

CITY HISTORY AND CITY PLANNING

**The Local Historical Roots of
The City Planning Function in
Three Cities of the Canadian Prairies**

by

EARL A. LEVIN

**A Thesis
Submitted to the Faculty of Graduate Studies
in Partial Fulfillment of the Requirements
for the Degree of**

Doctor of Philosophy

**Faculty of Graduate Studies
University of Manitoba
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Canada

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ABSTRACT

Counter to prevailing theories among urbanists which seek to explain urban phenomena on the basis of common characteristics of cities, this thesis argues that every city, because of its environment and its own peculiar history, differs from every other city in significant ways and that these differences are more revealing of the inner nature of cities than are their commonalities.

To confirm this proposition requires a comparison of the similarities and differences among cities and the demonstration that there are, indeed, essential differences among them which account for telling differences in their governance, development and outlook. Comparisons of cities in the same socio-economic and cultural milieu, the same time-period and the same geographic location would be most persuasive: significant differences among such cities are not normally to be expected and, if found, would support the thesis. Accordingly, three cities in the prairie region of Canada which meet these stipulated criteria - Winnipeg, Regina and Calgary - were chosen as the subject cities of this study.

The study examines the salient features of the physiography and history of the prairie region, the nature of the city planning function, the notion of a prairie regional personality, and the histories of the three subject cities. It finds that because of constitutional, statutory and historic factors, the common role of city government is administrative rather than policy-making; that the planning function is, in effect, an administrative instrument which simply expresses the city council's politico-economic orientation; and that the "master plan" is an ineffectual planning device. City government could become a true policy-making government if its statutory context were changed, but such a change is most unlikely. The planning function, however, could be made much more effective with some simple by-law changes. The study's principal finding is that although all three cities shared a common environment and had common characteristics at the outset, they diverged widely from each other during the course of their historical evolution until they became unlike each other, each with its own particular characteristics. These unique traits were embedded in the inner nature of each city and are expressed in its distinctive governance, communal ethos, planning function and development process. It surely follows, then, that the fullest understanding of any city, as well as solutions to its problems, must be sought in its own inner nature, not in synoptic urban theories or other cities' practices.

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PART I: INTRODUCTION

CHAPTER 1

**SOCIETY, CULTURE AND THE FORM OF THE CITY:
UNIFYING THEORIES AND DISTINGUISHING REALITIES**

The requirement in urban research is for approaches that delineate common patterns of social life in cities and that isolate factors affecting these patterns. What emerges is a theoretical perspective. This should offer a conceptual framework which outlines how research should proceed. We acknowledge the unique features of cities. It is their commonalities, however, that provide the bases for research and planning.

- Leslie W. Kennedy¹

Whilst there may, indeed, be certain properties of towns which occur irrespective of socio-political arrangements and to that degree are universal, these are of as much interest to urbanists as the fact that most people need a certain amount of sleep each day.

- Robert E. Pahl²

CHAPTER I

SOCIETY, CULTURE, AND THE FORM OF THE CITY: UNIFYING THEORIES AND DISTINGUISHING REALITIES

1. Commonalities and Differences - The Urbanists' Debate

Urban phenomena, indeed all social phenomena, may be seen in a variety of ways, often in ways which are widely divergent or even contradictory. The phenomena under observation are the same phenomena in each instance; it is the differences in the preconceptions comprising the intellectual or ideological context within which the observations are made which account for the differences in what the observers see, and the interpretations which they put upon what is seen. It is not uncommon among urban sociologists and historians to seek in urban phenomena evidence of common and recurring patterns which hold forth the promise of the ultimate disclosure of universal laws governing the genesis and development of cities and the social life which is lived in them. Such an expectation is consistent with the belief that all phenomena are causal in nature and therefore governed by laws which are knowable. The notion of universal underlying laws is the conceptual foundation on which rests the entire structure of Western scientific thought, and urban sociologists, and even historians (although the latter perhaps to a lesser extent) count themselves within the scientific community and embrace its concepts and methodologies.

In order that laws may be discovered, however, phenomena must exhibit consistent, recurring behaviour. Phenomena which are random and non-recurrent are not likely to be governed by universal laws which are knowable, except perhaps laws which say that such phenomena must be random and non-recurrent. But idiosyncratic behaviour is not predictable, and the essential quality of a natural law, the quality which makes it useful to human purposes, is that it is predictive. A law, of course, may say that the phenomena with which it deals are not predictable but this is not likely to be very useful in practical terms, nor indeed very illuminating in terms of understanding

the inner nature of these phenomena. Clearly, such a law is not what the urban sociologist or historian interested in predictive laws is looking for. There are urbanists, however who believe that urban phenomena are too idiosyncratic to be encompassed and explained by synoptic laws, and that it is the differences among cities rather than their commonalities which are likely to provide deeper insights into the nature of the city and which should engage the attention of the urbanist.³

Scholars of the city for the most part have been of the first type, seeking commonalities and theorizing about laws. Obviously the notion that cities in fact have little in common, or that their commonalities are of no greater significance than the fact that most people need a certain amount of sleep each day, would have little appeal in a scholarly discipline which sees itself as a science and dedicates itself to the search for synoptic, predictive laws governing the behaviour of urban phenomena.

Nevertheless the notion that a unifying urban theory is unlikely and that the differences between cities are of greater significance than any common characteristics they may exhibit is gaining acceptance. This notion arises out of the growing perception that cities are the result of a vast and complex congeries of forces - geographic, economic, social, political, historical and even accidental - and that these forces, in terms of the effects they have produced, are peculiar to each city.⁴ Moreover, these forces are not all external in origin but many are internally generated by the city itself.⁵ The city, thus, is not only made but makes itself, and moreover is made and makes itself in its own image and not in that of any other city. This concept has important implications for many aspects of urbanism but perhaps most important for city planning. If the genesis, development and character of each city is unique then the problems which beset it must also be peculiar to each city and the solution to these problems must be found in the context of each city's uniqueness and not in any general solutions equally applicable to all cities.

This notion has not been an established principle in Canadian planning thought. Traditional city planning approaches to the solution of local problems have assumed that what has been effective in one city will work in any other, that measures taken in distant places will succeed locally. It is an assumption which prevails not only among municipal officials but among provincial and federal officials as well.⁶ The practice of inviting outside experts to address local meetings on how they dealt with their problems in other places is common, as is the reciprocal practice of locals visiting other centres to learn how to solve their own local problems. There is of course something to be learned from such exchanges, something which even may be helpful to the several parties in the process. But for the most part what is to be learned is how other places deal with their problems, not how to deal with one's own. Imported solutions may of course be effective on occasion, but only if they can be modified and adapted to fit the local circumstances.

If there are commonalities among cities, one should perhaps look for them among cities of the same culture, at a similar stage of economic development, of comparable size, and sharing a common history at least in its most general aspects. In the context of western Canada, the cities which probably come closest to representing those conditions are Regina and Saskatoon as a pair, and Calgary and Edmonton as a pair. But to anticipate and then discover common characteristics within these respective pairs and take this as evidence of a law of urban development would be merely a self-fulfilling prophecy. On the other hand, to look at cities such as, for example, Lhasa and Brasilia and predict that there are no significant commonalities between them would also be merely a self-fulfilling prophecy. In all of these cases there must be certain phenomena which are common, phenomena which arise out of the fact that these cities are the habitats of human beings and human beings share certain requirements and characteristics universally. Human beings must eat and sleep and reproduce and confer and be entertained and gain their livelihood and perform rituals and order their collective lives and they must have places in which to do these things. The form of each of these

activities varies from society to society, and the varieties are innumerable and of such widely differing character as to be unrecognizable as stemming from a common source in the universal emotional and psychic make-up of the human being. And the nature and form of the places in which these activities are pursued are as different from one another, from city to city, as are the activities which they house.

To urbanists such as R.E. Pahl, the common pool of human needs that require places in which they are to be satisfied is of relatively little interest. What is of primary interest is the differences in these places which each urban society creates and the underlying factors which have produced these differences. The nature of, and the underlying reasons for the creation of extensive shanty towns on the *outskirts* of the city by new urban immigrants in Mexican and Central American cities as contrasted with the creation of immigrant ghettos in the *inner* city in the United States is of greater interest to a growing number of urbanists than the fact that all immigrants to the city share a common need to find a place to sleep.⁷

The urban street system is another example. Movement corridors are obviously essential if there is to be movement in any type of social organization. If you can't move, if you can't communicate, then you can't have much of an organized society. Even primitive hunters and gatherers have established pathways in their villages, and recognized routes between villages. Every society develops its appropriate, even typical street pattern. But why do some societies develop a systematic grid pattern of streets in their cities and others adopt a random, haphazard pattern?

2. Evidence from the Past

For example, the city of Kahun in Egypt, dated by archaeologists at 2670 B.C., had a significant area laid out on a rectangular grid pattern, as did the later (14th Century B.C.) city of Tel-el-Amarna. In both these cases however the remaining and largest portion of the city was irregular in pattern, and archaeologists speculate that the gridiron enclave was purpose-built in order to construct as quickly and expediently as

possible a housing quarter for the accommodation of the work-force which was engaged on the building of the Pharaoh's mortuary.⁸ Those parts of these Egyptian cities which were occupied by the wealthier residents were built on a laissez-faire basis and their pattern is random and irregular.

In the cities of the Harrapan culture of the Indus valley (the name derives from Harrapa, one of the two principle centres of that culture), the grid pattern is a standard feature. The Harrapan culture reached its zenith around 2150 B.C. and disappeared suddenly around 1750 B.C. The people of the Harrapan culture settled in the Indus basin and their major centres were Mohenjo-daro near the mouth of the Indus River, and Harrapa some 1000-miles to the north-east, on the Ravi, a tributary of the Indus, in what is today the Punjab. Despite the enormous distance between them, their urban structure in the form of the grid pattern of their streets is strikingly similar. So is that of the minor centres of Kalibangan and Lothal. On this evidence one is disposed toward the view that unlike its manifestation in the Egyptian cities of Tel-el-Amarna and Kahun, the rectangular grids of Harrapa and Mohenjo-daro had their roots not in the urgency to meet a construction deadline but in the cultural "values" of that society.

Dan Stanislawski in "The Origin and Spread of the Grid-Pattern Town"⁹ argues that continuity of the grid pattern is in fact a cultural phenomenon spread over a broad geographical area and a variety of societies through cultural contact. It is an interesting point, but whether the continual recurrence of the grid pattern is due to cultural contact and acculturation or to independent invention is still an open question. The acculturation theory doesn't really offer a satisfactory explanation for the random, irregular patterns of most cities of mediaeval Europe where the legalistic, systematic, engineering-technological mind of Rome and the Graeco-Roman tradition of the grid system had been dominant for preceding centuries. One can argue that the physical pattern of urban development can be explained just as readily in terms of its being an expression of the

peculiar cultural dispositions of each particular society, independently arrived at, as it can in terms of a form rubbed-off from contact with another culture.

The grid-patterned quarters of Tel-el-Amarna and Kahun offer a suggestion which might support this notion. As already indicated, scholars think that these workers' quarters were built as quickly, cheaply and expeditiously as possible so as to take as little time as possible away from the real work of the labour force. That immediately suggests that the gridiron is a quick, cheap, and expeditious pattern for building a street system. Moreover the grid is probably the most efficient pattern for movement in all directions through the space of a city. The grid pattern endows no advantage or disadvantage of access on any one location over another. Movement along one axis and then along the other can bring the traveller to any point on the grid with maximum efficiency. It doesn't take too much imagination to assume that any society could discover these qualities of the grid for itself, without having to have its virtues demonstrated to it by others. It does however require that the society value the qualities of quickness of construction, cheapness, expediency and ease of movement. In that sense one may say that the values are "cultural values" and the gridiron pattern may accordingly be regarded as reflecting important "values" of that culture.

But the gridiron pattern reflects more than these utilitarian values. The gridiron is an organized and systematic form. And organization and system require authority. Such a street system imposed upon a city requires some central civic authority responsible for the imposition and maintenance of the system. Which tells us something about the urban social structure of that city. In the cities of the Middle East and mediaeval Europe the street pattern was random, uncontrolled and irregular. But more than that the streets were the garbage dumps and the waste receptacles of the population. There was no system for the disposal of either garbage or sanitary waste. In startling contrast, most homes in Mahenjo-daro in 2150 B.C.:

had bathrooms, connected by drainage channels to main drains with access manholes running under the streets. . . . In his work Civilization of the Indus and Beyond Sir Mortimer Wheeler includes two intriguing photographs of elaborate sanitary installations and observes that 'the high quality of the sanitary arrangements at Mohenjo-daro could well be envied in many parts of the world today. They reflect decent standards of living coupled with an obviously zealous municipal supervision....'¹⁰

It would seem that the rectangular grid street system as a feature of urban form has as its basis a social and political system which chooses to exercise control over that urban form and to impose certain developmental disciplines upon it through the authority of some governmental agency.

At about the same time that Mohenjo-daro was building its rectangular grid street system and its astonishingly advanced underground waste disposal system, the city of Ur, an important centre in the Sumerian Culture of Mesopotamia¹¹ which flourished in the valleys of the Tigris and Euphrates rivers at about the same time as the Harrapan culture in India, was, by contrast, being established on its site through the random, uncontrolled proliferation of its streets, and making no provision for waste disposal.

About 1000-years after the Sumerian culture in Mesopotamia and the Harrapan in India, Greece emerged as the paramount civilization in Europe. Prior to about 900 B.C. Greece had experienced some 300-years of "dark ages" consequent upon the invasion by the Dorians. From about 900, however, city-states were evolving both on the mainland and in the Peloponnese with Sparta as the leading power. It was not until the strong and enlightened administration of Pisistratus (546-527 B.C.) that Athens emerged as a powerful *polis* of international significance. Between 750 B.C. and 550 B.C. the Greeks were very active colonizers, creating new city-states throughout the Mediterranean, mainly to reduce the pressure of population growth in the parent *polis*. For the most part the street pattern in the parent city at this time was generally unplanned, but almost invariably that of the new colony was a rectangular grid. And

from about the 6th Century, during the Hellenic period, the pattern even in the founding *polis* was typically "planned" as was the general development of the city, and invariably so in the Hellenistic period after the 3rd Century B.C.

About 1500-years after the Greek culture had achieved its highest expression the cities of mediaeval Europe began to emerge from the 'dark age' which had descended upon Europe after the collapse of Rome. The mediaeval European town's street system displayed the patterns of the societies which had built it. During the Roman hegemony the towns in which the Roman presence was dominant the Roman street-grid prevailed. With the fall of Rome some towns were simply abandoned, some towns continued, and with the revival of trade activity toward the end of the 9th Century some towns which had been dormant since the fall were re-occupied and re-built. The towns which had continued or were re-built during the five centuries of slow re-animation of the trading economy showed a mixture of patterns in their street system. Where the Roman imprint still remained the pattern was the rectangular grid; where new growth required new streets, those street were "organic" or "unplanned" in their pattern.

The Harrapan city's street system then, was "regular" or "systematic," or "planned"; the Egyptian city's was typically "organic" or "random," or "unplanned"; so was the Sumerian city's; the Greek city's again was "planned", particularly in the Hellenistic period; the Mediaeval European city's was generally "unplanned." The differences are not readily explained by the simple mechanism of imitation or acculturation through contact. They are more understandable as indigenous expressions of the cultural values and attitudes of the respective societies.

The random growth of the mediaeval European city and the customary use of its streets for garbage and sanitary waste disposal may well reflect the fact that during this period the Church was the effective authority and it was more concerned with The City of God than with the city of man. Undoubtedly it was very much concerned for and protective of the worldly welfare of the privileged classes, but for the masses of the

population it turned its eyes away from their earthly life and directed their gaze upward toward heaven. It seems that the grid system of street layout is most often found in cultures which are more secularly than theologically oriented; more concerned with practical affairs in the present life than with preparation for life in the hereafter; whose political structure provides for direct responsibility for the secular city and the built environment; and in which the imperatives of these cultural characteristics automatically express themselves in the urban environment in the form of the rectangular, ordered, gridiron street system.

But the street system is by no means the only element in the urban landscape which expresses the socio-cultural characteristics of a society. The public spaces, for example, are another important indicator. These varied widely from culture to culture in terms of their presence in the cityscape, public access, role and significance. These and other differences indicate that the cultural milieu of a city influences the city's form, and that even within a given culture local differences assert themselves and find expression in the salient features of the built environment.¹²

3. Unifying Urban Theories

In the search for the grand concept, the universal paradigm which will reveal the basic commonality of urban phenomena and express it in terms of a simple unifying theory, urbanists have speculated about not merely such component parts of the city as its street pattern or its open spaces, but about more comprehensive aspects, through which they have sought to explain the development of the city as a whole. In the United States there have been several such theories which have found recognition among those urban scholars who subscribe to the notion of an all-embracing theory of cities. The first, and perhaps the most celebrated of these was the Concentric Ring theory of city growth propounded by E.W. Burgess.¹³ The theory stated that cities grow outward in a series of concentric rings from the central business district which is the place where the land has the highest economic value. Each ring contains its own typical set of land-

uses which essentially are determined by the land values. Adjacent to the central business district is a transitional zone which typically includes wholesale establishments, light manufacturing plants and rooming houses occupied by factory workers and transients. The next ring typically contains working-class homes and second-generation immigrant settlements. Next to this is a zone of better-class homes, and beyond that, farthest from the central business district is the commuter zone.

Burgess and his associates in the Sociology Department of the University of Chicago formulated their concentric ring conception of city growth on the basis of their studies of Chicago. And indeed the concept did describe the general form of that city at the time. Its explanation of the underlying forces which produced this pattern, however, is far less persuasive than its description of the pattern itself. But Chicago in 1925 was not the archetype of the American city at that time, and other investigators found other patterns and formulated other theories.

One of these which came to prominence was the Sector theory propounded by Homer Hoyt.¹⁴ This theory held that the basic structure of the American city is that of a series of sectors in the form of wedges radiating from the central business district along major transportation routes. The wedges or sectors contain commercial and industrial uses as well as residential, but it is the high value residential locations which are the mechanism which determines the location of the other uses and the structure and location of the sectors.

Still another theory was the Multiple Nuclei theory developed by Chauncey Harris and Edward Ullman.¹⁵ They found that in the cities they studied the land-uses were disposed around a number of centres or nuclei. These nuclei were formed by the coming together of certain complementary activities which benefitted mutually from each other's proximity. Around these nuclei there were then disposed the broad range of land-uses which comprised each of the component districts of the city.