Patterns of Buildings and Spaces in Northern European City Centres

ABSTRACT

This paper is part of an on-going research theme that generated the paper for the 27th International Making Cities Livable Conference, titled ‘The Renaissance of Public Squares in Northern European Cities’. The principles for city design are still derived from the literature of urban pioneers working within the genre of restoration in post-industrial cities. However, the focus of this paper will be on the buildings and how they interact with city centre spaces. The patterns and language of contextual buildings will be investigated. This will include the nature of forms that can define and enclose public space while offering a continuous backdrop to external activities. It will also analyse symbolic buildings – their style, size, scale and relationship with both contextual buildings and spaces; as well as the civic amenity that they offer. The character of all these building types will be assessed and issues such as the landmark value and individuality within a framework identified. The data have been gathered from extensive surveys of Northern European Cities, and will offer evidence of numerous minor contributions to the built fabric, acting over a long period of time as a means of evolving robust, vigorous and community-orientated places.
INTRODUCTION

The context for this research is a group of exemplar city centres of Northern Europe. These traditional cities offer unique buildings, which are symbols of society, and familiar buildings which accommodate more commonplace uses and define streets and squares. The latter can be spaces where a whole range of community activities takes place for the enjoyment of society. The structure of cities of this kind has been gradually modified through evolution over many years. More recently, there has been a growing realisation of the disruption caused to this pattern of continuity and sustainability by the great modernist schemes of the 20th Century. While technology provided increased comfort for individuals, provision for the community in these other cities has diminished rapidly. They have become epitomised by images of large isolated buildings, amorphous external spaces, pedestrian barriers, vehicle channels, etc.. Therefore, the main objective of this study is to investigate how to establish models for the urban design of post-industrial cities which will restore them as fascinating and functional urban environments. The principal criterion is the generation of urban structures that promote rather than inhibit what should be centres of civilisation.

THE NATURE OF URBAN RESTORATION

One of the objectives of an urban restoration approach to urban design is to counteract the loss of place in cities that gained momentum during the 20th Century. These cities have now moved into a post-industrial phase and therefore the city structure has a greater association with pre-industrial models than those of the last hundred years. Establishing networks of people and the environments in which they can thrive is a long-term process that can be irreparably damaged at any time. Inducing massive changes in the built environment is not a solution and can often assist the downward spiral. It could be argued that local people are best at restoring local places. In this way, cities can become economically and socially congenial places for diversity of activity to become self-generating. National and international capital may appear to be a great source of funds but capital is moved around at an almost alarming pace – its arrival can be overwhelming and its sudden departure, devastating to communities. The term urban restoration can be misunderstood. While there is certainly an element of using past successes to guide future construction, it is not a hankering for past times that have gone and cannot be repeated. Nor is it to do with preservation or even arguably conservation. There is evidence of the dangers of such approaches. It is too easy to wonder at a preserved historic core whilst refusing to see the jumbled hinterland that surrounds it. Often conservation areas receive amazingly detailed attention while the city beyond seems to lack all care. A huge pedestrian area is invariably promoted as a civilised way to move around the city, at the cost of a choking ring of traffic at its periphery. If the integrity, traditions and character of each city are fully taken into account, a framework can be adopted that provides a set of criteria to assist each city to thrive in its own way. Cities must evolve if they are to thrive and that means dealing with the issues of present and future.
In simple terms a city is a place where people live, work, shop and play. Yet the attraction for residents and visitors may result from greater symbolic significance. Buildings and spaces can embody political and cultural attributes as well as being landmarks in place and time. The links of past, present and future become reassuringly familiar to local people and stimulating for visitors. However, each city differs considerably and it is this diversity that needs to be encouraged. It can be generated, enhanced or destroyed by the criteria for development (Gronwall 1988). Camillo Sitte (1889) suggested that even in his time, new moves towards modern planning labelled details like projections, porches, ornamental staircases, arcades and corner turrets, as unthinkable luxury. Throughout the 20th Century, the parcelling of sites, based on purely economic considerations became such a factor in modern plans that their detrimental effects could not be avoided. For example, in a rigidly uniform arrangement, there is no scope for picturesque street corners.

Figure 1: Model for the 20th Century Functional City

Designing buildings in scale with the traditional pattern of a city could be a first step towards regaining an urban community (Lozano 1990). This is not to denigrate the desirability of a proper system of planning. Indeed, the advantages of a sympathetic plan, prepared with forethought and care to provide for the needs of the community are self-evident. Yet, despite a long history of planning on behalf of the community,
one of the problems of the early 21st Century is that there has been a great decline in the public realm. We may be richer as individuals but as citizens we are getting poorer. There has been a retreat into the private realm - with emphasis on privacy, personal comfort, consumption and security (Tibbalds 1990). A response could be that development in different areas of a city, needs to be guided by a planned framework. Development cannot be based on unconscious and accidental character but must reflect the rules of conscious and ordered design. However, each framework needs to be specific to a locality. Topography and other natural features that are unique to a particular place should be integrated and emphasised.

Figure 2: Topography and Building Heights

For instance, keeping buildings at valley bottoms to the same or smaller scale to those at the tops of hills actually emphasises the topography. Other contrasts in response to topography are clearly evident in the following illustrations:

<table>
<thead>
<tr>
<th>TRADITIONAL BUILDINGS</th>
<th>MODERN PLANNING</th>
</tr>
</thead>
<tbody>
<tr>
<td>Buildings related to topography – small units capable of stepping down a hill creates a varied and interesting streetscape</td>
<td>Large boxes, incapable of dealing with the topography except by introducing artificial levels and ramps resulting in a monotonous streetscape</td>
</tr>
</tbody>
</table>

Figure 3: Built Responses to Topography

Sitte’s (1889) argument was that if traditional methods were taken into account in modern planning, the result would be a city plan that encourages parks, gardens squares and streets, all defined by groups of buildings.
BUILDINGS

In this analysis, there are two distinct building typologies. The first is associated with professional design and the second with the generation of human habitats (Lozano 1990). Buildings of professional design should be recognised by styles of high culture and should be reserved for buildings that have symbolic functions in a particular community. For example:

<table>
<thead>
<tr>
<th>Government</th>
<th>castsles, palaces, parliaments, city halls</th>
</tr>
</thead>
<tbody>
<tr>
<td>Religion</td>
<td>temples, cathedrals, churches, mosques</td>
</tr>
<tr>
<td>Public Facilities</td>
<td>museums, theatres, exhibition halls</td>
</tr>
<tr>
<td>Law</td>
<td>courtrooms</td>
</tr>
<tr>
<td>Health</td>
<td>hospitals</td>
</tr>
<tr>
<td>Education</td>
<td>universities</td>
</tr>
</tbody>
</table>

A few exclusive residences may also be included but these are usually part of the political, social and economic power structure of the community. Design solutions in this genre should originate in the rules of style, be impressive, prominent and aimed at achieving masterpieces. In this context, innovation is an essential ingredient. Moreover, as the buildings are representative of the wealth and power base of a civilisation and at least in theory, designed as a whole, the wealth associated with them should reduce delays and make them available to the community as they are needed.

The second type is more to do with context, unity, harmony, etc. Often the buildings appear in what is known as the vernacular. They are essentially private and offer more commonplace uses, such as: residence, employment, leisure and shopping. This appears to be the basis for a sound framework but there are difficulties with it. Invariably, so much has been overlaid upon a city that any local tradition occupies at best a minority of space and is therefore of dubious relevance. Secondly, an international style of building may have subsumed any traditional methods. This raises questions as to whether other styles might also be legitimately included. Thirdly, there may be a problem where new uses demand a scale and/or type of space not generated by a local building tradition. Shopping is one use that has tended to outgrow its traditional accommodation – with the advent of supermarkets, superstores, department stores, retail warehouses, etc. Yet, regardless of these difficulties, a policy that expresses the difference between focal and contextual buildings will greatly assist in restoring fascinating and functional urban environments. In many successful situations, each focal building is related to a place of assembly, outside its main entrance. This introduces an important concept that the entrance to each focal building should lead onto a public square. Also, the position of the focal building tends to determine the direction of the square. Some pioneers go further to suggest that in deep plan squares, the focal building should have vertical emphasis, eg a church, whereas in wide plan squares, it should have horizontal emphasis, eg city hall.
Contextual buildings perform two roles. First, they provide the frame for the focal buildings. Secondly, they define and contain urban space. It is the contextual buildings that should form the squares and define the streets.

Thus, there is a need for visual continuity, even if the buildings are not physically attached in a continuous manner. One of the most contentious issues is building height. The emphasis on symbolic buildings almost necessitates that they are prominent. It has already been suggested that this can be achieved through style and materials but size is also important. It must be the case that focal buildings lose their dramatic effect if overshadowed by one or more large buildings occupied by more commonplace uses. Alexander et al. (1977) have very forthright views about building...
They say that there is abundant evidence to show that high buildings make people crazy. Up to three or four storeys, there is still the possibility of social contact between buildings and the street. People can be seen at the windows and conversely they can see details below. Alexander’s research group believes that a four-storey limit is necessary to maintain an appropriate harmony between distance from the ground and the health and well being of people. Studies in the cities of Northern Europe have shown that areas with tall buildings often have lower densities than might be assumed. The reality is that such buildings appear as objects in space with such large areas around them, that as well as yielding relatively low densities, no definition of external space can be achieved. Moreover, their scale intimidates people and the environmental conditions generated are extremely unpleasant. The following illustrates the kind of density at different floor levels that were found in locations where people felt comfortable and reassured. These places also demonstrate that the contextual buildings have clear patterns that have been translated as architectural frameworks, and summarized thus:

**assertive architectural framework**
- informal
- greater variety of styles
- greater range of materials
- more elaborate facades
- emphatic changes in building line
- raised skyline
- narrower frontages

**passive architectural framework**
- formal
- limited number of styles
- limited range of materials
- simple elevations
- minimal changes in building line
- little skyline interest
- broader frontages

![Figure 6: Building Densities and Architectural Frameworks](image.png)
A final point about buildings is that the façade is literally the public face of even private buildings. This public face must not hide behind anonymity but express that the building and its occupants are meeting the public domain.

**INTERACTION WITH CITY CENTRE SPACES**

Urban space has always been the place for the community rather than the individual and is therefore public rather than private in nature. Historically, activities that have occurred in urban spaces have been representative of that settlement. They were the places where the framework of society was debated and formulated, and where economic activity took place. Modern cities have often lost sight of the importance of urban space but as Krier (1979) points out, both residents and visitors still have feelings for it. There is a distinct notion that something is missing although citizens may not be able to elucidate as to exactly what it is. A familiar theme among the urban design pioneers is that real urban systems are derived from the concept that buildings should define space, i.e. streets, squares, alleys, courts etc., which in turn express much of the character of each city. This is in sharp contrast to many recent developments where buildings just seem to have been dropped into space. City centre spaces used to be provided for the benefit of the public. Yet, even Sitte (1889) noted that the public square had become synonymous with an empty space. Its loss of symbolism was described and lamented by Giedion (1941), and Krier (1979) concluded that as a spatial type it awaits rediscovery. The functional justification and associated economic viability is the most difficult argument to overcome, when considering the creation of new spaces. However, this gives rise to two important questions. First, is the trend for transposition of outdoor activities to indoor arenas, really a response to community demands? The case for transposition is usually made in terms of increased comfort and convenience for the public, especially in relation to protection from the climate. There are economic and social arguments that suggest such transposition could equally well find its source in the privatisation of public space and increased social control by the private sector. At the same time, collective outdoor activity is as much under threat from the reduction of suitable spaces, as the converse notion. Such activities as outdoor markets, concerts, political meetings, charitable collections, theatre, religious gatherings, sporting events like road races and cycling, spectacles like firework celebrations or laser shows, and many more functions – all have valid roles in 21st Century society. They are only hampered by the lack of suitable space and the unwillingness of authority to encourage them. Secondly, does the creation of urban space necessarily have to follow the rules of function and economic viability? At least for part of the time, it is difficult to understand why a square cannot just exist for its own sake. Provided it acts as possibly a place for chance meetings, a focal point in the city, a recognisable landmark which offers orientation, the junction between various established routes, an entry position – urban spaces can be justified merely on these terms. Yet, the interaction between these spaces and focal buildings, suggests a more significant role. It has already been established that the entrance to every focal building should lead
onto a public square. If each of these buildings also displays a distinct attribute of the society it represents, then each square marks the arrival at that symbol of society. Individually, every pairing of symbolic building and square can have quite a dramatic effect on the psyche of the citizens. Traditionally, clusters of urban spaces have been such frequent phenomena that they were considered the rule and single public squares as the exception. An objective therefore, could be to create groups of interconnected places rather than isolated statements. It is fun to meander from space to space and place to place but people need different kinds of movement and a multiplicity of routes from the very direct to a variety of options.

Figure 7: Different Kinds of Movement through Spaces

The special effect that results from walking about from one square to another in a cleverly grouped sequence is that our reference points change constantly, creating ever new impressions. Moreover, if the most prominent of these squares contain the symbols of society, then citizens and visitors may feel re-invigorated as they move from one symbol to the next. In the following city centre plan, a hierarchy of space and movement is evident. At the heart is the market place which provides the entrance to the City Hall – symbol of Government. This leads directly to Schiller Platz with its symbols of the Justice Ministry, and the Old Castle that indicates the history and longevity of the settlement. Off Kirchstrasse, a square provides an entrance to the main church with all its spiritual symbolism. This leads to Sporerstrasse where a square announces the Markethall, the symbol of sustenance. Thus the urban spaces are defined by contextual and focal buildings, there is scope for external community activities, the symbols of society are visible and accessible, each acting as a landmark and orientation signpost. Squares celebrate the entrance to the focal buildings and the whole composition offers linkages and variety within a framework.
CONCLUSION

Cities and their inhabitants cannot live in the past. However, there is much that can be learnt from the structure of traditional cities. The contribution of the community over generations, was lost as 20th Century plans tried to create the modern, efficient, functional city. Time moved on again and the industrial setting that generated decentralised zones linked by urban throughways started to fade in many Northern European Cities. It was replaced by the post-industrial era, in which compact and usable centres became possible once more and the compatibility of a variety of uses enabled mutually supportive activities to thrive alongside one another. This was an
opportunity to reappraise approaches to city design with the community as the focus. Disheartened by the anonymity of the machine, people searched for more meaning in their lives and in their cities. This search led to a reinterpretation of pre-industrial city, in which the natural setting was celebrated rather than destroyed, where citizens were comforted by the human scale of buildings and spaces, and where they could tell the difference between the symbols of their society and buildings that are occupied by more commonplace uses. The main objective of the overall study is to investigate how to establish models for the urban design of post-industrial cities that will restore them as fascinating and functional urban environments. This paper has explored two distinct building typologies and suggested a relationship between them and city centre spaces. It has emphasised the importance of collective community activities and the need to create external public places in which they can be enjoyed. Perhaps one of the most important aspects in re-establishing identity is the balance between unity and individuality. The pioneers have written about the drive for human beings to pattern their environment as a means of understanding. On the other hand people seek exceptions to avoid monotony. In fact, a character of urban places derived from exceptions and idiosyncrasies is often much admired. However attempts to design such features look contrived and unconvincing. A flexible framework is necessary in which the structure of each city is created by adapting the principles to local conditions. Once again there can be a return to development through evolution with scope for minor contributions by members of the community over a long time period, to gradually create the admired idiosyncrasies. In this way, there is a chance of evolving the robust, vigorous and community-orientated places that people desire so much.

REFERENCES

Alexander, C. et al. (1977) A Pattern Language
New York: Oxford University Press

Giedion, S. (1941) Space, Time and Architecture

– A Survey of Trends for the period until the Year 2000, 6th ECE Conference in Urban Development Research, Leipzig, September

Krier, R. (1979) Urban Space
New York: Rizzoli

Lozano, E. (1990) Community Design and the Culture of Cities
Cambridge: University Press

Sitte, C. (1889) City Planning According to Artistic Principles
New York: Rizzoli (reprint) 1986

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