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PUBLIC URBAN SPACE:
connected essays

by

STEPHEN COHLMEYER

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By

Stephen C. Cohlmeyer

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abstract

Thesis for Masters of Architecture
by Stephen Cohlmeyer

Title:

Public Urban Space - connected essays 230 pp.

An exploration into the subject of public urban space: the forces that shape it and the joys it can bring.

An academic architectural thesis in two parts:

Part I: "The Nature and Design of Public Urban Space" - a study of ideals, behavioural resources, and means for image building.

Part II: "Analysis and Guidelines for a Particular Site" - an experiment in generative programming for a site in Winnipeg, Manitoba.

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PART I

THE NATURE AND DESIGN

OF PUBLIC URBAN SPACE

Introduction to Part I

This section forms the major part of this thesis. It is an academic, generic analysis of public urban space: why it is an important element in our environment, and how we might better design such spaces.*

The discussion is broken down into three main sections: 'bases', 'behaviour', and 'means'.

In the first section my own biases and concerns are set forth; these form the real basis of the analysis, and it seems important that they be presented at the outset as the groundwork for later discussion. This discussion of bases proceeds from a discussion of architecture as a romantic endeavor, to man's need for contact, to discussion of architectural design as a process of response rather than a process of order.

When we are concerned with public urban space, the search for forces to which to respond leads inevitably to the behavioural scientist. Most of the work of the behaviourists, however, because of its mechanistic nature and limited applicability, is not very useful to the architect; I have attempted to point out some less mechanistic results of behavioural and sociological research which may prove generative. This

* To avoid confusion, I will point out now that the most common names for these spaces are 'plaza', 'square', or 'street', rather than 'neighbourhood', 'block', 'highway', or 'precinct'. My major concern is the particular urban space as it is perceived and used by the pedestrian. I do not exclude the automobile, but my concern is with pedestrian requirements and enthusiasms.

research is concerned with public space behaviour, group theory, and individual motivational necessities. The bulk of the section on behaviour is a discussion of these findings and the influence they may have on the design of public urban space.

The final section of Part I is a discussion of the means to achieve 'successful' public urban space. ('Successful' meaning, essentially, 'peopled'.) The main hypotheses of this section are 1) that it is images of what is which affect people, and 2), that the appropriate images to broadcast are implicit in the preceding discussion of behaviour. A discussion of the formation of the image is followed by a discussion of the specific images which should be broadcast, and how these images can be developed in the public mind.

The goal of heavy usage of the public urban space will become apparent throughout this paper. This focus on popularity, however, does not deny aesthetic goals; and it is a fundamental precept of this discussion that the vernacular responses which encourage recognition, joy, and popularity are themselves powerful aesthetic resources.

bases:

"Pure architecture is a bore to everyone but pure architects"[1]

This report is based on the belief that architecture is at base romantic and not technic.

We have romantic visions: of what man is; of what building is; of what happiness and comfort are; of what fame and fortune may bring; and of the relative sanctity of the status quo. These romantic ideas have many sources: memories, observed pleasure in others, intuition, empathy, gall, ambition current taste, style, and religious attitudes... We operate from these romantic bases. They are our most important resource. The romantic bases we accept are not always our own. They can be imposed by our milieu, and accepted as working truths.

From our romantic bases we begin to operate as rational thinkers. We use our rational capabilities, in league with some unknown quantity called the intuition, and build frameworks around our romantic starting points. (In the case of imposed romances, we often accept the existing rational framework verbatim.) The processes of rationalization act in two ways: 1) they greatly increase our understanding of what began as romantic intangible convictions, and 2), they tend to isolate us, because of their own developing sense and order, from the romance of the starting point. It seems important to encourage the first of these characteristics, and to recognize the second.

1. Ivor DeWolfe, The Italian Townscape, The Architectural Press London. p.157.

A near-analogy exists in the traditional debating team: Teams draw lots to determine which side of the argument they will defend. They proceed to build logical dialectical structures to defend and, hopefully, to comprehend, their 'side'. The team with the soundest rational substructures wins the competition. The game becomes an amoral exercise in rhetorical prowess. Morality cannot reside in rhetorical prowess, nor in winning. Morality is unattainable, and uninteresting, to the debating team. Any morality or 'rightness' is in choosing the sides; and the debating team cannot choose sides.

As architects, however, we <u>are free</u> to 'choose sides'. And in the choosing we make decisions about right and wrong: we make moral decisions. <u>The choice of sides is an act of romance</u>. And that choice is the most important operative decision we make. If we do not make an active choice and unquestioningly accept the romance of others, we re-enter the amorality (and distance) of the debating team. It is important to remember that even established dogma is no more than well-rationalized romance. The uncritical acceptance of an established romantic base generally involves the acceptance of the logical structures and imperatives which surround it. And with that acceptance we generally give up our potential for individual and visceral comprehension.

The processes of design might be called the 'rationalization of the romantic'. The logical progressions of that

rationalization, as opposed to the intuitive insights and joys, have become deified in the twentieth century as the only viable resource.* This is not an attempt to denigrate the processes of logical progression; these processes are necessary to the evolution of any formulation -- especially in our western minds. What seems important is that we recognize that romantic inclinations are at the bottom of all of our beautiful Hegelian constructs.

One important facet of this proposal is that the technological imperative, to which we all pay homage in the twentieth century, is no more than a romantic starting point. Technology and the prophecy of the technological futurist is a religion which has strongly biased our views of life and of the potentials of man. It is -- as is attested to by the current worship of the practical scientist (technologist) and engineer as the priests of man's moral and physical progress -- the dominant romantic imperative of our time. Because his religion is so well cloaked in a veil of rational substructure, the technologist can scoff at more obviously romantic cries of indignation. This mechanism of veiling the romantic bases of thought with rationalistic cloaks is not new to the rise of the technologist. It is the connecting thread of western philosophy from Aristotle to Hegel: until the rise of the existentialists and phenomenology. The reliance on the 'rational' renaissance grid and vanishing

*This is probably an exaggeration; but it tends toward truth enough to be stated.

point is as romantic as a reliance on medieval city patterns. It might be argued, even, that Hegelian-Euclidean game playing is more loftily romantic, and potentially less physically responsive to patterns of needs -- and therefore less down to earth and real (the rationalist-technologist's eternal call-to-arms) -- than a good deal of vernacular architecture.

The desire to rationalize groups of information to systems of ordered hierarchies of ideas and objects may be a function of the way our minds work; it is important to realize, however, that this function is a result of some romantic notion that the world and its parts (including our souls and lives) do indeed fit into hundreds of interrelated hierarchical systems. It is not my desire to prove or disprove the accuracy of that notion; it is only to point out that it is a romantic notion which we have developed to make our experience of the universe more bearable. And it is a notion upon which we base a good deal of our thought and action.

Our technological century has solved numerous problems for the people of the world, especially North Americans and Western Europeans. It has fed them better than they have ever been fed before; it has made health care of respectably high quality almost universally available; it has made communication between people easier and faster; it has provided us with warm buildings; and it has given us all of the entourage of questionably useful gimmicks which are the fallout of the profit motive in a technologically oriented

capitalist society. Our technology has also served the needs of the patriotic militarist very well, with trips to the moon, ICBMs, supersonic bombers and fighter planes, napalm, and the hydrogen bomb. The extremely rapid increase of the technological repertoire that is available to us is unprecedented in human history. In past societies technological innovations were few and far between, and hundreds of years were spent in adapting values and patterns to changes in the technological landscape. Today we are faced with more than we can absorb and pass on to our children.

> "The technological gap and the generation gap are the same thing. And the young people today are coming into a world for which there was no preparation in custom. There never was a world like this. Not that any revolutionist made it. It was created by technology and science. They (youth) don't know what to do about it, and the older people don't know what to do about it, either. They don't understand it themselves. That is absolutely the core of our problems."[2]

It may well be that our rationalist-romance with technology has dug us into more holes than it has pulled us out of.

In the face of all of this, many wonder why we have become such servants of some hidden and remorseless technological imperative. It is precisely to the romance of the technologist's potential offering that we fall victim; and once having fallen victim, we rely on the technologist's rational structures and forget that at the bottom there is

2. George N. Gordon, Persuasion - The Theory and Practice Manipulative Communication, Hastings House Publishers, New York. p.413 (quoted from Walter Lippmann, 'On Understanding Society' in Columbia Journalism Review, fall, 1969. p.9.)

nothing more substantial than romance: a romance for an impossible dream of future happiness and perfection under the benefaction of some all-seeing and all-solving technological system.

> "The vision of the man of tomorrow is probably more central to contemporary persuasion than most futurists are competent to imagine. We shall, of course, be the manner of men we are expected to be if we believe that we have no choice but to let nature (meaning other men) take its course. All too often, it seems..., the direction of this vision is quite clear: Man is regarded as an object of manipulation whose way of living, values, choices and goals are determined solely by what technology will let him be. Built into this is the notion that scientific and technical discovery will somehow create by themselves both limitations and imperatives to which man must adjust or perish.
>
> Too rarely is the opposite view -- the logical truth of the matter -- voiced, even in tentative terms -- namely that science and technology are servants of man. And men may decide, as they have decided throughout history, how, when, and where these servants may be asked to perform. Such a banal vision is, of course, uninteresting to the futurist, because it places man, that greasy, unpredictable and ignorant mammal, in the position of power where he would rather see whirling instruments with flashing lights or mechanistic and carefully programmed input and output systems in operation. Because man may soon invent reliable chemical or electric methods of thought control, however, (sic) he does not need to use them except when and where and how he wants to. Nor must he, of necessity, control the sources of life just because he understands eventually the bio-chemical structure of his own germ plasm."3

Romance is not just a toy of the idle rich or of the dilettante. Romance -- whether it is for the familiar patterns of youth, for memory or anticipation of pleasure, for the goodness one can do for his fellowman, or for the imagined

3. George N. Gordon, Persuasion - The Theory and Practice Manipulative Communication, Hastings House Publishers, New York. p. 520 (quoted from Walter Lippmann, 'On Understanding Society' in Columbia Journalism Review, fall, 1969. p.9.)

rewards of fame -- is our only resource. Without romance there is no conviction, and if we lack conviction we can only submit to the romantic visions of others and float. We must discover our own romantic bases, our own faiths and distrusts, and operate from them. If we refuse to make this discovery we do no more than solve puzzles and ape set and comfortable modes of action and style.

Technology provides a good deal; but it does not have the potential to solve all of our problems. As has already been stated, it has a proven ability to create as many problems -- physical and moral -- as it solves. If we understand that technology's dream is no more than romance, and not some irrefutable destiny of mankind, we may be in a much stronger position to search for other romances: Romances which may hold more real promise for our futures. At the same time we will be able to take a more objective look at which of technology's promises are to prove humanized and which are to prove dehumanizing. There is no need to submit to the amorality of the research scientist who keeps telling us that there may be beneficial results to the invention of non-disposable poison gas.

The search for other starting points will not lead to the final dream. That search will lead, however, to a greater recognition that our humanness is our most important resource. Technological innovation must certainly play a part in any future directions which architecture and planning take; but the technological imperative must submit to and

work in league with other more empathic, and perhaps spiritual, romantic bases.

There are three general bodies of information which can prove most serviceable in the development of a more humanized romanticism. These three are: 1) our own memories and emotions; 2) the perceived emotions and patterns of others; and 3) history, which can teach us how and how well man has solved these problems in the past.

The first body of information, our own memories and values, seems the most potent, the most truly ours, and the one which can lead us to produce the most accurate responses to what life is all about. We know truly only our own lives, and an honest search to understand our own happinesses and frustrations must in the end prove the most vital means of understanding and responding to the needs of others. There is certainly a danger that this attitude can lead to autocracy. This especially if one's primary values are not pleasureful happiness but success and power. We suffer the danger of autocracy in any case, however, and our own experience of life must in the end be our most informative resource: the resource with the greatest potential of overcoming autocracy. We cannot distrust our souls and the things which give us pleasure.

Architects and planners must recognize the gap between their ideas about space -- what works, what is pleasant, even what is noticed -- and the ideas of the public. This does not mean that we should place ourselves in the lowest

common denominator of mass culture and kitsch; then we would do nothing. It does mean, however, that if we are to put ourselves in the position of arbiters of social good we should know more intimately and empathetically what the social and the good is for those whom we wish to serve.

We know of things which give us pleasure, or some kind of fulfilment. We also know of things which seem to give pleasure to others. We know this through the evidence that they come repeatedly to do these things with apparently voluntary motives, that they smile when they are doing them, and that they refer enthusiastically to their pleasure. It seems that the architect's job is to determine what things bring about those pleasurable experiences and to understand how he might encourage their continuation and expansion. The sociologist has produced a good deal of research about human patterning. The architect must be able to combine this research with some intangible thing called empathy. When he can do this he will be in a position to use his own romantic memories, emotions, and hopes with the greatest likelihood that what he produces will appeal to and be used by those whom he wishes to serve.

The greatest fallacy of the technologist's dream is that it rejects our humanness, and with it our past. That dream promises great happiness and comfort if men will just learn to behave correctly in a technological world. It assumes that man must change in order to be happy, and operates from the assumption that technology will inevitably point the way

toward man's correct behaviour. All of this in some untried and unknown future.

Man has not really changed very much in the last three thousand years. There is no reason to believe that this stability will reverse abruptly in the next thirty years just because we will be looking out on an expanded technological landscape. Man's past, and not the imperatives of technology, is our greatest tool for beginning to comprehend the future. If we have any resource beyond personal experience and the immediate observation of the experience of others it is history. "The past is not dead history; it is the living material out of which man makes himself and builds the future."[4]

Intuition and the love of life, of fun, of nature, of familiar and anonymous people and objects: these are more important as final resources in decision-making than piles of rationalistic economically oriented engineering. We can only put those engineering techniques to productive uses when they specifically apply, and when they do not interfere with other, more truthful, information.

4. Rene Dubos, So Human an Animal, Charles Scribner's Sons, New York, p. 242.

The Need For Contact:

A phenomenal move to the cities has occurred since the turn of the century. Yet the dominant characteristic of urban growth has been dispersal instead of concentration. It is a dispersal which has been encouraged by some egalitarian dream that every man deserves to live in a beautiful English manorhouse; a dream which is belied by the one-eighth acre that everyman can get for himself and his manor, the eight hour day he has not escaped, and the maids he cannot afford. It is also a dream which is belied by the leap-frogging growth of suburbia which leaves yesterday's Shangri-la in an anti-urban state which planners are wont to call 'grey'.

Television and the automobile have certainly done a good deal to encourage and facilitate this dispersal. As the most important machines of this sprawl, they exhibit precisely the most dominant and destructive qualities which begin to emerge from this pattern. In spite of the fact that the automobile lets one move from place to place with amazing ease, and in spite of the fact that television brings Archie Bunker and Walter Cronkite into everyman's living room, the automobile and the television act as powerful isolators, and not as connectors. They not only isolate people from contact with each other: why play bridge or go for a stroll when you can watch Lawrence Welk? But even more harmful: they limit the variety of stimuli which we perceive and from which we learn. No matter how interesting and varied the programs are which

come to us over the airwaves, (and they are not really very interesting nor varied), the manner in which they reach our senses is always the same: sound and two-dimensional images from a little box. An air conditioned North American automobile makes every attempt conceivable to limit infringement from the environment, and to make the perception of all environments essentially the same. There is general agreement amongst psychologists that limited environments with severly restricted input can profoundly limit persons who grow up in them. Such environments can limit one's ability to think, to develop new ideas, and to come to new self-satisfying ways of looking at life.[5]

> "In the course of planning our new cities and revamping our old ones, we might consider positively reinforcing man's continuing need to belong to a social group akin to the old neighborhood where he is known, has a place, and where people have a sense of responsibility for each other. Apart from the ethnic enclave, virtually everything about American cities today is sociofugal [ie., pulling people apart not together] and drives men apart, alienating them from each other. The recent and shocking instances in which people have been beaten and even murdered while their 'neighbors' looked on without even picking up a phone indicated how far this trend toward alienation has progressed."[6]

Television and the automobile are not the ultimate villains; they are only symptomatic. Our built environment, whether 'split level ranch' or 'highrise', begins to exhibit

5. Rene Dubos, So Human an Animal, Charles Scribner's Sons, New York. p. 178.

6. Edward T. Hall, The Hidden Dimension, Doubleday and Company, Inc., New York. p. 163.

the same isolating characteristics. This isolation, both from natural processes and from our fellow man, is counter to everything man has learned through the centuries about his own growth and survival. There is no reason, just because technology facilitates it, to embrace this isolation, and to call it the final resting place of man. We must come together with what is around us and with our fellow man. We must come together -- not because lovers of the city say so, but because it is the only way life can be more than survival. And this is true no matter how affluent that survival might become.

All of this is not a plea to tear down the walls around us and prance naked down the street. We have territorial needs which prohibit such an outburst. We require privacy, and no attempt is being made to negate that requirement. What is being proposed is that we require variety, contact, and things which we can look forward to and back upon as fun. We need options for easily accessible contact and variety. A hermit in the woods may be said to have these things. But in our urban society we require their urban provision.

Coming together with others is exciting; "there is a fecundity in aggregations, an emergent property which transcends the sum of individual reactions."[7] Public aggregation has been one of the most important facets of town and city throughout men's history, and his built environment has

7. Louis Wirth, On Cities and Social Life, The University of Chicago Press, Chicago. p. 9.

provided for it. This expression of urbanity has not demanded great cities; even the smallest towns and primitive villages have been able to express and accommodate an interplay between privacy and contact, between variety and constancy.

> "The idea of town as place of assembly, of social intercourse, of meeting, was taken for granted throughout the whole of human civilization... You might assemble in the forum at Pompeii or round the market cross, but you assembled. Nor in the general way did you have to explain whether your motives were proper or profane. Men are gregarious and expect to meet. In all ages but ours, that is."[8]

In spite of his move toward dispersal, the twentieth century suburbanite has not really rejected contact. He seems at times to recognize the actual lack of connection which is provided him by his polished environment. He searches out the all-too-rare opportunities around him to find contact and variety. One real problem is that because of the safety of polish, to which he has become accustomed, it is hard for him to escape to places of real life for refreshment: and the wandering hunter can only get into his automobile and drive to false environments like Disneyland or the air conditioned mall of the local shopping centre to see what the city is, and what nature is.

It has been argued that many of the forces which brought importance to the public urban space have disappeared, and that such places have become obsolete. If these places were developed only to serve as markets or as public fora we would

8. Gordon Cullen, Townscape, The Architectural Press, London. p. 103.

have to agree. But public urban space serves as too much more to be dismissed with such a definition. People in the city still take advantage of any opportunity they may have to congregate; if we are called non-plaza people it is only because we have not been given plazas which are any more meaningful than New York City's Lincoln Center.[9] Halprin's fountain plaza in Portland, Oregon brings droves of people to what was before an empty place; and Portland is as car oriented and dispersed as Los Angeles or Winnipeg. Festivals and open air theatre are appealing to people. People really do hunger for these things and jump at the chance for unthreatened participation in them. Toronto's Yonge Street mall, and city hall square; Winnipeg's annual 'get together' street festival; Vancouver's growing gastown shopping area; and San Francisco's Ghirardelli Square: are all examples of the vitality of public urban space use today.

Our job as builders of urban environment is not to take the lead from a tendency toward dispersal that; tendency is a result of some ill-founded conception of what man is, and what he requires of his environment. Corbusier's radiant city and Ebenezer Howard's garden city are beautiful conceptions of order. They have had a tremendous impact on the patterns of modern cities. But they demonstrate a lack of comprehension that the street and plaza were developed not

9. Lawrence Halprin, A Study of the Quality, Character, and Meaning of Open Space in Urban Design, prepared for the City of New York Housing and Development Administration, New York, 1968. p. 68.

as last-ditch efforts to conserve nature but as refined expressions of man's ability and joy in living together. Man needs contact and variety. Whenever he is given the opportunity to find contact and variety -- as long as they are not threatening to him, and do not deprive him of his privacy --, he does indeed find them and take advantage of their fruits.

Scale:

Architecture must have scale, or it can be no more than pretty facades or convenient planning. Scale is likely to remain forever undefined in the jargon of the architect; but it is the essential distinction between acceptable conceptual architecture and good architecture. It is their sense of scale which distinguishes the century's great architects: Neutra, Corbusier*, Mies, Stirling, Wright, Kahn, Aalto, and Sert. These may not be the greatest architectural thinkers, nor the most socially responsive architects; but as architects making some art called architecture they stand out.

This is not an attempt to enter into a dissertation on the nature of scale in architecture. It is, rather, an attempt to establish the importance of scale to architecture. To posit this importance is not a result of logical progression, and its only validation is example and viscera. In the same way, an insistence that Picasso's paintings are far superior to Buffet's is, in the end, unable to be logically substantiated.** Scale, as discussed above, might best be referred to as something produced by those with some 'sense of scale'. I will not attempt to define it, but only propose that it exists.

*Corbusier possessed a beautifully refined sense of scale, and attempted to codify it in his modulor extrapolations. His intention was to provide a formula which would infallibly provide building of refined scale and proportion. That sense was his, however, and the work of post-corbu eclectics is among the least well scaled architecture being produced today.

**Buffet is a stylish popular French artist; reproductions of his work flourish in student dormitories.

In addition to that artfulness called a sense of scale there is something which might be called a scale of life, or of living. Our built environment must respond to that scale or become oppressive or innocuous. When our environment responds to that scale of life, we say that it is appropriate in its scale. This appropriate scale tends to be more comprehensible than 'artful' scale, yet it is not quite measurable. It is best known by the comfort it gives us. It is quite often what we find appealing in areas such as old world markets, or tree shaded streets in rural America. Areas which are not very significant architecturally often exhibit the most appropriate scale: the most responsiveness to scale of life, and the most comfort. Architects must recognize this, and attempt to use the sense of comfort that they feel. This distinction between two kinds of scale is important; an architecture of scale must incorporate both. When I use the word scale in this report I shall be referring to both meanings. The beautifully scaled building is architecture; the object with scale appropriate to 'scale of life' is comfortable, and we are fond of it. An architecture of scale will be defined as having both qualities.

We find old European towns appealing; their scale refreshes us. Some of that refreshment is due, certainly, to a certain romance with the old world, but it is hard to deny the real pleasure of walking through the streets of Venice or Florence, or of exploring the residential sections of London. The scale of these places is what we find

pleasant and comfortable. One hears North Americans who propose that there is no lack of sensitive scale in their automobile dominated cities. They would argue that romance with 'narrow streets' is picturesque nonsense. But often when they have visited these picturesque places and seen their scale they think of them as wonderful and (if only they did not have that awful brown toilet paper and other problems like the use of the wrong language) would wish to live there. Appropriate scale varies from society to society,[10] and the scale of these urban places does not appeal to every person in North America. That scale is appealing, however, to a large number of North Americans. That appeal is demonstrated by ever increasing trips to Europe, and even more by the move of the middle class back to the centres of our cities where we find their closest approximation. Because of that appeal, we must posit the relevance of refined urban scale to our twentieth century sensibilities.

Architects and planners have a tendency to deny their own pleasures and comforts for the sake of ordered systems. Boston's north end is one of the most pleasant and well-scaled urban environments in North America. Jane Jacobs pointed out that the north end is the healthiest part of urban Boston,

10. Edward T. Hall, The Hidden Dimension, Doubleday and Company, Inc., New York. p. 158.

where even outsiders love to stroll, and where one can always find children playing![11] The area was labeled a slum by the city's planners because it did not look modern, because per capita income was not high, and because living densities were high. (In spite of the fact that the planners, too, liked to be in the area).

Even when architectural thinkers admit the pleasures of these places, they often attempt to codify the sources of their pleasure with simplistic functional categories and to interpret everything in rationalistic grids.* When places appeal to us because of their scale we should accept it that the scale is what is appealing and to be saved. That scale does not have to be translated into systematic renaissance Euclidean orders to become valid in our society.** A comprehension of the scale, complexity, interaction of forces,

*See the 'tissue studies' of N. J. Habraken, and Yona Friedman's grid recreations of Italian hill towns for what are frighteningly distant and safe games of mathematics.

**Another ploy of the architect or planner who may admit to advantages to urban scale and density is to translate parts of vocabularies on to North American suburban patterns. (With the cry that urbanity cannot work in the face of the automobile and its attendant freeways.) The result is half-baked 'town-houses', whose only joy seems to have been the developer's glee at getting a few more units on the site. These town-houses sit in the middle of nowhere and are looked upon by residents as no more than an acceptable, and temporary, compromise which provides nothing more than low rent.

11. Jane Jacobs, The Death and Life of Great American Cities Rancom House, Incorporated, New York,

accident, vocabulary, pride, and joy that created these places must become our resource for recreating their comfort.*

This is not an insistence that we impose the Italian hill town or the medieval village or the city of Florence on all of North America. Nor is it an insistence that technology be rejected out-of-hand as an evil force. It is, however, an insistence that we need options in our urban environment; and that we will come to know those options best through our own joys and through history. We must not reject what is enjoyable just because it does not easily show its systematic origins nor because it is not the same as what we have come to know as suburban life. We must respond to our own joys and the perceived joys of others. Our response must come with artfulness and sensitivity, and with empathy.

> "There is no need to exclude the splendor of art in building cities;...there is no need to renounce the accomplishment of the past. It is not true that modern traffic requires it. It is not true that public health requires it. Indifference and a lack of intelligence and good will condemn the modern city dweller to live his life out in a formless mass of monotonous dwellings and streets. It is true, of course, that the beneficient power of habit gradually dulls our senses to the impressions

*And it is comfort. These places often conceal behind their appealing facades rotten and outdated mechanical and structural systems. We have the technology to make the interiors of our buildings far more physically comfortable than these older buildings ever were; and we should use that technology. That these places lack the physical comfort of modern buildings is no reason to discount or negate the psychic comfort provided by their exteriors (the real urban interiors). Venice is damp, disintegrating, and sinking; and damp and rotting buildings are not very comfortable. But very few would deny the comfort and joy of the streets, piazzas, and plazas of the queen of cities.

> they receive, but how sadly this modern superficiality envelopes us when we return from Florence or Venice! Perhaps that explains why the fortunate inhabitants of these cities that have been built with such artful magnificence are rarely disposed to leave them, while we, on the other hand, must annually escape to take refuge in nature for a few weeks in order to endure the city for the rest of the year."[12]

Our built environment demands empathy, scale, accident, and complexity - not conceptual cohesiveness. It demands responsiveness in particularized ways to particular patterns of needs -- not in ways which fit into nice repetitive orders.

12. Camillo Sitte, The Art of Building Cities, (trans. by Stewart) Reinhold Publishing Company, New York. p.94.

Design:

> "As an ecological designer I have always been interested in pluralism and the generative force of many contributions to solutions. I view the earth and its life processes as a model for the creative process, where not one but many forces interact with each other with results emergent -- not imposed. I see the earth as a vast and intricately interrelated ecosystem. In this system all of the parts have value, and they are all moving toward balance."[13]

To define design is an act as difficult as to define scale. Instead of defining design, I will attempt to describe what seem the most important attributes of responsive design process.

Industrial design can claim to be responsive to a series of straightforward physical requirements, as can most engineering solutions. In order to move beyond the mechanistic correctness of engineering or industrial design we must begin to understand responsiveness as something which involves any number of psychological and social, as well as physical, inputs. The empathy and spirit which the builder can bring to the design process begin to define these elusive non-mechanistic inputs, or forces. And something called 'design' can lead to satisfactory physical resolutions of these forces.

Design should be the creation of objects in response to forces of desire and necessity, (in much the same way that the iron filings align themselves in a magnetic field in elementary school experiments).[14] The designer's most

13. Lawrence Halprin, The RSVP Cycles, creative processes in the human environment, George Brazillier, New York. p.3.

14. Christopher Alexander, Notes on the Synthesis of Form, Harvard University Press, Cambridge. p. 20.

important job is to develop an understanding of those defining forces. That understanding will come from personal experience and from a knowledge of the psychological and physical needs of others. Empathy and memory of one's own pleasures and frustrations become the working tools of responsive design. A simple example would be that a wall should not be located because 'one always puts a wall between the bathroom and the livingroom'; rather, one should think of activities, odours, embarrassments and noises which conflict, and either separate them with distance or with some opaque intermediate surface.[15] In the same way: I get wet in the rain and need protection over my head -- so I erect a protective surface and have what we call either a hat or a roof; I do not have a roof because it is 'done', but because it responds to a set of necessities or inconveniences. These are oversimplified and rather mechanistic examples, but they illustrate the idea of things coming to be in response to necessities. This response is equally important for psychological and sociological requirements, and it is in the response to these less mechanistic requirements that we begin to have truly responsive architectural design.

In addition to psychological and sociological forces, an anecdote may help to explain how empathetic romance frees the way for responsive design: As a design critic, I had a

15. R. Studer and D. Stea, 'Architectural Programming and Human Behaviour', Journal of Social Issues, 22 (1966) p. 135.

student who had received a previous degree in engineering. He was working on a retreat-cabin for a very particular client, who had expressed a number of far-out requirements and had described a highly individual life-style. The student's first solution was what could only be described as a typical suburban sub-division house. I asked what that solution had to do with the particular client: no response. I then asked, after some coaxing, what he thought this retreat should be like: what images had the client's description envoked: where was the romance. After a little hesitation he smiled and began to talk about the old-fashioned qualities the client had spoken of, and of the warmth and informality which he had inferred. He spoke of a castle and rocks and fireplaces and flowing spaces which were very high. He went back to work, and produced a lovable mass of rocks and curving spaces which really began to respect and be the client. The student has no fetish for medieval castles, he just allowed himself to believe in the images evoked by an enthusiastic client. Functional requirements were met equally well in both designs which this student completed; with the second design, however, he began to understand the 'forces of desire and necessity' in a psychological as well as purely physical way. This is not an example of some perfect design process; but the freedom to comprehend and operate from more than the most mechanistic necessities was in evidence.

When the forces of desire and necessity are understood, processes of resolution can begin. The process is not really so

linear, of course, and resolution is inevitably accompanied by increased understanding of the nature of determinant forces.

Ideally resolution involves the development of object-void relationships which respond to the forces of desire and necessity discussed above. When all of those forces are satisfied, we have what Alexander calls 'fit', or balance. When we have fit, we are able to operate in the new environment with ease, and not with inconvenience.

Buckminster Fuller has proposed* that 'invisibility' is the true test of a responsive environment, or of fit: if we have an environment which is all-O.K., we never feel infringements from it, and it is thus invisible. (Just as our tongues are always invisible to us even though they are busy tasting and talking: until we bite them and in their soreness -- a state of non-fit -- they become highly visible.) Fuller's ideas about invisibility tend to reject the joys (and the fitness) of the visible, the jarring, the unexpected, and the particularly beautiful -- but his concept illustrates this idea of fit. If we are able to recognize that a need for the visible, the jarring, the unexpected, and the particularly beautiful form part of our determining forces, we should be able to overcome some of the more technocratic implications of Fuller's analogy.

*(In private conversations, 1968.)

Christopher Alexander, in Notes on the Synthesis of Form,[16] explains the mechanisms of the 'un-selfconscious' builder and tradition as guarantors of fit and his example seems particularly appropriate to this discussion, and worth abbreviated repetition: The vernacular, primitive, or 'un-selfconscious' builder constructs elements in his environment in order to satisfy particular social or physical needs. He does not change these elements arbitrarily from one generation to the next because of the importance of tradition to all of his patterns; change is introduced only with the blatant inconvenience of some traditional solution, and with equally blatant convenience of some observed or invented other solution -- again particular. The checks of tradition and the solution of numerous particulars as particulars combine to guarantee, over time, a tendency toward fit.*

In light of our much more complex series of requirements and the need to resolve those requirements in months instead of generations, the greatest lessons (in terms of 'tendency toward fit') which we can learn from the vernacular builder would be: 1)That response to particulars (and not the invention of conceptually coherent repetitive or geometrically

*Alexander enters into series of formulae of mechanisms by which the contemporary designer ('selfconscious') can move toward fit in his greatly reduced time and with his highly complexified problems.

16. Christopher Alexander, Notes on the Synthesis of Form, Harvard University Press, Cambridge. pp. 46-55.

consistent patterning) is the road to responsiveness; And 2), that, if with our response to particulars we can provide for change to any of those particulars without fatal disruption to the others, we may be able to once again make change over time an important element of arrival at 'invisible' design.

This discussion has not dealt with aesthetics per se. The tourist's and the architect's love for vernacular architecture demonstrate that the honest use of the mechanisms of the vernacular will generate aesthetic qualities without the incursion of the academy. This is not to deny the importance of sensitivity, strength, and sense of scale: these are the qualities which make special-ness.

However, the anonymity of the builder does not itself lead to blandness or uniformity; nor does it lead to the rejection of sensitivity, delicacy, strength, or scalefulness. The decorative and cared-for quality of the vernacular environment demonstrate that. In fact the well-thought-out and distinctly designed (and therefore 'not anonymous') work of Shadrach Woods and others like him often produces the most anonymous space and displays the greatest disregard for care, decoration, sensitivity, appropriateness, and scale.

Place-ness:

Sense of place, and of places, is the most important quality which the architect can give to his environment -- as participant and as maker-of-environment. The greatest failure of radiant city planning is that places have disappeared; they have been usurped by endlessness. It is the pockets of specialness which make places: not endless repetition of even the most beautiful environments. Those pockets of specialness can be affected by the architect, but he must recognize other non-architectural forces which combine to generate place.

> "The sense of place arises from a quality in the environment, certainly. Usually designers speak of 'Place' as an architecturally designed kind of complex. But from our investigations we have found that the sense of place has to do with neighbors and ... common goals expressed and acted upon. It has to do with community, and mutual support and help. Design can facilitate this but it alone cannot achieve it."[17]

We have a number of non-architectural means for making place-ness begin to happen. Perhaps the most important is discovery of what the place in question has been: and what it is in the minds of the people who know it. Existing patterns of use are important resources,[18] especially as they generate new and special responses. Beyond amenity and convenience, or even historicity, place can only become if it is accompanied by some sense of self-esteem and pride on

17. Halprin, ...Open Space in Urban Design. p. 47.

18. Kevin Lynch, Site Planning, The MIT Press, Cambridge. p. 21.

the part of the inhabitants and users.[19] The architect must recognize these determinants and use them as he builds.

Gordon Cullen expresses concern with the determination of 'lines of force' in the building of towns: in the making of place. This determination should not lead us to look only at the most 'significant' lines of force, as Cullen suggests: such a limitation may lead to conceptual abstractions, and to the rejection of important but not dominant particulars. (It is the minorities which must together rule: not the largest forces alone.) We must avoid autocracy by the dominant forces, and let all of the forces together contribute to definition of place: We can then begin to have responsive environment which has true clarity. Cullen's ideas about lines of force and their resultant orders are meaningful not only for towns, but for rooms squares, and cities as well:

> "The essential function of a town should be visible from a single glance at the plan. This obviously is because the arrangement of its parts reflects certain lines of force which represent also the combination of circumstances that brought the town into being. Conversely, when a town lacks character and structure, the failure can nearly always be traced to some impediment in the relationship of form to function, whereby the lines of force have become confused or have disappeared...."[20]

19. Lawrence Halprin, Cities, Reinhold Publishing Corporation, New York. p 45.

20. Gordon Cullen, Townscape, The Architectural Press, London. p. 111.

The Vernacular vs. the Renaissance:

The tendencies of vernacular building and design have been discussed above; tradition and necessity combine to restrict and generate the form of the built environment. The ideals of the Renaissance, however, stand in rather strong contrast to this vernacular tradition; the ideal of the Renaissance was to have man's mind, with its capability for creating rationalized order, comprehend and order everything in geometrically consistent systems. A comparison between vernacular and medieval public space building and the attitudes of the Renaissance may help us to understand how a series of forces within can generate more satisfactory environmental solutions than can imposed orders.

The Renaissance ideal was rational and structured order; and the public square, in order to be 'right', had to be the geographic, geometric, and social centre of the city. Geometric order was to pervade everything.[21] Yet Zucker, a chronicler of public space who worshipped the Renaissance, expresses astonishment over an anomally:

> " Strangely enough, the most famous [and presumably the most successful socially and spatially] Renaissance squares in Italy do not follow the scheme of the typical closed squares of [the Renaissance]. . . . Neither are their layouts and appearances derived from the rationalized intellectual solutions of [the leading planners]. . . . They owe their final shape rather to a gradual development from the Middle ages to the Renaissance, when they took on the characteristics which make them the heart of their cities." 22 *

*In this discussion he refers specifically to St. Marks in Venice, the Piazza della Signoria in Florence, the Piazza del Sato in Padua, and the Piazza de S.S. Giovanni et Pablo in Venice.

21 & 22. Paul Zucker, Town Square from the Agora to the Village Green, Columbia University Press, New York. p. 113.

The artfulness with which the Renaissance 'finished' these squares is not to be denied. And that artfulness has a good deal to do with the success of those places as we know them. That artfulness, however, was not at the core of the Renaissance ideal of urban space. And the clean symmetrical results of that ideal are not the most successful urban spaces we know: unless parade grounds like Place de la Concorde in Paris, presently filled with parked and speeding cars and almost impassable to the pedestrian, can be labelled successful public urban spaces.*

Medieval builders built from the street; the view from the street was the most important starting point, and processes of passage through space were the main locational generators. Careful measurements of medieval towns rarely disclose accurate symmetries or 90 degree angles.[23] Those builders did not conceive of ordered series; they built around them what was necessary. Their aesthetic motivation was very real, as is demonstrated by the care with which these environments were built; but it was an aesthetic deeply tied to processes of action and inaction -- not an aesthetic of the helicopter, the X-ray, nor of the careful one-point perspective.

* Zucker expresses enthusiasm for the Place de la Concorde as the ultimate in the axial square, and supreme as an act of city building art.

23. Camillo Sitte, The Art of Building Cities, (trans. by Stewart) Reinhold Publishing Company, New York. p. 55.

Zucker, in condemning medieval fountains as unaesthetic, begins de facto to define quite well the process oriented aesthetic which created the most exciting and comfortable urban spaces:

> "Their /fountains'/ location in Romanesque and Gothic times is merely accidental or dependent on topographic considerations, since the concept of symmetrical organization in town planning did not yet exist. Fountains, erected as religious or secular mementos, may create poetic corners or lively centers for the exchange of women's gossip but they are never more than a decoration of the square, without much influence on its three-dimensional shape. Their mass is usually too small compared with the volume of a neighboring church or town hall, or surrounding houses."24

In the same way he discounts the public squares of early Greek towns: ' There were no squares. Where open spaces are encountered in villages or towns, they were planted, garden-like, destined to offer shade, to provide for 'free and pure breezing,' hygienically motivated, but not aesthetically motivated.'25 But they were aesthetically motivated!; and refined. It is an aesthetic of process: not an aesthetic of order. And it is exactly in this aesthetic of process that we can see built environment coming to be in response to forces of desire and necessity.

Yet there was one aspect of city building which even the Renaissance theoreticians did not destroy: the use of buildings to make places. It took the twentieth century to make space endless and to place buildings in what was left.

24. Paul Zucker, Town Square from the Agora to the Village Green, Columbia University Press, New York. p.91.

25. Paul Zucker, p. 22.

"Modern city building completely reversed the proper relationship between built-up area and open space. In former times the open spaces -- streets and plazas -- were designed to have an enclosed character for a definite effect. Today we normally begin by parcelling out building sites, and whatever is left over is turned into streets and plazas."[26]

26. Camillo Sitte, The Art of Building Cities, (trans. by Stewart) Reinhold Publishing Company, New York. p. 55.

Change:

> "According to a French proverb, Il n' y a que le provisoire qui dure (only that which is temporary endures). This phrase appears at firstsight only a flippant expression of lazy skepticism, a denial that careful planning is worth the effort. However, it embodies a profound and universal biological truth. Living organisms can survive--whether as species or as individual specimens -- only by continuously modifying some aspects of their essential being in the course of adaptive responses to the environment."[27]

> "Medieval squares owe their beauty to the growth through centuries, each epoch adding its specific architectural values."[28]

As mentioned above, facility for change over time is the real mechanism for ensuring appropriate environment; and respect for tradition can ensure that our environment does not change self-destructively at the whim of autocratic forces. Completed and formalized designs are usually lifeless because they do not provide for modification as new needs arise.[29] People appreciate the opportunity to mould their environment, and we should provide accommodation for change.

> "At the same time, most people are disturbed by sudden or sweeping change. Therefore it is advisable to preserve some link of continuity between a new development and the previous use of the site, and also to provide a pattern within which future changes can occur without destroying the general framework of form." 30

27. Rene Dubos, So Human an Animal, Charles Scribner's Sons, New York. p. 241.

28. Paul Zucker, Town Square from the Agora to the Village Green, Columbia University Press, New York. p. 96

29. Lawrence Halprin, ...Open Space in Urban Design. p. 47

The positive imposition of action, or of guidelines for action, is necessary. To make that action yet allow for the actions -- or reactions -- of others is very difficult. The greatest problem encountered with attempts at energizing and not controlling seems to have been a lack, on the part of those supposedly energized, of comprehension of the energizing forces: an impatience with environmental concerns coupled with a desire for immediate self-gratification -- usually economic.[32] It may well be that the strongest act, which 'makes the point' and defines the nature of things most definitively, is the act which allows for the greatest future alteration and still guarantees continuity. (In much the same way that the medieval squares defined the limits of their Renaissance modification.) An appeal for strength is not, of course, license to reject all of the preceding thoughts concerning responsiveness and the continuity of the initial act itself; responsiveness of the particular to the particular remains the most important quality of good design. This is not an attempt to make some definitive statement about processes of energization.* It is however, very

* The diagrams in Part II are one attempt to develop energizing guidelines. They are action, yet they allow for a great deal of personalized input from any number of other architects, merchants, residents, and passersby. The subjects with which they are concerned seem the most important for publicspace building on the particular site. If these guidelines were to be used as starting points, and if the builders were to respect the locational reasons and guidelines for just the subjects dealt with, the final result would be a cohesive interrelating series of places -- each with freedom to develop as itself. (over)

important that the builders of our environment begin to think about these problems: the problems of recognizing human and structural forces in the environment; of trusting romance; and of making positive acts of environment-building which allow for retention and change. In the end, it may all rest in attitude: It is the understanding of processes of being, and not of intellectualized orders, which will lead to the most responsive environment.

Landscape architect James Rose speaks not of 'doing' places, but of 'pointing the way'.

> "This isn't exactly the same thing as taking a job through from the beginning to the end. I'm not a perfectionist about that. Some people are. They like to put a bell jar over their work, as if it were going to be exhibited in a museum, but I don't have any feeling about it one way or the other. I can't think of it as a 'creation' which you try to preserve. It's a process that starts wherever you are and never ends. Of course, it's very nice to get there before the builder or the banker or the inspector loads the dice against you, but you have to get up pretty early for that. You're dealing with something that's already in motion and is likely to remain in motion after you've left and you've got to go with it because no matter where you start, it isn't the beginning and no matter where you leave off, it isn't the end." 33

*(continued from page 37)
This attempt to make energizing guidelines is not some definitive method; it is rather an example of possiblities and attitudes.

32. Lawrence Halprin, The RSVP Cycles, creative processes in the human environment, George Brazillier, New York. p. 46.

Change is important and to be welcomed, and any number of egos and life-patterns must be satisfied in the building of our environments. To recognize that continuity is even more important as a determining idea, however, becomes the critical point for environmental design. In order to act positively and creatively, we cannot accept all change which doea not arouse outcry; nor can we cling doggedly to everything which already exists. The job is to be energized by what is beginning, and in turn to energize the future. This energizing becomes particularly important today when development occurs so fast that tradition is left with little chance to act as control. The designer's job is to detect tradition and evolving patterns and to attempt to support and protect them. And it is romance which will allow for the most fruitful perception and energization of tradition.

The energizing, as opposed to 'controlling', of the developing environment becomes a very difficult process. This distinction between energize and control is important, however, if the built environment is to be a response to forces of desire and necessity over time.

> "Controls are negative and passive measures as opposed to the positive techniques of direct design. They tend to stifle innovation and restrict individual freedom; in a world of skill and goodwill they might be unnecessary. They have the characteristics of any negative means: they can prevent the worst but rarely bring out the best. If not used with restraint, they will produce an environment of competent mediocrity."31

30. Kevin Lynch, Site Planning, The MIT Press Cambridge, p. 13.

31. Kevin Lynch, Site Planning, p. 113.

behaviour:

"The more precise and unambiguous concepts in social theories become, the less valuable they are."[1]

Empathy is an important resource for romance; it is necessary to understand others if we are to make environments which are more than isolated and personal dreams.

Empathy does not mean 'scientific' knowledge, but it does mean understanding of the joys, aspirations, frustrations, and fears of others. Personal experience is perhaps our best source for empathy, but we cannot suppose that our own minds are the same as everyone's. Nor can we suppose that we really know all that has gone on in our own minds. The social sciences have done a good deal of research and theorizing about the patterns of others -- where consistencies lie, and what probable causes for action are. This work of the social sciences can help us to develop a greater understanding of others. The social sciences can work with our own memories and hopes as a resource for empathetic understanding of others.

Interpretation of the social sciences can proceed in two areas: 1) physical motivation and response, and 2), the dependencies and aspirations of man in society. The first area, that of physical stimulus-response behavioural patterns, seems the most attractive to the architect because it promises to generate the most direct information about buildings. The second area, however, holds more real potential as an

1. Louis Wirth, On Cities and Social Life, The University of Chicago Press, Chicago. p. xvii.

architectural resource: it deals with the hopes, frustrations, and interactive patterns of others, and it is thus empathic, whereas physical stimulus-response study is mechanistic. Empathy, and not mechanistic understanding of movement patterns, is what we must find if we are to find romances which are responsive to people, and if we are to avoid the possibility of foisting unwanted patterns on others.

Study of the physical patterns of people is not useless, but it seems important to make this distinction between empathy and the desire to control movement patterns of people. Study of movement can be helpful as a tool for empathy: if we use physical patterning as an indication of what makes people feel comfortable, and not as an indicator or how to control people's movement patterns. In any case, no matter how much some architects and sociologists might wish, the social sciences cannot provide us with mechanisms for affecting predetermined behaviour; they can only suggest what seem to be generally consistent spatial patterns.

The social sciences can tell us a good deal about what people are, the patterns they adopt, and the nature of their aspirations. They can also, perhaps, begin to point out ways to make people <u>be</u> in the environments we build: ways to make people come, be comfortable, stay, and come again.

One objection to the use of the behavioural sciences in architecture is that existing behavioural characteristics are always changing. In response to this it might be argued

that: 1) so are all other bases of form invention; and 2) environment can be structured to accept and respond to changes in behavioural input.[2] Behaviouralists open themselves to this kind of attack by concerning themselves with limited-variable physical stimulus-response analysis of behaviour. A slightly less myopic concept of behaviouralism, which involves all aspects of behaviour and not just simple path and stimulus-response patterns, may help even more to allay fears about the 'temporariness' of behavioural patterns. Some aspects of behaviour such as primary group dependencies or the importance of image to patterns of response seem to be universal, and provide as good a basis as any for understanding others.

One reason for the tendency to think in terms of limited variable responses is that mechanistic behaviourists dominate the psychology departments of most universities. They have the greatest range of data-producing capabilities in the field, which is good for university image, and so universities are glad to have them around. The student thus encounters the data-producing behavioural psychologist as representative of psychology. The fact that his pretensions are exploded outside the university does not affect his influence. The motivational behaviouralist, especially in

2. R. Studer and D. Stea, 'Architectural Programming and Human Behaviour', Journal of Social Issues, 22 (1966) p. 133.

our culture, though he does not yet know what he is talking about in any predictable constant way, is one of the most important members of the group of sub-disciplines concerned with man and how and why he functions.[3]

Man-environment studies, especially as exercises in stimulus-response examinations, are at an early 'pre-paradigmatic' stage.[4] (Which means, loosely, that one can prove anything one wants by simply citing the right report.) Even the sociologists most experienced in working with architects propose the utmost caution when hypothesizing about the behavioural effects of spatial arrangements.[5] In fact these man-environment studies will remain at a pre-paradigmatic level as long as they are concerned with simplistic one-to-one object-reaction hypotheses. We are not rats responding to flashing lights in a training maze. Sociologits find it impossible to determine neat answers of variable results from apparently equal environmental frameworks because they fail to recognize that elements of myth, self-image, reason, and history make human response very different from the processes of chemistry.[6]

3. George N. Gordon, Persuasion - The Theory and Practice of Manipulative Communication, Hastings House Publishers, New York. p. 221.

4. Amos Rapoport, Some Observations Regarding Man-Evnironment Studies', Architectural Research and Teaching, Vol 2#1, November 1971. p.6.

5. Robert Sommar, Personal Space, the behavioural bases ofdesign, Prentice-Hall International, Inc., London. p. 152.

6. Robert Sommer, p. 165.

The sociologist seems to have some desire to have a 'science' which is quantifiable and verifiable -- in order to really be part of the brotherhood of science. It is precisely this desire for scientific-ness which detracts most from the social sciences' ability to provide information which can prove useful and meaningful to the builder of environments. If any science should prove the model for social research it should not be physics or chemistry, with their one-to-one laboratory experiments and rigorous hypothese, but biology and ecology, with their reliance on observation and field experimentation over long periods.[7] And it is this kind of research which will prove most useful to the architect.

> "Human motivations, unfortunately, admit to few simplistic formulae..., for two apparent reasons: 1) the variablity of perception and feeling from individual to individual, and 2) the interdependence of functions which entwine neurological, physical, emotional, mental and environmental factors together. Only in extremely simple matters (reflex reactions, for instance) or among very simple people are such complexities avoided."[8]

> "Too many of the findings that have been made in animals have proven to be true for animals but not for the human being. There is no reason whatsoever why we should start with animals in order to study human motivation. The logic, or rather illogic behind this general fallacy of 'pseudo-simplicity' has been exposed often enough by philosophers and logicians as well as by scientists in each of the various fields. It is no more necessary to study

7. Robert Sommer, Personal Space, the behavioural bases of design, Prentice-Hall International, Inc., London. p. 166.

8. George N Gordon, Persuasion - The Theory and Practice of Manipulative Communication, Hastings House Publishers, New York. p. 42

> animals before one can study man than it is to study mathematics before one can study geology or psychology or biology.
>
> We may also reject the old, naive, behaviorism which assumed that it was somehow necessary, or at least more'scientific' to judge human beings by animal standards. One consequence of this belief was that the whole notion of purpose and goal was excluded from motivational psychology simply because one could not ask a white rat about his purpose."[9]

We never respond simply to some object; we respond to entire packages of images which that object elicit, and to lingering images which may have nothing to do with the particular object. Psychologists recognized and operated from this even before Freud. But the behaviourists changed that.* Recently, however, gestalt theorists have again begun to study collections of images as determinant of human action, reaction and interaction.[10] Kenneth Burke describes eight sources of the 'Image' which affect response:[11]

1. organic physiological processes
2. past experiences lost to conscious recall
3. past experience available to recall
4. material which may be assumed as a subpersonality
5. meanings and motivations intrinsic to symbols

* The submergence of the imagists and the dominance of the mechanists has not been absolute, but it has been strong enough to colour behavioural thinking a good deal.

9. A. H. Maslow, 'A Theory of Human Motivation', from Sutermeister, ed., People and Productivity, McGraw Hill, Inc., New York. p. 101.

10. Kenneth Boulding, The Image, University of Michigan Press Ann Arbor, Michigan. p. 151.

11. Kenneth Boulding, pp. 42-43. (from Kenneth Burk, Language and Symbolic Action, U. of California Press, Berkley. pp. 67-72.)

6. normal 'un-thought' behavioural patterns, as determined by un-consciously formulated societal strictures.
7. intuition
8. error, ignorance, uncertainty, confusion

The sixth area, especially as it applies to perceived societal strictures, is very important to any attempt we make to understand others as social beings. The image of others, as they would support or reject action on the part of the individual, is perhaps the dominant motivational force behind normal interactive patterns. And an understanding of how individuals develop and relate to images of others can prove the most important resource for empathetic understanding of others. This image of the response of others does not come into play in all human action, but in any action which might be called 'social' it is part of the determining 'image package'. These others to whom we refer are known to us either personally or at least by category. Sociologists call these others our reference groups, and they have done a good deal of research into the mechanisms of reference group patterns.

I will propose that reference groups, or more precisely, images of reference groups, are the dominant force in determining social action on the part of the individual. And almost all actions we take, even when alone, are made with some cognition of others, and are therefore social.

> "It is in the variety of groups, the interrelations between groups, and the differential positions of the person within these groups we must seek the explanation of the highly differentiated personalities

> emerging in our culture; and at the same time it is in the uniformities of group life and individual participation in and sharing of group norms that we must seek the clue to the uniformities of human behavior."12

Through analysis of reference groups we may begin to understand the means at our disposal to function as responsive and responded to builders of environment. It is important that this analysis not become too impersonal and distant; memories of our own reference group behaviour has as much to tell us as the sociologists' categories and observations.

> "We must see and feel the communal life of family and local groups as immediate facts, not as combinations of something else. And perhaps we shall do this best by recalling our own experience and extending it through sympathetic observation. What, in our life, is the family and the fellowship; what do we know of the we-feeling? Thought of this kind may help us to get a concrete perception of that primary group nature of which everything social is the outgrowth."13

12. Louis Wirth, On Cities and Social Life, The University of Chicago Press, Chicago. p. 7.

13. C. H. Cooley, 'Social Organization' from Ross, Lawrence, ed., Perspectives on the Social Order, McGraw Hill Book Company Inc., New York. p. 223.

Reference Groups:

There are four kinds of groups which sociologists generally examine:[14] 1) Statistical Groups are unperceived by members, and their only real existence is as a statistical tool. Statistical groups are not really reference groups because they do not have appreciable normative influence on their members. 2) Social Interaction Groups are labelled as primary groups and are characterized by fairly constant face-to-face contact. These primary groups are our main normative influence, especially for normal interactive processes. 3) Societal Groups are characterized by 'consciousness of kind', and may or may not have face-to-face contact between members. Societal groups affect behaviour greatly, especially as determinants of social and political mores. They provide fairly powerful and generalized sanctions beyond those provided by primary groups. Examples would be members of the town, 'hardhats', Catholics, or francophones. 4) Associations are similar to societal groups except that consciousness of kind is formalized. Actual on-paper membership exists, and patterns and sanctions become more precisely defined. Societal groups and associations are called secondary groups; they may have within themselves sub-groups which support constant face-to-face interaction, and these sub-groups are primary groups.

14. Ross, Lawrence, ed., Perspectives on the Social Order, McGraw Hill Book Company, Inc., New York. p. 204.

Large anonymous groups, or crowds, (or 'collectivities' in sociological jargon), too, are reference groups even though consciousness of kind may be tenuous and continuous contact unlikely. ' The concept of reference 'group' can be seen to include, in quite undifferentiated fashion, social formations of quite different kinds: membership and non-membership groups, collectivities, and social categories.'[15]

In addition to these categories, groups are characterized by size, voluntary or involuntary membership, and the nature of their boundaries.[16] (Open boundaries indicate that it is easy to become or to stop being a member, and closed boundaries indicate that membership is difficult to obtain.) For a long time sociologists considered that the only effective reference groups were primary groups exhibiting continuous face-to-face interaction. In the last forty years, however, the above mentioned categories have been refined and accepted. Groups become normative when members define themselves as members of a group, When others define individuals as members, or sometimes if others simply define a group as existing, and neglect to define its membership (eg. the 'conspiracy').[17]

15. Robert Merton, Social Theory and Social Structure, The Free Press, Glencoe. p. 354.

16. Ross, Lawrence, ed., Perspectives on the Social Order, McGraw Hill Book Company, Inc., New York. p. 204.

17. Robert Merton, Social Theory and Social Structure, The Free Press, Glencoe. p. 340.

Research and analysis of groups has tended to fall into four main areas:[18] 1) Experiment, usually with a series of variables and an expected set of response patterns. 2) 'Sociometry', which is a questionaire technique relating patterns of friendship and contact, and whose product is something like contact and popularity bubble diagrams. The diagrams are analyzed to determine evolving patterns and their causes. 3) Observation over long periods, and direct analysis -- the most traditional means of the sociologist. And 4) 'Field Theory', which is more an analytical attitude than a research method. It deals with lines of force of varying magnitudes of attraction or repulsion. Its greatest advantage is its ability to make comprehensible what might otherwise seem contradictory patterns. It might be called psychological magnetic theory. These methods of inquiry all overlap, and any single researcher or theorist may use all of them. Together they form a fairly complete set of resources.

18. W. J. M. Sprott, Human Groups, Penguin Books,

Mechanisms of Cohesiveness and Consensus:

Reference groups have two normative functions which work in league in their determination of the individual's behaviour. These two functions might be called 'normative' and 'comparative'. The normative function sets and maintains standards of attitudes and behaviour for the individual.[19] This function, as well, specifies 'ultimate values' -- morality -- for the individual. The individual and his group work together in these determinations, especially if the individual is a leader. But the group itself sets certain bounds for even its more innovative members. The comparative function sets the individual and his compatriots in a cohesive status position relative to 'the outside'. Even more importantly, it specifies a hierarchy of importance of different spheres of interest and authority -- thus mitigating potential conflict between inconsistent roles.[20]

The search for good-will and approval by others is a primary function of socialized man. This search is what brings groups together in the first place, and the satisfaction of that search is what holds groups together.[21] This is not to deny that people look for challenge, adventure,

19. Robert Merton, Social Theory and Social Structure, The Free Press, Glencoe. p. 337.

20. Robert Merton, p. 385.

21. W. J. M. Sprott, Human Groups, Penguin Books, London. p. 34.

or even dominance in groups; but these 'unsafe' characteristics are themselves sought out in the framework of the security of the group. Agreement with comrades over questions of morality or action eases tensions which might result if one were to be in constant disagreement. This agreement allows the individual freedom from any need to ponder or decide on questions of action or morality; he can let his comrades provide him with ready-made consesus.[22]

Any social group operates from a base of consensus, and the primary elements of that consensus are usually subconscious. (Kant: 'One should not believe everything that people say, nor should one suppose they say it without reason.') Behaviour within the group is resultant from a number of forces: standards assimilated by participants, sub-group demands, situations confronting the group, and the characteristics of individuals within the group.[23] The resultant patterns become norms on which the entire group agrees. These norms may be sub-conscious, but their violations are always known to the members. If the norms of the group are not agreed upon, (if there is no consensus), the group will disintegrate. Consensus is the main source of cohesiveness. A group exists because it provides its members with a way of looking at things which is consistent; members appreciate this safety, and will stick together because of it.

22. W. J. M. Sprott, Human Group. Penguin Books, London. p. 34.

23. W. J. M. Sprott, p. 38.

One of the most constant characteristics of socialized man is a dependency on primary groups; and with that dependency there is a desire for honor, a dread of ridicule, deference to public opinion, a feeling for family, and admiration for courage and generosity.[24] These constants form the bases for group consensus. With the desire for group support, and the constants mentioned above, individuals within the group will tend to 'level off'. (It has been experimentally determined that people as individuals tend to present a much wider range of beliefs, performances, abilities, and eccentricities than groups of the same people.)[25] It is not only a desire 'not to step on anyone's toes' which breeds consensus; time, too, acts as reinforcement for consensus. Friendliness and interaction combine to generate closer and closer congruence between the values of the interactors. And this consistency of opinion in turn reinforces cohesiveness.[26]

Consensus itself is not the only mechanism of cohesiveness. The following are some postulates concerned with cohesiveness as more than just a consequence of consensus: Some outside environmental factor is generally required for groups to form.

24. C. H. Cooley, 'Social Organization' from Ross Lawrence, ed., Perspectives on the Social Order, McGraw Hill Book Company Inc., New York. p. 222.

25. W. J. M. Sprott, Human Groups, Penguin Books, London. p. 109.

26. Herbert Simon, Models of Man, John Wiley and Sons, New York. p. 104.

This force can be either physical or psychological, and it can be either positive and pull people together, or negative, in which case a threat is to be escaped and the group forms to combat it. This external force exists throughout the existence of the group. It does not have to be as substantial a force after the group has come into existence as it was to bring the group together initially, but if it regresses below a certain level the group will dissolve.[27] A sense of cohesiveness within a group will increase with an increase in in-group activity. Interaction, too, increases a sense of cohesiveness. Activity in turn will tend to increase with an increased sense of cohesiveness. A decrease in activity will begin to break down a strong sense of cohesiveness.*[28]

* These postulates were developed by Herbert Simon and based on the research of George Homans. They deal with the cohesiveness of primary groups. They apply equally to secondary groups: An example would be the behaviour of Americans during World War II following the bombing of Pearl Harbor: a major outside force began a sense of outrage and consensus to go to war. It did not take such major external factors to keep the new sense of cohesiveness alive. Activity, as a group which might be called a warring nation, increased with the unusual level of felt cohesiveness. Interaction between group members -- both military and civilian -- increased with this increased activity. And this increased friendliness in turn supported increased sense of cohesiveness. The removal of the external force -- surrender of the enemy -- decreased the amount of activity which in turn reduced the sense of cohesiveness and consensus.

So Joe McCarth begat a new outside force which could re-create the cohesiveness of the previous decade.

27. Herbert Simon, Models of Man, John Wiley and Sons, New York. p. 111.

28. Herbert Simon, p. 101.

These ideas about activity and exterior forces become particularly important if we consider large anonymous groups, or collectivities. In such groups the consensus of the primary group, as a means of obtaining cohesiveness, is unlikely because of limits of time, the lack of face-to-face contact, and the diversity of members. External forces, on the other hand, are something which can be presented easily to a collectivity. These forces can take the form of recreational opportunities, entertainment, or propoganda. And they in turn will generate focused activity. Focused activity, either as single-focus observing or as activity in which a number of people are involved, is a means to consensus. (We are all doing it, and we all agree that we are doing it and that it is worth doing.) This consensus is not the same as the uniformity of opinion developed in primary groups: It is a consensus only about particular focused activities, and will last only as long as those activities last. This temporary quality of such consensus and cohesiveness suits the temporary quality of the collectivity. The collectivity becomes easy to enter because someone entering knows that the group he encounters is not of long standing, and because it does not threaten him with future ties.

The unity of the primary group is a result of all of the mechanisms described above: characteristics of confidence, closeness, regular communication, etc. The unity of secondary groups, however, is a result of symbolic references rather

than personal face-to-face references. Religious groups and nations are examples of this symbolic referencing. Symbolic referencing is not an automatic result of interaction, and must be maintained by myth, by propoganda, by language continuities, or by administration.[29] This distinction between personal and symbolic referencing is important if one wishes to develop means of influencing, or of bringing into being, groups within the environment.

29. W. J. M. Sprott, Human Groups, Penguin Books, London. p. 16.

Mixing:

Groups often isolate themselves from other groups and develop feelings of hostility towards those other groups. These hostilities result from feelings of fear, or feelings of inferiority or superiority. In order to break down these hostilities, which result in isolationism or even in open conflict, the conflicting groups must feel a sense of cohesiveness between each other. Competition between the groups in question, though often tried as a means toward brotherhood, often only serves to increase the hostility. Mixing the groups, however, and having them compete -- either against each other or against some other foe or outside force -- can have very positive effects: the two groups can begin to see themselves as one group which has a single purpose. An example of how this process of mixing can reduce hostility between two groups occurred in a Lebanese village. The village was torn by feuds until an American social scientist got the inhabitants to play volleyball with mixed teams, and the hostilities disappeared.[30] Mixing can be an important means for breaking down distrust between existing groups. Its strength lies in making the members of conflicting groups feel that they are really constituents of one group.

30. W. J. M. Sprott, Human Groups, Penguin Books, London. p.189.

Loyalties:

In industry it is fairly common to find that economic incentives are ineffective in increasing rates of production. there have been two basic reasons given for this resistance: One reason is that workers demand care and some feeling that they are real people; they do not respond to impersonal gifts of money. The other reason is that workers identify more strongly with their fellow workers (primary group) than with management and money (secondary group). The sanctions of the primary group are much more influential than those of the secondary group.

I will concentrate on the subject of groups and group loyalties, rather than on the importance of care as a motivational force: The primary group of workers have set patterns of work. If one attempts to increase production he is labelled a 'rate buster', and he receives fairly harsh sanctions in the form of a break in normal primary group interaction.[31] The primary group acts as the main determinant of the work patterns of its members. In the same way, sodiers in World War II operated more out of loyalty to 'buddies' than for patriotism or hate of the enemy.[32]

Anything which might be called control of primary groups incurs some kind of resentment on the part of those controlled. In order to minimize this resentment, authority must make

31. Ross, Lawrence, ed., Perspectives on the Social Order, McGraw Hill Book Company, inc., New York. p. 223.

32. Ross, Lawrence, p. 223.

its goals coincident with the goals of those controlled. Control techniques are essentially the establishment of these coincidences.[33] An example is the fund raiser's knowledge that 'joint committal', or the declaration of intentions in front of other group members, is the best guarantee that pledges will be kept. Those making pledges know that they have a responsibility to their primary groups, and not to some secondary charity group.[34] Their pledge thus becomes the goal of the primary group. The loyalty which tends to guarantee this pledge is not just some altruistic love of one's fellows and desire to do right by them; it is also a fear of reprisal by those closest to the individual if pledges made to them are not kept. The necessity for these techniques may seem insidious, but it illustrates the importance of the primary group. The primary group is the main determinant of the loyalties of the individual, especially as those loyalties affect action.

It is interesting that loyalties to established primary groups are strong enough to allow for a good deal of internal aggression. The loyalties of the individual and the perceived loyalty of others allow for aggressive behaviour without fear that the group will disintegrate or that aggressive members will be ostracized. Temporary or recently formed face-to-face groups, however, tend to allow for very

33. W. J. M. Sprott, Human Groups, Penguin Books, London. pp. 156 - 158.

34. W. J. M. Sprott, pp. 156 - 158.

little internal aggression.[35] This may at first seem contradictory to the preceding information about the tendency toward consensus which exists in primary groups. It can be understood, however, if we think of field theory: In the established group, the sense of cohesiveness is great enough to allow for some tension. Concensus still exists concerning roles, the limits of aggression, and the cohesive quality of the group. In relatively unacquainted groups, however, there is no such sense of cohesiveness nor consensus; consensus only exists concerning the tenuous nature of the group, and the desire to not let the group disintegrate.[36]

When the goals of the primary group and secondary groups are in direct and fairly limited conflict, the goals of the primary group will usually take precedence in determining the actions of the individual. Primary groups, however, are not always the determinants of action; loyalties to secondary groups can take precedence. The consistency of the primary group's attitude seems to be its most important characteristic. When the individual senses uncertainty or conflict in the primary group's attitude, he will begin to look at secondary group directives rather than search out a majority opinion in the primary group.*[37] Also, when the primary group has

* This conclusion is based on voting behaviour; it seems to have general validity, but it makes no claim to experimental proof in areas other than voting.

35. Sprott. (from J.P.R. jr., 'Organized and Unorganized Groups under Fear and Frustration', U. of Iowa Studies in Child Welfare, Vol 20. (1944), pp. 229 - 308.

36. Robert Merton, Social Theory and Social Structure, The Free Press, Glencoe, p. 301.

no views on some subject, secondary groups become the controlling resources. It is important to note that in referring to secondary groups it is one's perceived, rather than measurable, membership which determines which secondary groups become affective,[38] and to which groups the individual will develop a sense of loyalty. (An extreme example might be the hobo who romanticizes about the aristocracy, and always adopts its viewpoint.)

Urban Man:

'A person can live amidst a great multitude only by showing relative indifference toward the majority of them. Only by restricting personal contact to a limited number of people is a normal life possible.'[39]

The city is not a homogeneous enclave. 'It has brought together people from the ends of the earth because they are different and thus useful to one another, rather than because they are homogeneous and like-minded.'[40]

37. Robert Merton, Social Theory and Social Structure, The Free Press, Glencoe, p. 387.

38. B. Berelson et. al., 'Voting', from Ross, Lawrence, ed., Perspectives on the Social Order, McGraw Hill Book Company, Inc., New York. pp. 206 - 210.

39. Robert Sommer. (from Derk de Jonge, 'Some Notes on Sociological Research in the Field of Housing', U. of Delft, (mimeo), 1967.)

40. Louis Wirth, On Cities and Social Life, The University of Chicago Press, Chicago. p. 69.

In addition to its heterogeneity, the city has become more and more a place of mobility; that mobility takes others away as much as it brings us 'to'. We have today an urbanity of mass society which has resulted from the ease of rapid movement, and of fast and anonymous communication.[41] Personal referencing has become highly symbolic instead of personal; our main reference groups are series of secondary groups, and the only consistent primary group is the family. We still make face-to-face contacts with others, but we do so in a highly segmented way; those personal contacts are not with consistent and loved others, but with the segmented faces of representatives of the secondary groups which surround us.[42]

> "The close living together and working together of individuals who have no sentimental and emotional ties foster a spirit of competition, aggrandisement, and mutual exploitation. Formal controls are instituted to counteract irresponsibility and potential disorder. Without rigid adherence to predictable routines a large compact society would scarcely be able to maintain itself. The clock and the traffic signal are symbolic of the basis of our social order in the urban world. Frequent close physical contact, coupled with great social distance, accentuates the reserve of unattached individuals toward one another and, unless compensated by other opportunities for response, gives rise to loneliness. The necessary frequent movement of great numbers of individuals in a congested habitat causes friction and irritation. Nervous tensions which derive from such personal frustrations are increased by the rapid tempo and the complicated technology under which life in dense areas must be lived.'[43] (my underlining)

41. Louis Wirth, On Cities and Social Life, The University of Chicago Press, Chicago. p. 22.

42. Louis Wirth, p. 71.

A major part of the contemporary urbanite's referencing energies go into determining where and how much concern and allegiance he owes to the agglomerations of secondary groups around him. In earlier societies, this confusion was limited. In villages and in the more stable cities of the past primary groups existed throughout one's life. These primary groups set examples and helped determine allegiances. Primary groups consistency has not disappeared completely from the twentieth century city; but it has become rare enough to have created problems for the contemporary urban dweller. Primary group structures tend to exist most strongly in the slums and ghettos (though some middle class central city areas seem to be developing strong village-like neighbourhood groups).

(One interesting characteristic of a secondary group dominated society is that it reverses the traditional boundary characteristics of groups: In traditional village-like societies, which have fairly stable primary groups and well-known secondary group hierarchies, primary groups are quite open: The family can be easily approached, and members of other local primary groups are easily taken in as members. The local society, which is the dominant secondary group, however, is closed: Outsiders find it very hard to be accepted, and to cease being strangers. In our own urban mass society just the opposite characteristics exist: The city and its

43. Louis Wirth, On Cities and Social Life, The University Chicago Press, Chicago. pp. 74 - 75.

constituent secondary groups are entered easily, but the family is closed and becomes very difficult to enter.)[44]

As we develop patterns for modern cities it will be important to develop mechanisms which encourage stability and the formation of strong primary groups. The fact of mobility, which seems to be increasing, however, is not likely to disappear.* And in response to the likely continuation of this mass society, it will be important to develop alternate means for guaranteeing stability in the environment.

The modern urban dweller has been alienated from established hierarchies and consistencies of relationships which existed in the past. He still needs the stability, thrills, contact, and escape from routine which those relationships provided, and he searches for these things in the city. Instead of finding personalized and familiar provision of this stability, contact, and variety, however, he finds that it is provided as commercialized 'service'.[45] The commercial provision of stability, contact, and variety is not useless just because it is not 'homey' or personal; it is an important resource for developing security and models for judgement in a highly mobile society.

* Recent American census figures indicate that the average household moves every three years.

44. Robert Sommer, (from Derk de Jonge, 'Some Notes on Sociological Research in the Field of Housing', U. of Delft, (mimeo), 1967.) p. 23.

45. Louis Wirth, On Cities and Social Life, The University of Chicago Press, Chicago. p. 81.

Commercialized contact and security, however, does not really solve the problem. We still demand personal consistency, or surrogate kin, if we are to keep from disappearing into a vacuum. Surrogate kin can function in two ways: 1) They can provide identifiable primary groups to even temporary residents, and 2), as obvious examples of permanence they may encourage those who might otherwise have been just passing through to emulate such pleasant permanence. We may be able to begin to develop this kind of surrogate kin in any number of ways. Interest, age, and activity groups are examples. And the neighbourhood store, billiard hall, or pub are others. There seems no limit to the kinds of surrogate kin which can come into existence in our cities -- what seems most important is that we encourage their existence in any way possible, and that we not restrict them because of puritanical moralities nor belief in 'order'.

Changing Roles and Group Alliances:

A fairly common occurrence in our mobile society is that the individual will change his perception of roles and of group allegiances. This shift can occur as a result of movement from one place to another, but movement itself does not guarantee it. Changes in role definitions and group allegiance do not depend on change in place, and can occur within even fairly stable agglomerations of groups. It is only necessary that there be some belief in social mobility.[46]

46. Robert Merton, Social Theory and Social Structure, The Free Press, Glencoe. p. 359.

The following discussion of alienation and outside-group referencing is not meant to indicate that primary groups are dead; it is a discussion of one process which occurs in our society.

Every individual has a complement of role-relationships with individuals and groups around him. This complement of roles is called the individual's 'role set'; it is the set of roles which the individual expects, or is expected, to satisfy. The main models in defining these roles for the individual are his peers, who set examples and apply sanctions in response to the individual's own role fulfillment. Traditionally, sociologists have been concerned almost entirely with primary groups as the source of the individual's understanding of his roles. But secondary groups, too, are very important, and their effect should be realized. Secondary groups were not considered important determinants of the individual's role-behaviour by earlier sociologists. In the last thirty years, however, understanding of their importance and their effects as increased considerably.[47]

(Outside groups can exert pressure <u>negatively</u> as well as positively. The results are often particularly inane. Often members of one group will consider another group to be hostile. They will consider anything which the enemy does as reflective of the enemy's inferiority, and they will reject even logically supportable patterns just because they

47. Robert Merton, <u>Social Theory and Social Structure</u>, The Free Press, Glencoe, p. 288.

are the patterns of the hostile group. In this way, the Greeks refused to believe in infection in disease just because the 'barbarians' believed in it. Cold war Americans, too, will refuse to approve of otherwise acceptable patterns because they have been previously adopted by the communists.)[48]

The greater the number of groups which affect the individual the greater will be the freedom which he has to make decisions.[49] Conversely, the greater the diversification of the members of a primary group, the less control the primary group will exert on its members. One result of this freedom is that the individual can easily shift alliances and perceived roles; he can become alienated from his primary groups. Alienation from the primary group is not bad; it is a mechanism of social structures[50] -- especially in contemporary society. The loss of primary group stability and contact may be detrimental. But movement between different primary groups, and the freedom to determine one's own references, must be accepted as equally 'moral' as primary group constancy. Adopting patterns of other groups is as much a mechanism of stability in the society as is primary group cohesiveness.[51]

48. Robert Merton, Social Theory and Social Structure, The Free Press, Glencoe, p. 355.

49. Robert Merton, pp. 426 - 428.

50. Robert Merton, p. 323.

51. Robert Merton, p. 348.

Changes in group identification are called processes of 'anticipatory socialization' by sociologists. As mentioned above, some belief in social mobility, or the possibility of becoming a member of the outside group, usually accompanies outside-group association and emulation. The individual generally makes these associations with a group of perceived higher status, and he adopts their patterns in hopes of future entry, respect, or even wishful self-glorification.[52]

Non-conformity is not 'deviance', as was assumed by early sociologists. Non-conformity is usually association with the values and patterns of some outside group. Association with other groups can become dominant, in which case the non-conformist will leave his old group. In this case, the alienated ex-member becomes, himself, a reference for the remaining group members. He is a particularly damaging reference because his rejection of the group was from the inside; he makes a statement that the group was insufficient.[53] In response, the remaining group members label the former member a fool or a 'jerk'; if they were to admire him, or even to just accept his having left, they would admit that he was right, and that the group had nothing to offer. To heighten this split the alienated member tends to be even more critical of his previous group than outside detractors. (The greatest revolutionaries come from the bourgoisie.)

52. Robert Merton, Social Theory and Social Structure, The Free Press, Glencoe, p. 359.

53. Robert Merton, p. 358.

The move to new groups sometimes does not even involve allienation per se. It can be away from a primary group which is perceived as non-existent, and toward a primary group which achieves relative status just by existing. The most common example of this in our society is the urban street gang. These gangs appear out of a need to establish a new, visible, and operable social system to take the place of the non-existent social framework of the home. It is generally youths who come from inactive, un-loving, or broken homes who make up street gangs. Societies with traditions of strong home life and the extended family, however, do not alienate youth. Youth cultures, which exist not as status mechanisms but as replacements, have no need to exist in such societies, and they do not become strong formative elements.[54]

When one enters a new group, he poses little threat to that group. He tends to adopt a strong belief in the rightness of the new group -- even to the extent of being too worshipful. He learns how to be a member by emulating those with highest status in the group. This tends to guarantee assimilation, and not a tendency toward rebellion or the adoption of patterns of the more peripheral members of the group.*[55] New members, however, can pose a threat to a

* These hypotheses were developed as a result of military group behaviour; the controlled membership may have distorted behaviour patterns, but sociologists seem to agree that these characteristics of entry are common to civilian groups

54. W. J. M. Sprott, Human Groups, Penquin Books, London. p. 72.

group if they come in large numbers, and if they were previously members of the same group. The new sub-group which they form can disrupt the main group because thie sub-group maintains old unities which prevent the assimilation of the new group's values. The army recognizes this; it breaks up old groups and disorients their members before introducing them to new groups.[56]

* * *

In a discussion of consumerism, the Goodmans (in Communitas) make an interesting hypothesis about emulation: The consumer consumes in order to impute superiority. This is not effective with friends or family, to whom these signs are transparent. The consumer, then, requires a neighbourhood which is large enough to be anonymous, yet not so large that he might not be noticed. In such an environment he can pursue his battles of emulation. We emulate by classes, and each class has its particular symbols which are relatively particular and ignored by other classes. Because of this, different classes should live together; the result will be enough people to retain anonymity, and each group will be able to pursue its own battles of emulation.[57]

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55. Robert Merton, Social Theory and Social Structure, The Free Press, Glencoe, p. 308.

56. Robert Merton, p. 327.

57. Paul and Percival Goodman, Communitas - ways of livelihood and means of life, Random House, New York. p. 143.

The adoption of new reference groups is not always a matter of emulation, nor even of discouragement with the existing group:

> "The social image /a public self-image of one's societal group/ goes through three stages of disintegration. In the first stage, we find that people believe in it. This is the un-self-conscious stage. People think of themselves, for instance, as Americans, or as British, or as Germans, without ever questioning the notion. In the second stage, people believe in believing in it. They see the world as divided into nations. They see, however, that they might just as well have been somthing else from what they are. Once the image has reached this stage it is a short step to not believing in it at all. The same history is repeated in many religions."[58]

Entering and Remaining in Association:

In order to understand groups, it is important to understand that individuals do not exist just as group members. They have sense of self and pride which cannot be lost in their group allegiances; groups must respect this self-ness of their members if they expect any kind of loyalty from them. Erving Goffman has done a good deal of research of patterns of public and semi-public interaction.[59] He does not deal specifically with group theory; but his observations may be helpful in understanding the individual as entrant-into-group. (And that group may be an anonymous collectivity, or an established circle of acquaintances or friends.)

58. Kenneth Boulding, The Image, University of Michigan Press, Ann Arbor, Michigan. p. 62.

59. Erving Goffman, Interaction Ritual, Doubleday and Company, New York, p. 72.

We all have pride, or a necessity to save face. One societal means for guaranteeing face-saving is the fact that others ignore us when we act normally, when we are unacquainted with them, and when we make no demands upon them. If others were to pay constant attention to us, we would perhaps begin to lose our own sense of self worth: We would not be granted the right to privacy and dignity; we would become objects with no personal right to private action. (The greatest indignity of the cripple is not the inconvenience or pain, but the fact that everybody stares at him.) The fact that others will ignore one is fairly well guaranteed by our social norms, with the only common intruders being drunks and particularly aggressive salespeople.

The builder of environments may be able to further guarantee this right to the inattention of others. It may be possible to build sitting and stopping places which actively signal that one wishes to be left alone -- places which do not encourage casual eye-contact and subsequent conversational imperatives.

This insistence on privacy may seem harsh to those who wish to encourage 'brotherhood'. The point is not, however, to encourage brotherhood; the point is to make places comfortable to people. Places where people feel comfortable will encourage repeated occupancy, and their own de facto sense of brotherhood (though not, perhaps, of the back-slapping variety).

The granting of public privacy is an act of deference: we defer to others by ignoring them, and they defer to us by ignoring us. This deference is the behaviour toward others which they feel to be their due. A private individual expects to be treated as such; he does not receive what he feels is due respect for himself if he is treated as a public object. Conversely, when the individual feels that he is a public object, or a performer, and he is not granted attention, he has not received appropriate deference from those around him. Deference, then, is in the eyes of the receiver. When the individual does not receive what he deems to be deference appropriate to his status, he will feel uncomfortable, and probably be tempted to leave or to demand a more appropriate reaction.

As mentioned above, deference is attention as well as inattention. Attention is demanded when one acts unusually in order to attract an audience, when one sees an acquaintance, or when one expects service from others.

> " Four very common forms of presentational deference: salutations, invitations, compliments, and minor services. Through all of these the recipient is told that he is not an island unto himself and that others are, or seek to be, involved with him and with his personal private concerns. Taken together, these rituals provide continuous symbolic tracing of the extent to which the recipient's ego has not been bounded and barricaded in regard to others."60

Most of our societal patterns are geared to provide appropriate deference; deference occurs normally, and tends to be

60. Erving Goffman, Interaction Ritual, Doubleday and Company, New York. pp. 72 - 73.

noticed only in his absence. (If a waiter does not say 'Good evening, Sir' when he approaches the table, he makes the meal out a quite different occasion; or the lack of a greeting from a friend as we pass him on the street can sour a day.)

If the individual has any feeling that an occasion or a group will not defer to him appropriately, he will stay away rather than risk indignity. A fear of inappropriate deference can keep people away as much as actual violations. Groups and places which wish to attract people must not only defer appropriately; they must also present an image to the outside which removes potential fear of indignity or unwelcome.

We appreciate some contact with strangers as long as it does not threaten us -- either by destroying our own self-image or by taking too much of our time. We do not always demand inattention from others. Light conversation related to visible topics can be a welcome relief from anonymity. It cannot be encouraged universally, however, because that would lead to the breakdown in privacy discussed above. The mechanisms of breaking-down-inattention are usually highly visible 'impersonal' objects or activities, which can be discussed without threat to the individual being addressed. In our society the most common examples of these 'impersonal' objects are dogs, babies, the weather, or groups doing something noticeable: (We do not react to the man who approaches the young lady walking a dog or pushing a baby cart, but if

he approaches her when she is alone, he is offensive; the Hare Krishnas form a great topic of conversation amongst total strangers.) When it is important that individuals begin to break down their mutual inattention, (that they begin to talk), it is important to recognize these mechanisms: Simply telling people to talk, or sitting them face-to-face, will tend only to make them uncomfortable.

Reference Groups - Conclusions:

We act in order to fulfill needs. The influence of needs operates in a hierarchical way; the most basic needs must be satisfied before 'higher' needs can become important to us. Our physiological needs are the most basic. When we have a dominant physiological need such as starvation the need to eat supercedes all other needs. And, unless very strong religious or societal pressures exist, all behavioural energies will be directed toward satisfying hunger.[61] Simple physiological needs rarely control our actions, however, since it is only in an abnormal condition of emergency that a state of starvation -- or dominant physiological need -- exists. Even in poor societies true emergency is an exceptional condition. 'Man lives by bread alone only when there is no bread.'[62] The fulfillment of basic physical needs allows us to be concerned with higher needs.

61. A. H. Maslow, 'A Theory of Human Motivation', from Sutermeister, ed., People and Productivity, McGraw Hill, Inc., New York. p. 85.

62. A. H. Maslow, p. 87.

The need for safety is slightly higher* than that for basic physiological satisfactions; when we are fed, we have time to worry about safety. Safety is not usually a dominant motivational concern, but it does affect us when we encounter unknown forces or unexplained occurrences. 'Throughout life it may be said that one of the main connotative functions of education is the neutralizing of apparent dangers through knowledge, eg., I am not afraid of thunder because I know something about it.'[63] As with hunger, however, extreme conditions of danger, in which safety becomes the dominant behavioural determinant, are rare. In our usual condition we do not have any dominant physiological or safety needs, and such needs play a minor role in determining action. We do not eat nor drink nor sleep nor make love nor wear clothes because of pressing physiological needs; we do these things out of a need for regularity, companionship, love, and self-esteem. These needs are present in our daily lives, and are important determinants of action. They are essentially social concerns. When needs for love, companionship, regularity, and a sense of self-esteem are met, we can allow ourselves to think on the highest levels

* 'Higher' here means tending toward love and intellect. On a scale of relative prepotency, however, physiological needs should be labelled highest since the existence of dominant physiological needs nullifies all other needs.

63. A. H. Maslow, 'A Theory of Human Motivation', from Sutermeister, ed., People and Productivity, McGraw Hill, Inc., New York. p. 88.

of need: those of self-actualization, intellectual pursuit, and creative action.[64]

This progression of relative prepotency does not always apply, especially in the higher levels. (Eg., the genius may forego his need for love and pursue his intellectual concerns (self-esteem may satisfy the need for love); creativeness may result from a frustration of normal need satisfaction; an ability to rise to the higher levels of need may be deadened by a chronic position of basic need (eg., the welfare cycle of the Appalachians in the U.S.); or psychopaths, having been robbed of love in youth, have no potential for needing it or giving it.)[65] These exceptions are not the normal patterns as far as we can see, and the fact that there are exceptions should not destroy this concept of prepotent needs. This classification should help us to understand some nearly-universal characteristics of human motivation.

> "This classification of needs is in part an attempt to account for /the/ unity behind the apparent diversity from culture to culture. No claim is made that it is ultimate or universal for all cultures. The claim is made only that it is relatively more ultimate, more basic, than the superficial conscious desires from culture to culture, and makes a somewhat closer approach to common-human characteristics. Basic needs are more common-human than superficial desires or behaviors."[66]

64. A. H. Maslow, 'A Theory of Human Motivation', from Sutermeister, ed., People and Productivity, McGraw Hill, Inc., New York. p. 91.

65. A. H. Maslow, p. 96

66. A. H. Maslow, p. 97.

The most important facet of the preceding description of needs is that it is not physiological needs but social needs which are the determinants of most action. Need for self-esteem, self-actualization, intellectual pursuit, and creativity, as well as those for love and companionship, are social: they are supported and encouraged by our fellows, and only rarely do they exist without the knowledge and encouragement of others. Social needs, goals, and support require interaction, and interaction means groups. Groups are the mechanisms for the satisfaction of these needs. It is in the behaviour of groups that we can see most easily the processes of human motivation and satisfaction. And it is these processes which hold the most information for the environment builder who wishes to understand and build from human needs and motivations.

The use of reference group patterns may seem difficult; there is no direct correlation between group patterns and resultant physical form. Some areas of response have been mentioned in the discussion of group behaviour; it seems important that the architect begin to use these ideas and, perhaps more important, to think of groups as the key to the use of the social sciences in design. The use of group theory will inevitable involve extrapolations, and these extrapolations will remain tenuous. What seems most important is that extrapolations from this information are from a viable resource concerning motivation and interaction.

(If you start from the right place, you may have a better chance of ending up in the right place.)

Reference group patterns seem to be most obviously applicable to the development of public space. I will deal with public space specifically, but it seems important to point out that group patterns have as much significance in private homes or institutions. Families have their own complexities of group interaction, and church and hospital hierarchies are certainly centres for group development and interaction. If the architect can begin to consider what these interactive patterns are, and to build for them, he will begin to build socially as well as physically responsive places.

If public urban space is to be used, its most important quality will be that people are comfortable in it -- that they feel welcome and unthreatened. The development of comfortable public space can begin with analysis of those who will be affected and those whom we wish to occupy the space itself. There are five groups of people who will be affected. Each group overlaps with others, and is affected in different ways. If we can understand the needs of each kind of group and respond to those needs we may begin to develop not only responsive, but responded-to, urban environment. And environment which is responded to and enthusiastically used must be the goal of urban architecture.

The five affected -- and affecting -- groups are: 1) the city, 2) neighbourhood and family primary groups,

3) secondary groups in the city, 4) anonymous groups of (temporary or permanent) site occupants, and 5) smaller face-to-face groups on the site. Each group has a particular relationship to the site. I will attempt to describe that relationship and its importance to the success of a public urban space. This description is not meant to be definitive; it is intended only to point out the most important concerns. The urban builder will hopefully be able to take these concerns further: to elaborate on them until they mean something to him.

1) The city. We are all the city -- it is the all-inclusive group. When we make public urban space, it must be the city which receives it; only then is it public property. This public-ness should not be limited to some fact of allowable entry. It should be publicized public-ness; every member of the city should be made aware that this place is available to him. This appeal to city-as-group serves two supportive functions: it can encourage a sense of city as something more than a political convenience (look what we did for ourselves); and this sense can in turn encourage members of this super-group to come together comfortably.

2) Primary groups. There are thousands of primary groups in a large city. Each of these groups has its own values and activities. A single urban place cannot hope to meet the needs of all of these groups. Although an attempt

to respond to the needs of as many groups as possible is important, the need to let all groups know that they can make use of the site (that they can make the place respond to them) is perhaps even more important. The public urban space should provide for what seem the most likely requirements; and it should allow for new and constantly varying requirements over time. This provision for use will not bring people to the site by just existing; groups on the outside must be aware that there is provision for them, and that they are welcome.

It is perhaps not important to bring all members of an existing primary group to the site. Large groups may in fact be detrimental to the unity of the collectivity on the site. (As a band of delinquents, or school children, can make less-attached individuals feel threatened and want to leave.) What is important is to let the individual know that this place will satisfy the needs generated in his primary groups. In addition, it is necessary that the primary group itself will not disapprove of its members having gone to the place. A fear of negative sanction from one's comrades will prevent any individual from coming. The most likely reasons for negative sanction will be a feeling on the part of group members that the place is 'immoral', (ie., that it reflects the wrong values), or that one would be overstepping his bounds if he were to go there. Groups in the city should be aware that the public urban place provides for their needs, and that it is appropriate for them to be there.*

3) Secondary Groups. The needs of secondary groups are similar to those of the primary group. Secondary groups are much more identifiable than primary groups, and appeal to secondary groups will probably be the means of appealing to numbers of primary groups. (I can understand the idea of 'businessman', but cannot keep track of all of the particular groups of businessmen in town; I therefore appeal to the general group and hope to satisfy the needs of its constituent primary groups.)

Secondary groups are not, however, just packages for primary groups. They have their own cohesiveness, and reasons for existing. It will be helpful to the success of the public urban space if secondary groups were to begin to consider the space as their 'turf'; a sense of turf should help guarantee regular occupancy of the space by these groups. A number of different secondary groups, (such as businessmen at lunch, shoppers, strollers, residents, kids, workmen in bars, salespeople, entertainers, loafers, and restaurant and theatre-goers) can all use a public space. The more different groups which define the place as their turf, the greater will be the sense that this place is public, and occupiable. A

* This is not meant to be a discussion of means, but it seems important to point out that the shopping centre is not threatening to many people. We are all consumers, and to appeal to the consumer is the most universal publicity. Various cultural needs can be satisfied under the blanket of the consumer centre. The satisfaction of cultural needs may (and hopefully will) become the dominant offering of the public space, but it is likely that the desire to browse and buy is our most common magnet.

large number of secondary groups might conflict if they were to all occupy space at one time. However, if we provide for their needs as they vary over time, we can accommodate them all, and at the same time always have public space occupied.

There is a potential problem in the development of too-well defined turf for a particular group: Overt dominance would result in the exclusion of others during the period of the dominant group's occupancy. The best guarantee against such dominance probably rests in encouraging more than one or two identifiable secondary group to always be using the site.

4) Anonymous Site Occupants. The occupants of the site at any one time themselves form a collectivity whose identity rests simply in being there. It seems important that this collectivity sense some unity -- because, most importantly, there is a sense of comfort in such unity. And a sense of comfort, or of belonging, is remembered, and those who feel it will come back to experience it again.

The most destructive force to such a sense of unity is a sense of being an outsider threatened by dominant 'insiders'. Outside focusing objects or activities are the most effective means of obtaining some sense of unity in the area (cf., preceding sections on cohesiveness and on entering association). As we build the environment we should recognize the importance of such outside, and impersonal, referencing objects. They are the 'show', and the comfort and

unity of being the 'audience' is gratifying to all but the most flamboyant. The 'impersonal' objects can be the environment itself, goods in the window, children playing, pretty girls, entertainers, or even sub-groups within the environment (who in turn will regard their audience as an interesting show).

Single individuals on the site, who do not come with already-established groups, are the most susceptible to being threatened by the environment. And it is they who require group identification most strongly. They may be able to establish such identification with perceived secondary groups, or recognized acquaintances, but it is most likely that the unity of the collectivity will be their source of comfort. It is perhaps for these single individuals that the perceived unity of the collectivity is most important.

5) Primary Groups on the Site. Primary groups on the site will be either entire groups from outside or groups of two or three people. These groups have an already-established sense of cohesiveness, and they may require only the fullfillment of particular services. These services may be particular articles to buy, actual repair services, or opportunity to sit quietly or to eat in privacy. If the group is present only to obtain services, the environment should provide for those services and not inflict the unity of the collectivity. Of course, these groups really do contribute to the unity of the place even when they appear just to obtain services.

This is especially true if the services involve becoming the audience or part of the show (eg., sitting and talking or eating). The point is not that these people do not contribute to the unity and variety of the place, however; the point is that they may not demand the felt unity of the collectivity, and they should be allowed to pursue their own ends. The place should allow independent sub-groups to exist by themselves, and not make demands on their privacy.

It is just as likely that the group will have come to the public urban space to be <u>there</u>; they will not have come to buy, eat, or drink just anywhere. If this is the case, these small groups make demands on the environment as a source of unity in much the same way as the single individual mentioned above. The most obvious example of this would be the fair, where people come in small groups to become the ecstatic crowd, and they make little attempt to retain autonomy.

* * *

This is a description of the groups affected by and affecting public urban space. It is a description of the needs which must be satisfied if we are to develop urban space which is truly public, and which is used comfortably and regularly. Some of the hypotheses may be tenuous, and are certainly unproven, but they are based on reference group patterns as they are currently understood, and form an important basis for decision-making.

More precise hypotheses can certainly be developed concerning the intricacies of group behaviour. And these hypotheses should be encouraged. The major hypothesis of this report, however is more broad: that reference group patterns are our best resource for understanding motivations, and for using the sociologist as a resource for empathy. This is by no means an argument that the sociologist is the main resource for design, nor that his findings can generate architecture. If we are going to design for people, however, we will have to begin to understand them. This understanding does not have to be, in fact should not be, a physical path-preference stimulus-response understanding. An attempt at such an understanding seems bound to fail, and even if it were to prove successful, it would in all likelihood only lead to manipulative and mechanistic efficiencies of people-movement. Understanding of others is important as a resource for romance -- not as a resource for mechanistic efficiency. It is an understanding of patterns of comfortable interaction and isolation which hold the most promise for responsive architecture.

Some Physical Behavioural Patterns:

The insistence that we begin to look less at physical behavioural and motivational drives and more at psycho-social conditioners, is not a denial of the existence of physical patterning. It is, however, an attempt to point out where the most valuable and consistent behavioural and motivational information is to be found. In spite of the preceding arguments, there are some physical movement and response patterns which seem to be fairly consistent. And these patterns can prove helpful in the building of public space.

It is important to remember that these hypotheses make no claim to universality; they are the results of studies of particular people in particular places at particular times. In spite of their limited claims to constancy, they begin to highlight some spatial and interactive patterns which we may be able to draw upon. If we use these patterns with care, (and provide for the possibility that they will prove incorrect in the environments we build), they should help us to begin to build for people in space.

* * *

There seems to have been only one large-scale study done* on size of groups in public places.[67] And that study presents an interesting fact: 93% of all groups in public space were groups of 2 or 3 people.

* Ie., the only such study I could find reference to in a good deal of research.

67. Sommer. p. 60. (from John James 'A Preliminary Study of the Size Determinant in Small Group Interaction', American Sociological Review, XVI. 1951, pp. 474-77.)

group size	percentage of total number of groups
2	72%
3	21%
4	6%
5 or more	2%

This study was done using large numbers of counts of observed groups in parks, swimming pools, shopping centres, etc. It does not claim to be universally applicable, but personal observation and memory tend to agree with its findings. The fact that groups are generally of two or three people suggests that provision for groups to sit in public should provide for small groups -- the table or circular bench for eight is perhaps not the right stock unit.

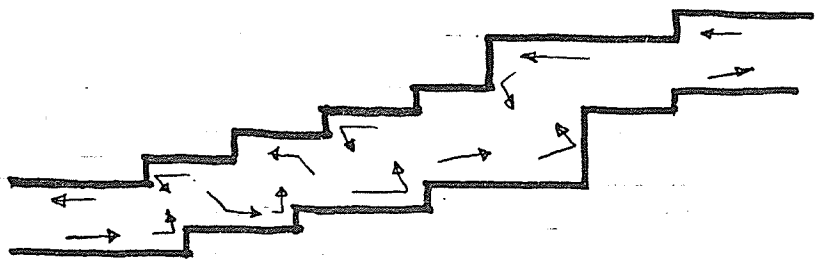
* * *

In relatively un-focused places the 8 foot or 12 foot long bench has room for one unacquainted occupant -- and perhaps two if they sit at opposite ends of the bench.[68] It is only when a strong outside inconvenience forces a large number to sit on the bench, or when a strong attention focus exists, that people begin to feel less self-conscious about usurping part of the occupied bench. (Strangers will sit next to each other when they have to get out of the rain, or when they can watch others performing in some way.)

* * *

68. Robert Sommer, p. 65. (from John James 'A Preliminary Study of the Size Determinant in Small Group Interaction', American Sociological Review, XVI. 1951, pp. 474-77.)

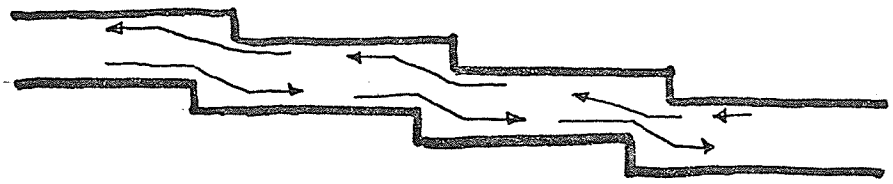
A shopping centre fails if people do not buy. The shopping centre developer becomes a very sensitive behavioural analyst by necessity -- he must build from the patterns of movement, interest, impulse, and consumption of future customers if he wishes to have a successful shopping centre. The shopping centre trade has come up with 3 'rules-of-thumb' concerning increased sales:[69] 1) competing companies generate more total sales if they are in the same centre than if they each controlled separate areas of the city; 2) a path over 40 feet in width is detrimental to impulse buying because the shopper ceases to relate to both sides of the path, and begins to walk by without as many little interruptions, stops, and looks; and 3), pedestrians tend to walk on the right hand side -- if they are to be distracted enough to slow down and begin to think about buying, the path will have to disrupt their movement, not ease it:



(distraction and displacement)

69. Lawrence Halprin, Cities, Reinhold Publishing Corporation New York, p. 194.

VS.



(movement is too easy)

* * *

Paths which are perceived as shorter will be selected even if they are physically longer or more difficult. 'Shops on the downtown side of a shopping area will be used more than equally close shops on the side further from town.'[70]

* * *

People seem to select areas which are marked or bounded yet which do not close them off from the outside. Especially when they wish to stop and rest or observe, they seem to prefer wall locations and to avoid central locations.[71] The well known preference for booths in restaurants is an example of this desire for safely defined locations.

* * *

70. Rapoport. p.5. (from Terence Lee, 'Brennan's Law of Shopping Behavior', Psychological Reports, II:662, 1962.)

71. Robert Sommer, (from Derk de Jonge: cf. footnote 39.)

The anthropologist Edward Hall has done a good deal of research on the interactive and spatial patterns of people. He proposes that there are differences between the spatial and temporal behaviours of different cultures. He classifies these patterns into two basic categories: the mono-chronic and the poly-chronic. The poly-chronic is exemplified by the southern European, who, (at least in stereotype) tends to do everything at once, does not require orderliness and divisions, and tends to become easily involved with others. The mono-chronic culture is best known by the stereotype of the cold rational Englishman. He separates things, requires order, schedule and regularization, and tends to keep a safe distance from others. There are certainly exceptions within cultures, but Hall proposes that this poly- and mono-chronic distinction remains fairly consistent.[72]

> "The Spanish plaza and the Italian piazza serves both involvement and poly-chronic functions, whereas the strung-out Main Street so characteristic of the United States reflects not only our structuring of time but our lack of involvement in others. Inasmuch as our large cities now incorporate significant elements of both types represented above, it might have a salutory effect on the relationships between the two groups if both types of space were provided."[73]

* * *

There seem to be four basic kinds of territories which we recognize:[74]

72. Edward T. Hall, The Hidden Dimension, Doubleday and Company Inc., New York. pp. 162 - 163.

73. Edward T. Hall, p. 163.

1) public territories, such as parks, malls, and shopping centres, which are characterized by free access to outsiders.

2) home territories, which are areas which might have been public, but which have been taken over by dominant groups (such as homosexual bars, occupied street-corner hangouts, or habitue cafes).

3) interactional territories, which are specific boundaried territories where particular interactions may occur.

4) body territories, or 'the bubble' around each individual, which is the individual's personal sacred territory; this bubble is not of constant dimension, and varies not only from culture to culture, but from individual to individual and situation to situation.

Each of these territories is important to its possessor, and infringement on these territories is a threat to them. Infringement can come in three ways:[75]

1) violation, or unwarranted use of the territory.

2) invasion, or the physical presence of intruders.

3) contamination, or rendering the terrotory 'impure' with respect to definition and usage.

The occupants of territories defend against these infringements. Their defence is oriented toward prevention-of-infringement more than toward offensive reaction to infringement. (Offensive reaction would be conflict, and our society is not wracked by conflict just because the usual mechanisms or territoriality are preventive, and not combative;

74. Robert Sommer. pp. 43-44. (from Stanford Lyman and Maurice Scott, 'Territoriality - a Neglected Sociological Dimension, (Social Problems, XV (1967), pp. 236-249.)

75 Ibid.

they occur before violation, and usually prevent it.) This prevention-of-infringement requires signalling to outsiders where territories exist; if signalling is visible infringement will be unlikely.

This signalling occurs at all levels of territory. The signalling of the individual defines his bubble -- its dimension, approachability, and penetrability. The individual has three mechanisms for signalling his territory within a space:[76]

> 1) position within a space: obvious location speaks of display and aggression, and hidden location speaks of defensive isolation.
>
> 2) stance can be aggressive and imply dominance or openness; or it can be closed and imply isolation and self-preservation.
>
> 3) gesture can openly encourage or discourage encounter.

These three mechanisms of territorial signalling all work together and none is necessarily dominant.

Groups, too, can exhibit these same signals of territoriality. Especially small groups signal in ways similar to single individuals, while larger more highly defined groups may incorporate more formalized signalling mechanisms and spatial boundaries.

* * *

'Spacing' refers to the tendency of individuals to assume certain physical distances between each other. It is a

76. Robert Sommer, p. 46 (from Stanford Lyman and Maurice Scott, 'Territoriality - a Neglected Sociological Dimension', (Social Problems, XV (1967), pp.236-249.)

mechanism of individual territory as it meets the territories of other individuals. Spacing varies from culture to culture (there is a correlation between Hall's poly- and monochronic cultures and characteristics of spacing -- with polychronic cultures exhibiting much greater olfactory and tactile contact between acquaintances). Spacing also varies with intensity of friendships, and with occasion. Feelings of stress tend to make people assume greater distance between each other, and a feeling of confidence tends to make them move closer together. A shared sense of fear will make people move closer together, whereas fear or suspicion of another individual will tend to keep people away from that individual. And introverts tend to stay farther away from others than do extroverts.[77] A Chicago theatre owner reports that,

> "When we play a family picture like Mary Poppins, Born Free, or The Cardinal, we can line up only about 100 to 125 people in a lobby built for 200. These patrons stand about a foot apart and don't touch the person next to them. But when we play a sex comedy like Tom Jones or Irma La Douce, we can get 300 to 350 in the same place. These people stand so close to each other you'd think they were all going to the same home at the end of the show."[78]

Information on spacing, and especially on the distances involved, are general. It is not possible to use analysis of spacing to generate building patterns, but it may be possible to develop spatial and seating arrangements which reflect the activities and spacing tendencies of future users.

77. Robert Sommer, p. 30.

78. Robert Sommer, p. 29.

The most important thing to realize about spacing norms is that they are not destructive and that our job is not to attempt to alter them. It is not important that everyone adopt the spacing characteristics of the Italian villager nor the British accountant nor the lynch mob. Cultural spacing norms provide feelings of comfort, predictability, belonging, and safety -- and their violation causes some measurable indication of strain.[79]

* * *

There is fairly strong evidence that face-to-face encounter engenders more interaction than any other bodily arrangement.[80] To catch the eye of another is the most important step into his consciousness.

* * *

People seem to prefer to face each other when they converse, and they will do so as long as the distance between them is not uncomfortable. A study of conversational distance was done in which subjects of slight acquaintance were asked to speak with each other in a large room. Furniture arrangement was varied for different groups, and the groups did not know the intentions of the experimenter. It was found that when people could sit facing each other at a

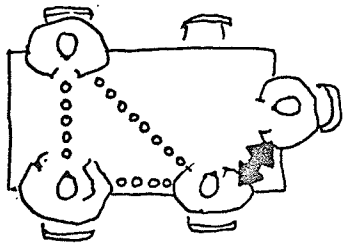
79. Robert Sommer, pp. 56-57. (from Stanford Lyman and Maurice Scott, 'Territoriality - a Neglected Sociological Dimension, (Social Problems, XV (1967), pp. 236-249.)

80. Robert Sommer, p. 61.

distance of less than 5 feet 6 inches they would choose to do so. When the nose-to-nose distance was greater, however, they chose to sit side by side. This face-to-face conversational distance seems to enlarge in smaller residential scale rooms, and to shrink when distractions on the outside increase.[81]

* * *

Conversations and perceived facility of interaction at table are slightly different: Sitting 90° to someone at a table seems to generate far more interaction than any other arrangement -- even sitting directly across or side-by-side:



Perceived sense of intimacy seems greatest to those either sitting side-by-side or 90° to each other at a corner.[83]

* * *

81. Robert Sommer, p. 66, (from Stanford Lyman and Maurice Scott, 'Territoriality - a Neglected Sociological Dimension, (Social Problems, XV (1967), pp.236-249.)

82. Edward T. Hall, The Hidden Dimension, Doubleday and Company Inc., New York. p.101.

83. Robert Sommer, p. 63.

Some observations on motion in the city:

"At points of spatial transition expectations and vulnerability can become acute."[84]

"Attention oscillates between necessary concerns with the path ahead: traffic, decision points, hazards, and environmental changes; the sighting of, or arrival at dramatic and meaningful features of the city. The interplay between attention to path and to environment may form one of the basic ryhthms of a journey. When the level of attention rises too high, the traveller compensates by slowing down..., which allows a greater intake of events at climax points in the city."[85]
(my underlining)

"Motion through space leaves an even stronger impression than motion by and around an object . The trauma experienced on entering tunnels or other very confined spaces and the sense of release, surprise and delight of entering a new space, indicate the force of these sensations. Confinement usually induces a heightening of experiential intensity; openness conveys a sense of serenity. Each can be satisfying, if not in excess, but long tunnels, corridors, serpentine paths or the obsessive openness of some expressways and suburban streets can bring on claustro or agrophobia."[86]

"Pedestrian motion, like a flow of water, has an apparent fluid momentum. It follows lines of least resistance, shortening distance by cut-offs. It swings wide on curves, eddies about obstacles, forms pools above and below restricted channels such as stairs or corridors.... The flow may be smooth or turbulent, purposeful or meandering. It can be deflected or encouraged by using attractions, by levels, openings, or the character of the floor. Only with difficulty can it be blocked."[87]

84. Donald Appleyard, "Motion Sequence and the City", from Gyorgy kepes ed., The Nature of Art and Motion, George Brazillier, New York. p.176.

85. Donald Appleyard. p.185.

86. Donald Appleyard. p.178.

87. Kevin Lynch, Site Planning, The MIT Press, Cambridge. p. 53.

There are any number of behavioural observations which have been made by social and perceptual scientists. This has been a selection of only the observations and hypotheses which seem to have the most potential as resources for the design of public urban space. None of these hypotheses makes and claim to finality, but we can verify most of them with our own memories, and we can hopefully begin to think about them as generative of object location in the environment.

Because there is no assurance that any interpretation or prediction will be correct, it seems important that the locational hypotheses we make should allow for alteration in the future. The fact that we will probably always be unsure is no reason not to think about these things. To build in response to the patterns of man does not demand the assurance of exact formulae. It is the processes of action, reaction, destruction, and rebuilding which will lead to environment responsive to man and his habits; and we can only hope to make beginnings through an attempt to understand.

means:

Introduction

" "Townscape belongs to the stage rather than the architect's drawing board, and its components, once isolated as objects, are best assembled in terms of 'theatre'.1

"Architecture does not make a great street any more than a fine stage set makes great theatre. The two depend, finally, on what happens and what interactions occur; what they generate in the human experience."2

The success of the public urban place depends on its ability to appeal to its users. This appeal is a result of the idea the user has of the place -- what it is, whom is welcomed, whether it is comfortable, and whether it is fun, exciting and relaxing. The idea one has of a place is not generated by simple physical stimulii alone; it is an image generated by experience, symbol, fellowship, convenience, comfort, beauty, and many other qualities. Because this image is a result of much more than simple objects and straightforward perceptions, the success of a place is also a result of more than simple object perceptions.

If we are to build successful places, we will have to not only make buildings which are comfortable and inviting: we will have to create the image that the place is appealing. In order to do this we will have to expand our conception of object-in-the-environment to include much more than just buildings and pavement patterns. Sound waves, smells, people moving, and even verbal messages, are also objects, and they

1. Ivor DeWolfe, The Italian Townscape, The Architectural Press, London. p. 126.

2. Lawrence Halprin, The RSVP Cycles, George Brazillier, New York. p. 85.

are as important as the architecture in creating the image of a place. These objects are important not only within the given space, but outside as well: as they contrast with, support, and convey the quality of the place.

There are five general images which a public urban space must convey in order that its users will themselves have an image of an appealing, successful, and comfortable place: 1) an image that the place is inviting -- that one is welcome there, and that entrance is easy; 2) an image that there is activity -- that something is usually going on and that it is worth seeing or taking part; 3) an image that the place is comfortable -- that it is physically and psychologically safe and warm; 4) an image that it is cared for -- that it is not accidental and that others have tried to make it special; and 5) an image that it is economically viable. Some suggestions for conveying these images will be presented later, but it seems important to first discuss more completely the nature of image -- where it comes from and how it affects us.

Image:

One of the few things which those who study perception agree upon is that perception of physical objects are different for everyone. Impressions of shape, size, and movement are different from individual to individual and this difference can become even more marked from culture to culture or at different levels of education. Yet, in spite of these experimentally observable variations in physical perception,

there is substantial agreement between individuals about what is out there.

This agreement exists because we learn about what is out there (ie., we gain images of what is there) more through history, memory, aspirations, habit, and the interpretations of others than through measurable physical stimuli: The world does not exist as 'facts'; it exists as series of valuated images, or 'messages filtered through a changeable value system'.[3] This series of images is not just a private agglomeration of the individual's own mind; it exists as a result of contact with others, and with the confidence that at least large parts of it are shared with others.[4] (Our ability to make contact with others and to discuss these images with them is our 'proof' of this.) We can -- and have to -- operate on the assumption that image-knowledge structures in the rest of our fellowmen conform fairly closely with our own.[5]

That it is images which form the basis of our understanding of what is out there is not to deny the existence of physical stimuli. Physical stimuli exist as <u>messages</u>, or as data, but they do not have <u>meaning</u> until they have been digested by the already-established images of the receiver.[6]

3. Kenneth Boulding, <u>The Image</u>, University of Michigan Press, Ann Arbor, Michigan. p. 14.

4. Kenneth Boulding, p. 15.

5. Kenneth Boulding, p. 16.

6. Kenneth Boulding, p. 7.

In this way, knowledge, or the comprehension and retention of meaning, does not come directly from outside stimuli: knowledge results from the effect that stimuli have on existing images. Physical stimuli, or messages, can effect the image of the receiver in five identifiable ways:[7]

1) the image will remain unaffected (the result of most messages)

2) the information which the message conveys will simply be added to the existing image

3) the message will effect revolutionary change by attacking the basic underpinings of the existing image -- the result is the 'conversion'

4) the message will help clarify some confusion in the existing image

5) the message may cause confusion about the clarity or correctness of the existing image.

Messages can exist as simple sense perceptions such as colour, sound, light, or dark. But they can also exist as symbols; symbolic messages are the messages which convey thoughts and processes from one mind to another.

> "Symbols are tools which make it possible to organize the machinery of social life and to master the complexity of our civilization. There is no small value in the symbolic construction; it makes man foresighted, saves him from being drowned in the abundance of details, from being entangled in the changing moments of life and from tottering around in a useless struggle. It lifts men into the cooler sphere of a clear-patterned schematism."[8]

7. Kenneth Boulding, The Image, University of Michigan Press, Ann Arbor, Michigan. pp. 7-11.

8. Martin Foss, Symbol and Metaphor in Human Experience, University of Nebraska Press, Lincoln, Nebraska. p.10.

Symbols are the rationalizing and categorizing sources of meaning whereas simple perceptual stimulii are the sources for contact, verification, and connection. Students of perception have tended to take sides on the question of whether the world is a symbolic whole or a perceptual physio-chemical whole: of whether the mind receives its dominant messages as phenomenological sense perceptions or as ordering symbols. Neither side is 'right'. The total image is a result of symbolic understanding and perception of the flow of things outside. The messages which give meaning are both rational and perceptual.[9]

Images grow and change through interaction with the images of others, and through other external stimulii. But even more important, images grow from the workings of the individual's mind. Imagination and rational progressions are the ultimate human capabilities -- and they are the resources for the greatest breakthroughs in image structuring.[10] Every mind develops its own image of what is around it, and each image is a result of the processes of that mind and what that mind encounters on the outside.

As he builds images the individual attempts to arrive at a state of equilibrium toward the world around him. He appreciates the stability of that equilibrium because it allows him to maintain a consistent stance toward the outside.

9. Martin Foss, Symbol and Metaphor in Human Experience, University of Nebraska Press, Lincoln, Nebraska.

10. Kenneth Boulding, The Image, University of Michigan Press, Ann Arbor, Michigan. p. 26.

Messages which are dissonant are usually absorbed without affecting his beliefs, but when that dissonance is too great he is forced to change his perceptions of the situation and to alter his responses to it.[11] Dissonant messages are kept to a minimum; when they do become strong enough to effect this change we try to absorb them as easily as possible into previously existing images in order to retain a consistent grasp on what the outside is. Equilibrium is very important to us, and we can change our images of the world only gradually and piece-by-piece.

Images do not simply exist filed away by subject and number in our minds. We valuate our different understandings of what is and why. This valuation is one of the most important characteristics of the images the individual has; it allows him to maintain his beliefs and to set up hierarchies of importance for varying forces on his life. The things which are closest to us and most affect our sense of well-being are the things to which we assign relative value. Those things which have the highest valuation tend to be those which we find hardest to change our beliefs in, and this can lead to refusal to accept even very strong messages which contradict our established views.[12]

11. George N. Gordon, Persuasion - The Theory and Practice of Manpulative Communication, Hastings House Publishers, New York. p. 235.

12. Kenneth Boulding, The Image, University of Michigan Press, Ann Arbor, Michigan. p. 11.

Valuation -- or the image of relative values of our different beliefs - is the result of societal conditioning. Ceremonial and formal instruction is important to valuation, but the small face-to-face group is the real source for the individual's values. The morality of the group is strong enough to resist the law, the pulpit, and even threats of violence from the outside. These sources of valuation (ceremonial and formal instruction, and the primary group) are primarily transmitters of value hierarchies. The growth of public images and values is generally a function of regular patterns of diffussion; it is a fairly regular process, and it is internal. Innovation in value hierarchies, however, requires the intrusion of external forces. Change in valuation requires unusual, creative, or charismatic revolutionary individuals or groups.[15]

This is not a terribly complete discussion of the image. But it is hopefully enough to explain what the word means, and how images come to be in our minds. Perhaps the most important things to understand are: that it is our images of what is out there which we act upon and understand as reality, and not what is measurably there; that Image is a result of messages from the outside and the processes of our minds; and that we create value hierarchies of images in order to

13. Kenneth Boulding, The Image, University of Michigan Press, Ann Arbor, Michigan. pp. 73-78.

14. Kenneth Boulding, p. 88.

15. Kenneth Boulding, pp. 85-87.

function normally in the face of contradictory images. The only way that physical objects become effective is as they affect the image (or the individual's conception of what is there); and this should be the key concept of the environment builder.

The Issue of Corporeality:

In the preceding discussion I have avoided discussion of the nature of the corporeal world. Philosophers and scientists have little agreement on what is out there, or whether there is anything there at all. This problem has little importance for this discussion of images; whether we are all only minds communicating figments, or real bodies receiving rays of amorphous colour and light, or real bodies stubbing our toes on real curbs, is not important - what is important is that we can communicate information about what is out there, that we can have it reasonably verified by others, and that we can develop images about it which seem to be supported by others minds which we encounter. The processes of image seem to develop fairly consistent and analyzable patterns which are independent of the corporeality of the world.

In any case, when I refer to 'what is out there', I am referring to the world in which $e=mc^2$, apples trees have blossoms, and a baby's skin is soft.

The Image of the Urban Environment:

Most work which has been done concerning image of the urban environment has been concerned with the image as it corresponds with what is measurably out there. This concern has lead to increased understanding of the image of the city, but its bias towards correspondence between 'fact' and 'fantasy' is not really the critical issue.* The improved image of the city and its parts should not be image of what is physically there, but image that it is there, and image of what is qualititatively there. It is not really very important for Bostonians to know that the Common has five sides - what is important to know is that the Common is a magic place to be, and that others will be there to share the magic.

Physical objects help create this kind of image. But we must understand that it is not the comprehension of the physical objects which is critical: it is the belief that something special is there which we must cultivate. In fact, there is no real necessity to develop the image of what is measurably there at all: such an understanding can in the

* I am referring primarily to Kevin Lynch's Image of the City and to the work of Saul Wurman. Lynch does not concern himself only with this correspondence between real object and image of real object, but it seems to be the main object of his investigations. He seems to tell us that image of a place, division or path is incorrect if it does not align directly with measurable physical objects. He procedes to tell us of the physical means available to achieve this correspondence; and these means can help a good deal as effectors of image. Wurman is even more adamant about this correspondence; his studies of 'image-ability' deal almost entirely with correct, mapable understanding of the city and its parts.

end only detract from the magic: ' A Beethoven string quartet is truly ... a scraping of horses' tails on cats' bowels, and may be exhaustively described in these terms...'[16]

The theatre is our best example of the importance of this 'unreal' image: The audience sits and watches a bunch of people walking around the stage or movie-screen, wearing outrageous costumes, and throwing out memorized words and gestures. But what the audience sees is a tragic or happy story unfolding before them; they gasp when tragedy strikes, smile when the lovers kiss, and often cry when it is all over. These responses are not to actors speaking lines in a dingy theatre, but to Othello really falling in front of our eyes, or to Sam really playing it again in some nightclub in Casablanca, rather than in some dirty Hollywood studio twenty-five years ago.

The theatre has an expression for this unreal image which the audience holds: the audience is said to accept 'Willing Suspension of Disbelief'. The audience agrees not to see actors on a stage, but to observe a real set of occurrences between the characters the actors represent. When theatre is unsuccessful it is usually because it cannot keep the audience in a state of suspended disbelief - when the audience thinks about the tickle in its throat, what

16. Robert K. Merton, Social Theory and Social Structure, The Free Press, Glencoe. p. 418. (from William James, The Will to Believe, Longmans, Green and Co., New York, c.1937. p. 76.)

the starlet will be doing after the show, or the tricks of production, the theatre is gone, and all we have is observation.

In theatre the observer knows that he is expected to suspend disbelief and to participate. In the city, however, the participant is not always aware of his opportunities to be theatre. When we build places in the city, we must encourage the same kind of participation; we must make willing suspension of disbelief obvious and easy. We must make the image of the place be more than a simple reflection of the objects in it. It is not necessary to have an isolated subject which one looks at in order to suspend disbelief - suspension can occur within the occasion as well as out of it. There are some places where this happens now - especially in theatre-like places like fairs and carnivals or parks on Sunday afternoons. And there are any number of ways to encourage this kind of image: we can actually have fairs in the park, we can advertise, and we can construct myths; the presence of large numbers of people seems to facilitate the growth of this kind of image - though the empty stage set, too, can be haunting.

This willing suspension of disbelief, or this participation in theatre, is not something which takes us away from reality. It moves us beyond simple material facts, but the contact it provides is much more a source of <u>reality</u> than the horses' tails and cats' bowels mentioned above.

> "Social encounters differ a great deal in the importance that participants give them but, whether crucial or picayune, all encounters represent occasions when the individual can become spontaneously involved in the proceedings and derive from this a firm sense of reality. And this kind of feeling is not a trivial thing, regardless of the package in which it comes. When an incident occurs and spontaneous involvement is threatened, then reality is threatened. Unless the disturbance is checked, unless the interactants regain their proper involvement, their state of suspended disbelief , the illusion of reality will be shattered, the minute social system that is brought into being with each encounter will be disorganized, and the participants will feel unruled, unreal, and anomie."17

We are all participating in this kind of image structuring most of the time; and we do not really rely on particular theatrical occasions for impetus. Suspension of disbelief, however, can almost disappear in particularly mundane or isolated situations. If we are to build successful places, we must recognize and encourage theatrical experiences and not rely on magic to just happen. Through an understanding of image, the theatre, and our own memories of these things we may be able to make places be much more than what they are.

If we wish to have people come to a place and feel that it is comfortable, exciting, and worth being there, we must create the image that it is fun, comfortable, exciting, and worth being there. Objects in the environment are our means for creating this image. The most important thing to understand about objects in the environment is that they should be used as they help to create the image. If we can begin

17. Erving Goffman, Interaction Ritual, Doubleday and Co., New York. p. 135.

to understand the images which we wish to develop we can perhaps come to a better understanding of the objects which should make the place.

These objects-in-the-environment are not just architectural and they are not just within the particular place. We do not even control most of them. But we can increase the likelihood that they will exist if we can understand them and understand the forces which bring them into being. For example, 'word of mouth' is a symbolic object or message which influences the image. We have little control over word of mouth, but we can increase the likelihood that it will be favourable. We can do this through placement of more controllable objects and occurrences, such as popular entertainment, comfortable seating, or popular consumer goods. (We can also create false word of mouth such as messages over the media.) These means for affecting word of mouth are themselves objects. They affect the image itself directly, and at the same time bring other objects (or messages) into being. And these messages in turn affect the evolving image. The real aim of this discussion is to suggest that we can develop the image with any number of means. And that it is important to explore these means if we are to cause the image of a place to develop.

I have attempted to divide what seems to be a successful image package of a place into the five distinct constituent images mentioned above (invitation, activity,

comfort, care, and economic viability). It is more important that the observer-participant thinks that these qualities exist than that they really do exist in any measurable way. The following discussion is an attempt to point out ways to generate these images. It is an incomplete catalogue, but it should prove helpful as a starting point.

Invitation:

The image that a place is inviting seems to rest on three other images: that the place will welcome the outsider, that entrance is easy, and that the place can offer something to the individual which the individual would be pleased to receive.

The image that a place is inviting is generated by objects outside of the place. It is what 'gets you in the front door'; subsequent images developed inside will 'keep you at the party'. This is not to say that objects on the inside do not affect a sense of invitation -- it is to say, however, that objects on the inside are only affective as they affect other objects on the outside. For example, the fact that a band is playing on the inside (as an object of sound on the inside) will not attract outsiders; it is only when the outsider knows of the band playing that he will go to see the band. And he will know of the band playing only through some object on the outside, such as advertising, word of mouth, or even sound broadcast to the outside. Advertisement, however, is not the only object which can

generate an image that a place is inviting. Built objects, such as signs, flags, colour, pavement pattern, openings and paths leading to the place are also objects which speak of ease of entry, excitement, and welcome. These objects are on the outskirts of the place; they are objects on the outside whose primary image function is as invitors.

The Las Vegas strip is an excellent example of the importance of an image of invitation which is generated on the outside: Las Vegas depends on advertisement to all over North America; the signs on the strip have very little to do with what is inside, yet they create the image that there is something inside (they often cost as much as the actual building facility); and the parking lot is the obvious signal that the place is easy to enter and that he who drives an old Ford is as welcome as he who drives an Eldorado.

Ease of entry is not necessarily left to choice between entering and not entering. Ease of entry is perhaps best enforced by the inevitability of entering, or by the necessity to pass through even if one is on the way to someplace else. This inevitability of entry is perhaps the secret to most successful urban squares. The path system leads one right into the plaza, and invitation is automatic and does not require competitive bidding on the movement of the pedestrian."*

* This mechanism works with pedestrians, whose speed and ability to be sidetracked contributes to a feeling of active, comfortable urban space. With the automobile, however, such inevitability of entry tends to destroy the space because

This inevitability of entry should be developed wherever possible. In our grid cities, however, there is little in the path system which contributes to such inevitability - and we must generally resort to competitive presentation of face (my place is better than theirs: you are more welcome, entrance is easier, and I have more to offer).

We see this competition wherever we look, and it highlights an important characteristic of effective invitation: effective invitation relies on contrast; the wide open prairie which is equally penetrable in all directions is not very inviting in any particular direction. In order for a place to be inviting the penetrability and excitement of that place must stand in contrast to the penetrabilities and excitements which surround it.

* * *

Some thoughts on invitation:

-A verbal slogan, even when it evokes no visual images, can be a powerful fact in the mind of the individual. If we hear this slogan enough it will itself gain meaning and may make us even search out what that slogan purports to describe. Advertisers use this all of the time - radio advertisements for furniture and car dealers are particularly effective. For example when one passes '--' Chevrolet he

* the driver of the car is always passing through, and has no chance, nor inclination, to stop, meander, and contemplate. When the automobile is to contribute to place it must not be inevitably just passing through - the driver must have decided to come to the particular place, to stop, and to connect.

may say to himself 'Oh, yeah, I know that place it's '--' Chevrolet the friendly people', (and because he 'knows' them he may feel easier about buying his car there). Cities, too, have these slogans, and they are potent in the minds of outsiders as definers of what the city is - in spite of the fact that they may have little to do with the city itself.* Most important, these slogans, or verbal symbols, attract people when they actually do come to the city. 'Bay and Adelaide - the centre of Canada's economy' is a dreary intersection, yet it attracts tourists (who quickly depart). And 'Portage and Main', Winnipeg's intersection, is known all over western Canada - yet is a windswept plain with traffic lights.** Not all of these symbols are so depressing in fact - Vancouver's Gastown and San Francisco's Ghirardelli have become very potent verbal representations, and they prove to be wonderful carnivals.

-Camillo Sitte proposed that people do not enter huge squares as easily as they enter smaller squares; they feel uncomfortable in wide-open places in the city. (These large squares have become more and more common in the last 100 years because as the size of streets has increased the

* These slogans are also important to the insider's definition of what the place is, and may sometimes have a stronger influence on the nature of the place than more measurable forces.

** I have a friend who stood at the corner of Portage and Main for two hours just to see if something worth remarking happened ..... and nothing did.

squares have had to become larger in order to be distinguished from the street.)[18]

-An unfinished place, which the outsider feels he can affect and finish in response to his own needs, is more appealing than a place in which he feels he will remain an observer.[19]

-Because of the importance of group reinforcement in encountering and daring to encounter new situations it is probably important for the public place to broadcast to those outside that the place is 1) open to new groups and 2) itself a comfortable non-threatening group.

-The young in our society are eager for new values, opinions, and lifestyles. They try to get these in the face of a rapidly changing society and in order to demonstrate their own maturity. The new values which they adopt are malleable, temporary, and inconsistent, but they fill the gap in the youth's image of the world. Youth search for ideology and beliefs, but can only find styles and opinions in a society which can no longer provide firm belief. This lack of belief results in, generally fickle, flirtation with the beliefs of others - such as eastern cultures, astrology, and witchcraft.[20] We can respond to this search for

18. Camillo Sitte, The Art of Building Cities, (trans. by Reinhold Publishing Company, New York. p. 28.

19. Amos Rapoport, 'Some Observations Regarding Man-Environment Studies', Architectural Research Teaching, Vol.2 #1, November, 1971. p. 9.

faith by keeping track of the popular opinions and styles of youth and by advertising to them that we can provide the necessary brotherhood, equipment, or training. This support of faddism, however much it may help attract youth, however, is really a support of a current cultural malaise. Serious attempts to demonstrate constancy, joy and contact - the underpinnings of belief - is perhaps a much more lasting and human way to cater to youth's (and everyone's) need for belief and ideals.

Activity:

Activity operates within the site to keep the occupant there -- it entertains him. Outside of the site, the image that there is activity acts as a strong mechanism of invitation. Outside, the image of activity is provided by advertisement, word of mouth, memory, and expectation. Positive experience seems to be the best guarantor that those outside of the site will carry the image that something is going on at the site. (It is important that this activity be thought available at all times, and not just limited to shopping hours.) Within the site a sense of activity will be generated by 1) actual 'people-shows' and 2) the intensity of tactile stimulii presented by the environment itself. The job of the architect, planner, and merchant is to maximize these two sources of activity.

20. George N. Gordon, Persuasion - The Theory and Practice of Manipulative Communication, Hastings House Publishers, New York. pp. 420 - 422.

Activity as 'people-shows' is generated by actual provision of entertainment, and by people just being on the site. Entertainment can be shows such as music, skits or competitions, or it can be much less formal things like folk singers playing for themselves, ice skaters, or vendors selling produce, candy and flowers. Official entertainment is something which can be provided by local merchants, the city, or even by independent performing groups which want nothing more than a place to perform. It would be to the benefit of all concerned to impose no restrictions on performance on a site (beyond some scheduling requirements -- so that conflicts are not won by he-who-plays-loudest); any cost for the right to perform should be absorbed by those who really benefit: the merchants and the city (the people!). Official entertainments tend to be short-term, and to draw specific audiences to the site. They are valuable as mechanisms to 1) bring new people in, 2) entertain people already there, and 3) create the image that special things are often going on.

The less formal 'people-shows' on the site are even more important than formal entertainments. It is these less formal shows which people come to see at odd times when they would not expect to see some particular entertainment. This activity should be available most of the time. It is essentially the activity of the crowd, and when one comes to see the crowd he becomes part of the crowd -- and everyone else's entertainment in a pleasant symbiosis. The

existence of the crowd on the site is not as controllable as that of more formalized entertainment, but there are some things which can be done which will help the crowd to exist:

Vendors are an appealing source of life. They become a permanent personal fixture in a place with whom casual visitors come to identify (even if they do not become customers). Vendors are not very common today; this is not so much because vending is too much work, nor because people really prefer to buy at the cellophane supermarket -- it is because it is very difficult to obtain a license, because puritanical legislators have decided that the street vendor is dirty and primitive, and because nearby merchants fear the competition of the foot-loose vendor. The crowd-supportive qualities of the vendor can in reality only help the nearby merchant by increasing the amount of nearby pedestrian movement. And the unlicensed is as liable to legal rebuke for unhealthy standards as the licensed vendor. Permission for unlicensed vending may not bring a wave of enthusiastic salesmen from the alleys, but it would certainly not be detrimental to the sense of liveliness and well-being of our streets.

For the westerner the semi-public activity which allows the greatest freedom to sit, observe, and be observed for extended periods is drinking. This is not to deny the importance of just plain sitting, reading, or talking, but more people seem to feel comfortable sitting with a glass

on the table than with only their hands in front of them. Places to drink should be easily accessible from the main space; they may be completely introverted, but an opportunity to drink and to watch people go by certainly provides more of a sense of things going on.

People like to shop, and it seems to be one of the main things we get out of the house to do. Shopping involves the movement of people in search of ways to spend their money and time, and people looking for such outlets can be productive to the creation of activity in the space. The consumer should be presented with 'impulse' items, and fairly common purchases such as clothes, convenience items, and food. Specialty stores, such as music stores, furriers, or gift shops are excellent for window shopping, and help to generate activity -- but they will be effective additions as shopper generators only when complemented by the heavier-use outlets mentioned above. Commercial activity may be considered detrimental to the restful nature of a particular site, and such activity within the urban space is not absolutely necessary to success; however, some nearby retailing is probably important if there is no commercial activity on the site.

The vendors, drinkers, and shoppers are all people-in-the-place who help to build the crowd, to make the audience, and provide the spectacle. However, it is the less predictable actors who must be present if the show is to gain a

certain flavour and special-ness. It is the ice skaters and waders and young sailors and checkers players and bums lying on the grass who make up an overlay of activity which adds a certain specialness, a sense that something is really going on. There are no predictable means for encouraging these special people to come; comfort and safety, and a place to do all of the things which might be done must be available. The real art of the architect appears in the encouragement of these activities.

* * *

> "The type and design of space has a vital influence on choreography [ie., the movement and quality of movement through that space]. Long linear vistas, overly great spaces, undifferentiated and uninterrupted streets, lack of color are dull and uninteresting, not so much because of their static visual qualities but because they are uninviting to move through at pedestrian speeds. If they become too uniformly dull, they achieve a nightmarish quality of personal disassociation; they are impossible for a person to relate to. If he finds no fixed intervals, or changes, or points of interest, he will even choose not to walk through these amorphous kinds of spaces."[21]

- An image of activity in the place must exist even when there are few people there. The man or woman standing alone in the middle should not feel that there is only emptiness before him. The objects in the environment, including the floors and walls, should create an activity of their own which will keep the inhabitant from feeling alone:

21. Lawrence Halprin, Cities, Reinhold Publishing Corporation, New York. p. 193.

> "The sense of sound, smell and touch, as well as the visual sense, affect the quality of crowding or isolation. No matter what the extent and size of a space, high levels of noise will diminish its apparent size. Strong smells affect the scale of a space."22

- Density of visual material, too, can affect the sense of crowding or of activity.

> "For example, movement is exaggerated at the periphery of the eye. Straight edges and alternate black and white bands are particularly noticeable. This means that the closer the walls of any tunnel or hallway, the more apparent the movement. In the same way, trees or regularly spaced pillars will exaggerate the sense of movement. This feature of the eye causes drivers in France to slow down when they enter a tree-lined road from an open highway. To increase the speed of motorists in tunnels, it is necessary to reduce the number of visual impacts that fly by at eye level. In restaurants, libraries, and public places, cutting down on movement in the peripheral field should reduce the sense of crowding somewhat, whereas maximizing peripheral stimulation should build up a sense of crowding."23

- Water, with its liveliness and sparkle is a wonderful source of action and life. People will sit for hours in the presence of water, even very still water, and feel that there has been a good deal of activity around them. Water does not act automatically as an activity simulator-stimulator, however. It makes the most powerful impression when it is moving a good deal, when one must discover it, or when it exists in a special place which allows for exploration, connection, contemplation, or rest.

22. Lawrence Halprin, A Study of the Quality, Character, and Meaning of Open Space in Urban Design, prepared for the City of New York Housing and Development Administration New York. p. 53.

23. Edward T. Hall, The Hidden Dimension, Doubleday and Company Inc., New York. p. 68.

-Kevin Lynch suggests that we remove all advertising signage in an area which does not advertise some facility immediately within that area.[27] This would mean that all inputs from advertising would heighten our sense that things go on right where we are (rather than tell us that all good things come from New York, Japan, or Coca Cola).

-Violent impact on the senses is a very powerful tool in the development of an image of activity.

> "To have lived through violence of any kind is analogous to the mystique of having survived combat in war, and this mystique has, through the ages, displayed greater sticking power than the enormous revulsion many people feel at the actual moment of engagement."[24]

The violent occurrence attracts us and makes us feel a sense of comeraderie which is not generated so quickly by any other occasion; strong counterpoint or disturbance in scale such as the 'quart size monument in the pint size square'[25] (eg., the Trevi fountain) can impose on our senses enough to convince us that there was activity there. Extremely static elements, such as a sleeping dog or a piece of sculpture, may tend to highlight any activity which occurs elsewhere.[26]

24. George N. Gordon, Persuasion, The Theory and Practice of Manipulative Communication, Hastings House Publishers, New York. p. 433.

25. Ivor DeWolfe, The Italian Townscape, The Architectural Press, London. p. 205.

26. Ivor DeWolfe, p. 117.

27. Kevin Lynch, Site Planning, The MIT Press, Cambridge. p.79.

- And Camillo Sitte on the location of activity and statues in the public square:

> "Only blindness can escape the observation that the Romans left the centers of their forum free. Even in Vitruvius we may read that the center of a public place is destined not for statues but for gladiators."[28]

Comfort:

An image that a place is comfortable is necessary in order that people will feel at ease about just being in a place. Invitation and activity can draw outsiders in and keep them occupied, but comfort is necessary if people are to be able to consider a place as more than just an arena. An image of comfort is not so directly attainable as that of invitation or activity. If a place is thought of as uncomfortable, however, it is not likely that it will be used for more than very particular occasions. Comfort will exist as two distinct provisions: that for purely physical comfort, and that for psychological comfort.

The provision of physical comfort is more quantifiable, and certainly no less important because it is measurable. Physical comfort exists in the provision of pleasant micro-climate, and restful -- or at least not tiring -- amenity such as sitting, leaning and walking surfaces.

Micro-climate can exist as air-conditioned interior space, or as exterior wind control, rain shelter, and sun control. The predictability of interior air conditioning

28. Camillo Sitte, The Art of Building Cities, (trans. by Stewart), Reinhold Publishing Company, New York. p.13.

is its greatest drawing power in our technologically equipped and demanding century. And the effectiveness of that drawing power can be seen by the proliferation of indoor shopping malls all over the U.S. and Canada. The exterior micro-climate too can prove to be a powerful attraction to outsiders -- especially if its quality stands in marked contrast to other places. The fact is often overlooked in our search for technological solutions and polished environments.* (Even in Canada people survive quite well outdoors as long as the wind is not blowing.) The effective exterior mico-climate is less expensive than the enclosed mall, and provides a very important bonus: greatly increased contact with the environment and room for discovery, imagination, and non-directed relaxation.**

* People really do search out relatively pleasant exterior micro-climate: Jane Jacobs tells of the woman in New York who used to come all the way from 44th St. to Greenwich Village to walk her baby; when she was asked why, she explained that it was much warmer in the village's less wide-open and wind-swept environment (and subsequent measurements showed this to be true). George Orwell, in Down and Out in Paris and London, tells how the local bums in London knew the relative temperatures of outside walls in great detail, and they would congregate around the warmest walls on cold nights. And in Paris the park behind Notre Dame is sunny and almost windless on cool days in spring; it is full of governesses, perambulators, and strollers soaking in the warmth; in July, though, when the park is quite warm, there are very few people there.

** The interior mall is not necessarily a stifling place -- the Galleria in Milan is an excellent example. The problem with most malls in north America is that they are built with one thing in mind: opiate the occupant and entice him with the

An understanding of the techniques of micro-climate optimization is one of the most valuable tools which the designer of urban space can have. The science of micro-climate is not very precise, and relies more on observed success than on predictable models; so far the only reasonably sure predictions come from extensive and refined three-dimensional model testing rather than from any set of formulae. (See Part II for a more complete discussion of the means available for improving micro-climate.)

Comfortable amenities involve all of the measurable characteristics of comfortable furniture -- in fact, that is really what they are: furnishings for the place. Seating should be at comfortable heights, and seats and benches should have backrests! Benches without backrests signal that we are invited to sit for a short while, but that dawdling is not encouraged -- and it is to encourage people to dawdle that we provide a physically comfortable environment. Not all sitting places demand backrests, but the places which do not require backs are not formal seating, but the edges, barriers, slopes, and steps which people can make into sitting places. (The act of creating a seat out of a step or a retaining wall provides enough of a sense of lounging, comfort, and control to make up for a little discomfort.) Floors should also be comfortable for standing walking, and changes in level should

***(cont'd)sale goods around him; minimal provision is made for stopping, contemplating, or for any recreational acting other than consuming. (cf. Peter Pragnell's criticism of the Toronto Hyatt House in The Canadian Architect for an excellent discussion of this subject of control.)

be comprehensible and easy to traverse: Shallow steps are much less tiring than very steep steps (though rapid ascent can be exhilarating if it does not go on forever). The hectic level changes of Boston's Copley Square, and the City Hall Plaza, are confusing and frustrating -- they never define special places nor are they predictable enough to allow for walking without one half of one's mind watching that he does not trip over an unexpected step. Exceptions to this requirement for ease and predictability exist. But they exist as <u>active</u> impositions of inconvenience and adventure rather than as arbitrary little confusions and irritations. (Halprin's Portland fountain and the sunken fountain at Boston City Hall are excellent examples.)

* * *

Psychological comfort might be described as a sense of place, and perhaps of home, and a lack of threat -- either to one's psyche or to one's body. The provision of physical comfort is important as a creator of psychological comfort -- especially as it makes one feel 'at home' and unthreatened by physical discomforts such as the cold wind or a tired back. The greatest contribution which the architect can make to a sense of psychological comfort, however, is not the provision of comfortable furniture, but the creation of a sense of identifiable and possess-able place.

One key to the development of psychological comfort is that some identification or association should exist between

the site and other places which are already known to the individual. This sense of association can grow out of things like recognized similarities of address, similarity of scale or detail, connection with city-wide governmental groups, or performance by celebrities who are familiar. Association can work in reverse, too, with the site broadcasting itself and the outsider identifying with the broadcast itself as a familiar thing. Some specialty offered by the place can become so important and well-known to outsiders as a myth, adventure, or entertainment that the association is between the dreams of the outsider and the potential of the place to satisfy those dreams. Carnivals and football games are our most common examples of this kind of association. Whatever the source of association, its existence is important because it is the connection between the rest of one's life and this special place. Without this connection, any place, no matter what else it has to offer, can only be seen as foreign and belonging to others.

Development of a sense of association can be architectural or a result of advertising and other physical means of image making. Other means for creating psychological comfort are more distinctly within the realm of the architect. They involve the creation of a sense of particular and protected places and the creation of comfortable scale.

Comfortable scale, as discussed earlier, is rather difficult to define. But it does exist, and when we find it

we recognize it and feel that we are safe. In spite of the difficulty with definition, comfortable scale is an important characteristic of the successful urban space. The anthropologist Edward Hall even goes so far as to suggest that it is in the provision of appropriate and comfortable scale, rather than in the fulfillment of functional requirements, that we have the greatest potential for making a healthy environment.[29] Comfortable scale is not universal; it varies from culture to culture.* It is through the understanding of different cultures' sensibilities and memories that we have the greatest potential for making public urban spaces of recognizable and comfortable scale. We cannot make 'this place for Slavs', 'this place for the English', and 'this place for the Italians', etc., because the idea of making 'this place' is to make it for all of the public, and not for particular ethnic or economic groups. We can begin, however, to learn from the preferences and historical examples of others what provisions and scales exist in the most successful places -- and perhaps we can begin, too, to understand how to apply these lessons to the built environment. Such

* Hall tells of the black U.S. unit he was with in World War II. They were in six campaigns in Europe and seemed always threatened and uncomfortable in their environment. When, however, they served in the Phillipines they seemed to feel at home with the scale of the environment.[30]

29. Edward T. Hall, The Hidden Dimension, Doubleday and Company, Inc., New York. p. 159.

30. Edward T. Hall, p. 159.

a beginning would certainly generate more comfortable spaces than are currently generated by the dictates of vehicular movement and regular block size.

In the development of comfortable scale, it is not necessarily in the dimensions and proportion of the grand square or plaza that we will succeed or fail; it is rather the scale of the parts which are perceived by the occupant -- the doorways, the seating areas, and the paths -- which are the more critical vocabulary. There are no rules for these things, but some suggestions have been made concerning dimension and proportion which might serve as starting points:[31]

-Exterior closure is most comfortable when the enclosing walls are one third to one half the horizontal dimension of the square. When the walls are lower there is no sense of closure, and when they are higher the skyline is not easily judged ; the space tends to become a pit or a trench. (This does not apply to streets so much as to squares, and there are examples of squares which do not conform to this rule which are not at all claustrophobic, nor agrophobic.)

-We can recognize another at 80 feet. At 45 feet we can get a clear portrait. And 3 feet 10 inches feels like an intimate interpersonal dimension.

-Exterior dimensions of 40 feet feel intimate, and 80 feet feels comprehensible and in scale with typical patterns of movement.

31. Kevin Lynch, Site Planning, The MIT Press, Campridge. p.60.

These dimensions do not really tell very much, but they may help in the creation of comfortable space. It is more in the intensity of tactile inputs and the requirement to discover that scale becomes right. And it is the empathy and sensitivity of the architect and the freedom of the occupant to make changes which is going to make that scale become right.

Even more important than scale to the creation of an image of comfort is the developement of recognizable and possess-able places in the city. The beautifully proportioned square, or even sitting nook, is not very comfortable if it is not recognizably defined or if it does not encourage its discoverer to enter and take part. The concept of closure is the key to the creation of recognizable place; and it is the understanding of closure at all levels of perception and use which is the key to the creation of possess-able place. Closure can exist as simple, static enclosure, but it also exists in much less static perceptions involving comparison, contrast, and movement. The baroque architect worked almost entirely with arrested movement along a procession rather than with enclosed and static places. And it may be that this recognition of movement and arrival is more essential to comfortable closure than is the more simple conception of static and firmly closed plaza or forum.

Arrival occurs when one arrives at something which is recognizable as special: as intentional and recognizable,

as different from other places, as usable (ie., as possessable), and as 'here'. Gordon Cullen discusses the importance of a conception of 'here and there' in the development of a comprehension of what here is: It is only through an understanding that other places exist in contrast to this place that we can begin to understand and possess this place. Surface does not exist as open un-colonized flatness. It is colonized for many different reasons and becomes a series of possessed places more than an eternal flow. Each colonization, or act of possession, and perception of possession is the most important clue we have in making up an image of the parts of the city and how these parts fit together; as this image develops the world changes from everywhere-ness to firm -- and possessed -- conceptions of here and there. The more we can begin to understand that 'there' exists too, as someplace else and not as an extension of 'here', the more we will be able to relate to parts of the environment as related constituents of our lives.[32]

The distinction between static enclosure and closure of elements in a stream can be illustrated by the difference between the closed room with a single door and the path, or hallway, with expansion, contractions, and contortions -- each of which makes a special place. It is more difficult to enter the room, especially if it is already occupied or

32. Gordon Cullen, Townscape, The Architectural Press, London. p. 182.

if one might suspect that he is being observed, than it is to proceed down the path and discover and become part of the places one encounters as he procedes. This is particularly true if the path is used normally to go from one place to another. The expansions, contractions, and contortions along the path, and the provision of necessary and recreational services, is the provision of closure.

A simple expansion in a straight path may provide an identifiable change, but because it does not contribute to arrested movement it does not provide closure. Closure exists only when identifiable and particular place-ness exists. The edges of the place can be penetrable -- as when closure is created by an open arcade -- but the edges must stop the eye enough to speak of specialness before leading on. Place-ness does not exist just as a slowing of the eye, however. Closure speaks of rest, safety, and refuge in the stream, and it is by speaking of these things more than by describing physical bounds that closure can be an effective creator of comfort.

> "Ordinarily the eye has too many responsibilities for comfort-safety, protection, defence, contacts, food, orientation, opportunity, pleasure and the job of boxing the compass. Result fatigue, mostly unconscious. By the extent to which it reduces the eye's commitments by limiting and canalizing the visual possibilities, arcading /and all acts of closure/ does a lot to relieve pressure. Hence the warm and womb-like sense of comfort one experiences on such streets."33

33. Ivor DeWolfe, The Italian Townscape, The Architectural Press, London. p. 74.

* * *

Some further thoughts on comfort:

-Besides walls and arcades, we can use actual openings to provide closure: a framed view of water, a river, mountains, the sky, or even another set of activities beyond can exist as its own moving mural at the edge of a square. Closure can also result from a strong nuclear element which draws attention to itself yet which is not surrounded by any kind of wall, arcade, or level change; the piazza di ss. Giovani e Pablo in Venice or Chicago's Buckingham fountain are examples.

-Because acquainted group size is almost always 2-4 people, permanent seating arrangements should provide for small group sitting. Free-standing and movable seating seems appropriate because it adapts to changeable group sizes, and because its provision is a strong statement of welcome and trust in the individual.

-Lighting can be a generator of comfort as 1) adequate provision of lumens, 2) celebration of life with sparkle and glitter, and 3) reinforcement of closure and sense of location.

-Steps are places set apart which set other places apart. They are places to stop and observe others. And they are places for oratory. Ramps, on the other hand, are not conducive to stopping. They pull one down, and one always relates to gravity when negotiating them. Ramps are fluid --

they generate a strong sense of the process of monument rather than of arrested movement and closure.[34]

- Gordon Cullen on change in level:

> "Every place has its datum-line and one may be on it or above it or below it.... To be above datum produces feelings of authority and privilege; to be below feelings of intimacy and protection.
>
> These sensations imply a very direct relationship between the observer and his environment. The enjoyment of a feeling of authority and privilege is of quite a different order from the enjoyment of other townscape effects -- the sparkle of texture in a wall or the shape of a letter face on a shop front. In the first case the observer is committed; in the second he can regard himself as more detached yet each is a desirable effect to aim at."[35]

And each of these effects can add to an image of comfortable place.

- The plan, decoration, and texture of the floor can reinforce the patterns of movement, contrast, contact, and closure which emerge within a place.

- Powerfully static elements seem to act as magnets to movable objects -- this protection seems to be appreciated by both animate and inanimate objects.[36]

- When pedestrians stroll they seem to prefer to stroll where there are long facades with no intersections in order not to expend all of their mental energy avoiding traffic.[37]

34. Lawrence Halprin, Cities, pp. 116-117.

35. Gordon Cullen, Townscape, The Architectural Press, London. p. 175.

36. Gordon Cullen, p. 103.

37. Camillo Sitte, The Art of Building Cities, (trans. by Stewart), Reinhold Publishing Company, New York. p.62.

- Periodic enclosure against the weather - as in the enclosed cafe -- seems to avoid the problems of total weather protection discussed above and at the same time to strengthen a sense of process from place to place; (ie., the particular street-oriented weather-proof box can provide connection, encourage comtemplation, give warmth, and also provide a sense of closure.)

Care:

An image that the public urban place is cared for is important in generating acknowledgement and care on the part of the occupant. That others care for a place indicates that they identify the place itself enough to bestow their attention on it; when others perceive this care they too are encouraged to register that the place exists as something special. In addition to helping to identify the special place, an image of cared-for-ness says to the newcomer 'welcome to this place'. And, perhaps most important, an image that someone else cares is the strongest generator of care in others.

Two kinds of caring are perceived in a successful urban environment: 1) Care for the occupant as provision for his needs and desires, and 2) care for the environment itself. Care for the occupant is something like 'We care enough about you to make this place for you'. This kind of care is essentially a result of the provision of invitation, activity, and comfort as discussed above. Care for the environment itself is something like 'We care enough about this place to make

it a special place'. The requirements for invitation, activity and (at least physical) comfort can be met in a littered alley; but care for the environment demands aesthetic concern for the nature of our surroundings.

Care for our surroundings does not require that we 'clean them up' with twentieth century steel and glass nor does it require that we impose eclectic facades. Real care comes with the provision of visual and physical amenity at the level at which it is perceived: we perceive our environment as a collection of particulars; urban architecture is seen at close range, and it is the detail at close range which exhibits care or carelessness in the environment. Carelessness is exhibited by any number of occurrences, from dirty windows or excessive litter to rusty railings or cheap infill brickwork. Some of these carelessnesses are offensive only to architects, but the most blatant are visible to everyone.

The architect's contribution can be very important in the development of detail which speaks of care. This care may be limited to the development of clean, air- and water-tight joints which will always appear clean and looked after. Such technical care is certainly important, and rust stains, drip marks and chipping paint are blatant indications that there is a lack of carefulness somewhere. The greater care -- that for transmitting visual and tactile intricacy and joy to the viewer -- however, is even more important: St. Marks Square in Venice would not hold our hearts for long if it

lacked the delicacy and excitement of facade, pavement, and detail which it has. And reference to Venice and to the Gothic cathedral should remind us that it is very difficult to flood our senses with too much detail or decorative excess.

Careful and joyous detail should not be limited to the buildings which make up an urban place; an intricate facade next to a stark pavement and a chain-link fence can exaggerate sterility rather than combat it. The care must be everywhere:

-Pavement materials should respond to patterns of use and even more they should speak of places and parts which are different and special; paving materials are unlimited, and anything more pleasant than un-decorated rolled asphalt will speak of care.

-Bright lights and neon signs can be harsh and demanding on the highway 'strip' or on skid row, but glitter and clash can be happy and care-full when they exist as decoration instead of advertising (as in the Tivoli Gardens or the trees along Chicago's north Michigan Avenue).

-The little details around us such as railings, grates, light standards, and bollards are generally passed over by both the designer and the observer. These details, however, provide an excellent opportunity for the imposition of care; when the most mundane objects are celebrated we feel that someone cared much more than when only the more gross elements are celebrated.

-The provision of seating facilities speaks of concern for the occupant. Beyond mere provision there is a great deal which can signal care for the environment such as comfort, placement, size, orientation, material, detail, and decoration. It is these most-used facilities which are in closest contact with the occupant, and care in their design, detail and placement is immediately obvious.

-Greenery is a provision for softness and visual and physical rest. 'Creepies and growies' are not a necessary complement to all public urban space, but when they do exist they speak of care most when they actually provide shelter and a place to be still rather than just an exquisite view. This shelter can be minute closure by walls, trees, vines, and berms of a place to sit -- as in Seville's narrow streets; it can be grass and trees as an accessible place to loll unthreatened by police or passing strollers -- as in Nathan Phillips Square in Toronto; it can be trees and grass which are out-of-bounds but which create a comfortable and protective back-wall for bench sitters -- as in the Luxembourg Gardens in Paris; or it can be simply comfortable protection from sun and wind.

-Adequate maintenance is most obvious when it is lacking. Nothing bespeaks a lack of care more strongly than litter blowing in the street and weeds and mud taking over planting areas.

These are all things to think about in the creation of the urban environment. They are not solved just by being thought about, nor does spending more money on detail, hardware, and greenery guarantee that the occupant will infer that his surroundings are care-full. It is only real care on the part of the creator which can speak of care to others. And that care must exist at every level.*

* * *

Care should not exist just as care from above (from the designer and the city). The occupant, too, should have an opportunity to express his care if we are to avoid the risk of vandals in a perfectly engineered environment. Hopefully evidence of care will help generate a sense of care on the part of the occupant; it is necessary to provide him with opportunities to express his care if we are to encourage and not frustrate him. These opportunities can be small; the important thing is that they provide the site-occupant opportunity to act on his own. A small thing like walking twenty feet to deposit litter in a basket can give us a feeling that we have contributed to the place -- that we have evidenced our care. And a movable chair is a wonderful opportunity to act. More permanent residents and merchants should have opportunities to impose their care; they should

* This is at odds with an earlier assertion that the image of what is is more important than any measurable reality. I accept that there is a contradiction, and feel that it has to remain. One can do all kinds of Madison Avenue things to fake invitation, activity, economic vitality, and even comfort -- but care has to be real.

be able to put in planters, small gardens,* and their own street furniture. This opportunity to act as a caring part of the environment not only fulfills the occupant's need to be part of the caring; more importantly, it says to others that the place is really cared for, and not just by outside powers and hired labour.

Economic Vitality and Viability:

Traditional urban ecologists dealt almost entirely with economic motivation as cause for action within the city (whether it be in search of lowest rent, lowest prices for goods, or highest earnings for ownership or investment). Since the early 1950's when this view was current we have gained more understanding of the complexities of locational motivation in the city. A good deal of activity revolves around the exchange of goods, money and time, and in general this exchange is governed by the desire to get the most for the investment. But even these activities of exchange are not governed solely by profit or bargain-hunting motives; symbolic references, sentimental ties, and sub-cultural patterns often outweigh any obvious effeciencies of cost and return.[38] I have been dealing in this paper with all of these potential economic inefficiencies as motivational

* Christopher Alexander even suggests loose paving blocks which can be removed to allow for gardens and replaced later when a non-gardener moves in.

38. Firey, Walter, 'Sentiment and Symbolism as Ecological Variables', from Paul Hatt and A. J. Reiss Jr. ed., Reader in Urban Sociology, The Free Press, Glencoe. pp. 233-244.

factors. The fact that these uneconomic forces at times outweigh strict economic formulae, however, does not mean that economic viability is unimportant as a motivational force.

An image of economic viability says 'it is worth it for me to exchange my time or money for what I can get here'. This 'what I can get' can be tangible goods, services, entertainment, or rest. Economic vitality, on the other hand, says 'there is an active exchange here which is supporting itself and which is drawing and keeping both sellor and purchaser'. The transmission of both of these images is important if purchasers are to come and come again, and if sellors are going to come and stay. (This image of efficacy of exchange is what is economic: Money and goods need not exchange hands in order for one to feel that he got a good deal for what he received or gave; when people perform in public the presence of the audience is often adequate payment, and the audience pays with its presence for its entertainment.)

In a place whose primary formal activity is commercial -- such as a shopping mall or any plaza or street lined with retail outlets -- the importance of an image of economic vitality is obvious. A street lined with for-rent storefronts or advertisements for bankruptcy sales is unlikely to attract new retailers nor casual shoppers. It will attract only those who come to take advantage of the cut-rate prices

that economic contraction provides -- and these people will be coming not to be in a place but to save money at all costs.*

This does not mean that only the success of the high-class retailer can imply economic vitality: flea markets and concentrations of street vendors only exist where money is moving and people are passing by. (It is not important whether the vendor attracts the passer-by or a preponderence of passers-by attracts the vendor; their mutual support is an example of the effectiveness of an image of economic vitality in keeping the goods moving and attracting people.) These concentrations of vendors generally make up a very real community, and provide not only a commercial service but a bit of a carnival, too. And it is perhaps an image of economic vitality as a bit of a carnival which is most attractive to both the retailer and the casual shopper.

The success of a commercial area must be obvious to both the shopper and the retailer if that success is to continue. An image of success is generated by the presence of a large number of shoppers, diversity of stock, obvious movement of

* The equivalent of Boston's infamous Filene's basement exists in every city. Its cut-rate prices on out-of-style and damaged goods, and the greedy pushing and shoving which make up the action (action provided by both the poor and the obviously well-to-do) is hardly an indication of economic health nor of civilized behaviour.

I was recently at an 'economy' retail outlet (which was not at all economical) and the woman in front of me was telling her daughter of the three other such centres she would be going to that day -- they were at the far corners of the city, could only be reached by car, and all provided essentially the same goods at the same prices.

stock, and few closings. In addition to these on-site indicators, outside advertising and word of mouth which bring the area to public attention are important as generators of an image of economic vitality. It seems that everyday demand goods, such as books, food, clothing, trinkets, or money, rather than durable goods, such as automobiles or appliances, are most effective as sales items whose movement is obvious and which draw the greatest numbers of people to a place the greatest number of times in a year.

An image of economic viability is important not only to the retail oriented plaza or street; it is also important to the place which has no particular commercial activity: A non-commercial park which does not seem to have economically viable surroundings, which exhibits poor maintenance, or has a preponderence of 'down-and-outers' for users,* is unlikely to be very attractive to potential users. The lack of economic viability in such a case may be felt as neglect on the part of the city, or lack of appeal to economically active users -- in either case, the message is that no one

* A small but important distinction should be made lest we tend to eject all but the bourgeoisie: The down-and-outer as the ragged passer of paper bags of booze is a threat to others when he dominates a place. (His presence is not particularly bothersome, however, nor does it signal economic paupacy, when it is not predominant.) This ragged passer of paper bags is quite different from the pensioner who likes to watch people, play checkers, and kibitz, or the intellectuals or teenagers who like to spend afternoons sitting, reading, watching, or performing. This second group of itinerant occupants of city places gravitates to comfortable but not terribly polished places, and tends to signal some degree of vitality rather than stagnation in a place.

cares enough to put money or care into the upkeep and presentation of the place, and the result is that few people will be attracted to the place.

* * *

An image of economic vitality is important to the 'little' guys' such as the stroller, shopper, and the small-time one-outlet merchant. Without an image that economic survival is possible neither the shopper nor the vendor will appear. The economic 'big guys' too are susceptible to images of economic capabilities as much as they are to measurable economic tendencies. (In spite of their wish to be extremely rational and 'process responsive'.)

Economic patterns, especially at the level of high finance and of the stock market, exhibit a good deal of reliance on images of what is happening -- and surprisingly little reliance on what is measurably ascertainable. Economic patterns are a good example of the mechanisms of image assimilation and retention and they may help us to see how images become an important determinant of action. Personal transmission is a major source of image creation and valuation; personally transmitted messages have the greatest likelihood of obtaining high valuation and of bringing about action. This is exactly what happens in the stock market -- so much so that an economist, Pignon, has hypothesized that the real cause of business cycles is personally transmitted news and moods of optimism and pessimism, and not what might be considered

more reliable economic indicators.[39] We can see this dominance of the image, too, in the rise and fall of the stock market in response to the sickness of the president or escalation of the war: the Image of danger or success really has little to do with actual market conditions, but it is the controlling force nonetheless.

The need for equilibrium of images is also exhibited in economic patterns: The businessman does not want to disturb what have proven safe and reasonably profitable patterns; predictability and the attainment of predictability are the primary goals of the economist and analytical businessman. This desire for some image of predictability can work against normal market forces -- so much so that the economist cum sociologist Kenneth Boulding has proposed 'the first revised law of economic behavior: we will do today what we did yesterday unless there are very good reasons for doing otherwise' and the 'second revised law of economic behavior: the good reasons which are necessary if we do not do today what we did yesterday are derived mainly from dissatisfaction with what we did yesterday or with what happened to us yesterday'[40] (rather than being derived from mathematical analytical methods, radical innovation, imaginative fantasy, or greed). This is not to propose that market forces are unimportant to economic patterns; it is just to point out that economic

39. Kenneth Boulding, The Image, University of Michigan Press, Ann Arbor, Michigan. p. 88.

40. Kenneth Boulding, pp. 85-87.

action, which might be supposed to be purely a reaction to rational, measurable market forces, is responsive to images of what is happening as well as to what is happening.

The big-time investor or city councillor is most helpful in generating an image of economic success when he underwrites undertakings on a site. He generally will not take this step until smaller merchants and investors have begun on their own to develop and broadcast some degree of economic success. This underwriting by 'big money' can be very important to the little guy -- both as growth money and as a vote of confidence (ie., image builder to other big money) in the potential of the undertaking. All too often, however, the big time investor or city councillor does not underwrite locations until they are failing enough to be 'ripe for renewal' or speculation, or until they are successful enough to be taken over and monopolized.* In either of these cases the result is rarely so responsive to the real economic tendencies of a place.

* (A favourite practice of the 'syndicate!)

Postscript - Cullen's Words

These are some of the subtitles from Gordon Cullen, (Townscape, the Architectural Press, c.1961). They are a wonderful bunch of words: all dealing with spatial progression and characteristics. The words are included here in the hope that the reader might begin to think of and use them in supportive and responsive ways, and not relegate them to categories of aesthetic tricks.

Possession
occupied territory (shade shelter, amenity convenience)
possession in movement
advantage (line overlooking something else)
enclaves - eddies
enclosure
focal point ('it' is here)
precincts
'indoor landscape - outdoor room'
hereness
multiple enclosure (the cloister)
insubstantial space (mirrors, gothic cathedrals)
looking out
truncation (base hidden - to be discovered later)
change of level
netting (transparent enclosure)
silhouette
grandiose vista (all there)
screened vista (strengthen desire to search out)
closed vista
deflection (improvement on closed vista)
projection and recession
incident (entrap eye, do not let it slide to boredom)
punctuation
narrows
fluctuation
undulation
closure (not enclosure, but chance to stop)
anticipation
infinity
mystery
maw (the great black hole)
linking and joining
continuity
hazard

juxtaposition
immediacy
'thisness' (these objects <u>are</u> what they <u>are</u>)
seeing in detail
secrecy
urbanity
intricacy
propriety
bluntness
vigour
entanglement
nostalgia
exposure
intimacy
illusion
metaphor
tell-tale
animism
noticeable absence
geometry (as immutable imposition)
multiple use
foils
relationship
scale
distortion
trees
calligraphy
publicity
tact
texture
trim

It would be possible to enter a prolonged discussion on each of these qualities: how they can become effective supportive elements in our environment. I have described what seem the most important of these in the last section, and would urge the reader to attempt similar extrapolations on any of the above qualities which interest him.

PART II

ANALYSIS AND GUIDELINES
FOR A PARTICULAR SITE

Introduction to Part II:

Part II is an attempt to apply the thoughts and conclusions expressed in Part I to a specific site in Winnipeg, Manitoba. The site is near the intersection of Portage and Main and north of the Richardson Building, where developing commercial activity, existing inexpensive building stock, some benign corporate protectionism, a vacating warehousing industry, and proximity to the Red River provide for potentially exciting urban development.

The application of these ideas takes the form of a series of diagrammatic guidelines, rather than the perhaps more traditional form of a final design solution. These diagrams suggest desired object and activity relationships, and they form, in effect, an architectural-behavioural program for the site. The intention underlying the development of these diagrams is the encouragement of activity and use of the site. And the means for this encouragement lie in the development of images of invitation, activity, comfort, and economic vitality as discussed in the preceding sections.

The diagrams deal deal with optimization of: 1) object relationships, 2) micro-climate, 3) activity location, and 4) scheduling and regulation. The diagrams are preceded by a short discussion of the site: location, politics, use, and economic directions. The 'Object Relationships' diagram deals with location and quality of surfaces, and with location and quality of visual and auditory stimuli. The major

decisions presented in this diagram (such as road closings and general layout) form the basis for the following diagrams.* The 'Micro-climate' diagram opens with a discussion of means for improving micro-climate; the diagram deals with the maximization of winter solar radiation and of summer breezes, and the minimization of summer solar radiation and winter winds. The 'Activity Location' diagram deals with activities on the site: their locations and their presentation to the public. The 'Scheduling and Regulation' diagram deals, as the title suggests, with scheduling of events and regulation of the space.

The diagrams begin with the same assumptions concerning the layout of the site; there is, however, some conflict between them. This conflict is similar to that which exists in any design program: the job of the designer is to understand the program well enough to make decisions concerning priorities and synthesis; in order to help I have included a short discussion of synthesis, which follows the four diagrams.

* * *

I have attempted to present the 'solution' as a series of open-ended diagrams for a number of reasons: 1) The most important reason is a desire to break down the concerns into recognizable sets which are more easily analyzed and

* This interrelationship between diagrams may detract from their 'purity'. However, it has not limited the ability to consider each set of concerns in isolation, and has the advantages of 1) simulating real-life interdependencies, and 2) making synthesis easier.

optimized; by isolating sets of information for analysis and optimization we tend to guarantee the correctness of future synthesis. 2) By isolating concerns we can consider such 'non-architectural' factors as activity patterns and scheduling, and guarantee their more effective integration into final 'architectural' solutions. 3) If this document is used as information for the design of this particular site (taking into account the ego of the design architect) it will have greater affective potential as a series of resource 'facts' than as a pretty design proposal.* And 4), I am excited by the architect's potential as a generator of action: as one who points the way yet allows for changing forces and stylistic tendencies; the diagrams might be considered an exploration into generative programming.

The diagrams fall between such open-ended performance requirements as 'There shall be enclosure of this space' and such closed requirements as 'There shall be an arcade here with semi-circular arches at twenty foot centres with a cut stone wall beyond.' The diagrams refer to traditional place-making strategies such as wall, path, arcade, or fountain, and use a vocabulary reflecting those strategies. The use of these traditional strategies may act as a restriction to

* The presentations of these diagrams hopefully make enough direct architectural implications to make pictures in the mind and to turn people on; yet they do not restrict exploration in the areas of aesthetic and logistic synthesis (as would a purported 'final solution').

more inventive ways of providing sense-of-place, but such traditional strategies have the advantage of being meaningful to the greatest number of people and open-ended enough to allow exploration.

It should be pointed out that these diagrams represent one of many possible approaches to the design of the site as a public urban space. The solutions presented reflect one set of biases and concerns, and even that set of biases and concerns could evolve other, perhaps equally successful, solutions. However, that these diagrams cannot claim to be the only dogmatically correct approach to the design of the site does not limit their veracity and generative potential. And I would propose that that veracity and generative potential, especially in terms of attracting users, is great enough to warrant their use in the development of the site.

* * *

The diagrams impose major decisions concerning locations and activity relationships. Synthesis and aesthetic input can be in the realm of future planners and designers. If these diagrams are respected, future designers can exercise their own creative and aesthetic tendencies, and respond to developing economic patterns, with no detriment to the affective-attractive potentials which are being optimized in the following diagrams.

site analysis:

Research on the site has been general: it has involved, primarily, an attempt to understand the nature of occurring development, and the likelihood of future development on and around the site. The purpose of this analysis was not to come up with a series of specific -- and not particularly meaningful -- rental and land value numbers, so much as to find some reassurance that future development of an urban park on the site was in the realm of possibility.

Winnipeg has had a tendency to spread, with subdivisions overlapping eachother to the perimeter highway (approximately an eight-mile radius). This has meant a good deal of new building is going on in metropolitan Winnipeg; however, because of the city's relatively slow growth, population has actually decreased in central Winnipeg during the last census period. In order to attract development downtown the city managed to implement what it calls the downtown development plan:* The problems were to reverse the inertia of spread,** and to make it economically attractive to build downtown. The solutions were to: 1) allow a floor area ratio (10)***

* I wish to express thanks to Earl Levin, former chief city planner for Winnipeg, and the man credited with getting the downtown development plan rolling, for information about the city and its development patterns.

** I would propose that 'what everybody else is doing' and is proven safe constitutes a form of economic pressure which is as great as well-accounted profit potential; and will refer to that pressure as 'inertia'.

*** This ratio, the lack of controls on sizes of lots to which it applies, and a complete absence of any street-level definition of space, have brought an oppressive quality to this area which is little improvement over the parking lots which were there before; 'public amenity' seems to have evaporated, or flown to 16' above grade.

which was sufficiently high to attract development,* and 2) have the city pay for the development of parking space and of 'amenity' -- presumably parks, in what is now an area full of asphalt parking lots south of Portage Avenue. The production of amenity space serves two functions: it relieved the developer of the cost of this work, and it, hopefully, guaranteed the developer an environment more attractive to future tenants.

The plan seems to have succeeded -- at least in attracting building downtown. Since the city council became 'unicity' in 1972, however, the government's goals have reversed: the council now consists of representatives from what were formerly the suburbs. Those representatives wish to encourage development in all of their dispersed constituencies, and to raise their tax bases for what remain locally funded community services. (Apparently it is easier to convince oneself to spend money on necessary new roads and sewers than on frivolous urban parks and parking facilities.) In effect, the city has pulled out its financial support for downtown development.** There is some evidence, however,

* It is important to understand that this set of mechanisms is important to Winnipeg, where the central city was being evacuated, and ½ of the central area was parking lots. It was originally hoped that the floor area ratio would be lowered again when inertia towards the centre began to develop its own marketing pressure -- such a reversal, however, seems unlikely.

** Levin proposes that within 5-6 years the city council will recognize the importance of such support and re-institute a program of paying for amenity in the central city: There is a precedent for such financing; more importantly, there is some fairly hard evidence that the policies in question do work. When we consider Winnipeg, we must remember that is not a growing city -- the job is to attract what development there

that the inertia of the development plan has already become great enough to bring about new development in the area without specific amenity provision by the city; this kind of development off of Portage Avenue would have been inconceivable as little as five years ago.

** (cont'd) is to chosen parts of the city (through increased potential market, and through attractive cost reductions) It seems an acceptable conclusion that government support of amenity provision will be reinstituted, (if not in the downtown development plan area, in areas which have not yet been developed). Reinstitution of the policies in question is our main hope for financing any development on the proposed site.

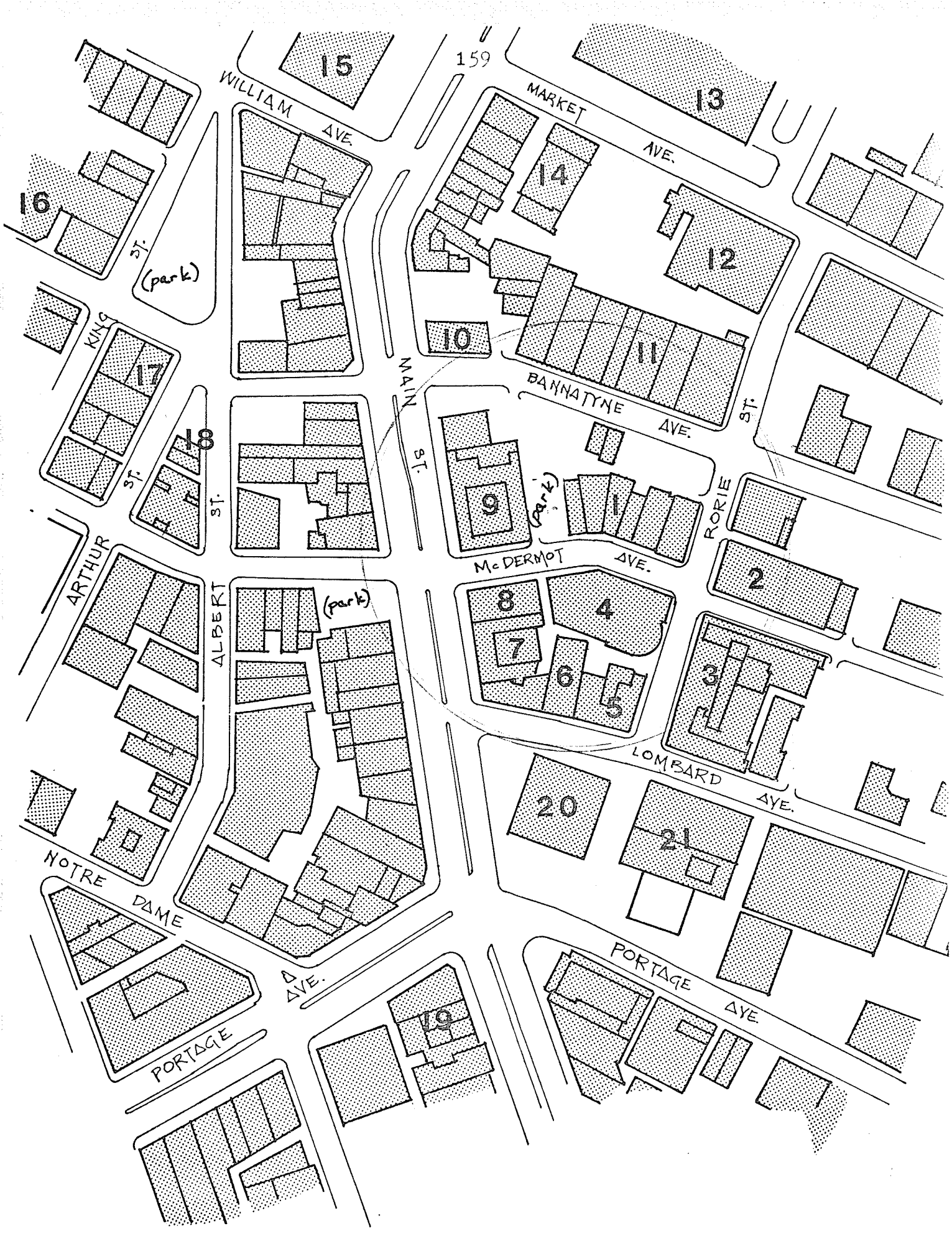
1 downtown development plan

2 the site

central winnipeg

north

1 mile


159
WILLIAM AVE.
MARKET AVE.
15
13
14
12
16
(park)
10
11
KING ST.
17
MAIN ST.
BANNATYNE AVE.
ST.
18
9
(park)
1
RORIE ST.
ARTHUR ST.
ALBERT ST.
(park)
McDERMOT AVE.
2
8
4
7
6
5
3
LOMBARD AVE.
20
21
NOTRE DAME AVE.
PORTAGE AVE.
19
PORTAGE
0
100
400
north

the site

Key: Site Map

1. 'McDermot block': storage warehouse, gallery, jeweller, studio, interior designer.
2. Railway express warehouse.
3. Grain Commissioners Building.
4. Parking structure.
5. Offices.
6. 'Old Bailey' restaurant - Oliver's Bar.
7. Bank.
8. United Grain Growers.
9. Offices.
10. Bank
11. Warehouses: light manufacturing, leather goods outlet, 'Monty's Warehouse' restaurant.
12. Manitoba Theatre Centre.
13. Centennial Concert Hall.
14. Playhouse.
15. City Hall.
16. 'Old Spaghetti Factory' restaurant.
17. Gault Building.
18. Gallery.
19. Location of future office development.
20. The Richardson Building - offices.
21. The Winnipeg Inn - hotel.

This discussion of the downtown development plan has been included in order to give some indication of the nature of development in Winnipeg. The site with which we are concerned in this report is outside the area of the downtown development plan. It is, however, an important location in the city: at the intersection of Portage and Main: north of the most prominent office building and hotel in the city; and near the Red River.

Besides its central location, the most attractive qualities of the site are its appealing scale, and the low rent available in the old brick warehouses which are being vacated as the railway begins to move out. A number of shops have recently moved into the area (two large restaurants, a leather goods outlet, and a clothing retailer since this report was begun). The move of small businesses to the site, and their apparent success, indicate that the site has potential as a developing retail area in central Winnipeg.

The block of buildings on the north side of McDermot (1) are owned by Richardson Securities -- the developers of the Richardson Building (20). They are holding these buildings and renting them at low rates to what they feel are attractive tenants. (So far, there are: a silver craftsman, the Fleet Gallery, an interior-design-furnishings group, and a group of artists silkscreening in the basement.) The provision of cheap space and selection of clients is supposed to act, in advertising parlance, as a 'loss leader',

ie., a money-loser which is supposed to increase potential profits elsewhere. In this case, Richardson Securities wish to create a buffer of attractive business to the north of their building -- this buffer, it is hoped, will put the city's most prestigious office building in an attractive neighbourhood, and not butted up against some 'slummy old warehouses'. This situation can prove helpful in the development of the site: one of the largest blocks of private money in the city is distinctly interested in the future of the site.*

There is little market in the city for new office space of the quality or prestige of the Richardson Building, and there is little likelihood that the site will be the location for any large office building development. (It should be pointed out that there is a good deal of small low rent office space on the site, and there seems to be a continuing market for it.) The 'Trizec' development, a huge hotel-office-commercial complex (19) (3) is being contemplated on the southwest corner of Portage and Main. This development will probably take a number of years to complete (the Richardson Building was 'on the boards' since 1929), and will provide for most developing need for new prestigious office space.

The Trizec development will probably have an underground commercial street linking with the existing facility beneath the Richardson Building and the Winnipeg Inn. If this link

* James Richardson himself is MP for Winnipeg, and his influence and interest in the site will certainly not hurt the area's development potential.

does develop, it will generate a good deal of pedestrian movement near the site, and some continuation of that link on to the site would insure a flow of people to the site.

The warehouse at the jog in McDermot (2) is now a handling depot for railway express. The owners have contemplated altering the building to a large boutique-house, and they had preliminary design work done* two years ago. They have since stopped work on the project, but subsequent growth of shops in the area and the owner's already-established interest in such a development may result in its revival.

Most of the brick warehouses in the area are in good structural condition. They are now renting, as warehouses, at $.50/sf. As soon as any improvements are made -- eg., in electrical and plumbing renovation, the provision of exits necessary for commercial use, and simple re-finishing and re-glazing -- that rent increases substantially; we should not think of these buildings being available at $.50.** The rental increase is not so great, however, that it becomes prohibitive -- especially if merchants begin to recognize the area as a retailing centre. The rentals, in any case, remain much lower than those along Portage Avenue, or in the city's major shopping centres. The situation is similar to that in Vancouver's gastown, where warehouse renovation has proven economically attractive.

* (By Libling Michener)

** (Information from Earl Levin)

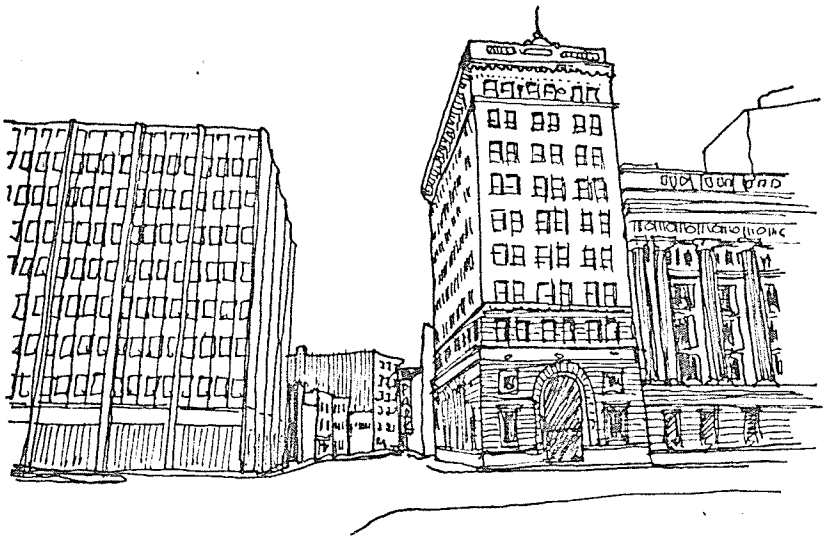
Residential development in the area will probably cost more than simple commercial development. And it appears that some economic aid will be necessary -- probably in the form of low-interest mortgages from the CMHC. A mixed development, residential and commercial, is being proposed in the area for the Gault Building (17). The Gault Building is a large brick warehouse similar to those on the site. The development proposal is for 3 stories of commercial space (boutique and small offices), and 4-5 stories of bachelor and 1-bedroom apartments. There will be no parking facilities -- the hope seems to be that either the city will pay for parking in the area, or approve a variance on the grounds that a low percentage of people in the centre of the city will need automobiles. The developer has confidence that a market exists for this development -- probably young executives and secretaries. The problem is in financing. A request has been made to CMHC for a low-interest mortgage (95% mortgage at 6% over 50 years), under its experimental housing program. To date, this program has only funded developments which are 100% residential. The developer indicates that, with current rental potentials and renovation costs, the development cannot succeed without a mix of income activities; and he will not of ahead with his proposal if it is restricted to 100% residential use. (It seems arguable that if the CMHC is indeed interested in the development of urban housing it must accept and encourage development of mixed use buildings.) The

developer is hopeful that both the zoning variance and the CMHC loan will be approved. If they are approved they will set two encouraging precedents for the development of our site. The developer's confidence in the existence of a market for 'young-exec' and young married housing is also encouraging.

I have been discussing, in fairly general terms, the nature of development in central Winnipeg and on our site. The main point of this discussion has been to demonstrate the potential of the site as an evolving retail and residential centre in the city -- evidenced by the amount of central-city building development which has been occurring, and by the evolution on and around the site of retailing and restaurant outlets. Besides these economic and growth conditions, there are some qualities of this site which make it important and worth preserving. No claim is being made that the old warehouses on the site form a collection of great architecture; in fact, they are rather ordinary turn-of-the-century eclectic brick and timber buildings. Great architecture, however, is not the only thing which deserves preservation. These buildings do several things -- most important: they create a fabric of spatial sequences of a consistent and urban scale; they provide a sense of the past, of a time when men did things differently, of a time when Winnipeg was a different place -- but not really different; and they have facades with a wonderful amount of careful

detail and decorative excess which no contemporary building would have. All of these attributes: urban fabric, historicity and detail, become important in a city which suffers from an endless similarity of scale and detail, and in which the only build-up from that suburban scale promises to be streets crowded with highrise buildings.

There is one building on the site which breaks down the qualities which the older warehouses begin to develop: the new parking lot on the south side of McDermot. This parking lot also interferes with what could become an exciting penetration of pedestrian movement from the south. The scale of the parking structure is not itself offensive; the wall defines McDermot Street in a comfortable way. The imposition of that wall of impenetrable space which is used only for cars, however, makes McDermot a one-sided place which becomes rather uncomfortable. In response to this I would like to propose two options: 1) for the parking lot to have a 30' deep layer of shop and office space 'tacked' to its north and east sides -- which would make McDermot a narrow pedestrian street with shopping facilities on both sides, and 2), for the parking lot to be removed, and to put parking facilities underground. The first option would probably provide fewer bureaucratic problems, and it would probably cost less. The second option is not unreasonable, however, especially if we remember the potential money and influence interested in the improvement of the site. The removal of the parking structure



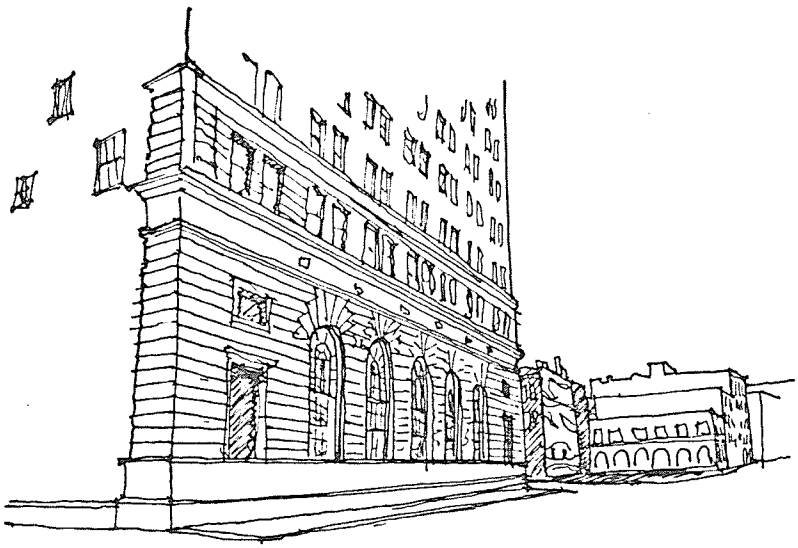
Looking east on McDermot (across Main)

North of the Richardson (without the Bank of Commerce's concrete sign in the foreground).

the site from outside...

Looking east on Bannatyne:

a lack of closure



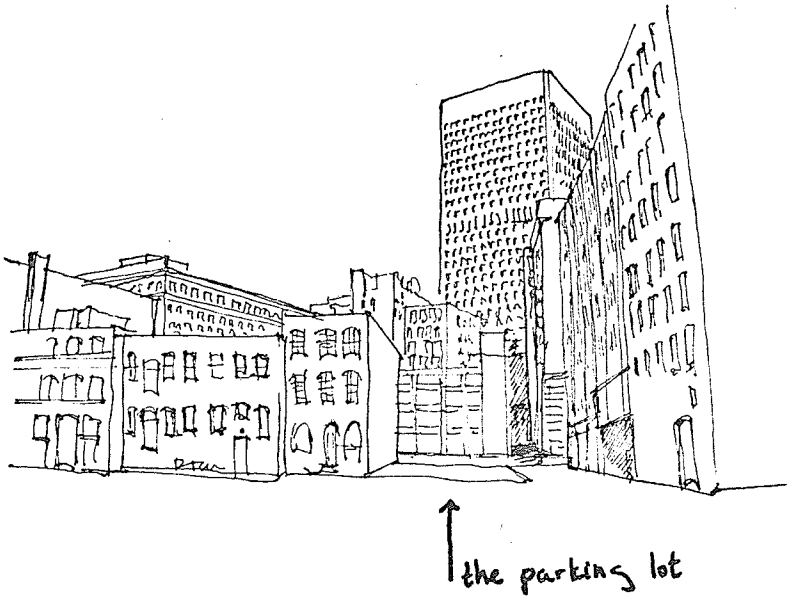
Looking west on McDermot
• the park and mural are on
the far corner

Part of the block of buildings
on the north side of Bannatyne

... and inside

The group of buildings on the north side of McDermot

Looking south from Bannatyne: the Richardson Building is very present - but it does not overwhelm.



The north side of the McDermot block (without telephone poles and fire escapes, a handsome pattern of its own).

would leave an open area which we could begin to call a plaza of appealing scale, and easy penetrability on all sides (most importantly from the south).*

The Watts report proposed an expressway running north-south along the Red River's west bank, with a large cloverleaf interchange to the east of the site (and engulfing part of the site). The current mood, evidenced by Toronto's Stop Spadina successes and San Francisco's bay highway halt, is against expressways. Winnipeg's agile mayor has reflected this mood in recent proclamations, and the city council recently refused monies for the proposed expressway. I applaud this direction and hope that it is not just a temporary reactionary fad.

Winnipeg already has a number of major arterials which meet at the intersection of Portage and Main: Portage Avenue, Main Street, Provencher Blvd., and Pembina Highway, Notre Dame and Henderson Highway. These roads do not really bring people to Portage and Main; they connect the outskirts of the city, and people just happen to pass by Portage and Main on the way. A new expressway in the proposed location would tend to exaggerate this condition: the city's centre is just something one passes through. If the city council is really interested in the development of its downtown as something special it will attempt to exaggerate the fact of coming to

* Either of these options seems acceptable. In any case, it seems most important to somehow bring life to that lifeless, and rather oppressive, side of the street. Concern for the parking structure has been expressed here rather than in the later design sections because it is a major fact of the site, and because the subject of its possible removal is as much economic as behavioural or aesthetic.

the centre, and not of just-passing-through the centre. Those who wish to by-pass the centre should do so somewhere else; the 'inner loop' system, if it could become a system of on-grade arterials and not a super-expressway, seems an excellent response to Winnipeg's problem of a centre which is overloaded with traffic, but whose traffic is always just passing through.

Another reason for protecting the area to the east of the site is that it is close to the river. The railroad is moving out, and with it most of the heavy warehousing activity in the area. This vacant land, with proximity to the river and to the city's centre, is surely too valuable to give over to ribbons of concrete -- especially in a city which has for too long turned its back on its two rivers.

The city's parks department has a substantial budget, and may prove the party most able to pay for the development of the site. The parks department is buying up downtown riverfront property as it comes up for sale. Their intention is to create a linear park along the river. The desire to take advantage of the riverfront is a pleasant change from past policies. But the isolated quality of the river parks which now exist, and their habitation by derelicts instead of the imagined Sunday stroller,* would probably only be

* I have never been to the river park in front of the legislature without either being approached by a down-and-outer or having to watch one urinate. (Though I know some people have not had the same experience).

exaggerated by the proposed park extensions. In the face of this isolation, it would seem that the appropriate policy would be to encourage development along the river -- both residential and commercial -- which related more strongly to the river. Parks could form pleasant interludes and points of access. It must be realized that it is people using parks which makes them attractive.

If the city were to change its policy to just buying 'interlude' parks along the river, and to requiring that private development make some provision for public passage along the river (through tax and zoning incentives), the riverfront might become a lively, inhabited, and very beautiful place.** All of this would be much less expensive to the city. And, with the money not spent, the parks department would certainly be in a position to invest in other park development in the city -- parks which have more potential than the riverfront parks are ever likely to have for use by large numbers of people.

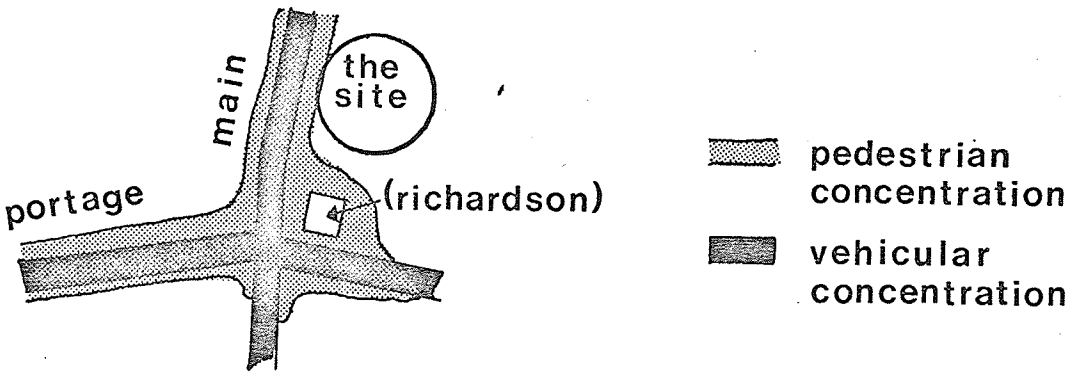
There are, at present, few people using the site at any given time of day. Yet the site's growth as a retailing and entertainment centre, and the likelihood of housing development in the area point to greater and greater numbers of people living, and just casually being, in the area. This developemnt is worth noting, and it is my hope that the following studies can point to ways of encouraging some fact of 'people-being-there-ness'.

** And what other goals might one have for parks?

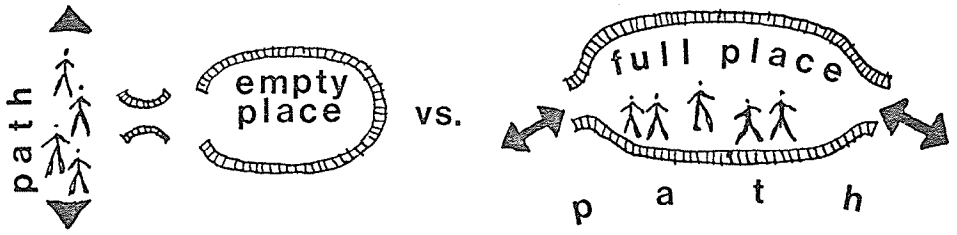
object location:

Organization:

The site is located off of the main pedestrian and vehicular paths in the area; movement is greatest to the west on Main Street and to the south around the Richardson Building:

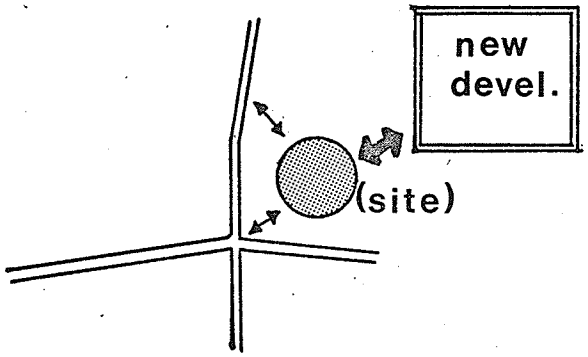


In order to encourage pedestrian movement on to the site,* we must enhance the image of invitation which the area conveys. As mentioned in the discussion of invitation, one of the most potent invitors is the inevitability of entry as we pass from one place to another. One of the most consistent characteristics of peopled public places is that they are not isolated dead-ends; people move through them while going from one place to another:

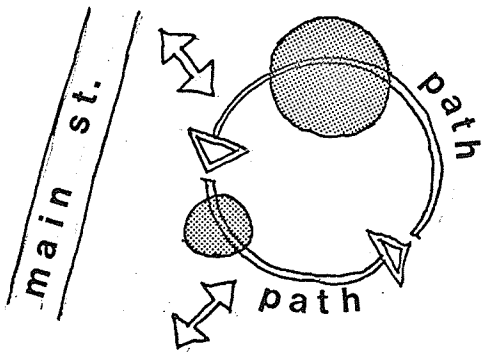


* Even though there is little pedestrian activity on the site now, the site is worth developing as a pedestrian space because of developing retailing patterns, because of the building stock available, because none of the existing areas of pedestrian concentration are used for anything more than corridors and bus stops, and because there is a huge stock of pedestrians in the area every day for whom such an urban place would be a major amenity.

The main problem with our site is that there is nothing particularly attractive to the pedestrian to the east of the site; the site is a dead-end to the people passing by. The most important thing we can do in the development of the site as a public urban space is to make it not a dead-end: We can do this by either: 1) making the site a stop-along-the-way to other things to the east:



Or, 2), we can make a loop through the site, so that there is no arrival at a dead-end at all:

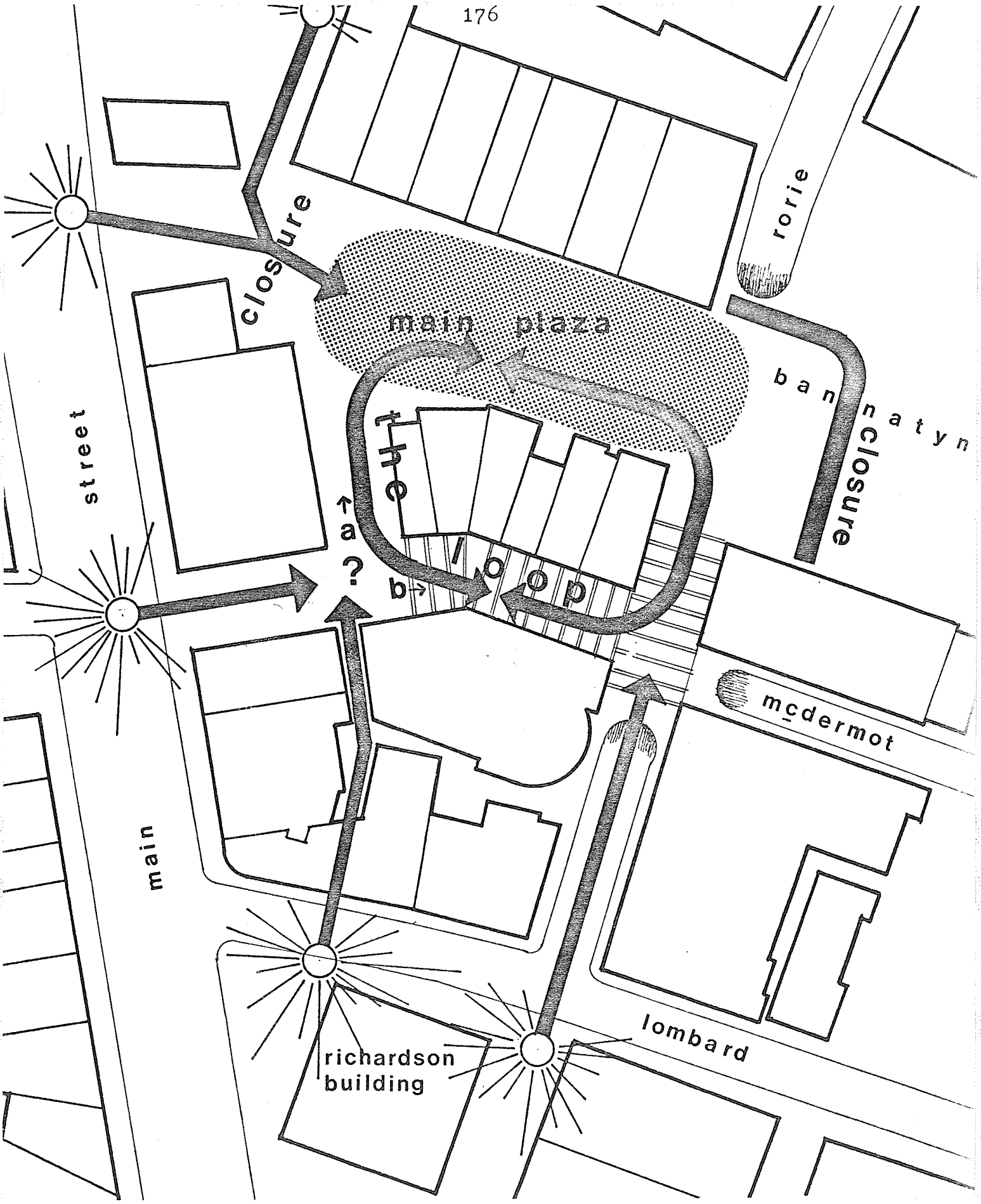


The first solution is beyond the scope of this paper, and would require substantial outside development. The latter solution, however, even though it somewhat warps the diagram of the through path, fits the site conditions and shows some promise of overcoming the problem of the dead-end.

The loop, as a pedestrian path through an urban park, is enhanced by the restriction of cars. By closing McDermot, Bannatyne, and Rorie streets where they intersect the site we can make the entire site a pedestrian domain; and by allowing Rorie to continue under the loop (see 'organization' drawing) very little disruption to existing (very light) traffic patterns would occur.

Alone, the loop would exist as an isolated path beginning and ending nowhere; advertisement, invitation, and obvious and easy entry are necessary to get people to come and explore the path. The advertisement could take many forms; the goal should be to attract attention, to arouse curiosity, and to make entry easy and obvious. The paths to the loop would exist wherever large numbers of outsiders are likely to exist, and wherever existing streets or alleys would allow access. In particular, advertisement and access should concentrate on Main Street, around the Richardson Building, and around the theatre section to the north (see 'organization' drawing). People should become interested, begin exploration, and arrive in the loop; no matter where they come upon the loop they will be part of it, and part of its procession.

The greatest number of people will probably arrive from the southwest entries. They will arrive at a minor square (the question mark on the 'organization' drawing), and they should sense the draw of the loop -- and a certain tension between the two possible directions they can go to become



organization

0 75 150

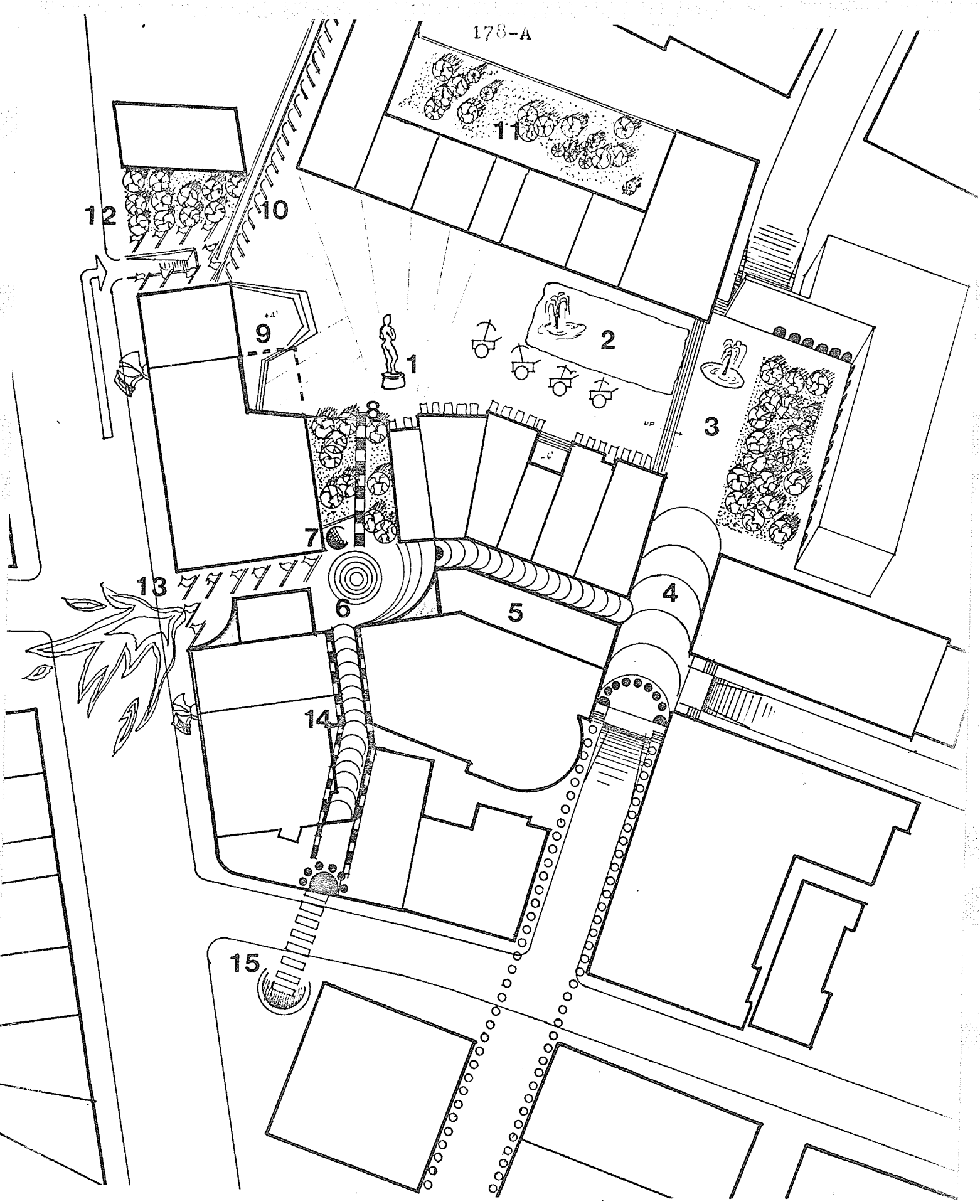
part of the loop ('a' and 'b' on the 'organization' drawing). This 'draw' would be accomplished through the use of heightened visual activity, suggestions of what is beyond, and apparent ease of access. (This extra invitation to join the loop is important at this minor square because here it is easy to be drawn back out of the loop before one has even begun to explore it. People arriving from other points have arrived at the loop when they have arrived on the site, and there is not so much need to keep them from breaking away again.)

The entire site should be an identifiable area. Parts within it would be parts of that whole: not just isolated occurrences. This is probably guaranteed by the existence of the loop, which becomes a 'path through the park', and makes the processes of movement through the park coherent. It is important to make the parts of the park identifiable yet supportive of each other: it is important that one feel that he is in no part of the park, yet he must be able to know of the other parts around him. It must be emphasized that the comprehension of the particular place, or part, is very important to one's comfort in the environment, and to his ability to relate to the processes of being in that place, and of coming to be in other places.

The main plaza (shaded area) would be north of the McDermot Street block of buildings. This plaza is farthest away from the largest number of people coming from the outside.

In order to get to the main plaza those people would pass through other parts of the site which might be less attracting -- thereby peopling and getting to know these other places on the way. This location also has the advantage of requiring the least amount of destruction to existing buildings, and of taking advantage of the handsome facade of the block of buildings on the north of Bannatyne. Closure at the east and west ends of this plaza (see 'organization' drawing) becomes very important in making it an identifiable place, a place to stop... and start.

The other main parts of the loop, along McDermot and Rorie, would be a more linear mall with retail outlets on both sides. This mall, with its linearity, would speak much more of movement to somewhere else: encouraging the greatest at-rest-ness at the main plaza.



objects

0 75 150

key


Large, highly noticeable entry way.


Bright lights.


Loudspeakers broadcasting activities on the inside.

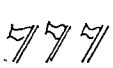

Fountain.


Large piece of sculpture.

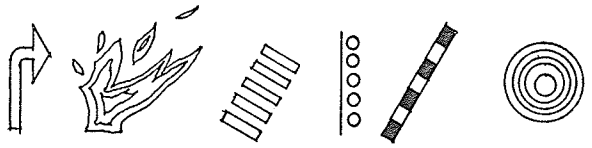

Trees - with grass below.


Vendor (colourful).


Awnings (colourful).


Flags (colourful).


Covered arcaded walkway.


Pavement highlighting (schematic).

1 Large sculpture at focal point of main square.

2 Large fountain and pool.

3 Raised area with lots of greenery & strong closure by new building.

4 Glassed-over mall.

5 New retail building attached to parking structure.

6 Sub-plaza at main point of entry - decision point.

7 Toilet facilities.

8 Strong link between main plaza & 'decision point'.

9 Stage - note change in existing building to form appropriate backdrop.

10 Freestanding arcade: gateway, enclosure & access from theatres.

11 +20' planting area for apartments above.

12 N.W. entry - cars, softness of trees, action of flags, noise of loudspeakers.

13 W. entry - noticeable pavement, welcoming building shape, loudspeakers.

14 Enclosed link from Richardson Plaza.

Leaf 180 omitted in page numbering

Attraction and Invitation: Ease of Entry

Playgoers: The only time there is a traffic overload around the site is after theatrical performances at the three theatres just to the north (the Manitoba Theatre Centre, The Playhouse, and the Centennial Concert Hall). Traffic should be inconvenienced even more, and this is accomplished by the closing of Bannatyne and McDermot. The relative inconvenience of waiting through an even worse traffic jam should encourage the decision to wait until the traffic thins down, and to walk over to the park to have a coffee, or a drink, or a late meal, or to do a little window shopping. A covered arcade (10) would extend north to Market Avenue, and end there with a burst of neon. It would remind the playgoers of the park to the south, and show them the way.

From North Main: Main Street to the north of the site is one of the poorer, and more dreary, areas of the city. A patch of green is one of the most inviting things one arriving from there might encounter (12). Flags would be flying, and loudspeakers would be blaring out to passersby the sounds of any activity on the inside. The arcade from the playhouses (10) would continue south, and form a strong but penetrable gateway into the main plaza -- providing a firm sense of arrival.

By Automobile: Pavement highlights, the noise of loudspeakers, the sight of lights and flags, and the ease of finding access to underground parking (12), should all combine to make the driver feel that there might be something here to discover.

From South on Main: A large number of people will probably be arriving here (13). Because of the large number of prospective customers, this is the location for the most energetic attempts at advertisement and invitation.* A strong pavement highlight will attract attention. The loudspeakers will be signalling, and the flags will be flying. The flag poles form a highly penetrable line, yet a line which once crossed gives a sense of having left Main Street and of having entered someplace else. The building shape and colour should attract attention and encourage the ease and comprehensibility of continuing the process of entry and exploration.

From the Richardson Building and the underground mall: (15) There is a large pool of pedestrians using the underground mall of the Richardson Building. If we make it easy for these pedestrians to find their way to our park we cannot help but encourage use of the site. A large exit should be

* Because the people coming from the south tend 1) to be more affluent, 2) to be perhaps more 'switched on' to the prospect of an urban park, and 3) to have green places to go home to, this location can have more hard, flashy advertisement than the pedestrian entry from the north mentioned above.

made from the underground mall. This exit should be unobtrusive from the surface (because we do not wish to advertise the underground mall, but to allow people to come out of the mall). The exit should open directly to the entrance across the street to the north. That entrance, which is the entrance to the existing building, should be generously supplied with lighting and signage, and should be rebuilt as a very obvious large hole into which one might enter. This entry would lead to a covered mall with shopping facilities on both sides (14), which would in turn open on the small plaza (6). The importance of the shopping facilities is that they will tend to keep the tentative explorer from feeling that he has trespassed on private property as he procedes to the park.

From Rorie Street: It is unlikely that many people will be entering along Rorie Street from the south to the main covered mall (4). That entrance will not be the location of major advertisement. Those who pass by, however, should have their attention drawn to the mall, which would form a strong wall to the north. Pavement highlights should lead to the mall, the mall facade should be well lighted, especially as an attraction to people in the Winnipeg Inn.

* * *

The Small Plaza (6):

The greatest number of people will probably be arriving at the loop at this location. It should be recognized as a

place, but not as the end place; it should be a strong quality as an identifiable location, but it should not give the impression that when one has arrived there one has finished his experience of the site. Some strong central pavement and definite closure should help to give a sense of place. The ways back out (through the small mall (14), and the McDermot entrance (13)) should be fairly secure and closed. (cf. 'organization' drawing) The entrance to the main mall and to the main plaza to the north should be quite open and noticeable: The drawing shows the addition to the parking structure (5) stepping back and allowing easy entrance to the mall. To the north would be a highly visible path leading to the main plaza (8). The path would lead through a green area with grass and trees; the green would appear as an especial relief after all of the hard surfaces, and would work in league with the highly visible path in attracting one toward the main plaza. There should be a public toilet facility on the site, both as an attractor and as a necessary convenience. It should be known, and should be in a noticeable but unobtrusive place. It would be located on the small plaza (7), and would have entrance doors to the north (such a door location would be inoffensive to the plaza, and would help to 'get people going in the right direction'). This location would work well because 1), it would be in a relatively transient location (reducing embarrassments of being on view), 2), it would be where a good number of people would know of its existence, and

3), its use would not interfere with the goings-on in the main plaza.

The Covered Mall:

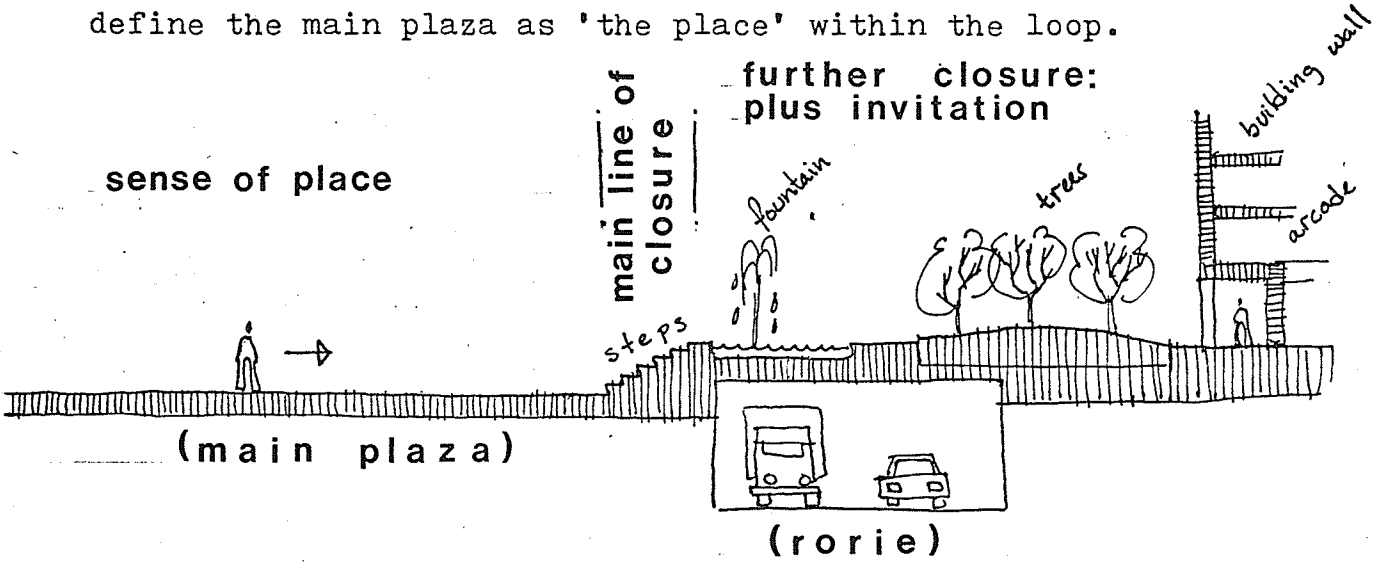
The covered mall is developed as a lineal shopping street; it forms the 'non-static' part of the loop. The mall would be weather protected in order to encourage casual movement and 'time to look'. A line of shops would be built on the north side of the parking structure (5) which would leave a 20' walkway -- narrow enough to encourage two-sided shopping, and to seem full of people with just a few there. The main galleria is at the far end of this mall (4). It would be a strongly recognizable place along the loop. Even during the coldest weather it would be a piazza warm enough for casual sitting and drinking. It would be a minor node in the loop, with retailing activity spilling out on all sides -- especially from the Railway Express Building directly to the east (the 'Boutique House'). The main galleria would open to the main plaza to the north, and passage in that direction would be very easy. One would see water, and the steps spilling on to the plaza to the left. The weather protection, the increase in scale, and the amount of retailing around its edges would all combine to make the main galleria a special and comprehensible space in the loop. And at the same time the ease of access to the north, and the hints of more to come make one remember that there is more to be seen.

The Main Plaza:

The main plaza is bounded by the Bannatyne block on the north and the McDermot block on the south. It is important to provide closure to this space; on the west the arcade from the playhouse (10) acts as a gateway and a wall. A screen of trees beyond (provided as invitation to North Main) exaggerates the sense of separation it provides. To the southwest the treed area acts as a closing wall: attractive yet noticeably someplace else. The statue (1) is located at a focal point which defines some special place in the plaza. At the same time it provides a good deal of closure: The statue should have a perceptible front and back (whether it is objective or non-objective), and the front should face north and slightly east: People coming from the south will come out on the sculpture's rear, and will feel compelled to come around to its front to see it 'right' -- and then be in the plaza. Those coming from the north or east will approach the sculpture from the front, and tend to stop at its front -- or at least be aware of some violation of its front side as they pass. The sculpture really becomes a focal point: the loop stops here from either direction: that halt says 'this is the plaza'. As a behavioural hypothesis this location may seem rather tenuous. It does seem important, however, to underline some part of our loop as here, and everything else as coming to or going away. The main open part of the plaza would be presided over by this sculpture,

and the sculpture should help to give the large open place some sense of connection or habitation even when it is empty.

The main line of closure to the east would be the steps up to the higher level over Rorie Street (3) (going up 4' to 6')* These steps would delineate a fairly strong line beyond which would be someplace else. This quality of closing yet allowing further places to be seen enhances the continuity of the loop and, at the same time, helps to define the main plaza as 'the place' within the loop.



The closure of the steps is reinforced by the higher level fountains, by trees beyond, and, with most finality, by the new building at the east end, with its arcaded ground floor. This stepping of closing elements keeps the space from going away forever, and provides at the same time a highly penetrable and inviting extension of the loop.

Water is one of the most attracting elements we can put in the environment. People will come to see it and to relate

* These steps provide closure, and also allow Rorie Street to underpass the loop.

to it -- especially if it is active water, and if it is located where people can stop by it and feel that they have arrived at a place (cf. Boston City Hall, and Toronto City Hall plazas). The main body of water is to be located on the main plaza farthest from the main pedestrian arrival points (2). The water acts as an incentive to pass and know other, less attracting, places. And it is in a comfortable stopping place -- not just in the middle of a space: it is firmly bounded on the north by a large building, on the east by steps and more water, and on the south by vendors and more building, and on the west it sits firmly regarding the main open area of the plaza -- it becomes a place to be a safe audience.

The open area of the main plaza is nearest the main pedestrian arrival points; this proximity increases the chance that any activity on the plaza will be seen by curious explorers; and this in turn increases the image that the place is a centre of activity. This main open area is defined by the sculpture (1), by the edge of the water (2), by the arcade to the west (10), and by the main Bannatyne block to the north. Because of these strong boundaries it is a recognizable place within the loop. When special activities take place they will generally happen on and around the stage (9). People will pass by in order to go to other parts of the park, and will be more likely to get involved in the activities on the stage than if it were at the far end of the

plaza. This open area is the focal point of the loop; it is the largest open space, and the path through the site really leads to it from both directions.

Vendors will locate to the south of the main area of water. They are a colourful and varying attraction, with a good deal of romantic appeal. They help to define the loop as a street with peripheral attractions, and exaggerate the special relief provided by the main open space to the west.

Ice skating, especially when one can keep warm, is one of the most enticing winter activities -- for both participants and observers. In the winter the vendors would be replaced (or covered) with a warming hut opening directly on to the water, and providing access from the south. This provision of the warming hut is important 1) as a source of physical comfort and 2), more importantly as a sign of welcome to the public.

The main green area (3) would become an attractive place to sit and rest; it is a place to get away for a moment. It would be located at the far end of the plaza: 1) because it would not act as a very powerful draw into the site if it were at the entry to the site, and 2) to act as a buffer between dwelling units in the new building at the east end of the plaza and the activities of the plaza.

* * *

The block of buildings along Bannatyne would be cut out from the north to make a 'U' and court at approximately 20' above

grade (11). The main facade would be renovated and be the dominant element of the plaza. The 'U' shape would allow for apartments at the upper levels, and the new court would provide attractive relief from the urban intensity of the main plaza.

* * *

The order and location of all of these objects might appear disparate to the explorer. But they would all reinforce some feeling that there is something here, and that there is activity ... and rest ... which would be worth coming back to see again: To see again when it would be different, and the same.

Objects built according to these guidelines should be built with care: not some sterile care of the good draftsman so much as care that this place become a wonderful and special place. Joy in making this place should be encouraged: joy: not conceptual coherence. People can begin to <u>feel</u> joy; they cannot feel conceptual coherence. The image of the place can be improved considerably by some sense that people were happy, and not just stylish, about what they have done. And that image is much more attracting to people than the sterility of architectural professionalism and consistency. Joy, of course, cannot be legislated; but if it were recognized as an important ingredient during the early stages of development, it would have a much greater chance of survival against the exigencies of conceptual coherence and economic necessity.

General:

Seating: - freestanding chairs (with backs!) should be available everywhere; it should be obvious that this park is a place to come and stop.

- fixed seating should be located around (but not encircling) all green areas, and around the main bodies of water. This seating should be either long benches or seating for two; lengths accommodating 4 - 8 people are not used very comfortably by unacquainted groups. These benches should have backs, and even armrests where possible. Double purpose retaining walls and edges are certainly acceptable as benches.

- And a sign from the Toronto Parks Department: 'Please walk on the grass - Vous etes prié de marcher sur la gazon'.

- Any excuse for decorative excess in the design of elements, either fixed or movable, is welcomed.

micro-climate:

In Part I I discussed the importance of comfortable micro-climate in the development of an image of comfort. This importance is highlighted in Winnipeg, with its extreme temperature range of -35^{o} to $+100^{o}$, and its long winters.

The site poses two particular micro-climate problems: 1) winter winds are funneled along the main east-west streets (McDermot and Bannatyne), and 2) what sunlight manages to penetrate to the site in the winter provides very little radiant heat. In the summer the problems are just the reverse, though not so severe: southeast summer breezes should be encouraged, and because of the high sun angle summer heat radiation is great and should be minimized.

There are two areas of concern in this study: solar heat radiation, and wind, and it is the control of these which will provide more comfortable micro-climate. In the development of the micro-climate diagram I present ideas about these two concerns with little or no concern for practicability, economics, or activity patterns; the concern is with micro-climate and objects which might diagrammatically improve micro-climate.

Heat Radiation:

Solar heat radiation is a relatively straightforward concern: one can get the sunlight in or isolated, either reflect it or absorb it, and measure the btu's which are gained or avoided. In the diagram I have attempted to develop a system for getting the sun in and isolating it when and

where it is important; this has been done through the placement of reflective and absorptive surfaces. (These reflective and absorptive surfaces are mirrors, sun-shades, black and white surfaces, and trees.) I have not gone into the measurement of actual btu build-up; rather, I have attempted to increase or decrease that build-up where it seems important to do so.

One important piece of information is that during December and January the sun's rays in Winnipeg do not have enough heat energy to provide any measurable heat build-up. In the face of this fact, I would propose two ideas: 1) the psychological warmth of the 'fact of sunlight' is important even if there is no actual btu build-up, and 2), the removal of winter wind coupled with the presence of direct or reflected sunlight will make the outdoor spaces acceptably comfortable down to about -15°.* 'Acceptably comfortable' does not mean to intimate that there will be sunbathing in the plaza. With sun and no wind, however, people can ice skate comfortably, and walk outdoors between separate buildings without encountering the bitter bite of Portage Avenue. The comparison between this protected environment and others not so protected should itself prove inviting to pedestrians.

* These are some personal observations: 1) Winnipeggers walk around outdoors with uncovered ears and hands at temperatures which would keep any one else indoors; 2) When the wind is not blowing I can walk 3 miles at -15° and not feel too cold; and 3), There are not really many days which are colder than -15°.

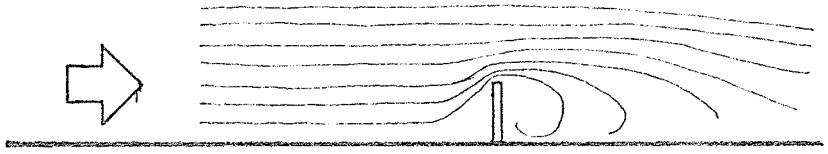
Wind:

The study of wind, unlike the study of heat reflection, has not reached a paradigmatic level. Extrapolation is only possible through empirical analysis: not through the use of some refined body of theory and formulae. That empirical analysis can be done 1) on the particular full-size building(s) involved, or 2) with highly refined wind-tunnel testing.

The most definitive wind analysis work has been done in three areas: 1) wind loading on large buildings, 2) windbreaks -- esp. agricultural, and 3) turbulence patterns around and through generalized objects. The first area does not concern us; it is a structural engineering concern. Agricultural windbreak information can prove useful to us if we can begin to think about windbreaks for people. Turbulence pattern testing is our first resource in developing arrangements of objects: which might then be tested in the wind tunnel, refined, and built.

Windbreaks[1]

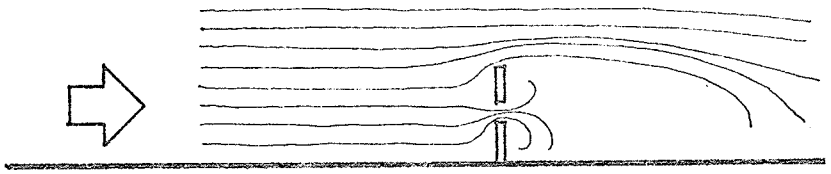
This will be an attempt to describe as concisely as possible the most important findings of windbreak research.



1. Kevin Lynch, Site Planning, The MIT Press, Cambridge. pp. 91-96.

and (over)

The basic wall-windbreak causes roughly the turbulence pattern shown above. Air is almost still just to the leeward side, and full wind speed develops again at a distance of about 5 times the height of the windbreak.



Some penetration of the wall may reduce the eddying and also relieve some of the low-pressure characteristics of the area just to the leeward side. The penetration, because of developing minor wind turbulence, actually begins to 'use up' the wind energy, and full wind speed is not regained for a much greater distance. The more penetrable the windscreen (to a point: 35%-50% of area), the greater will be the absolute reduction in windspeed. Plants provide this penetration well, are pleasant, give shade, and they are penetrable by the pedestrian. "Plants alter the form of the surface, increasing the area for radiation and transpiration, shading the ground, braking air movement, and trapping air ... The net result is a cooler, more humid, more stable microclimate."[2]

1. (cont'd) Victor Olgyay, Design With Climate, Princeton University Press, Princeton, N.J. pp. 94-98.

2. Kevin Lynch, Site Planning, p. 95.

Conifers, because they have foliage to the ground (and because that foliage exists year-round), are our most satisfactory windbreaks -- especially in winter. Belts of trees 3-deep can give wind protection of more than 50% for distances of more than 10 times their height.

Deciduous trees are also good windbreaks: especially in league with conifers. The deciduous tree loses 40% of its windbreaking efficiency when it loses its leaves. It (poplars excepted) does not have foliage near the ground, and the area just to the leeward may have higher windspeeds than exist on open ground -- (though it must be emphasized that this does not affect the total wind-slowing qualities of the deciduous tree).

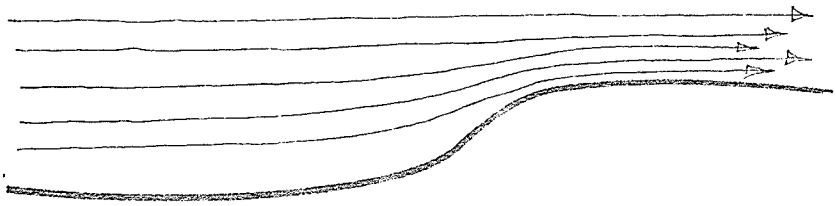
We must also consider surfaces as windbreaks. The ground creates a good deal of friction for air movement, and we can begin to use this in the development of windless places: by 1) putting people at the level of the ground, and 2) making the walls themselves act as greater wind friction, ie., wind eddying, devices.

If we consider that wind at 6' above the ground is travelling at 100% velocity, the wind at 3" above ground is at 30%, at 6" it is at 50%, and at 3', it is at 80% of full velocity.[3]

3. Kevin Lynch, Site Planning, The MIT Press, Cambridge. p. 91

Wind can be travelling more slowly on the leeward side of a change in level:

Or it can be travelling faster on the leeward side:



Wind patterns

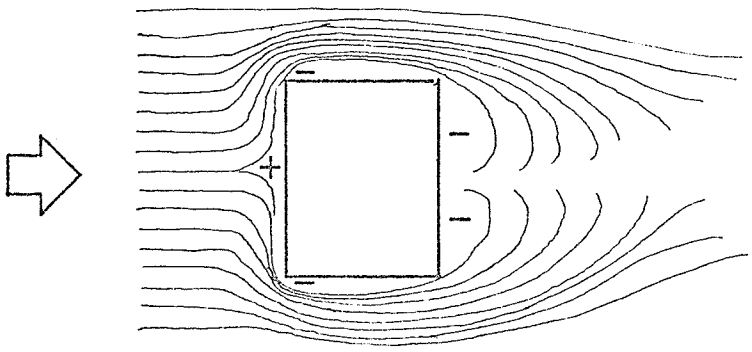
The most important and comprehensible analogy to air flow is water flow.* And the pattern most analogous to change from even flow is to be found in the rapids of a river: a river and its expansions -- which we call lakes -- move a certain quantity of water; when the cross-section of the river is large, that quantity can move slowly, and we see no current; yet when the cross-section becomes smaller, the same quantity of water must still get through, and the speed of the water increases; when the cross-section again enlarges, the water

* Those concerned with wind tunnel testing actually refer to air as a fluid.

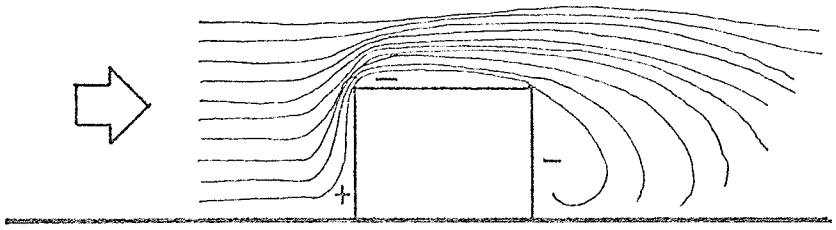
returns to a slower ('normal') speed. Eddying is exaggerated by increased speed, and it is caused by interruptions in the established flow. It is the eddies of still water, and not the increases in speed of flow, which we will wish to encourage in the development of improved urban micro-climate.

The following are some diagrams of the generalized flow of air around objects;[4] it must be remembered that these are general, and that they cannot be taken as completely meaningful when we introduce the large number of variables found in any real built environment.

In plan, the pattern of wind around a simple box:

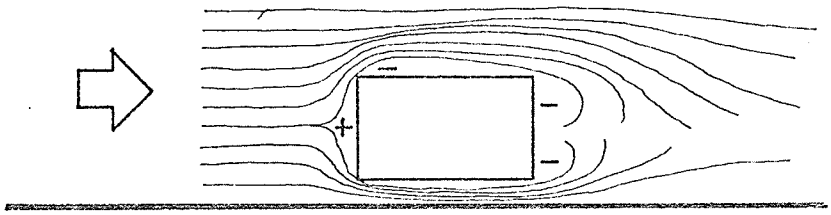


And in section:

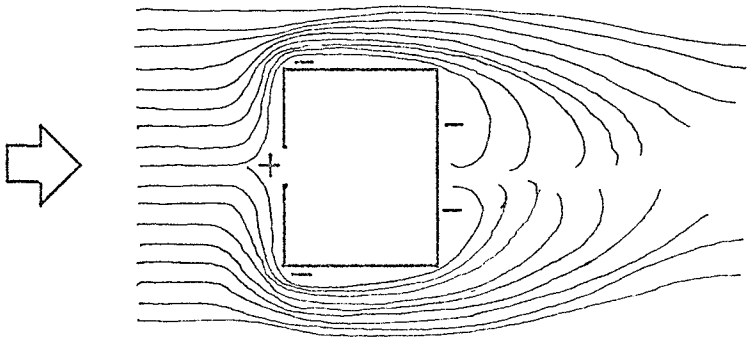


4. Victor Olgyay, Design With Climate, Princeton University Press, Princeton, N.J. pp. 103-105.

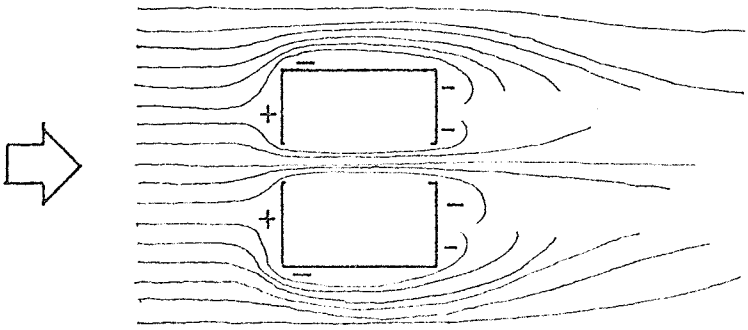
We must be careful to avoid the rapid flow of air at ground level brought on by a penetration at grade, as air at the high pressure side attempts to fill in the void on the leeward low pressure side:



Air will not enter an inlet which does not have a corresponding outlet:

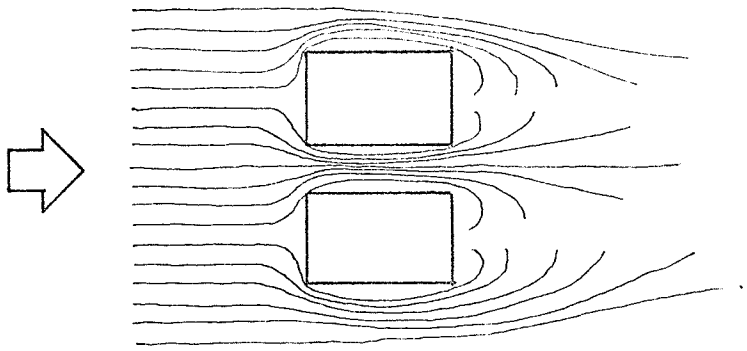


The maximum amount of air will enter when the outlet is equal to the inlet:



When the inlet is smaller than the outlet, air enters at the highest velocity and when the inlet is larger than the outlet air enters at the lowest velocity.

The most important fact to remember about groups of buildings is that buildings placed close together cause an increased wind speed through the space between them:



* * *

Accurate wind tunnel testing requires highly refined (and expensive) equipment.[5] The critical difference between the perfected wind tunnel and the useless one is that the good tunnel provides evenly moving air with no edge turbulences, and subsequent irregularities of flow. Less refined tunnels are used, but, because of the disturbances caused by edge turbulences, the findings one gets from them are meaningless. At the University of Manitoba, the refined tunnel is used by the turbulence laboratory of the engineering faculty; this $12,000 tunnel has an accurate cross-section of 4". The director of the facility, Professor Azad, suggests

5. (discussion with Professor Azad of the Turbulence Labs of the University of Manitoba)

that a facility with an accurate cross-section of 5' to 6' (minimum for architectural testing) would cost $100,000. Such facilities exist in London, England, and in Ottawa -- but not in Winnipeg.*

Because of the local unavailability and the expense of proper testing in Ottawa, I will only make hypotheses about wind optimization on our site. These hypotheses will be based on our general knowledge of wind behavior and of windbreaks. In an ideal situation, these hypotheses could then be tested in a wind tunnel and refined.

* The National Research Council in Ottawa gave me a price of $4,000 to do the empirical testing originally contemplated for this report.

Micro-Climate and the Site

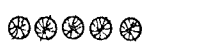
Winter:

In the winter the wind comes from the northwest. It is funnelled down east-west streets, and on the site that wind is almost directly from the west at ground level. This wind is the main problem with the site's micro-climate as it exists, and the most important thing for us to do is to minimize ground level air flow from the west. The next problem for winter micro-climate is the encouragement of heat build-up during the months of lowest sun angle.

One is tempted to put deciduous trees over the entire site, with a windbreak of firs at the west end, where the winter winds enter the site, and with dark pavement everywhere, (which would absorb and radiate heat in the winter, and would be shaded by the trees and cool in the summer). That solution would probably keep winter winds to a minimum, and cool the plaza well in the summer. The following proposal, however, shows a more judicious placement of trees; it is an attempt to put them where they will do the most good in the smallest numbers.

Probably the most important groups of trees are the double windbreaks at the two Main Street entrances to the site (1 and 2 on the drawing). These windbreaks would slow down the wind considerably, and would keep general wind flow well above the ground plane. Later subsidiary windbreaks (3 and 5) would prevent wind from regaining force at

key

 Fir windbreak

 Deciduous windbreak - with dark, radiant paving

 Water

 Building-height wall

 Building height wall: open summer, closed winter

 Cornice-top sun reflectors

1 Main windbreak at N.W.

2 Main windbreak at W.

3 Secondary windbreaks

4 Water areas

5 Tertiary windbreak - protecting raised area in winter

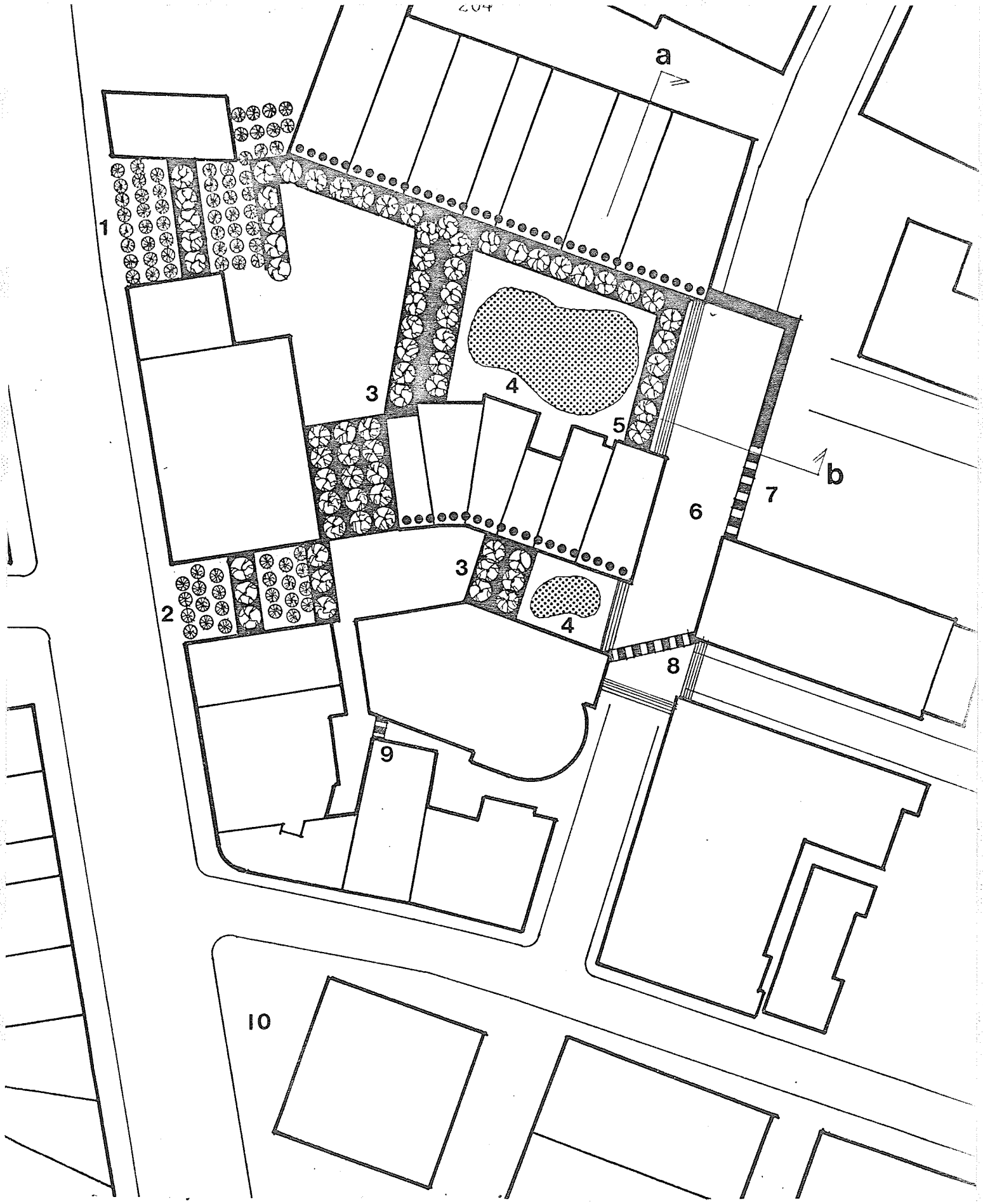
6 Raised plaza - heightening summer breezes by constricting cross section

7 Variable windbreak - letting in Summer breezes - dead-ending winter winds.

8 Variable windbreak - letting in summer breezes - dead-ending winter winds.

9 Variable windbreak - letting in summer breezes - dead-ending winter winds.

10 Nothing



micro·climate

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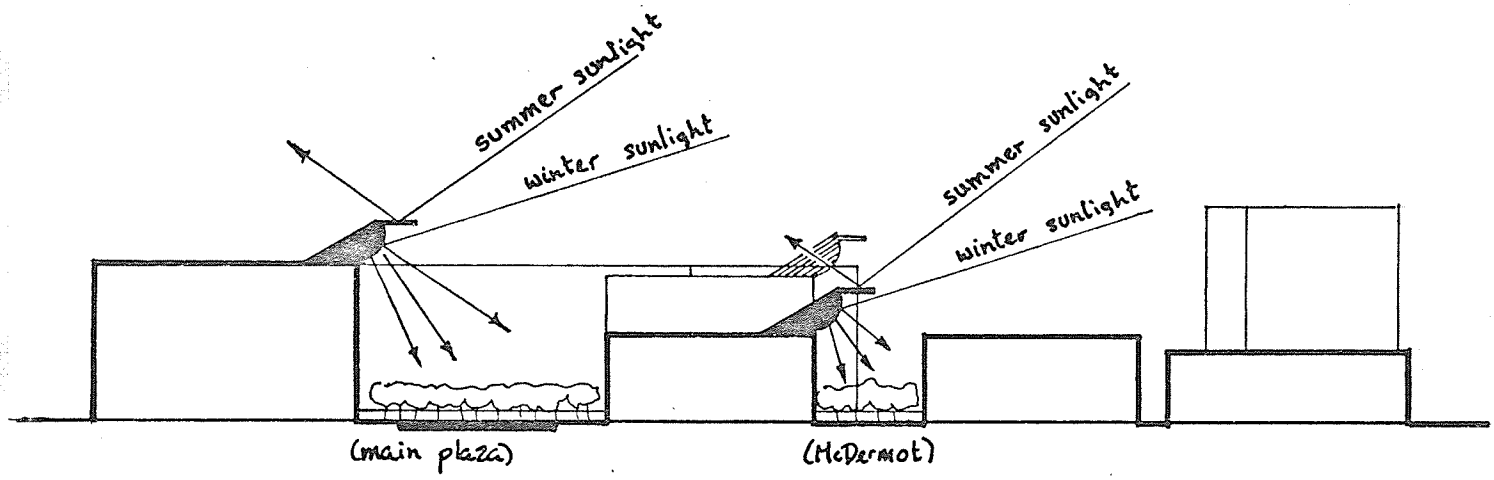
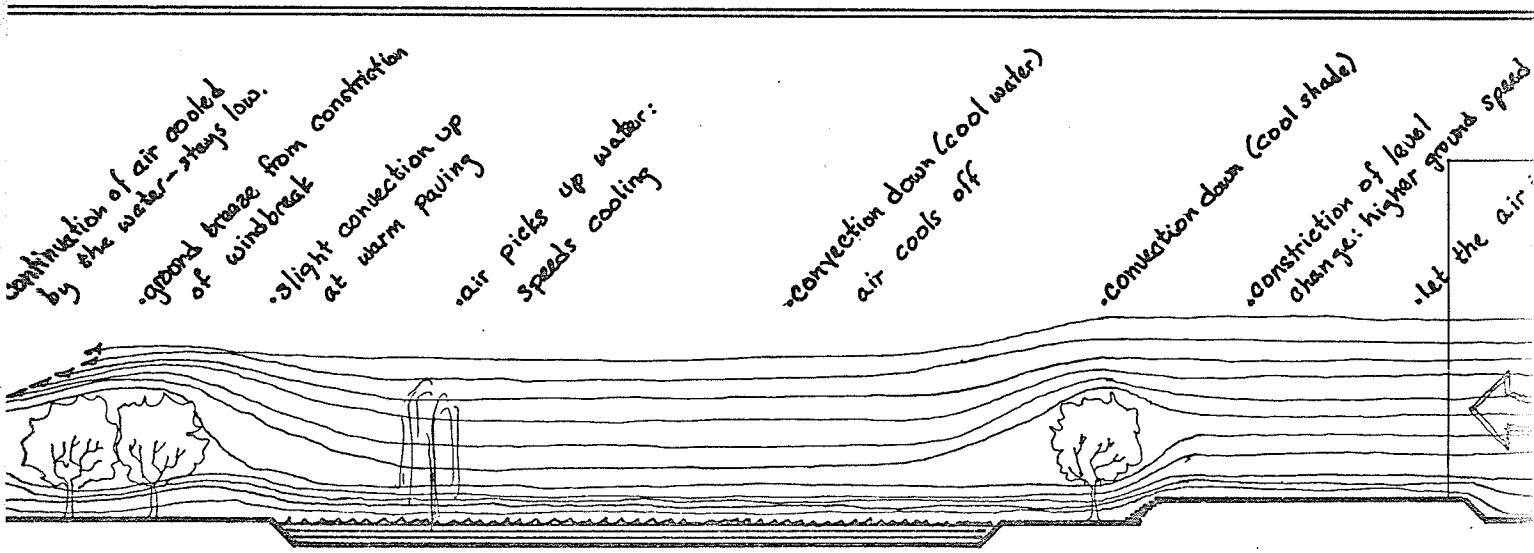
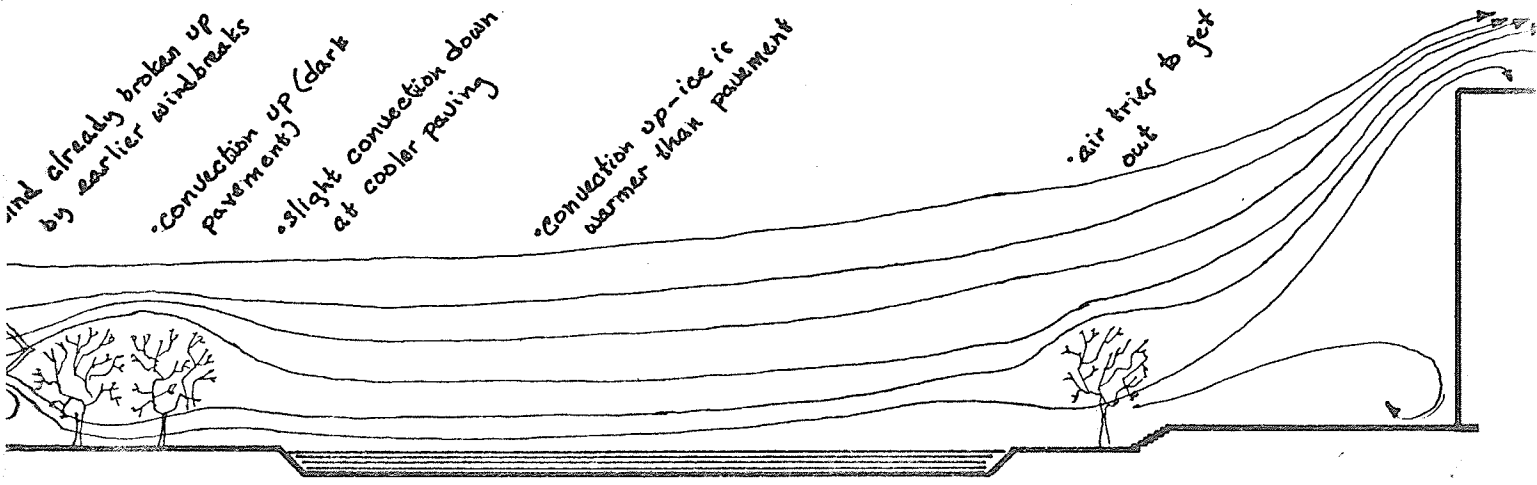


section 'a' sun-catchers



summer breezes



winter winds

section 'b'

ground level. The bodies of ice (4) tend to remain warmer than the pavement, and convection from their relative warmth would aid in keeping air movement dispersed. There would be building-height dead-ends (7, 8, and 9) at the east of the site, which would slow down air flow at ground level, and limit total amounts of air passing through the site (cf. above on inlet and outlet characteristics). (See partial section 'b' - winter.)

In the winter it is important to develop as much radiated heat as possible: dark pavement and sun reflecting south sides of buildings would substantially increase heat radiation. Deciduous trees have the advantage of allowing sunlight to penetrate during the winter and of providing shade in summer. Pavement below these trees can be black; all other paving would remain lighter in colour in order to avoid excessive heat buildup in the summer (but not white: extreme glare is an uncomfortable climate condition in itself).

The greatest potential sunlight and heat reflection would occur just in front of the block of buildings along Bannatyne, and darkened paving there would radiate a good deal of heat in the main open square. That building face should be white in order to increase the total amount of sunlight arriving at the ground.

During the winter the sun comes from a very low angle, which leaves most of the site in shadow. In order to increase

the amount of sunlight which actually makes it on to the site there would be 'sun-catchers' along the two main south faces on the site (see micro-climate plan, and section 'a'). These would be curved mirrored surfaces which would spread sunlight over the site; they are curved in order to give sunlight over a maximum area of the site.

These sun-catchers are located only in these two locations because they would create the warmest micro-climate on the site; if the sun were caught by all of the buildings around the site people would not come to the site to find a warmer place, and the main subject of this report is the mechanisms available to bring people to the site (not to make them equally comfortable everywhere). The not-so-tongue-in-cheek labelling of the plaza of the Richardson Building as 'nothing' (10) is an attempt to exaggerate the fact that people must be uncomfortable in one place in order to go out searching for a place which is more comfortable. It is only through this contrast that improved micro-climate can become an effective mechanism for attracting people from the outside.

Summer:

In order to cut sunlight radiation buildup in the summer, deciduous trees will be located where sun reflection is greatest at the base of the Bannatyne block of buildings. The mirrored sun-catchers will have sun shades protruding horizontally preventing the mirrors from reflecting the higher summer sun (see section 'a'). The trees located as subsidiary

windbreaks (3) will shield the darkest pavement below with their summer foliage.

The most important thing to do for summer micro-climate in a city with many 90° days will be to increase wind speed near the ground, and to cool the air. Summer winds are predominantly from the southeast in the summer. The first step will be to let the air in: the building-height windbreaks of winter should open at the south and east to let these winds in (7, 8, and 9). The ground plane is raised where the air enters, and this vertical constriction will increase the speed of ground-level air (6). Next the air would hit a row of trees and the relative coolness of the plaza below in combination with the openness of the trunks would speed air along the ground. Air would then move over the relatively cool water and should drop through convection, and pick up moisture and cool off as it passes over the water, and passes through a series of fountains, (see partial section 'b' - summer). The cooler air would pass by the remainder of the plaza, and on out over the main windbreaks (and 2). These windbreaks are only tree height, so that there is, effectively, a large outlet for the wind entering at the south and east: this good outlet, in combination with the large summer inlet, would allow for a maximum flow of summer air through the site.

activity locations:

This locational diagram is not as much an isolated paradigmatic statement as the first two diagrams; it builds upon the implications of the object location diagram, and upon existing activity locations on the site.

This activity location diagram has two main image-support objectives: The first objective is to reinforce the general organization of the site, especially reinforcement of invitation at the main entrances to the site and reinforcement of the loop as an active choice-ful path through the site. The second objective is to reinforce the image of activity on the site; this objective is realized primarily in the development and location of activity in the main plaza.

At the main McDermot entrance (1) the new building should hold a small bakery, with fans exhausting the luscious smells to Main Street, and the entrance should be toward the site and not on the Main Street side. This would reinforce the architectural implications of invitation discussed in the 'object location' diagram: olfactory curiosity and appetite joins visual curiousity and appetite and gets the traveller to the minor plaza; from this plaza he finds it quite easy to further his exploration of the loop.

The mall entrance from the south should be lined with small shops (probably on the west side only because the parking structure to the east is not very adaptable to such an alteration). These shops should have open glazed storefronts which are highly penetrable; the beginning explorer

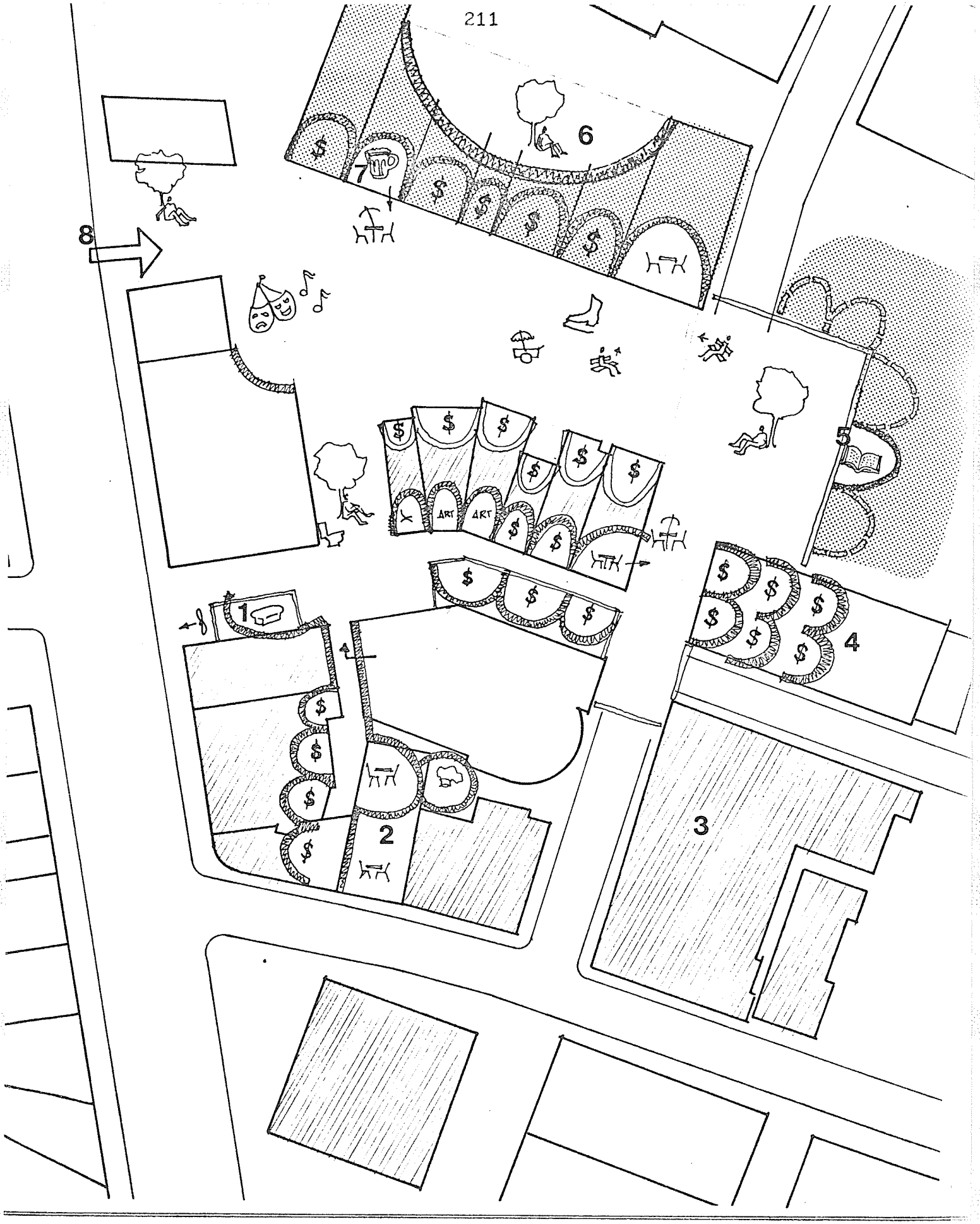
must not feel he is being shunted down a tunnel. The Old Bailey Restaurant (2) should open a new grade level dining room (probably casual sandwich and beer drinking) facing the mall; the kitchen would be relocated in the existing alley as shown. The dining area should be open to the mall in order to increase the occupied quality of the mall.

General retailing (impulse buying: gifts, tobacco, stylish clothing, and specialty shops, rather than heavy goods such as appliances) should be located to reinforce the loop.

In shopping centre jargon, a 'magnet' would exist in the Railway Express Building (4). This is a high-draw retailing outlet characterized by a large selection of consumer goods and a fair amount of public advertising. It could be either a large number of small shops, or a branch outlet for one of the department stores in the city. (Simpson-Sears is apparently in need of a better outlet in Winnipeg.) The handsome four-arched arcade would be an enticing entryway to this complex.

Across from this magnet would be a restaurant, which would open to the south and east, and would have outdoors-in-the-mall service. This all-weather cafe and the magnet shopping area should reinforce each other, and also reinforce the quality of special-ness for the galleria.

Outlets on the north of the McDermot block should be from the basement, and not simply opposite entrances to the main floors (at +4'). They can be for the same businesses, but, if they are, they should show a different kind of ware.



activities

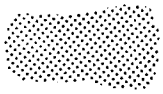
0 75 150

key

Retail space (general)

Retail space at one level below grade

On-grade residential - future retailing



Residential on upper levels

Office space - all areas not occupied by retailing facilities

Fixed seating

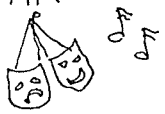
Sitting by & under trees: on the grass and on fixed benches

Skating - splashing and wading in summer

Vendors - warming hut location in winter

Outdoor eating and drinking

Indoor eating and drinking



Stage activities - formal and informal

** Free-standing seating available everywhere

1. Bakery - air exhaust toward Main St.
2. Old Bailey restaurant: new dining room & kitchen locations
3. Office space
4. Boutique house - or single large retailer
5. Public library branch
6. Private outdoors for apartments
7. Beer hall - spilling out to plaza
8. Access: parking below grade, and night time service

This will prove important in heightening the sense of new places along the loop; if one just comes out on the back sides of shops he has already seen he is likely to become disinterested.

Activity locations in the main plaza were discussed under object locations: Vendors, selling snack foods, fruits, and trinkets, are very important in reinforcing the 2-way shopping loop. Sitting and watching the water is a major relief from passage through the park. Splashing and skating are our main forms of physical recreation. Stage activities would relate to the main open plaza. Stage supplies and facilities would be stored either beneath the stage or in the building behind. Sitting under trees would be peripheral -- but connected.

A library branch should be located at the east end of the main plaza (5). People should know that reading is encouraged here -- this is a place to stay as long as one likes. The library would be in a quiet part of the site, with few distractions, with the trees just outside, yet it would be in a location which did not isolate it from the main plaza.

The ground-level arcade around the library would be housing originally. Because it is out of the main flow of people in the park, it would be acceptable as ground-level housing, and it would not be as likely to support retail business in the early years of the site's development. As

the area develops as a retailing centre, these units would probably go to retailing use.

The main Bannatyne block would have retail outlets along its first floor. These outlets, being off of the main loop, could be more closed, and have more specialty and non-impulse goods than the other retail outlets. A new roast beef restaurant at the east end of the block would remain, and keep its closed facade. (It is a specialty restaurant, and people go there as an occassion, not because they just happened to be passing by.) A beer parlour should be located where shown on the drawing (7). It would be developed as a working man's pub, it would be near the north Main Street entrance, and would aid in the psychological ease of entering the site from 'north main'. Outside this pub would serve light food and drink on the main plaza. This outdoor eating area would be a place to go to from any direction on the plaza, and would provide a 'people focus' complementary to the 'object focus' of the sculpture.

Parking would remain in the large parking structure south of McDermot. New parking would be built in two levels under the entire main plaza -- where there is room for approximately 400 cars. Access would be direct from Main Street (8), or from the underground section of Rorie Street. Vehicles could enter the plaza at (8), and pass under the arcade to serve the site, preferably at night.

It is important to have housing on the site. Housing guarantees people in the area at all hours: it would make the park seem an occupied territory, and not just a plaza for shoppers and for businessmen's lunch. Because of all of the mechanisms of public-ness which have been discussed above, it is doubtful that the presence of housing would cause the visitor to feel he was intruding on someone else's turf. The presence of housing would provide a sense of connectedness and permanence, and help to avoid a sense of sterility. As discussed in the site analysis, there seems to be a good market for urban housing in the area, especially for young executives, professionals, secretaries, and nurses. Housing should be located where it can relate to the main plaza: it is the largest open area, and it would provide the greatest sense of specialness of location to renters. Parking, at .5 spaces per unit, could be supplied below the new building at the east of the main plaza.

There should be a small grocery outlet somewhere on the site, preferably somewhere near the housing developments.

scheduling and

regulation:

Scheduling:

The year begins in May. Activities on the site should begin then too: a celebration of the arrival of warm weather is particularly meaningful in Winnipeg, and the warm weather use of the site should start with a major event which would be city-wide. A major event would create more momentum to come to the park than a slow drifting in as the summer goes on.*

Winnipeg's annual 'Get Together' festival, which involves closing off Portage Avenue for a week every summer, is being halted -- though certainly not because of a lack of public response. All of the management mechanisms of 'Get Together' should be applied to a 10-day welcome to Spring on the site. People have shown an enthusiasm for a city-wide festival, and Spring seems more important to welcome than the middle of summer. The festival would last for 10 days - Friday through the following Sunday -- at the end of May, when there is some assurance that there will be warm weather.

The festival would have as many kinds of events as people can think of. The aim would be to provide 'something for everyone', and to let everyone know about it.

In addition to the food stands, open air shops, and casual performances of 'Get Together', some examples are:
- name the park contest the first year.
- a regatta for toy sailboats in the fountain

* I would like to thank Joel Shack for this idea.

- rock bands
- country and western bands
- swing bands
- Ukranian folk dancing
- raffles and lotteries.

More 'cultural' activities such as plays, classical music, modern dance, and ballet, which require a more sedentary, permanent, and attentive audience should probably wait until after the main festival.

From the Spring festival through mid-October there should be a good deal of activity at the park. The pattern of activities should be irregular: the main object is to get people to think 'let's go down to the park (with the new name) and see what's going on'.

Saturdays should have things going on -- especially in the early summer. Some things to happen:

- rock bands to celebrate the end of school (and on throughout the summer)
- band concerts in the evenings.
- classical music
- evenings of ballet and modern dance
- local art exhibits on the plaza
- evening plays - the latest run from the MTC, and the Warehouse.
- 'Theatre Winnipeg' is having some success putting on lunchhour plays every day; they should do their summer performances in the park.

- Miss Winnipeg

(and Miss-anything-else one might invent -- especially good for weekday lunch-hours)

- who would like to show off?

- the weekly CJAY-TV talent show could perform Sunday afternoons all summer.

It is assumed that the schedule will fill itself out as the park grows.

Informal activity will form a large part of the real schedule of events: children sailing toy boats and splashing in the water, lovers strolling, vendors hawking, flags flapping, and aspiring folksingers singing.....

And a big Labour Day extravaganza: rock bands and cotton candy -- time to go back to school, and forget the cottage until next year.

Late autumn and early Spring provide the greatest scheduling difficulties: it is too cool for shirt sleeves and sedentary activities, and too warm for ice skating. In cooler weather the main galleria would become the site of entertainments, and entertainment in restaurants should be subsidized. During autumn bands could be on call to play outdoors on sunny days.

In late November the ice should be ready for skating. The ice skating season and the installation of the warming hut should be accompanied by much media noise and celebration.

In February there should be a city-wide winter carnival, whose major events might be:

- school and neighbourhood broom hockey games,
- and ice sculpture contests
- and beauty contests

And then, again, to Spring.

Regulations: Management

This is by no means an attempt to cover all aspects of management. It is, rather, an attempt to mention the management imperatives most important to the development of some mentality that this park is a place which belongs to everyone, and to which everyone is welcomed.

- Any group which wishes to perform will be supplied with free use of amplification and lighting equipment, and they will receive free advertising spots on appropriate radio and television stations, and in the newspapers.
- Movable seating will always be available; the budget will have to cover breakage and theft, and the practice must be continued indefinitely.
- Seating must be set up for classical music and theatrical performances, and for any other activities which request it.
- The snow must be plowed off of all of the main plaza; paths will suffice elsewhere.
- The shopping malls must be open 24 hours per day every day.
- Any vendors will be welcomed as long as they have colourful wheeled carts, locate themselves to the south of the main pool, and do not litter the plaza. (After the first year, when they have established the 'loop', they will be allowed to locate wherever the market seems to be moving.)
- Activities will be paid for primarily by the city. The province, merchants, and private groups will also sponsor performances.

- There will probably be a tendency for the residents of the housing to be there only temporarily (with the move to the suburbs when marriage comes, or certainly when the baby arrives). Temporary populations begin to break down a sense of permanence in the environment, and this leads to two problems: 1) a breakdown of internal self control (policing, perhaps), and 2), a loss of the specialness associated with visiting a place and being sure of seeing some particular people year after year: sitting on benches, minding the store, or leaning out of the windows above. We must guard against the anonymous urban place becoming too anonymous and fluid. People with different backgrounds, and with differing aspirations from the typical young executive, might be more likely to stay in one place, and they would help 1) provide a sense of permanence, and 2), by example, encourage the 'young exec' to stick around. I would propose two mechanisms to diversify the economic background of the population, and to make it attractive to become a permanent member of the local society:

- Develop as much of the housing as possible as empty space with basic service connections only (this would allow lower initial cost; encourage ownership, and its attendant sense of permanence; and allow for <u>individual</u> environmental development to suit taste and economic capabilities).

- Any person who works on the site (whether as an owner, service person, retailer, or employee) should, if he

desires, be given an apartment on the site, and he should have his payments subsidized to match his ability to pay.*

Regulations: Users

NONE

* I would like to thank Robert H. Jacobs for this suggestion, which he developed for the Harbour City development in Toronto.

synthesis:

Each of the preceding diagrams has been a discussion of an isolated concern and its optimization on the site. Each subject has been isolated in order that it might be better understood, and not lost in a jumble of conflicting requirements. Hopefully this greater understanding can lead to more meaningful decisions during processes of resolution and finalization.

As has become more and more evident, these discussions have been directed at some fact of people-being-there much more than at aesthetic quality. This priority should remain the most important factor in decision-making. Conflicts between aesthetic priorities and the enclosed guidelines must be decided in favour of these guidelines: 1) There is plenty of room for aesthetic elaboration and refinement of these guidelines, 2); These guidelines have been developed as supportive of people-presence, and the resultant object-activity locations and requirements should themselves present the beginnings of a strong and appropriate aesthetic statement, and 3); The aim must be 'an inhabited place which people enjoy' before the aim can be 'beautiful piece of architecture'.

Resolution of these guidelines is not so difficult as it might at first appear. Any reasonably sensitive designer should be able to understand the implications of this report. And he should be able to make effective decisions about the use of the preceding information in the development of a coherent design which would, indeed, encourage people-presence.

The main conflicts are between the micro-climate and object location diagrams. Yet there is a surprising amount of consistency, which eases the problem of synthesis (eg., location of water, of raised levels, and of enclosure). Interference between the two diagrams is never fatal, but there are a number of obvious resolutions which should be pointed out:

- The covered malls shown in the object location diagram do not interfere with the micro-climate: they enclose a weather controlled area; they are effective end-walls for winter winds; and, with louvered walls they could give access to summer winds from the south and east.
- The subsidiary windbreaks shown in the micro-climate diagram, (in the middle of the main plaza and at the bottom of the steps), would probably not damage the sense of the main plaza as place -- they might actually aid the plaza by providing a transparent screen which would define the parts of the plaza.
- The entrances to the site from Main Street are quite different in the two diagrams. It will be important to provide wind breaking here, or the winter micro-climate of the site will be little improved. Trees are themselves soft and inviting, and they thus can be effective psychologically as well as climatically. Man-made attraction also is important, however; it must work in

league with the windbreaks and even dominate them at the entrance to this man-made park.

- The arcade at the west end of the main plaza should remain, and not be usurped by windbreaks; closure must be strong, and obviously man-made.

- The new building to the west of the main plaza does not allow for summer winds to enter the site. The space between this building and the 'boutique house' could be increased substantially, and a wall with operative louvers could fill the space between the two buildings.

With the help of these comments, effective synthesis should be quite possible. The designer should be able to introduce a good deal of variety into that synthesis and stil respect the intentions of this report.

And the result should be people in the park.

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an afterword
22 April, 1974

Oral presentation of this thesis was made on the 17th of April, 1974. The presentation was well received. Some questions were raised by my advisor and examiners after having read the thesis, and some were raised at the oral presentation. I would like to report these questions and to take this opportunity to respond to them in the hopes that such a forum will clarify some of my own intentions and point out some of the areas of the thesis which might be open to question and further research.

Part I:

behaviour:

It was suggested that the section on behaviour was written from a stance of 'structural functionalism', and that it overlooked a major corpus to literature concerning mutual presence and attention. It was also suggested that the main emphasis was toward the motivational dominance of the primary group and tended to de-emphasize other motivational forces. It was also suggested that I had referred very little to the work of the environmental sociologists and architectural psychologists.*

In response to the first comment, I would propose that all sociological thought assumes some 'stance' as a necessary starting point. I would suggest also, however, that I have not ignored the work of Gans concerning mutual presence and attention: the section entitled 'Entering and Remaining in

*These comments were by Sheilagh Lindsey.

Association' deals almost entirely with the mechanisms of deference, and deference is the conceptual key to the study of mutual presence and attention (mutual monitoring and grooming, the granting of attention or indifference, submission-dominance, focused and non-focused interaction, and territoriality between strangers).

In response to the second comment, I would suggest that only in the very early parts of group analysis do I limit my discussion to the influence of the primary group. The discussion of urban man and his growing dependence on secondary groups, and consideration of the collectivity as an important motivational and referencing force belie a point of view which considers only the primary group. (Consideration of the mechanisms of the collectivity centres around the study of the intricacies of deference and focused activity mentioned above.)

In response to the third suggestion I would have to plead guilty. My use of architectural psychologists and environmental sociologists is limited. I would explain this by stating: 1) that my reasons for avoiding mechanistic behavioural research are stated at the beginning of the section and these form the main guidelines for the ensuing discussion; 2) that all sociological exploration operates from bias, and that a recognition of the ever-presence of bias has been one of the major recognitions of recent sociological thinking; and 3), that limits of time and scope, and requirements to

produce inevitably force one to 'stop here' even though processes of exploration and refinement can go on.

Part II

Habraken report:

I was asked whether the solution to the site was the same as that developed two years earlier by me and six other students.* The study which we did two years ago was a development proposal for the area around the site. There is very little resemblance between the solution presented in the initial project and the solutions presented in the thesis; the original project only provided the idea of developing the park.

consistency:

One comment about Part II was that it did not seem to be consistent with the directions and rigour developed in Part I.** One way such 'consistency' might have been reinforced would have been to develop the diagrams as reinforcement of the five images: invitation, activity, comfort, care, and economic viability. Such an exploration would certainly be valid. However, my concern was to develop a strategy for generative programming; by categorizing my concerns along future decision-making channels (objects, activities, regulations), and by reinforcing the five images in each of these channels, I tend to make a more comprehensible programming tool for future actors.

* Question from Eric Lye

** Made by Etienne Gaboury

street patterns:

I was asked for further description of the sinking of Rorie Street and the closing of McDermot.* This request came in two parts: 1. where do the streets go? and 2. what are the mechanical ramifications? In answer to the first question: McDermot would be closed between Main Street and Rorie; Rorie Street would be lowered between Bannatyne and McDermot. In answer to the second question: The decision to close and lower streets on the site is a result of a very particular priority: the development of the site as a popular pedestrian precinct. This priority determines the development of the site, including the closing and lowering of streets. The mechanical ramifications of this decision have not been explored, and as explanation I would suggest 1) that the necessary mechanical alteration is not impossible, and 2), that, because this is an 'academic' thesis and not a 'comprehensive' thesis, it is more important to develop the ideas of what should happen and why than to develop specific technical solutions.

(Note: If it were to prove impossible for economic reasons to lower Rorie, I would suggest that the pedestrian loop should be retained and that Rorie should simply be closed or re-routed to the east.)

* Question from Jacques Collin and Gustavo da Roza

micro-climate:

Two main comments were made concerning the section on micro-climate: The first comment really overlaps with 'object locations', and dealt with the fact that the climate in Winnipeg is extraordinarily rigourous: why not take the lead from the enclosed shopping mall and cover the whole place instead of going to such great measures to warm the place up?* The second comment was that all of the effort to bring in summer winds are probably wasted in Winnipeg, where summer winds tend to be very dry and uncomfortable and are better kept away.** I appreciate and concur with the second comment. The main answer to the first comment lies in reference to the first section of this paper, and a belief that personal and natural contact are important and to be encouraged. In addition, I have pointed out 1) that periodic enclosure against weather can mitigate most problems of our severe climate, and 2), that -15^{o} is acceptable weather when there is no wind: I have provided a pattern of periodic enclosure against the weather in the 'object location' diagram, and windbreaks are the most important part of the 'micro-climate' diagram. (Note: the 'sun catchers' shown in the micro-climate diagram are perhaps extraordinary measures with small return. Because sun radiation in the winter is not a potential resource at this latitude, these great mirrors could be called superfluous -- and certainly distracting.

*Comment from Etienne Gaboury

** Comment from Gustavo da Roza

They have been presented primarily as an attempt to free our thinking about the means available for affecting our environment.)