

SOME URBAN DESIGN ASPECTS OF CAPITAL CITIES

Professor Wallace van Zyl, Cape Town, South Africa

This paper will be divided into two parts, firstly, selected aspects of planning theory and history and secondly, case studies of some examples of major capital cities.

Since capital city design is multi-disciplinary, the author will mostly discuss his interest in physical planning forms, functions and context. First-hand observation of capitals during international visits will be augmented by means of colour slides and subsequent ideas developed in Masters en Doctoral seminars. Some tentative conclusions relate to sustainability, adaptability, genius loci, design language and non-material values.

1. INTRODUCTION

In a simplistic sense, planners might advise decision-makers about a future involving the matching of needs and resources required to design a capital city. Superficially then planning and the administrative functions of government resemble one another, until one adds on the weighty legislative and judicial powers of government. Since government is about power and the art of the possible (politics) many decisions will be short-term compromises or "satisficing" which negates some aspects of middle to long range planning. Since the decision to design and build a capital city is both political and long-range, planners may be challenged to reconcile conflicting demands and to grasp the special urban design criteria involved.

2. DEFINITIONS

At this stage, the two basic terms of "urban design and capital city" are defined. The following is a preliminary, basic definition of a capital city:

A multi-functional, symbolic centre(s) of the nation, whose prime role is to house central government functions such as legislature, administration and judiciary in a

landscape and townscape of unsurpassed urban design excellence.

Some discussion of the characteristics of urban design is required.

Design has been described as an act of creative will or a giving of form (German *formgebung*) (Bacon 1978). It is "holistic" - drawing parts of space and material into a whole and including analysis, but a larger portion of synthesis is present. Product tends to overshadow process. Urban Design lies in an area between the professions of city planning, landscape architecture and architecture with a design "review process" as a monitoring tool, which is gaining acceptance (Shirvani 1981). Hancock (1995) has suggested that urban design language is rooted in the past and may employ a "grammar or syntax" which is international.

According to Segal (1991) the art of urban design is "the creation of activity spaces for people in the public realm". The urban design framework provides a three-dimensional structure for urban elements which include movement systems, built form and open space.

Selected key words such as creative, holistic, synthetic, activity spaces and a three-dimensional form give some early clues about the nature of urban design. In a search for an international design language, it has been useful to distinguish between "organic and planned" capitals, which will involve some recent history.

3. ORGANIC

Let us begin with organic capitals which evolved over many centuries and which usually exhibit non-geometric plan forms. There were many functional reasons for the location and founding of historical capitals such as military, trade, resources, transportation, religion and government. In a historical typology certain building types have become power symbols of the city

such as temple, acropolis fortress forum and palace.

As words like acropolis, forum or palace imply, the classical capitals of Greece and the Roman Empire have been highly influential in urban design for the Western world. For example, the Acropolis in Athens could be seen, shared and "understood" by most citizens. In one sense it may have expressed the Platonic values of the time, the True, the Good and the Beautiful (Prince of Wales 1994). It was a gleaming symbol of strong leadership (Pericles) and temple of the goddess Athena, elevated on a hill above the city.

On the other hand, in China the old capital Peking (1268) is an example of a religious ritual grid along clear, straight axes. Every house and every temple was built according to ritual, for Peking was much more than a capital. It was the residence of the Emperor, a demigod, The Son of Heaven. "His throne was a sanctuary, the throne hall a temple facing due South, the entire city a temple ground" (Rasmussen 1951). In plan, Peking is a series of rectangular towns placed inside one another until the mystic Purple City is reached. The allusion is to the "purple pole star", centre of the celestial world, as it was the palace around which the terrestrial world revolved. "When a ruler makes himself a high-priest of deity for his people, of itself a ritual develops which forms the city". (Rasmussen 1951).

The three organic capitals which have exerted the strongest influence are Rome, Paris and London. Strictly speaking the military camps (*castra*) and roads of the Roman Empire accounted for more than half of the plans of all the major cities in Europe and the Middle East. After many centuries the coming of the Renaissance caused the urban design mantle of Rome to fall on Paris. In practice this meant the wholesale adoption of such classical Roman design elements as monumental axes, obelisks and triumphal arches. Thus one might revise the famous saying about

Rome to read: "All design roads leads to Paris".

Giedion (1947) has called Pope Sixtus V "first of the modern town planners". In Rome he had spiritual motives for linking major pilgrim churches along axial vistas with "marking" obelisks in front of the churches. In classical Rome large structures (e.g. amphitheatres, aqueducts) projected their design into the urban fabric by means of Compression, in Renaissance Rome when Pope Sixtus V linked churches by means of monumental axes, he created Tension (Bacon 1978). Both visual tension and compression are necessary contrasts in urban design. The Roman legions marched all over Europe and held frequent victory parades to celebrate their conquests. Broad avenues were required for processions which spawned the concept of a "vista of power", with its overtones of surveillance and control along straight lines (radials).

Hancock (1995) has suggested that the "vista of power" or main urban axis in major capitals (Paris, Berlin, London, Washington) runs East-West to symbolise the cycle of birth and death. However, in Peking and Brasilia the vista of power runs North-South, because the most sunny orientation was sought or ritual was being observed. In any case, the two original axes in a Roman castrum crossed at right angles in the town square and then radiated out in all directions of the compass. Therefore the axis or vista of power was a design choice to emphasise only one of these axes.

In the case of London, Roman and Baroque design principles were modified in the tension between the twin cities of Westminster (government) and the City (commerce). At Westminster there is almost a "triangle of power" formed by the axes between parliament, palace and Trafalgar Square. However, the most powerful spiritual symbol (St Paul's Cathedral) is dwarfed by a mixture of commercial uses and forms in the City (Cameron & Cooke 1980). Then too the British Empire (later Commonwealth) was a launching pad for exporting the more informal urban design of the English Parliament to countries such as

Australia, New Zealand and South Africa. Westminster's Gothic image and mediaeval appearance suggest continuity and conservatism in government. Yet in a North-American context the former British colony of Canada adopted a Gothic Revival style for the new Federal precinct in Ottawa.

4. PLANNED

During the Renaissance, the compact settlements of mediaeval Europe were dramatically extended, refined and restructured. Cities became a means to express the aesthetic and functional aims of the period such as a desire for order and discipline and a drive to impress. In turn, this led to designs such as the Gardens of Versailles, the piazzas of Rome, or the Georgian squares of London (Hodge 1988). After 1600, the Baroque era showed a revival of interest in the classical art forms of Rome and Greece. There was a growth of wheeled traffic in capital cities and an accumulation of autocratic powers by the heads of nations and city states.

Thus city planning turned away from the Middle Ages concept of citise as concentric, concentrated, and self-contained, and "opened up" new avenues and public squares, in a self-conscious undertaking based on certain design principles like symmetry, coherence, perspective, monumentality and composition. Besides being functional and symbolic, public squares were designed as three-dimensional spaces to be surrounded by buildings or other landscape features providing architectural harmony and human scale. Main streets with their uniform facades took on this same sense of enclosure and quality of architectural coherence, probably best summarised by the notion of "urbanity" in a city, a quality still sought after in building today's capitals.

The five elements used by Lynch (1960) in his image of the city (landmarks, nodes, path districts, edges) would appear to be tailor-made for analysis of capital cities. Firstly the legislature, executive, courts and cathedral would be classified both as major Landmarks and Nodes. Secondly Paths or axes would link these nodes and the

whole ensemble might them form a capital precinct of District. The author has conducted an image survey of Adelaide, state capital of South Australia (Van Zyl 1965).

Attention now turns to carefully selected case studies of planned capital cities, most of which are of recent origin and have been visited by the author. The following have been selected, namely Washington, Canberra, Brasilia and Berlin.

4.1 Washington

According to Hall (1988) the City Beautiful movement had its origins in the boulevards of European capitals, e.g. Haussmann's reconstruction of Paris or Vienna's Ringstrasse, but L'Enfants' plan for Washington DC was also important. Using Baroque planning principles, the plan of a French engineer for Washington was later adjusted but had many of the features, grammar and syntax of capital urban design. It was formal, axial yet democratic and encrusted with Roman symbols! True to the City Beautiful, Washington emphasized the processional an dsuquential aspect of urban space with buildings as a frame for a human procession moving from one node to another. Monuments became the terminal elements along axial vistas formed by diagonal boulevards (Hines 1982).

The location and plan of Washington may be seen as a political gesture in the aftermath of the American Revolution and a creation of the Age of Reason. Opponents of the plan having just shed a monarchy, were shocked in principle by the regal grandeur of L'Engants' design (Cooke 1979). In recent years the Pennsylvania Avenue axis has bee enhanced as a processional way between the Capital and the White House by creating a special Development Corporation, which applies strict reviews and height control to urban design and landscape projects (Van Zyl 1985).

4.2 Canberra

With the creation of the Australian Federation at the turn of this century, an opportunity arose to build a new capital city. The choice of a "neutral" site was influenced by a political compromise between the two largest rival citise of Melbourne

and Sydney. In 1908 a small sheep farming settlement Canberra was chosen some 250 miles south-west of Sydney, because of fine views in hilly country.

When an American Walter Burley Griffin, won the international competition in 1916, his design used prominent natural features like hills and streams as reference points and an artificial lake to complete the design. It is in the form of an equilateral triangle with its base formed by the lake and its apex on Capital Hill where parliament now stands, and is known as the Government Triangle, the form of which reminds one of Versailles! There are two major planning axes, namely the Land and Water axes, which are powerful and detailed (Pegram 1983).

In Canberra there is once again a strong historic Beaux Arts influence and a superhuman, heroic scale as applied to landscape planning, which is not matched in the urban design. The scale of public buildings appears to be suburban and lacking in mass, but it is a model of the Garden City par excellence, which suits the lifestyle of most Australians! Would an European planner have shown the same foresight?

4.3 Brasilia

Although the constitution of Brazil (1889) included a new capital, the location some 600 miles north of Rio was not finalised until 1955. The alternative was the "status quo" namely to upgrade Rio. The design competition of 1957 was won by Costa and many of the buildings were designed by the fashionable architect Niemeyer, who was a disciple of Corbusier and "the skyscraper in the park" (Evenson 1973). The plan of Brasilia has been described as a bow and arrow, with the arrow as its central axis and a triangular Plaza of the Three Powers (of government) placed at the tip of the arrow. The central axis of power terminates in the legislative building and the secretariat, thus forming a monumental "shaft of space" lined by identical, slab-like office buildings. Some softer relief is provided by an artificial lake, but it is certainly not an integrated Water Axis like Canberra's.

In Brasilia administrative buildings dominate the skyline, while the

legislature is low key. This might lead one to conclude that Brazil is a bureaucracy, which coincides with the real executive powers of the President! Indeed, without the personal support of the President, Brasilia might never have been sued as a political instrument to develop a backward region. Crouch (1982) optimistically maintains that Brasilia is a "final image" of our infatuation with mechanisation and gigantism! "It struggles to incarnate itself as a place for human life and not merely as a set of propaganda gestures; the conflict between grand aspirations and pedestrian needs is being worked out ... as Brasilia fills in its empty superblocks".

Brasilia and Canberra are newer capitals in the Southern Hemisphere created on neutral virgin sites, but both suffer from design problems of scale. In Brasilia the bland, hard-edge architecture, windswept plazas and auto dominate, whereas the Australian landscape submerges isolated buildings, and a lawn actually sweeps across the roof of the fine low-key, earth-bound Houses of Parliament! However, Canberra has an individual personality which makes a low-density contribution as a "natural" and friendly capital.

4.4 Berlin

The last case study illustrates "work in progress" and points to the future. On a visit to Berlin one is confronted by a forest of tower cranes and a beehive of 4,000 artisans on a gigantic building site where the notorious Wall separated East and West. For forty years Bonn was only regarded as the provisional capital by the Germans, but Berlin as always their symbol of unity, freedom, democracy and the rule of law "like no other city". A politician, Chancellor Kohl is also the driving force (Van Zyl 1997).

With typical German efficiency funding of the urban design implications of the new capital was subject to the following reasoning. Since building a national capital is a one-off major event, one would expect a large contribution from the Public sector (taxpayers). While Private sector values of profit and loss may be inadequate to evaluate the intangible aspects of capital city urban design, public-private partnership would still make sense

to match needs and resources. Thus a development corporation Baugesellschaft Berling was formed to oversee the mammoth task and to organize design competitions under an international panel of experts. The private sector is creating its own "Manhattan" around Potsdamer Platz.

The most noteworthy urban design competitions were those for the Reichstag (legislature) and the Spreebogen (administration). It was inevitable that Wallot's historic Reichstag should be restored and used as the seat of the new all-German Parliament. An international design competition attracting 80 entries, was won by Sir Norman Foster with his transparent dome, which will give Berlin a "new landmark and clear capital signal" especially when lit at night (German Bundestag 1997).

There were no fewer than 800 entries for the Spreebogen competition and the winner bridges the bend (bogen) of the River Spree by means of the gigantic Band des Bundes with office blocks one mile long and 100 yards wide. However, note that its six-storey buildings will not exceed Berlin's traditional eaves height of 70 feet! Urban design guidelines specify: "integration into urban landscape, ... transparent and open links between parliament and public ... a lively urban atmosphere with flair, cafes, bookshops, art and fountains" (Bundestag 1997). We will watch how the Germans combine conservation with a post-modern idiom for reinstating Berlin as the federal capital, in a public-private partnership. It is obeying the "rule" that parliaments are traditionally accessible to citizens when sited in the heart of the city (De Klerk 1995).

5. CONCLUSION

This paper has only introduced a vast subject with at least a dozen conclusions, but the following are singled out:

5.1 Adaptability is a major criterion for enduring capital city design and principles of sustainability are still valid, namely "long life, loose fit and low energy" (RIBA 1970).

5.2 Capital designers should seek out a "spirit" expressive of time, place and people. This Genius loci

is paramount in creating a sense of identify, e.g. Berlin, Paris, Washington or Canberra.

5.3 Current urban design language is rooted in past Western culture (e.g. Roman symbols) and has become part of an international

capital city formula or recipe, grammar or syntax. Will it evolve and change?

5.4 Non-material values are important, not profit and loss, so we need an urban design equivalent of the statement:

“Capitals are containers of sentiment and symbolism and a moving aesthetic experience? (Van Zyl 1996)

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End note: Can we expect greater choice and design innovation in future? Centres of economic power are assuming even greater importance than those of political power and may undermine capital cities, e.g. New York or Frankfurt. "Globalisation" challenges existing capital cities, because decisions are flashed around the world from headquarters situated almost anywhere. This centralisation of power in fewer major capitals (e.g. Brussels) may marginalise decision-making in smaller local capitals. How will they adapt?