liberty's, all provoked initial adverse comment but if we always tried to play safe, cities would become completely characterless.

Most architects are familiar with the situation in which they sit across the desk from a junior planning officer who has a degree in geography and who is telling him how to design his building. In this way we drift towards premasticated architecture. The architect should be free to practice the art of architecture, thus allowing cities to continue to evolve with a diverse sense of character.

Not everything architects produce will be liked but then you will not like every picture painted, every book written or every song composed. But if the public does not want architecture to become "Musak meets Mills and Boon", then the profession must be given a chance to use its talents to create buildings of distinction where the situation demands it. (Article by Philip Moloney, a partner in Scott, Brownrigg and Turner, examines the value and role of the city landmarks.) Source: Building Design, March 6, 1987, p.9)

CHAPTER 6: REFERENCES

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1. Scottish Development Agency: "The Potential of Glasgow <u>City Centre</u>".

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2. Central Area Local Plan: City of Glasgow District Council".

BIBLIOGRAPHY

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BIBLIOGRAPHY

1. Beddington, N. (1982). Design for Shopping Centres. Published by the University Press, Cambridge, England. 2. Booth, N.K. (1983). Basic Elements of Landscape Architectural Design. Published by Elsevier Science publishing Co. Inc. Amsterdam, Netherlands. 3. Cezar, M. (1983). Typical Commercial Buildings of the Ottoman. Classical Period and the Ottoman Construction System, Published in Istanbul, Turkey. 4. Corporation of Glasgow (February 1974). Planning Policy Report on Shopping. 5. Darlow, C. (1972). Enclosed Shopping Centres. Published by the Architectural Press, London. Davies, R.L./Champion, A.G. (1983). The Future for the City Centre. Special Publication No. 14 published by Academic Press Inc. 6. New York. 7. Dawson, J.A. (1983). Shopping Centres Development. Published in U.S.A. by Longman Inc. New York. 8. Evans, W.H. (1975). Planning Cities: Legacy and Portent Published by Lawrence and Wishart Ltd. London. 9. Gayler, H.J. (1984). Retail Innovation in Britain. Published by Geo. Books Regency House, Norwich, England. 10. Gosling D./Maitland, B. (1976). Design and Planning of Retail Systems, Published by Architectural Press, Great Britain. 11. Gosling, D./Maitland, B. (1984). Concept of Urban Design. Published in U.S.A. by Martin's Press, New York. 12. Holliday, J. (1973). City Centre Redevelopment. Study of British City Centre. Planning and Case Studies of Five English City Centres. Published by Charles Knight and Co. Ltd., London. 13. Lindsay, W.J. (Dis. 1985). The City Centre. As Assessment of Change. Department of Planning, Glasgow School of Art/ Glasgow University.

14.	Lynch, K. (1960). The Image of the City. Published by the M.I.T. Press, Cambridge, England.
15.	Mackeith, M. (1986). The History and Conservation of Shopping Arcades. Published by Mansell Publishing Ltd., London.
16.	Rannells, J. (1958). <u>The Core of the City</u> . Columbia University Press. New York.
17.	Smith, L./Gruen, V. (1960). Planning of Shopping Centres. Shopping Towns, U.S.A. Published by Reinhold Company, New York.
18.	University of Manchester (1964). <u>Regional Shopping</u> <u>Centres</u> . A Planning Report on North, West England. Printed by Boon and Co. Waterloo, Stockport.
19.	Bentley, I. (1985). <u>Responsive Environments</u> , A Manual for Designers, Published by the Architectural Press, London.
20.	Krier, R. (1979). <u>Urban Space</u> , Foreword by Colin Rowe, Academy Editions, London.
21.	Architect's Journal (Apr.June 1985). Vol. 181, No. 15.
22.	Doyle, D. (JulDec. 1983). Perspectives, Progressive Architecture, Vol. 64, No. 12.
23.	Kouba, T. (Jul./Dec. 1985). Progressive Architecture, Vol. 66, No. 10.
24.	Gilette, H. (Autumn 1985). <u>The Evolution of the Planned</u> <u>Shopping Center and Suburb and City</u> . Journal of American Planning Associa- tion, Vol. 51, No. 4.
25.	Wilson, G.R. (Nov.) 1986). Learning from the American Vernacular. The Architecture Review.
26.	Building Design Partnership and Donaldsons (Dec. 1977) City of Carlisle, Scott Street/ Lowther Street, Report 1.
27.	Building Design Partnership and Donaldsons. (April 1978). <u>City of Carlisle, Scott</u> <u>Street/Lowther Street</u> , Report, No. 2.
28.	Estates Gazettes. (Jul. 5 - 1986). Shopping Centres. The Lanes, Carlisle. A Story of Endeavour, Vol. 279, by Ives, D.

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