

A METHOD FOR INTRODUCING YOUNG PEOPLE  
TO THE SOCIAL ART OF ARCHITECTURE

by

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Diploma of Architecture, Leicester College of Art, 1953

A THESIS SUBMITTED IN PARTIAL FULFILMENT OF  
THE REQUIREMENTS FOR THE DEGREE OF  
MASTER OF ARCHITECTURE

in the School  
of  
Architecture

We accept this thesis as conforming to the  
required standard

THE UNIVERSITY OF BRITISH COLUMBIA

September, 1970

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## ABSTRACT

This thesis describes and illustrates a method for involving young people of ages nine to eighteen years in the Social Art of Architecture. It aims to develop an awareness of the various environments in which we live; aims to develop personal values in the young people of the way they wish to live; and to develop abilities in them so that they can express their values and direct the design of their future environment. It aims thereby to assist the reversal of the present trends in which as Lewis Mumford declares in *The City in History* "the increasingly automatic processes of production and urban expansion have displaced the human goals they are supposed to serve."

The word "architecture" here applies wherever people dwell, as in the words of Sir Kenneth Clarke, who in *Civilisation* refers to architecture as "a social art--an art by which men may be enabled to lead a fuller life--."

The study, made under a Fellowship of Central Mortgage and Housing Corporation, evolved in answer to questions from students and teachers, who, following my visits to classrooms asked for aid and guidance to continue the study of architecture and particularly for information on the future scene.

The first part of the thesis describes the method as it is used in the classroom. It progresses from the historic past that led to the present scene, analyses the present in terms of life and perception, and invites suggestions in the light of future trends.

Scenes of present day cities, suburbs, farms and wilderness guide the analysis and comparison of the kind of life that pertains to each environment. Scenes of eating, shopping, and other forms of providing food; scenes of work and play, offer a variety of choices from which students select their preferred ways of life and examine the values by a recall of all the total perception of the scene in all their senses.

The exercise develops the awareness of the environment and acuity of perception and personal values which are next applied to their design of the future. Drawn as a place called Crown City, it contains within its boundaries wilderness, farm, suburb and city. It incorporates the classical future city forms and the probable trends of development known to architects, engineers and planners. It also incorporates the views of students made during the past eight years and it is designed to incorporate new ideas.

The drawings of Crown City aim to encourage the students to contribute ideas on life not only from North American culture but from other cultures, and to define their ideas in terms of design requirements that relate to the senses. From this point,



the social and technical questions that arise from the design requirements can be pursued closely associated with the students' personal set of values.

The second part of the thesis recounts the studies and observations that led to the design of the method. The attitudes of young people, the communication aspects of group response, of images and drawings and cartoons, and the various audio-visual media channels of film and television, relate in a special way to the method. A drawing made on paper placed on the floor produces better results than drawing on the blackboard. A drawing board of thirty feet encourages discussion on the future way of life while a board of twenty feet in length produces discussion on overpopulation. Participation, which includes young people in the design process, acquires special qualities by emphasizing perception and the fertility of ideas.

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Faculty Supervisor

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## ACKNOWLEDGMENTS

*Margaret King A.T.D.*, who is my wife, has contributed her skills as an art teacher, her experience of teaching architecture at high school level, and her sensitivity as a landscape painter. The impulse behind this work comes from her conviction that a more humane development must be found that avoids the difficulties we experienced and observed in living in a totally planned English New Town, and in contrast, in the commercial anarchy of Montreal.

The members of my Advisory Committee, at The University of British Columbia, have helped beyond the requirements of the organisation of the thesis by their enthusiasm and comments on the importance of the work:

<i>Hilda Symonds</i>	Supervisor, Urban Affairs Program, Extension Department.
<i>Henry Elder</i>	Director, School of Architecture.
<i>Wolfgang Gerson</i>	Professor in Charge of Graduate Studies, School of Architecture.
<i>Bruno Freschi</i>	Assistant Professor, School of Architecture.
<i>Frank Hardwick</i>	Chairman of Social Studies, Faculty of Education.
<i>Ben Whittinger</i>	Chairman of Audio Visual Studies, Faculty of Education.
<i>Leonard Marsh</i>	Professor, Foundations Department, Faculty of Education.

Among the hundreds of children who have been involved, many have helped after school hours and during holidays with the expressed intention of furthering the work, which bears their approval. My own children *Jonathan* aged fifteen, *Rachel* aged thirteen, and *Celia* aged eleven, after many years of close involvement are still ready to offer invaluable assistance.

The teachers who have invited me to visit schools are listed below. Their comments and practical use of my visits helped to shape the method. Apart from my first approach to Vivian Graham School in Quebec and to University Hill School on my arrival in Vancouver, all the visits have been at the invitation of the teachers. By their invitations and interest they have provided enormous encouragement.

<i>Mr. Peter Glouteney</i>	Geography, Grades 3, 4 and 5, Vivian Graham School, Ile Perrot, Quebec.
<i>Mr. D. Maggs</i>	History, Grades 6 and 7, Edgewater School, Pincourt, Quebec, and Oakridge School, Baie D'Urfe, Quebec.
<i>Mr. Willard Davidson</i>	Geography, Grades 6 and 7, Edgewater School, Pincourt, Quebec.
<i>Mr. R. Crowell</i>	History, Grades 5 and 6, Edgewater School, Pincourt, Quebec.
<i>Mrs. E. Dunbar</i>	History, Grades 4 and 5, Edgewater School, Pincourt, Quebec.
<i>Mr. J. Davidson</i>	Geography, Grades 5 and 6, Edgewater School, Pincourt, Quebec.
<i>Mr. G. Norman</i>	Whole School, Centennial Project, Kensington Elementary School, Montreal, Quebec.
<i>Mr. G. Dodge</i>	Art, Grade 10, Macdonald High School, Ste. Anne de Bellvue, Quebec.

<i>Mrs. M. King</i>	Senior Special Education, Dorset School, Baie D'Urfe, Quebec, and Macdonald High School, Ste. Anne de Bellvue.
<i>Mr. O. Stevens</i>	Senior Special Education, Macdonald High School, Ste. Anne de Bellvue, Quebec.
<i>Mr. D. Barnes</i>	History, Grades 9 and 10, Macdonald High School, Ste. Anne de Bellvue, Quebec.
<i>Mrs. Glynn Jones</i>	Geography, Grade 10, University Hill Secondary School, Vancouver.
<i>Mr. D. Howie</i>	Geography, Grade 9, Magee Secondary School, Vancouver.
<i>Mrs. Helen Sherriif</i>	Social Studies, Grades 8 and 12, University Hill Secondary School, Vancouver.
<i>Mr. G. Onstad</i> <i>Mrs. Judy Doyle</i>	Social Studies, Grade 11, Alpha Junior Secondary School, Burnaby.
<i>Mr. L. Butchart</i>	Social Studies, Grade 7, Southlands Elementary School, Vancouver.

In addition the mass drawing involving young people and the discussion of the future, each of which furthered the work by the wide exposure, has taken place in public on the following occasions:

Kensington Elementary School, Montreal, Centennial Project, 1967.

Pincourt, Quebec, Library Opening, 1967.

Architectural Institute of British Columbia "Adventure in Architecture" at Vancouver Playhouse, 1968 and 1970.

Canadian Broadcasting Corporation, Vancouver, Hourglass, 1970.

Eatons opening of "Vancouver I Love You" Exhibition, 1970.

The Vancouver School Board arranged mini-courses during February 1970 to demonstrate the method to High School and Elementary School teachers providing an invaluable exchange of views.

Financial support during the past two years of study at the University of British Columbia came from the Grant of Fellowship of Central Mortgage and Housing Corporation. The Directors, in granting the Fellowship, lent the authority of their practical concern with the problems of development, and also lent their esteem. The public regard for C.M.H.C. is high and mention of their backing gained respect and attention for my work.

Additional funds have come from the preparation and sale of teaching material, which appears in the thesis, through my company, King Graphics Limited, formed during the studies for this purpose. Purchasers of material who have assisted the study in this way include the University of British Columbia, Vancouver School Board, and Schools throughout British Columbia.



A METHOD FOR INTRODUCING YOUNG PEOPLE  
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## CHAPTER I INTRODUCTION, AIMS AND METHOD

The Commencement of the Study

The General Aim and Purpose

The Professionals' Reaction to Public Design Participation

The Choice of Young People for Involvement

The Method

*How do you wish to live?*

*What is your way of life and your situation at present?*

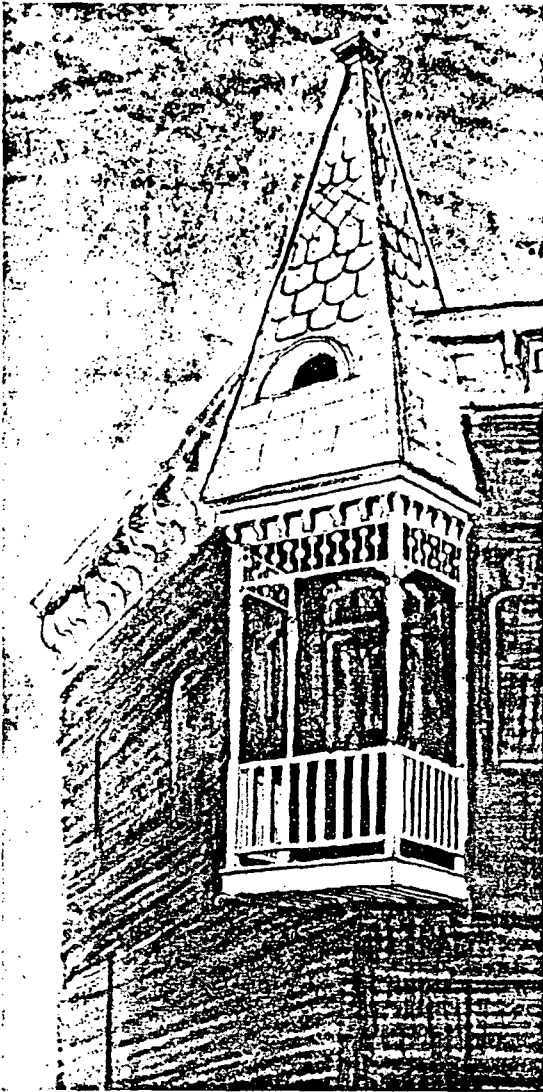
*What do you like about your present surroundings  
and what would you improve?*

Architects and clients discuss such questions after visiting the site for a new home. The answers form the human goals for the design. They are paramount, above the goals of economics, of management and structure. The method of architectural design discussion has no parallel in the design of the environment at large. As a result, human goals remain unstated and other goals prevail.

This study proposes a method for stating the human goals for the design of the environment. Based on architectural design discussion, it considers *change and the future; life styles; and perception*. It addresses young people, while they perceive acutely and curiosity for the future runs high, to give them time to prepare for participation in the design of the future environment. The method is intended for use in Grade Schools where the ubiquity of architecture applies to the study of geography, history, the sciences and mathematics, and the arts.

#### The Commencement of the Study

The Habitat articles that follow mark the commencement of the study in 1962. The view propounded in the articles, that architects and the study of architecture both have a place in Grade Schools won the approval of students and teachers. Invitations to visit school came frequently.



*by Mr. Stanley King  
who has worked with Central Mortgage and  
Housing Corporation and later with consultants  
preparing the Frobisher Bay New Town Report;  
he then joined Peter Dickinson's office as  
Assistant Chief Architect on the Bank of  
Commerce Skyscraper in Montreal.*

Reproduced from *Habitat*  
Vol. V, No. 5, Sept.-  
Oct., 1962, p. 12.

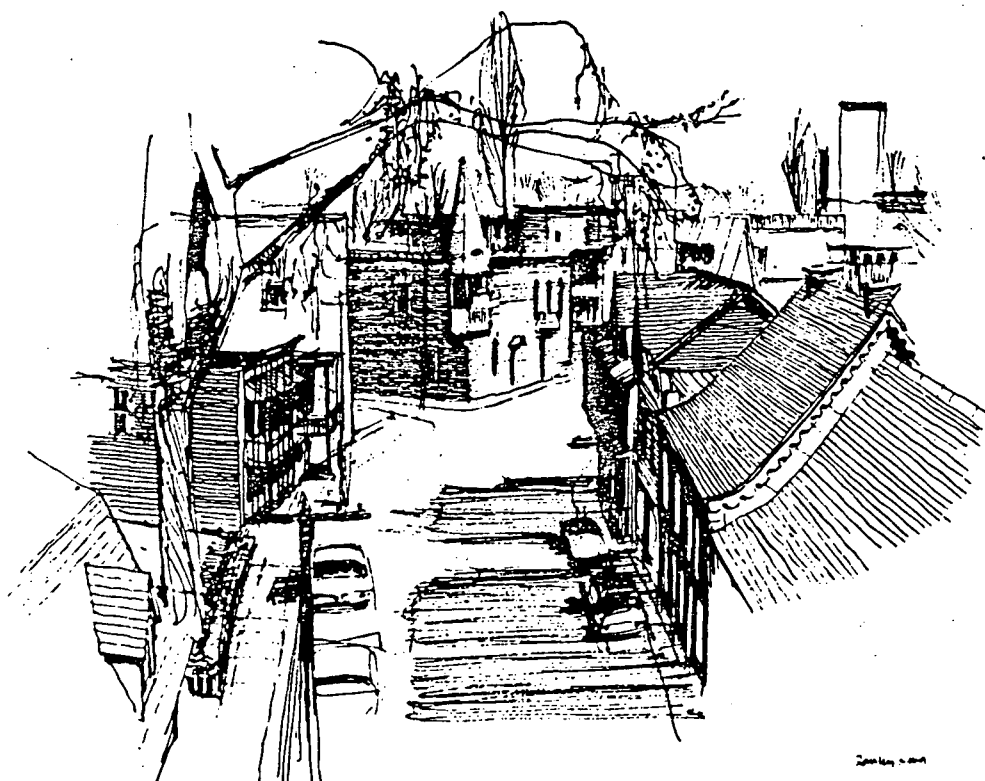
## *Elegy*

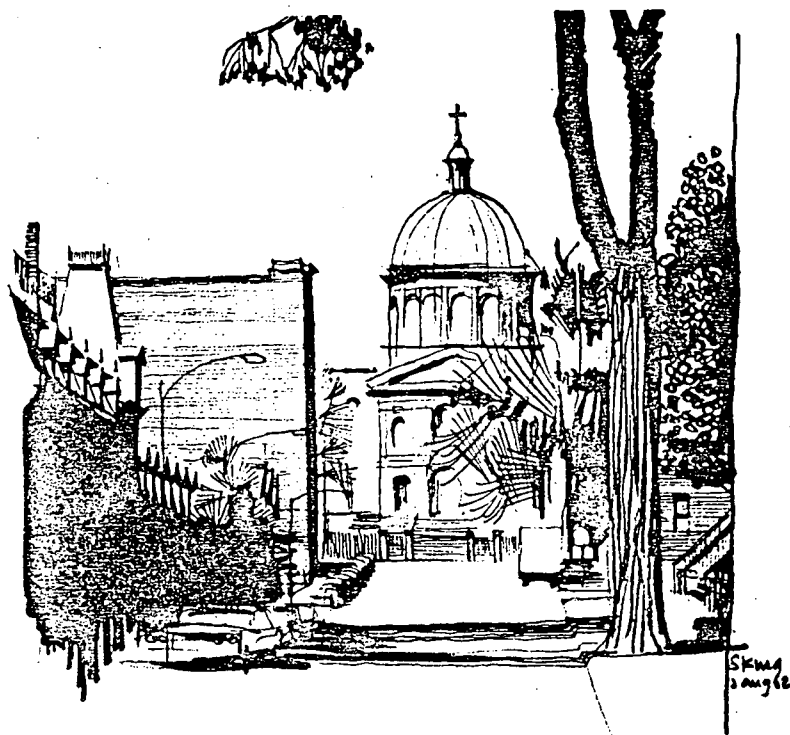
Nearby my home west of Montreal are these streets and houses. They are not well-known views and will soon be gone. The houses located in Saint Anne de Bellevue will soon be replaced by a bridge—anyway the balcony centrepiece and the houses to right and left are decaying and tottering. Any day now the view will be gone. The sketch just catches a moment in time.

Often this spring I have been too late. Exquisite streets noticed on a Saturday morning have been changed by the time I return for another look on Sunday. In two cases the removal of a double balcony and the tarpaper facing of key buildings have altered the appearance, making me realize just how brief is the moment in time. It is a moment of evolution.

It is appalling that it should happen so quietly. So many of these town streets and squares are gems of urban domestic streetscape and eminently worth studying. They are excellent visual solutions of urban dwelling problems—problems now being featured in the architectural press. On that count alone they could be studied by architects and planners, but this subject is much wider and is everybody's business and should not be kept within the profession.

So what is to be done? Here, going unused, are full scale educational models for teaching townscape and we have been taught the phrases to describe and analyze and yet we are silent. We should be talking and pointing and showing photographs to councillor, teacher, parent and child. Why is this evolution so appallingly silent?





*by Stanley King*

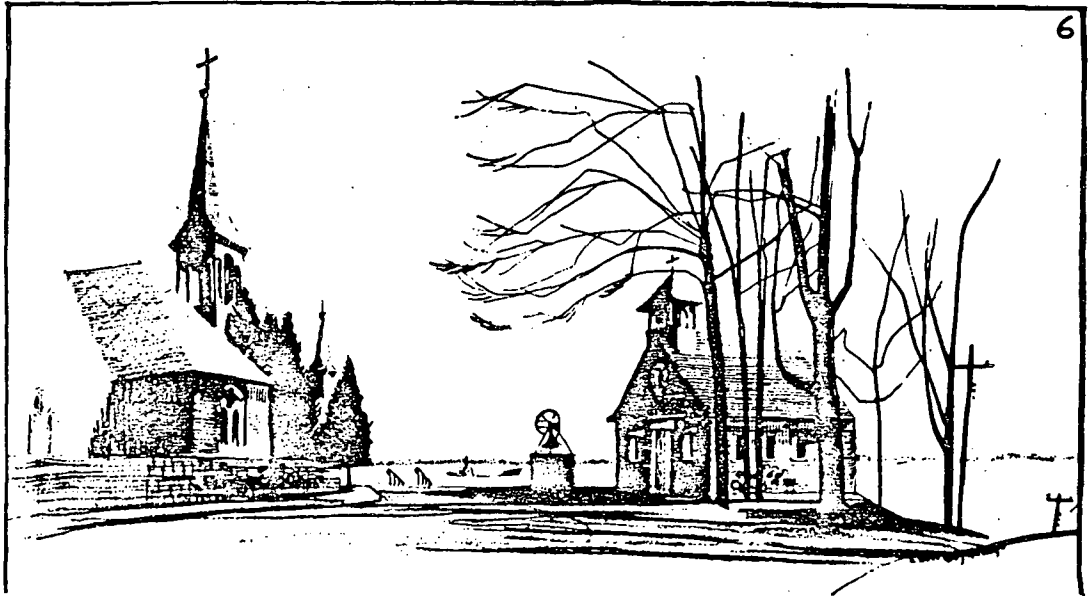
# REVIVAL

While discussing my drawings, I find people anxious to try to preserve any view that shows charm or character. It is an emotional response without discrimination. I am never asked why I like the views I draw. Love for a street is so vulnerable and beauty can be suddenly destroyed without regard for the opinions of people who made it their environment.

This is so different from conversations on separate houses and their interiors. It is a tragedy that the relation between consumer and producer should vary so much inside and outside the lot line. Inside the lot, people have a sense of participation in raising standards of beauty and opinions are well-informed. Outside there is no sense of participation and very little knowledge.

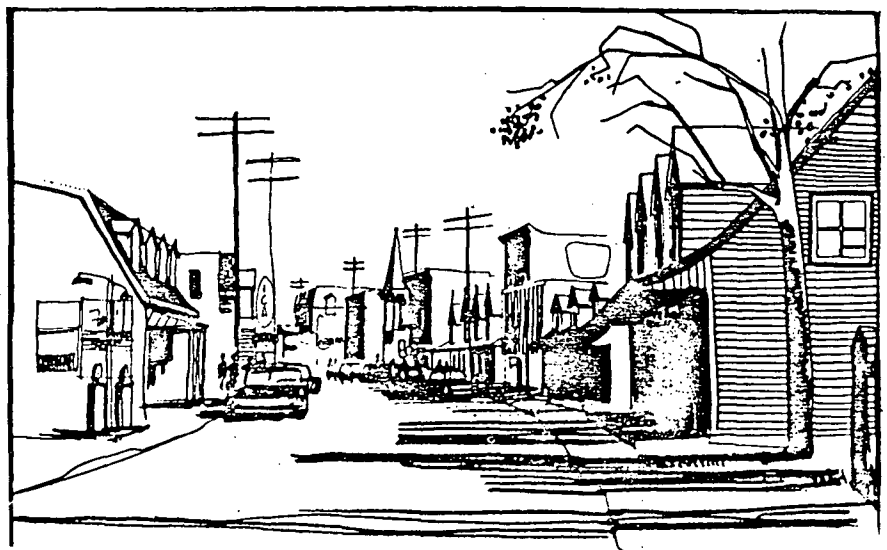
We of the architectural profession must help. Commerce can do nothing, for streetscape is not immediately for sale. We have been trained to create towns and we know townscape as environment. We know how art, mathematics, physics, geology and geography are used in the fabric of towns and the different settings in history and literature. All these are school subjects. We should go to the schools with talks and illus-

Reproduced from *Habitat*  
Vol. VI, No. 1, Jan.-  
Feb., 1963, p. 19.



trations. We should show pictures of different streets at home and abroad and blank off key buildings to show their effect. This is not a specialized subject. A child of six knows more than we do about ground texture and the space of a gas station. This awareness must be sharpened before it is lost. We must remove the barrier between expert and lay. There was no such barrier between the

public and the Renaissance Architect whose finishing school was a tour of the world's best contemporary cities. Much of Renaissance London, Bath and Edinburgh was built to conform with the public's taste. Our status of skilled servant is much the same as it was, but a large gap has grown between the architect and the public. It is entirely up to us to bridge the gap. ♦♦♦♦



A method of involving young people in the Social Art of Architecture began to shape itself. The involvement of other visiting experts to supplement the architect formed part of the method, an aspect alluded to but not part of this study.

The idea of involving young people in the design of their environment appealed to the producers of mass media. The National Film Board commissioned a report. The Canadian Broadcasting Corporation gave television time. Parents expressed high regard for the idea, spoke of it at public meetings. It featured in panel discussion at the 1966 General Meeting of the Quebec Protestant Home and School Association. Kensington Elementary School in Montreal, as their 1967 Canada Centennial Project, featured the method and involved the entire school and the parents.

Nevertheless, due to the demands of my architectural practice, the advancement of the idea progressed slowly. It showed great promise and attracted encouraging support but the interest it aroused turned endlessly around the questions that it provoked about the future. Commencing in 1968, with a Grant of Fellowship from Central Mortgage and Housing Corporation for Graduate Study, I attended the School of Architecture at the University of British Columbia to develop the work to the stages presented in this thesis.

#### The General Aim and Purpose

I present a method whereby Grade School students may acquire the Social Art of Architecture which may assist them when, as adults in positions of authority, they face decisions on the design of the



environment. It aims to produce a practical method of public participation for the design of the environment.

The method aims to develop an awareness of the various environments in which we live; aims to develop personal values in the young people of the way they wish to live; and to develop abilities in them so that they can express their values to direct the design of their future environment.

It aims to demonstrate that, as Ruskin advocates, "Architecture is an art for all men to learn, because all are concerned with it."<sup>3</sup> "Architecture" writes Furneaux Jordan "is a social art."<sup>4</sup> "--an art" says Sir Kenneth Clark "by which men may be enabled to lead a fuller life."<sup>5</sup>

By acquiring the Social Art of Architecture, young people, who view the future with great anxiety, may find a more promising approach to solutions that technology has failed on its own to find. The approach lies through an awareness of the arts of life. "We need art" writes Jane Jacobs "in the arrangement of cities as well as in the other realms of life to help explain life to us. We need art most, perhaps, to reassure us of our own humanity."<sup>6</sup>

The method attempts to meet the need and to do so with a sense of the desperation and urgency present in our cities where, as Giedion writes "A horror of mankind arises from the enormous heaping up of human beings. Overfilled cities have perforce led to a bankruptcy of life";<sup>7</sup> "ours is an age" declares Mumford "in which the increasingly automatic processes of production and urban expansion have displaced the human

goals they are supposed to serve."<sup>8</sup>

By developing an awareness of life and of our surroundings the method aims to repair the foundations where the basic problems lie. It is not intended, by its emphasis on the arts of life, to be an escape from our real troubles, a relief from failure, nor a journey to Utopia. The enormity of the problems, of planning, of transportation, of economics, is respected. "But" says Giedion "despite the complicated situation of the present day, the unchanging values of life remain. Independent of all obstructions which impede its fulfillment the uppermost question is: *How do we wish to live?*"<sup>9</sup>

The question forms the heart of this work. It is put to the student and followed by another: *In what surroundings?* The answers set the approach to further study and may include natural as well as artificial surroundings. The study of the Social Art of Architecture aims to include, in unity, the whole environment in which we live. Ian McHarg writes in his book *Design with Nature*

Our eyes do not divide us from the world, but unite us with it. Let this be known to be true. Let us then abandon the Simplicity of separation and give unity its due. Let us abandon the self mutilation which has been our way and give expression to the potential harmony of man-nature. The world is abundant; we require only a deference born of understanding to fulfill mans' promise. Man is that uniquely conscious creature who can perceive and express. He must become the steward of the biosphere. To do this he must design with nature.<sup>10</sup>

By the development of sensitivity to life and perception it is hoped that an inner spiritual advancement might be achieved that appears to be necessary for the quality of beauty to emerge. Sir Kenneth Clark

speaks in his *Civilisation* Series of the views of Abbot Suger in the Twelfth Century "who argued that we could only come to understand absolute beauty, which is God, through the effect of precious and beautiful things on our senses. He said 'The dull mind rises to truth through that which is material' and 'Man may rise to a contemplation of the divine through the senses'".<sup>11</sup> Frank Lloyd Wright suggests that

Man seems to be dependent upon inspiration from a higher source. Neither by heredity nor by instinct does man succeed in the life-beautiful. He seems to have missed much of this accord, concord and simplicity and instead left a trail of ugliness in his wake, instead of what we call this reality of nature--beauty. In all mans' attempted civilisations this natural right to beauty seems left to mans' vision of himself and the affair seems to rest not so much in his education as in the culture of his spirit.<sup>12</sup>

In addition to the spiritual effect of perception the method aims to develop the spiritual rewards of united and combined endeavour by a demonstration of involvement that is open to all as participants. It aims to equip and encourage people to involve themselves in the design of the environment. Notwithstanding the evidence around us, the method bases itself on the faith that our environment will be improved by increased public involvement, and that the present scene does not represent public aspirations. In his book *Cities in the Suburbs*, Humphrey Carver maintains that

A stranger observing us in our suburbs might conclude that North Americans had been utterly subdued into conformity by the great corporate systems of democracy and industry. Yet in fact this is not the truth; the suburbs give a false impression of what is in our minds. We have failed to give expression to the motives and purposes that govern us; in the arranging of cities we have been inarticulate.<sup>13</sup>

Finally the method aims to ease the alarming anxiety with which young people view the future, an anxiety that is increased by adult concern with pollution and overpopulation and increased by teachings which elaborate upon the urban problems for which we evidently have no solutions. The method aims to ease their distress by indicating areas in which young people can prepare themselves for contribution, by emphasizing the wealth of possibilities and by developing their confidence in the worth of their own experience.

#### The Professionals' Reaction to Public Design Participation

Humphrey Carver, says further in his book *Cities in the Suburbs*

To a large extent the suburbs have been an accident, the consequence of an elaborate interplay of forces in land speculation, in traffic arrangements, and in the bid for consumer markets. The people who arrive in the suburbs have been inarticulate; they have neither formulated nor expressed their desires. How could they? They weren't there when the decisions had to be made.<sup>14</sup>

If the general aims of this thesis were achieved, and students learned to formulate and express their desires, would they, when adult, be there when the decisions were made? Would designers discourage their participation, fearing a Tower of Babel?

Instances of the involvement of the public in planning issues grow in number. Some local examples that follow may convey the interest in participation between experts and citizens.

The City Planner of Vancouver, W. E. Graham, during the past three years invited submissions from the public on the issues and the alternative plans for Vancouver, and with Richard Hayward, the Director of

Long-range Planning, held public discussions continuously with citizen groups.

Peter Oberlander, the Director of the School of Community Planning at the University of British Columbia and Chairman of the Vancouver School Board, with Hilda Symonds, Supervisor of Urban Affairs Programs of the Extension Department at U.B.C., brought teachers and planning experts together for seminars during the past three years. They are now producing publications for teachers of Urban Studies, assisted by a research grant from the Central Mortgage and Housing Corporation.

In Vancouver, the leading citizens' groups formed a Composite Committee, and during the past four years held exhibitions and meetings to hear planning experts of renown. Nearby, in New Westminster, the Library and the Planning Department recently held a series of public meetings, under the chairmanship of Planner, Donald Barcham, to discuss the future of the City of New Westminster.

The Architectural Institute of British Columbia held shows at the Vancouver Playhouse Theatre during the past two years and encouraged the audience onto the stage to draw on a huge board, thirty feet long, their images of the future environment. Recently Marathon Realty of the Canadian Pacific Railway sought design leads from citizens by questionnaire surveys of areas of Vancouver.

The continued growth of public participation may herald a change in the design professions. Marshall McLuhan, in an interview in the magazine, *Monday Morning*, in 1968, addresses the problem of design of the environment, which he says:

Requires a knowledge on the part of the designer of all the effects that that particular design or image is going to have on the whole public who are subjected to it. What is becoming increasingly necessary in our world is a knowledge of effects before the effects take place, and this takes much more knowledge than the knowledge of simply producing the product.<sup>15</sup>

Designers will need the advice of media specialists, psychologists and many other experts, in addition to the fruits of participation with people. Participation has the advantage that it prepares public acceptance of the design. Undoubtedly, images help discussion, and architects are uniquely skilled in producing images of the future for their clients. No other professional group fits the role as aptly. It emphasizes a particular talent in architects, one that has suffered neglect during a preoccupation with building systems and management, the talent of portraying a variety of future scenes. The variety so far displayed is a fraction of its potential, confined by the developers' purse and his estimate of public taste. "Ugliness, writes Trevelyan, "remains a quality of the modern city, rendered acceptable by custom to a public that can imagine only what it has seen."<sup>16</sup>

#### The Choice of Young People for Involvement

The work with students applies also to adults and derives from adult architectural practice. Where it dwells on the future the young have, of course, a special place. The young represent the future: They are the future. The selection of young people for response does not exclude adults, who often participate as one with them. The emphasis on youth occurs naturally. Students in High Schools and Elementary Schools

and their teachers show more eagerness than other groups to participate, and they extend pressing invitations. Also, they offer advantages over other groups of citizens.

They assemble in classrooms without prior motive. They are not there to show themselves in the community, nor to protect their own interests. They are neither investors, developers, realtors nor builders, nor specialists in university study. The students respond openly, unaffected by special interests.

The students remain as a group day after day and so the exercise of response goes beyond the stages of adult public participation that are often limited by difficulties of assembly and by lack of time to devote to meetings. The exercises fit into the curriculum study of History, Geography, Economics, Language Arts and the Sciences, and provide a motivation for study. The exercises, even in their early form, have a place in the normal school program.

Effective communication can be established with adults through young people. Adults identify with the young people through images of their own youth and recall the changes that have occurred to the environment. Adults and young people appear to achieve a sense of unity during the exercise.

### The Method

Fifty children gather before a drawing board thirty feet long. I invite them to be architects and to design the city of the future, but first to look at the past to see what made the city into the present shape and what might shape the future.

A small trading community drawn on the shore of a river grows larger to include stores and houses. The children suggest solutions to the problems that arise in the community and draw a prosperous town that includes all that comes to mind as belonging to towns and cities. The board is obscured by a crowd of children all drawing parts of the city. They duck down to permit the children behind to see the drawing.

The board, apart from an area on the right reserved for the future, is crammed with buildings and structures of a monstrous modern city. I release the future land for development, some rush to fill the empty space, some call out for them to wait, to plan, to avoid a repetition of mistakes. But while they exhort their colleagues and point out the consequences of over population and pollution the developers are still drawing and the whole board is filled. All land is built over.

"We've messed up the future again," bemoans one student among a group who had attended previous sessions.

They recall reading of solutions and disasters of other cities, and fall to arguments about rival solutions. I guide them away from arguments, and ask them to picture themselves in the future. *What kind of life do they desire? And, if all cannot be obtained, what do they value as most important?*

Later, I help them to perceive themselves in the future and to dwell in their minds on a part of life, perhaps the hour of eating, in varieties of situations, now and in the future. The hour and then the day expand to fill a life style. Effects perceived of sound and sight and touch fill in the details of the image.



They apply their thoughts for the future in the direction of the designs for a place called Crown City. Sketch designs are suggested on the pages that follow. They describe the area and the general settings of possible solutions. They are intended to aid the imagination so that the students can extend the picture to cover a full perception of the scene through all the senses. The students are asked to imagine time in the setting before and after the scene depicted.

The students' own ideas develop from the sketches. All ideas are acceptable for consideration. They study the social and technological implications of their ideas.

The description of the Method that follows resembles a presentation to a group of students, it would vary for different ages and abilities. The presentation to students of about twelve years of age would consist of the wording and student participation that is depicted. A full degree of participation would be expected. The pace would be fairly slow and would cover six classroom periods. The historical section proceeds quickly and the section dealing with the students' designs extends to suit their fertility and pace of imagination. Generally, for older students, the pace increases and the spontaneity of response declines, and for students younger than twelve years of age the reverse would apply.

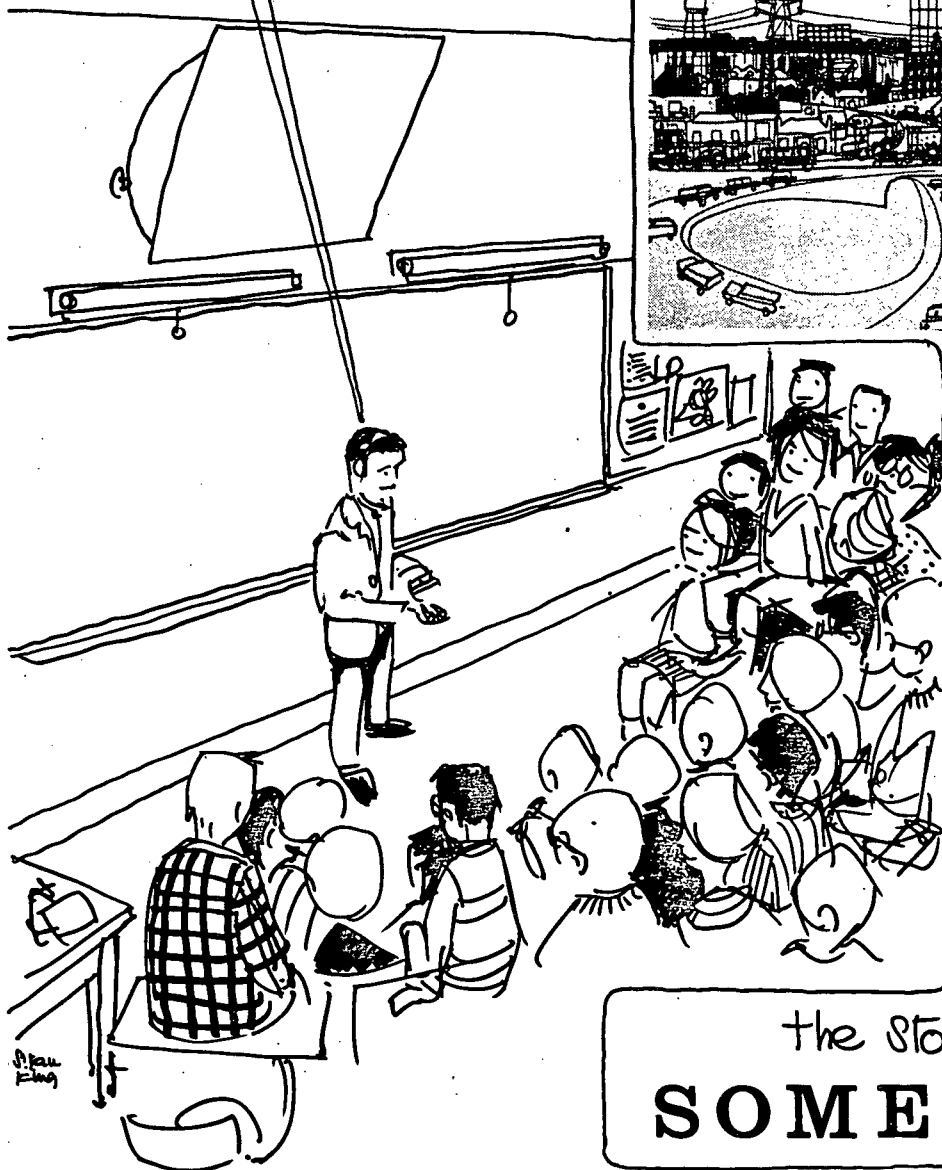
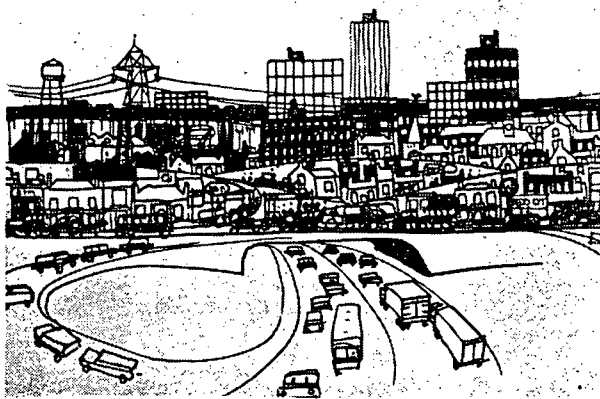
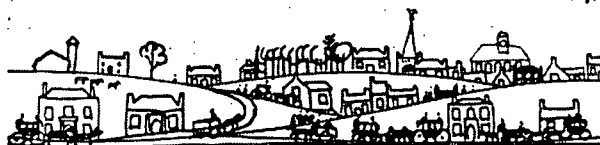
I ask the reader to imagine the scene as the students respond. Where drawings appear in the text the students would see projected slides, or be the artists of the drawings themselves.

YOU ARE INVITED TO BE ARCHITECTS AND TO DESIGN YOUR FUTURE SURROUNDINGS. BY THE YEAR 2000 THE CHANGES MIGHT SURPRISE YOU. MAYBE YOU WILL SCRATCH YOUR HEADS AND WONDER HOW IT HAPPENED.

HOW DID THE PRESENT HAPPEN? LETS SEE IF THE YOUNG GROWTH OF THE CITY HAS ANY CLUES TO HELP US DESIGN THE FUTURE.

LET YOUR IMAGINATION COME BACK TO THE BEGINNING OF A CITY. AND WATCH IT GROW AS WE DRAW IT.

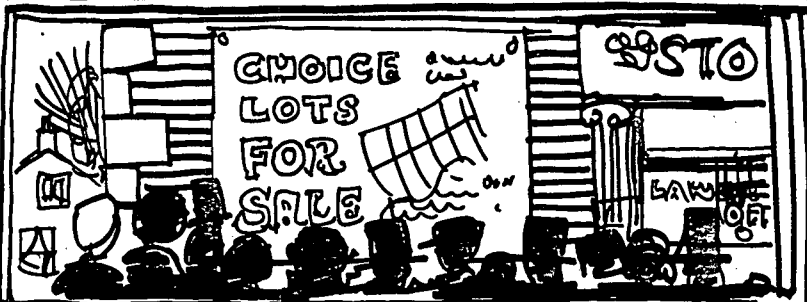
17.



the story of  
**SOME CITY**



'SOME CITY' ONCE WAS WILDERNESS. SUPPOSE YOU KNEW IT THEN AS A PLACE ON YOUR TRADE ROUTE.



YOU STAKE OUT LOTS WITH THE HELP OF A RICH FRIEND YOU BUY THE LAND AND ADVERTISE FOR SALE



SOON YOU HAVE A SETTLEMENT.

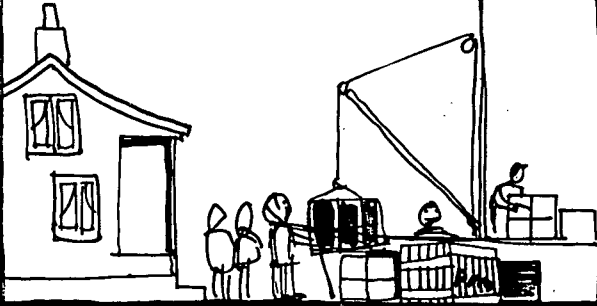


YOU SEE THAT IT COULD MAKE A TOWNSITE

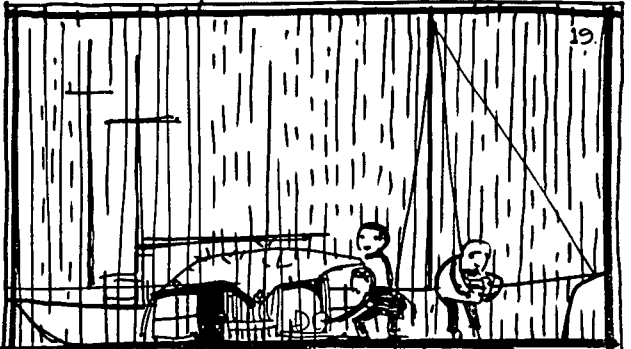


TOGETHER WITH OTHER SETTLERS YOU CLEAR THE LAND AND BUILD HOMES

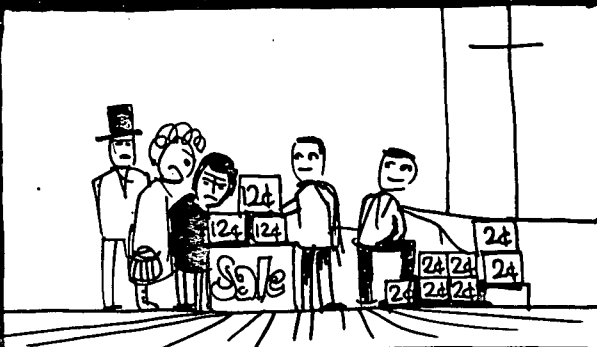




SHIPS BRING STORES. SOON THE WATER SIDE BECOMES A MARKET.



THE STORES ARE NOT SECURE  
AGAINST THIEVES & WEATHER



SOME MERCHANTS MONOPOLISE THE STORES AND RAISE PRICES



## THE TOWNSPEOPLE AND THE LOCAL MERCHANTS TALK OF REGULATIONS

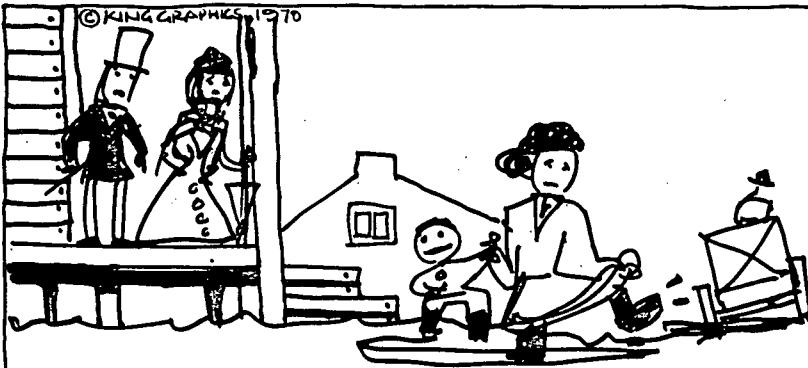


ALL MERCHANTS MUST PAY THE TOWN FOR A LICENCE TO TRADE

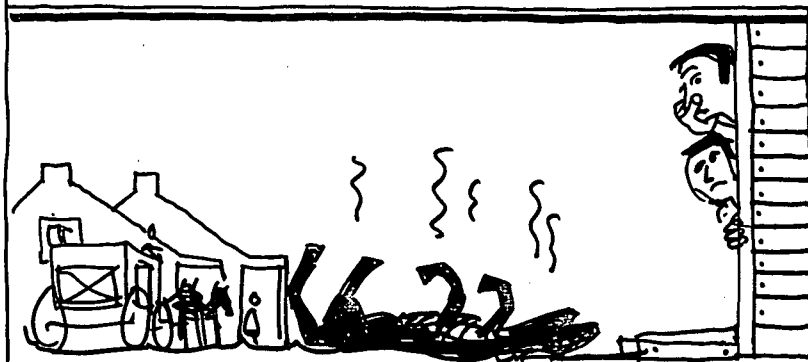


THEY MAY ONLY TRADE AT CERTAIN HOURS  
ON MARKET DAYS AND IN MARKET AREAS





THE STREETS BECOME OVER USED  
FULL OF MUD AND GARBAGE



NO ONE PERSON FEELS THAT THEY SHOULD CLEAN  
STREETS THAT OTHER PEOPLE HAVE POLLUTED.



THE TOWN HAS TROUBLE FINDING VOLUNTEERS  
TO FIGHT THE FIRES

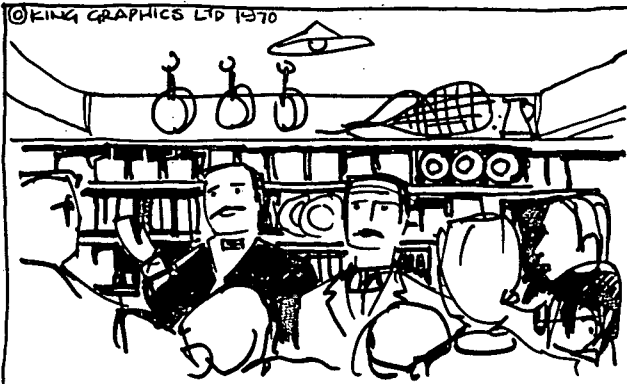


ROWDIES MAKE THE  
STREETS UNSAFE AT NIGHT

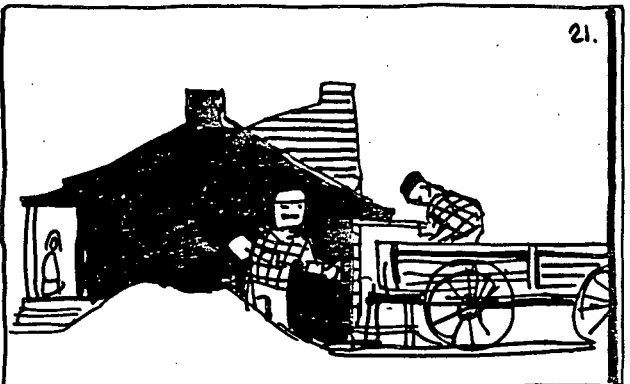


PARTS OF THE TOWN BECOME  
UNSAFE EVEN IN DAYTIME.





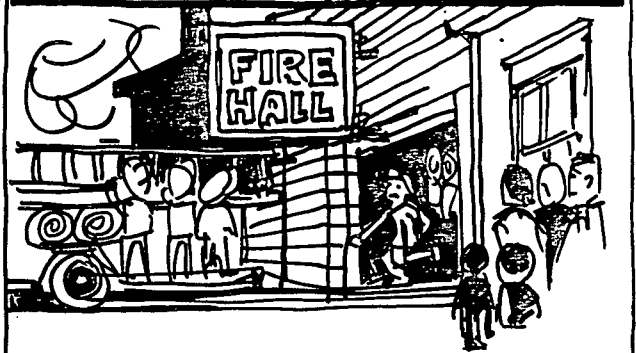
THE LEADERS SPEAK OUT - THE TOWN MUST SPEND MONEY TO IMPROVE ITSELF



MEN ARE HIRED TO TAKE CARBAGE TO A DUMP AND TO FILL THE POT HOLES



A POLICE STATION IS BUILT AND STAFFED WITH POLICEMEN



A FIRE HALL IS BUILT AND FIRE TRUCKS AND EQUIPMENT PURCHASED

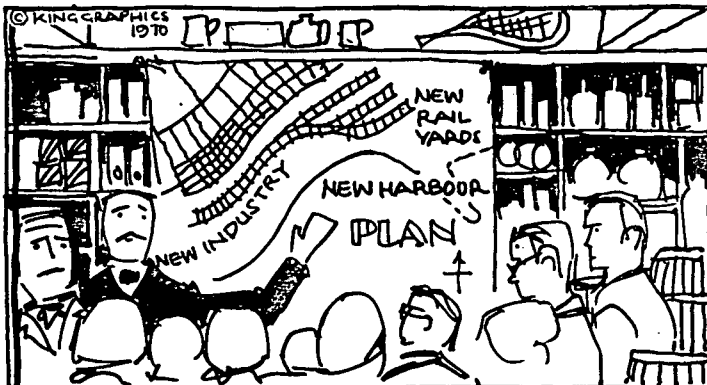


THE TOWN HAS TROUBLE PAYING FOR THE NEW IMPROVEMENTS

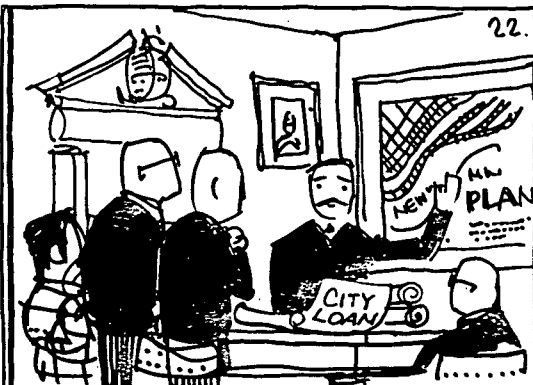


THE PEOPLE HAVE LITTLE MONEY - THEY SHOP LESS. LAND VALUES FALL.

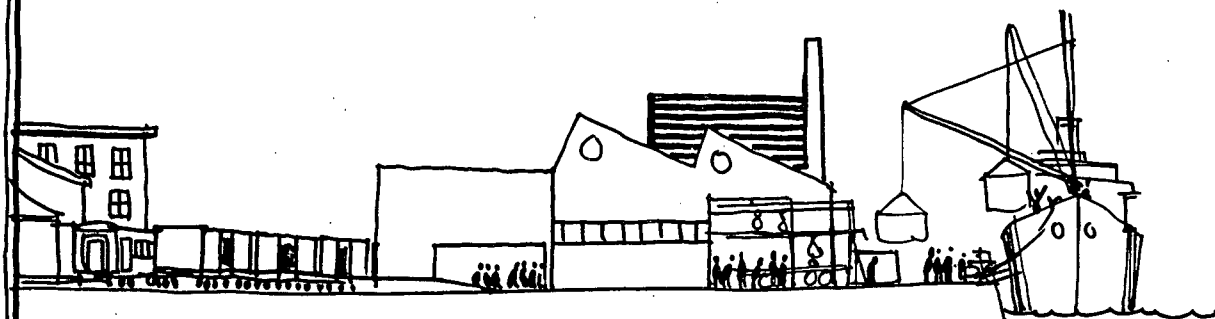




THE TOWN LEADERS PROPOSE  
A PLAN TO ATTRACT MONEY AND JOBS



THEY BORROW MONEY TO BE  
REPAID BY LATER TAXES



THE SHALLOW HARBOUR'S EDGE IS FILLED IN TO PROVIDE FLAT LAND  
FOR RAILWAY YARDS AND INDUSTRY. BIGGER SHIPS USE THE IMPROVED HARBOUR



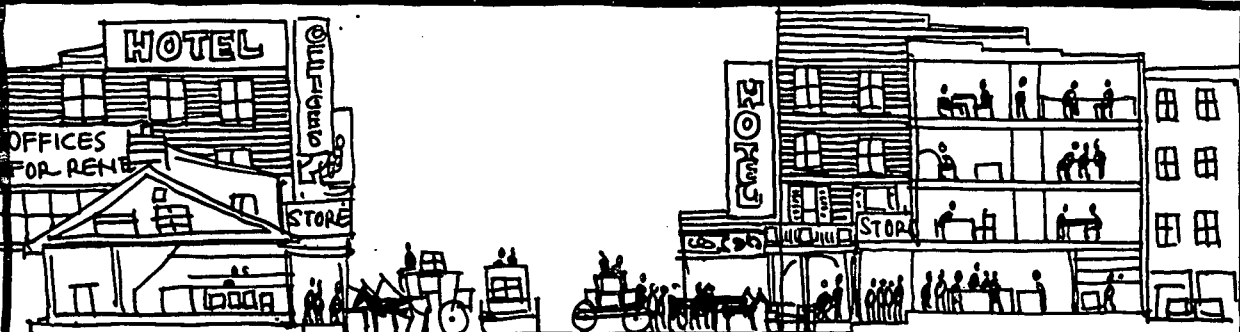
MEN AND THEIR FAMILIES ARRIVE  
TO WORK AND TO SETTLE





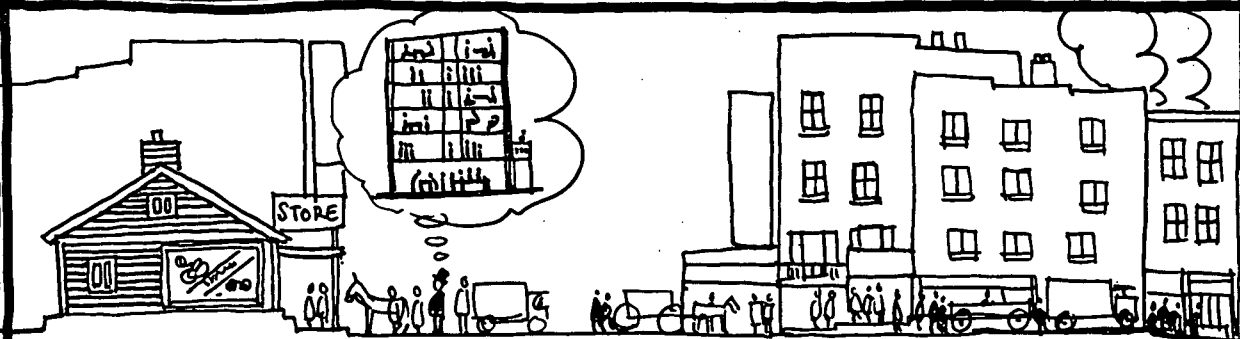
FAMILIES MOVE AWAY TO QUIETER AREAS  
HOMES ARE CHANGED INTO STORES -

THE CROWDED STREET ATTRACTS  
MORE MERCHANTS

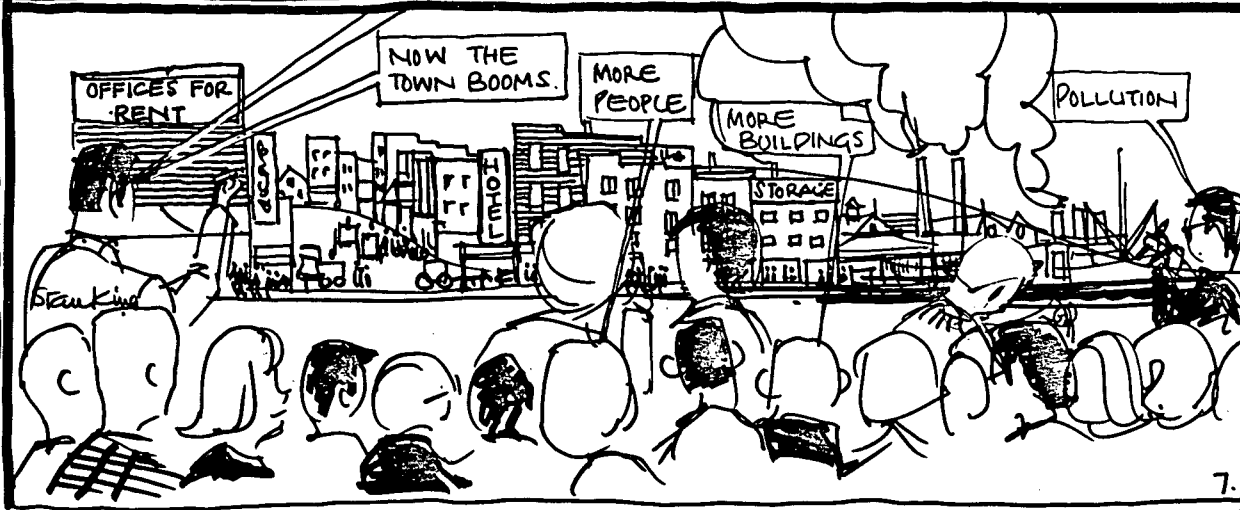


HOTELS AND OFFICES  
RISE ABOVE THE STORES -

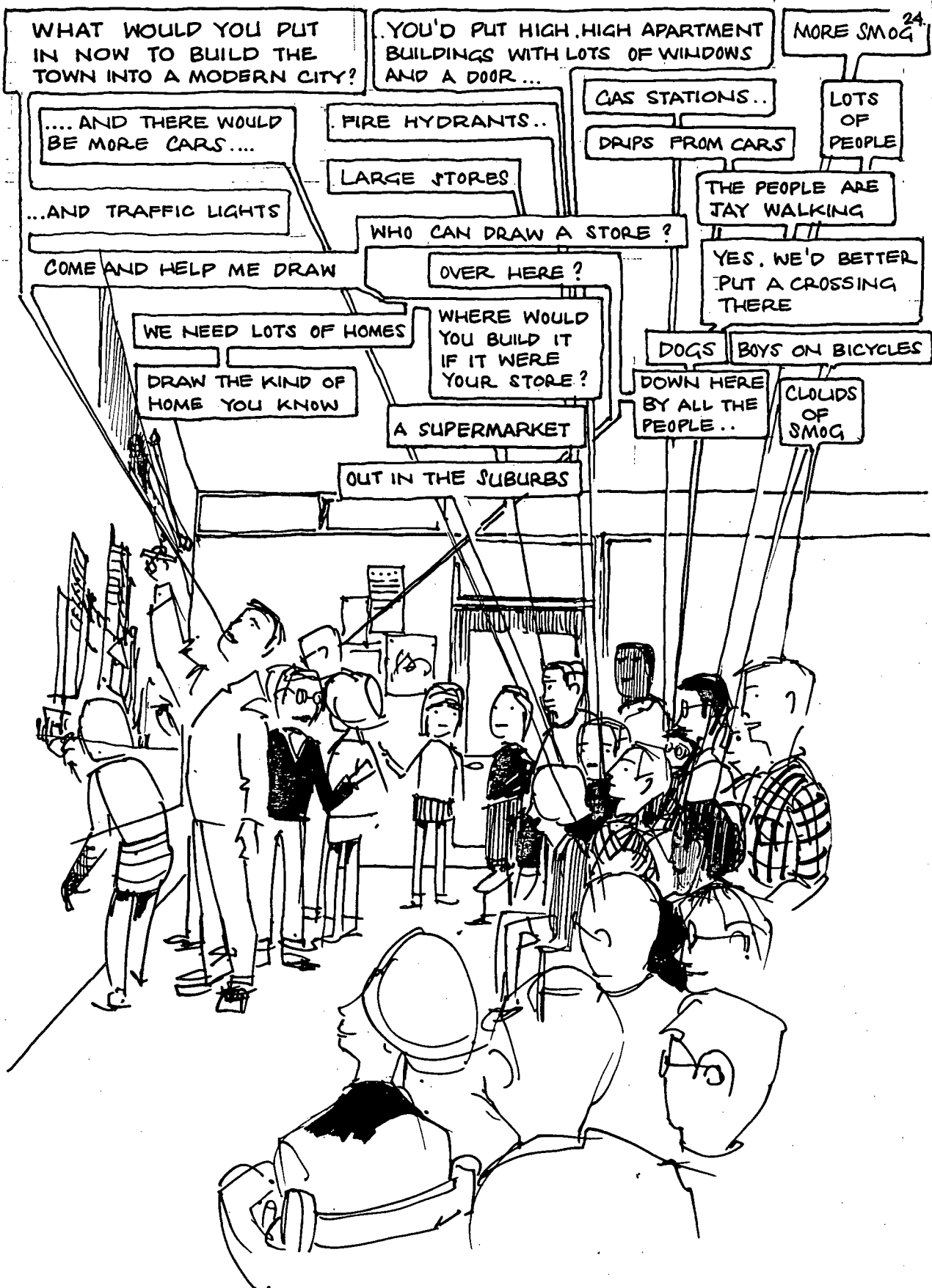
RENT PAYS THE LANDOWNERS RICHLY  
LAND BECOMES EVER MORE EXPENSIVE



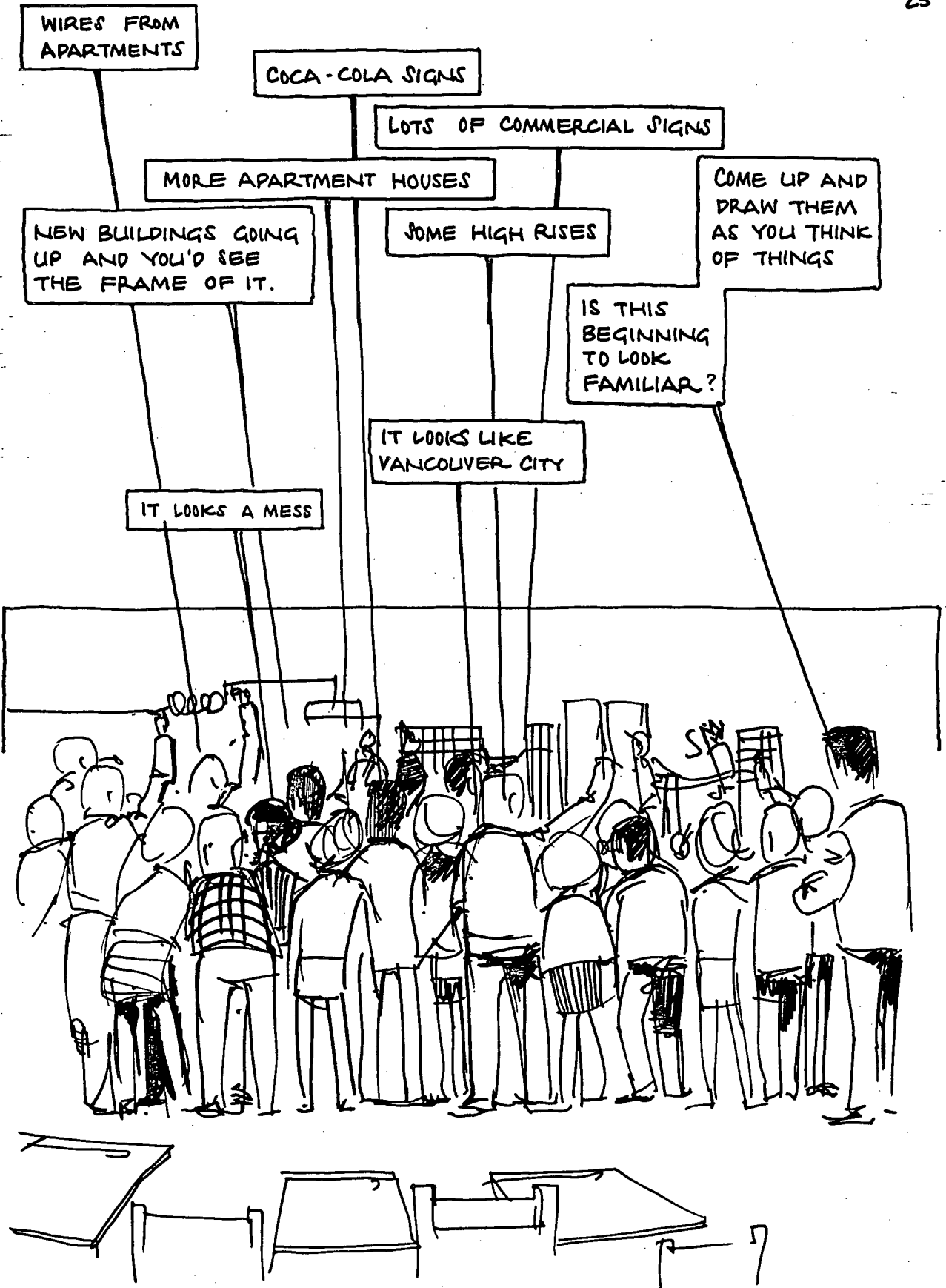
MEN BUY LAND AND OLD BUILDINGS  
HOPING TO GROW RICH FROM THE RENTALS OF A NEW LARGE BUILDING.

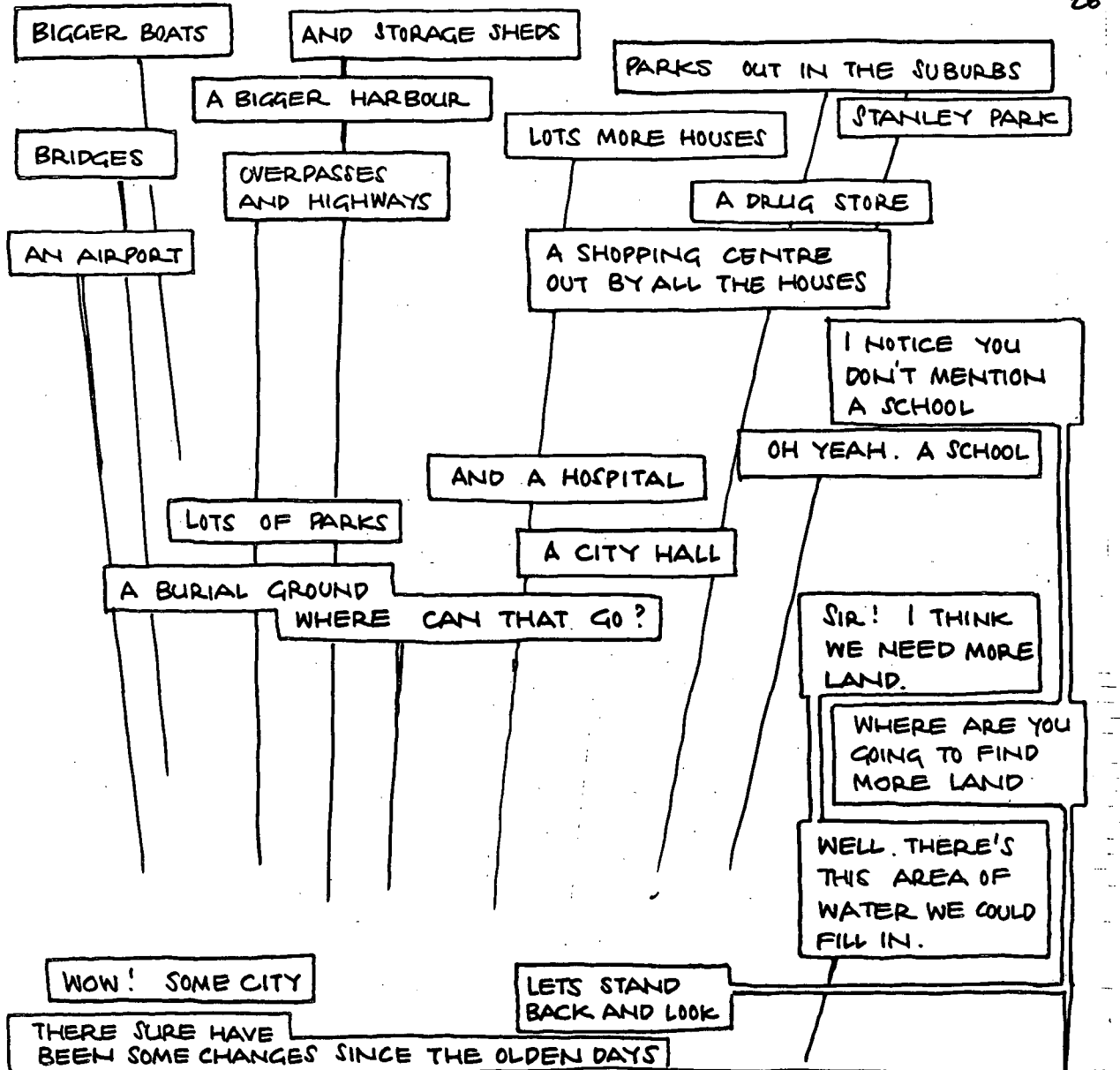






NOTE: ON THESE PAGES OF DIALOGUE, THE COMMENTS ARE FROM RECORDINGS OF LESSONS.

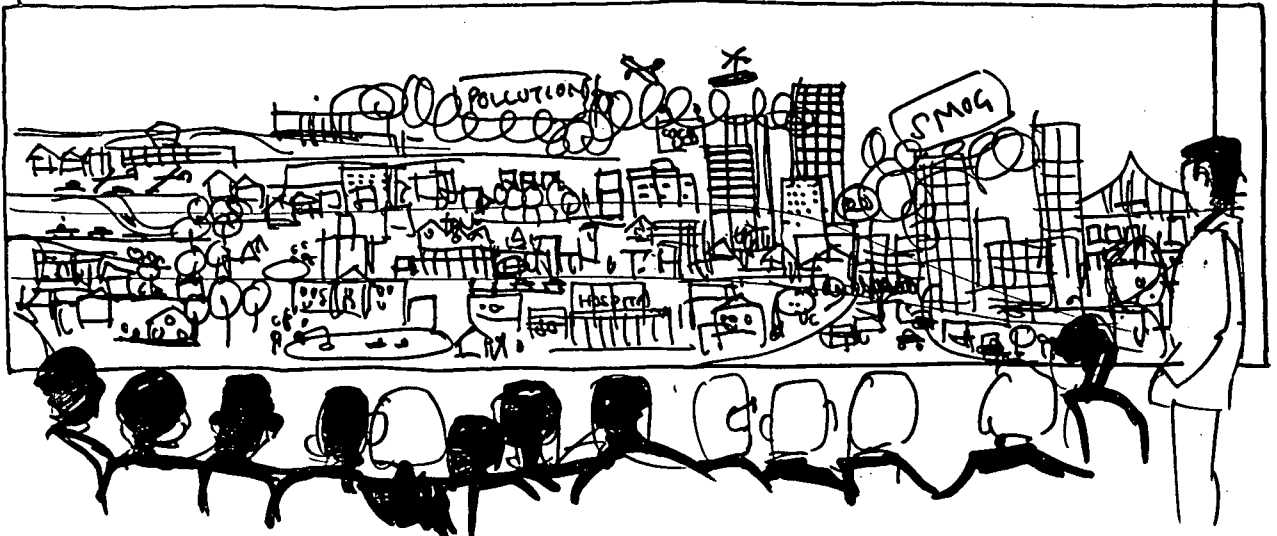


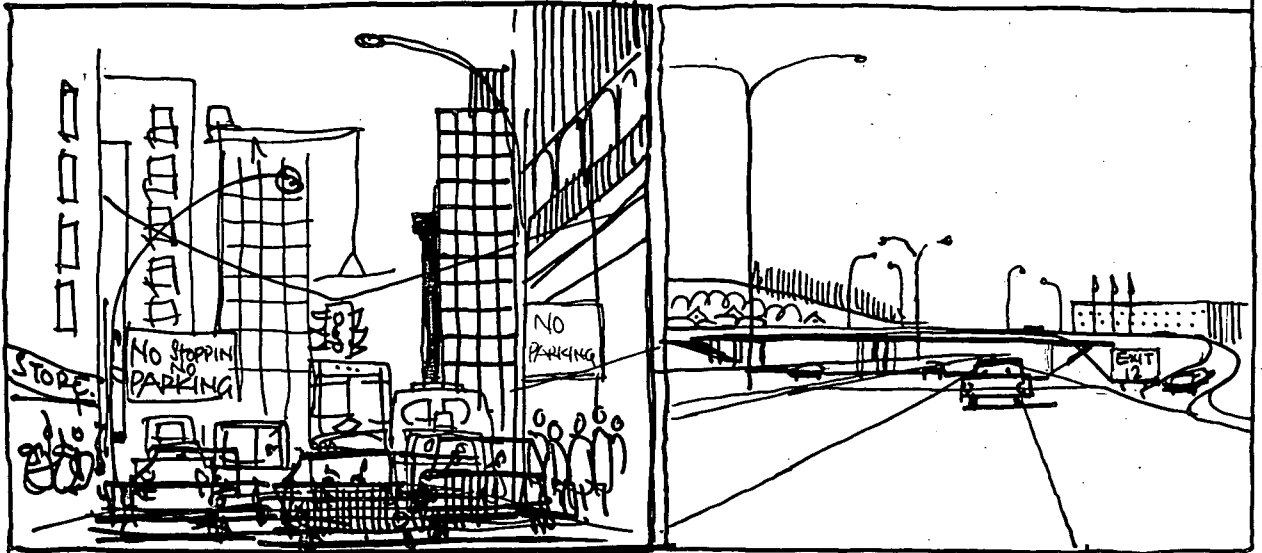


WOW! SOME CITY

LET'S STAND BACK AND LOOK

THERE SURE HAVE BEEN SOME CHANGES SINCE THE OLDEN DAYS





DOWNTOWN IS SO CROWDED THAT SHOPPERS PREFER THE SUBURBAN SHOPPING CENTRES



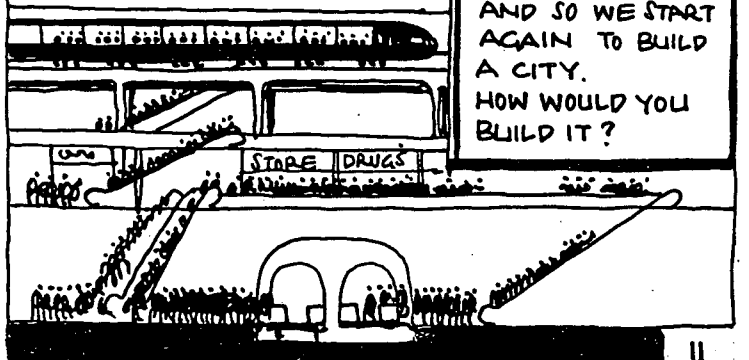
PARTS OF DOWNTOWN BECOME DESERTED  
LAND VALUES FALL

FOR SALE  
BANKRUPT SALE

MASS TRANSIT IS PROPOSED TO IMPROVE THE CITY

AND THEN RAPID TRANSIT TO BRING PEOPLE FROM FAR AWAY -

LAND FAR AWAY IS DEVELOPED INTO SETTLEMENTS AND SO WE START AGAIN TO BUILD A CITY.  
HOW WOULD YOU BUILD IT?



WE'VE MESSED  
UP THE FUTURE  
AGAIN

COULDN'T WE HAVE  
AN UNDERGROUND  
CITY SO THAT THE  
GROUND ON TOP IS  
LEFT NATURAL  
FOR PARKS?

COULD THEY HAVE A GREAT  
BIG BIG BIG PIPE THAT'S  
ABOVE GROUND SORT OF,  
AND EVERYBODY JUST WALKS  
THRO' IT  
AND THE STREETS AND  
EVERYTHING WOULD JUST  
BE USED FOR CARS?

I THINK IN THE FUTURE  
TO PREVENT CASUALTIES  
ON THE ROADS THEY WILL  
HAVE . UM . ALL THE  
WALKING WILL BE DONE  
ON THE BOTTOM LEVEL  
NEAR THE GROUND AND  
ALL THE TRAVELLING BY  
CAR & ANYTHING ELSE  
WOULD BE ON A TOP LEVEL  
SO CARS AND PEOPLE  
WOULD NEVER COME IN  
CONTACT.

WHAT ABOUT FRESH AIR?

THE TOP WOULD BE  
ALL USED UP WITH  
FANS AND THINGS

YOU COULD HAVE  
AIR CONDITIONING

I WOULDN'T LIKE THE RESIDENTIAL AREAS  
UNDERGROUND, THOUGH THE TRANSPORT  
AND SHOPPING MIGHT BE. I THINK THAT WE  
LIKE TO SEE THE BEAUTY OF THE WORLD  
NOT JUST DARK NOTHINGNESS

IT WOULD BE EASIER  
TO HAVE THE OTHER  
WAY ROUND BECAUSE  
CARS ARE HEAVIER  
THAN PEOPLE

DOWN IN SEATTLE, I THINK THEY'VE MADE  
A DRASTIC MISTAKE WITH THEIR MULTI-  
LEVEL FREEWAYS. THEY'VE GOT THEM  
RIGHT DOWN TO THE WATERFRONT ....  
AND YOU JUST HAVE ALL THIS SMOG  
COMING FROM 3 LEVELS OF TRAFFIC, 4 LANES  
TILL THERE'S 12 LANES OF TRAFFIC CONSTANT  
ALL THE TIME...



I'D LIKE TO LIVE ON AN ISLAND  
BECAUSE ITS SEPARATED.. NO  
CONFUSION.. NO QUARRELS AND  
ITS REALLY BEAUTIFUL, THE WORLD  
ISNT WASTED BY CITIES & SMOG..

... AND YOU COULD  
GO ON HORSES..

YOU'RE ALWAYS GOING TO HAVE PERSONAL  
OR POLITICAL ARGUMENTS IF YOU WANT  
TO KNOW WHAT'S GOING TO KEEP THE  
CITY GOING.

THE BIG QUESTION IS-  
WHAT KIND OF LIFE  
DO YOU WISH TO LIVE?  
IF ALL YOU WISH  
CANNOT BE OBTAINED  
WHAT DO YOU VALUE  
AS MOST IMPORTANT?

WELL I'D LIKE TO LIVE IN A TOWN...WELL A MODERN  
TOWN IN A BEAUTIFUL SETTING BY THE SEA

### CONSIDER EATING.

MANY DIFFERENT  
WAYS OF EATING  
AND OF OBTAINING  
FOOD COME TO MIND

SANDWICHES IN  
THE SCHOOL YARD.

HAMBURGER IN  
A CAFE.

CAKE AT A PARTY.

A PICNIC.

COOKING YOUR OWN  
FOOD.

PICKING FRUIT.

THINK ABOUT A FEW POSSIBLE WAYS  
THAT APPEAL TO YOU

NEXT · THINK ABOUT THE SURROUNDINGS  
WHAT DO YOU SEE IN YOUR MIND ?  
CLOSE YOUR EYES AND IMAGINE THE SCENE

WHAT LIGHT AND COLOURS ?

WHAT SOUNDS DO YOU HEAR ?

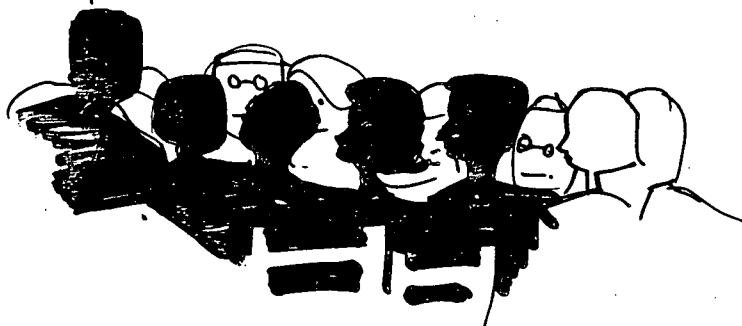
WHAT SMELLS AND TASTE ?

HOW MANY PEOPLE ARE WITH YOU ?

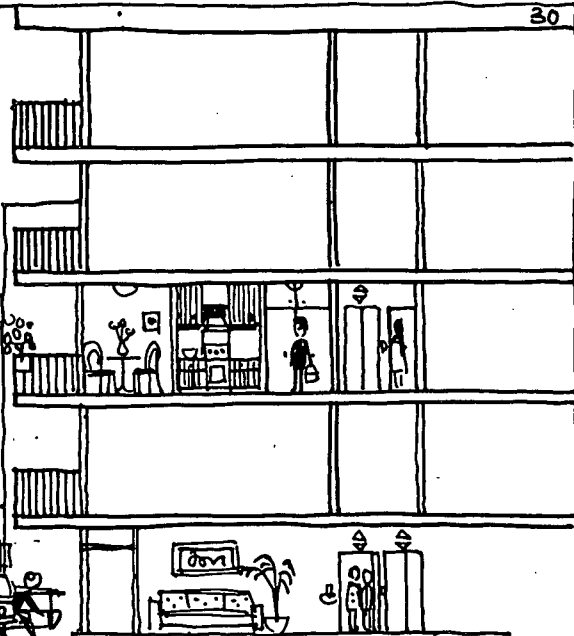
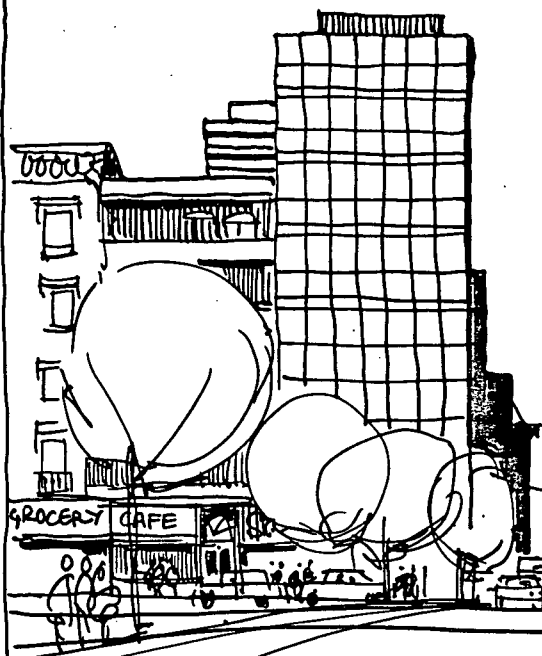
IS IT DAYTIME OR NIGHT-TIME ?

THE SURROUNDINGS INFLUENCE THE  
CHOICE THAT ARE OPEN TO YOU.  
LOOK NOW AT THE DIFFERENCES OF FOUR  
ENVIRONMENTS.  
FORM YOUR OWN LIST OF FEELINGS.

CONSIDER OTHER ACTIVITIES IN EACH  
ENVIRONMENT TO COMPARE AND TO  
TEST YOUR OWN CHOICE OF .



## LIFE STYLES



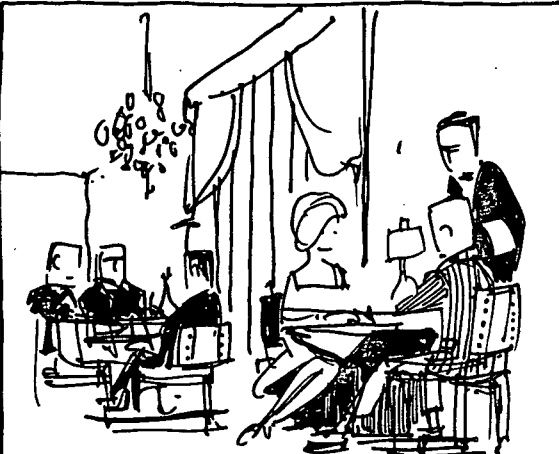
SMALL CITY APARTMENT.



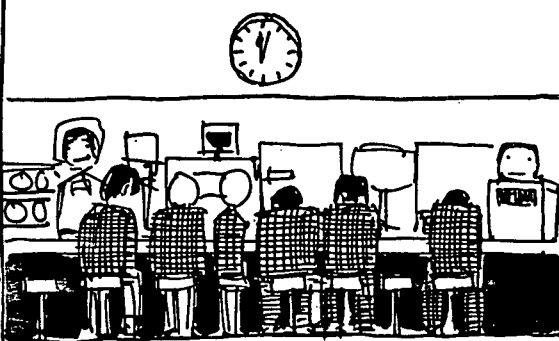
FREQUENT SHOPPING

SOUNDS OF TRAFFIC, CASH REGISTERS  
SMELL OF STORES, PEOPLE, EXHAUST  
TOUCH OF PLASTIC, MONEY  
COMMUNITY OF CROWDS, FRIENDS  
RHYTHM OF DAY AND NIGHT

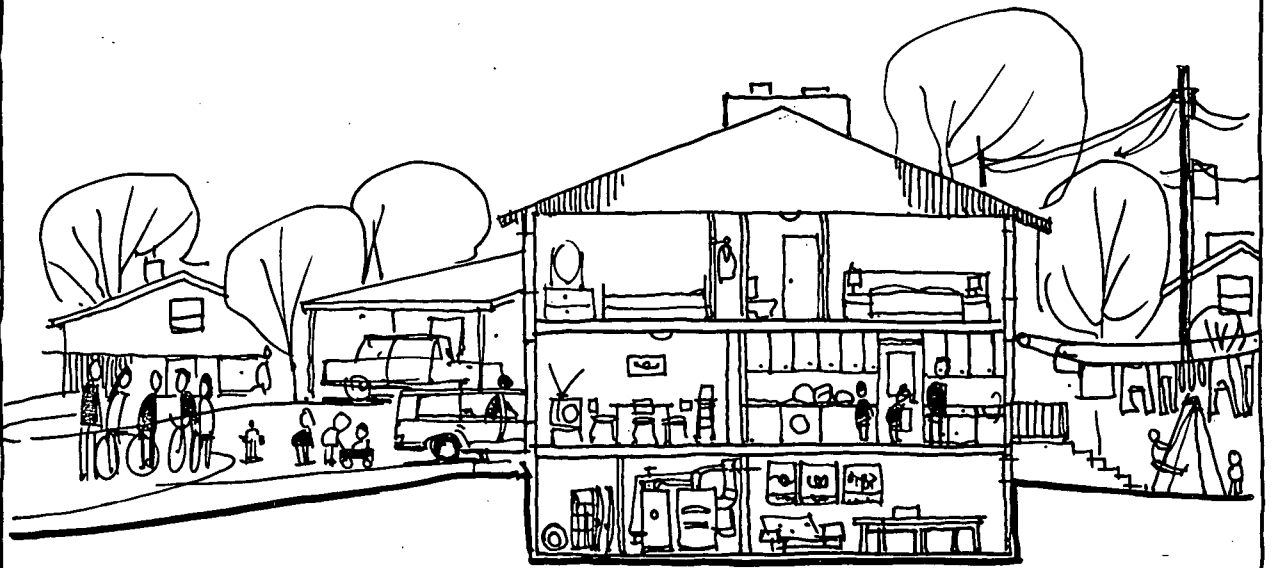
SMALL KITCHEN - LITTLE STORAGE



EATING OUT



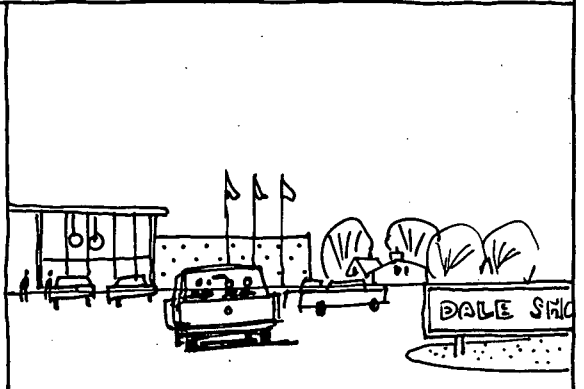
city



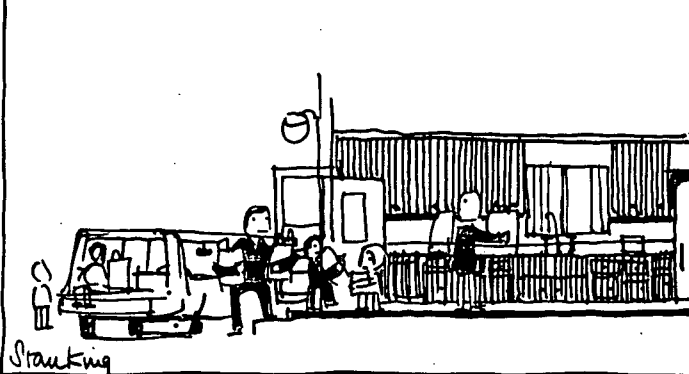
LARGE SUBURBAN HOME · LARGE KITCHEN · MANY CLIPBOARDS



WEEKLY SHOPPING



HOME COOKING



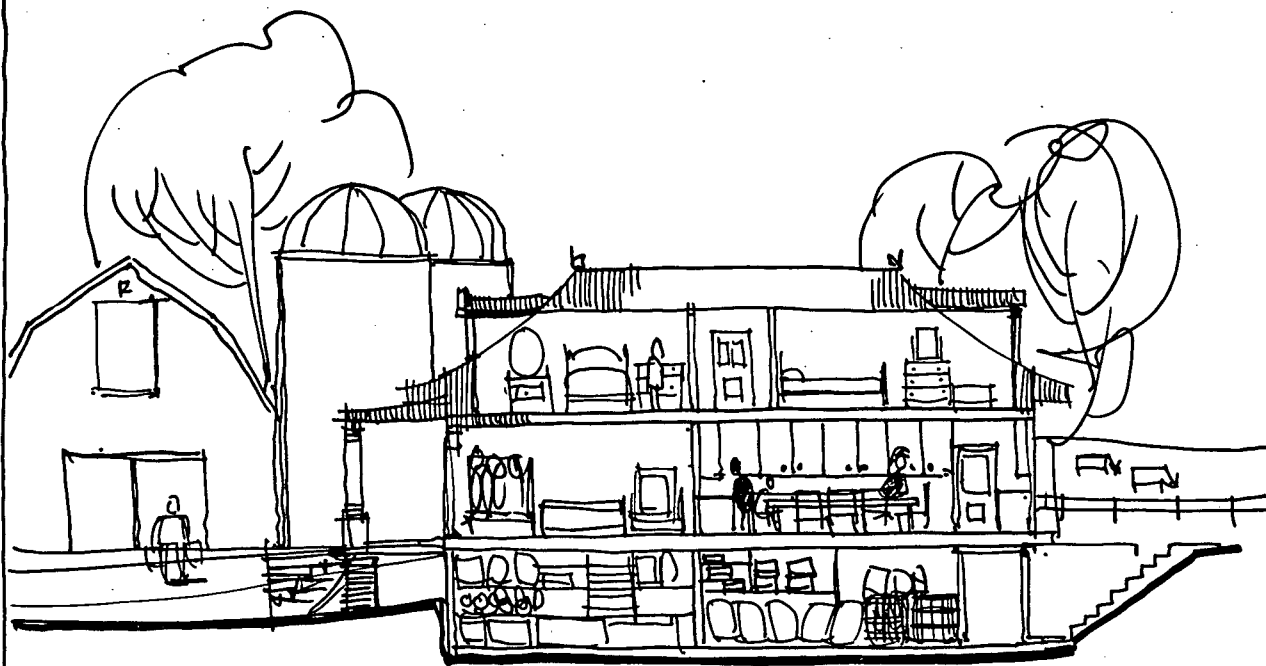
Stacking



SOUNDS OF CHILDREN , HIGHWAY  
SMELL OF BLOSSOM , BASEMENTS  
TOUCH OF GRASS , WOOD .  
COMMUNITY OF FAMILIES  
RHYTHM OF SCHOOL & HOLIDAYS

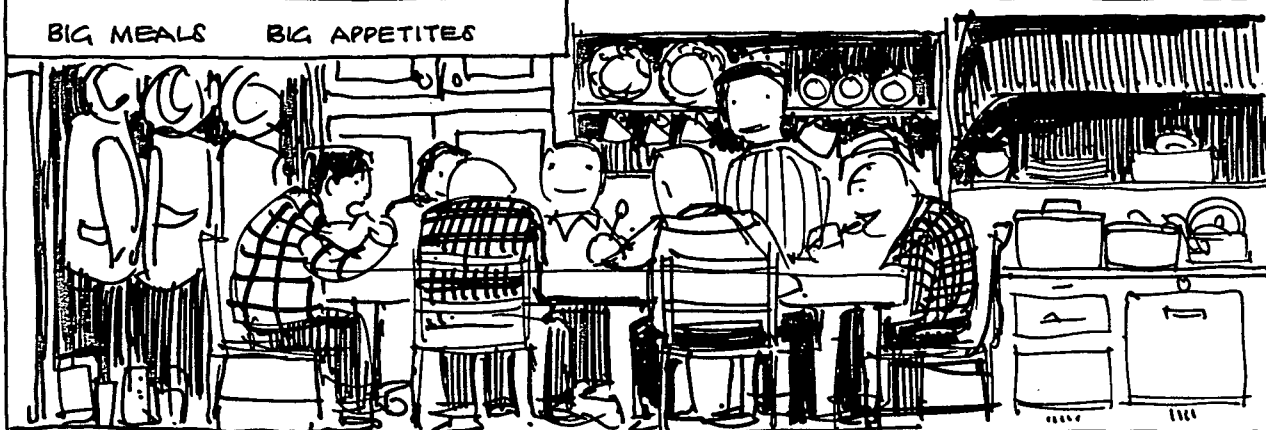
suburb



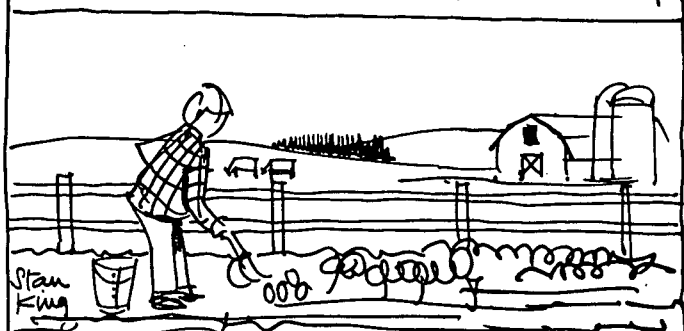


LARGE FARM HOUSE - MUCH STORAGE - LARGE KITCHEN

BIG MEALS BIG APPETITES



GARDEN PRODUCE OCCASIONAL SHOPPING



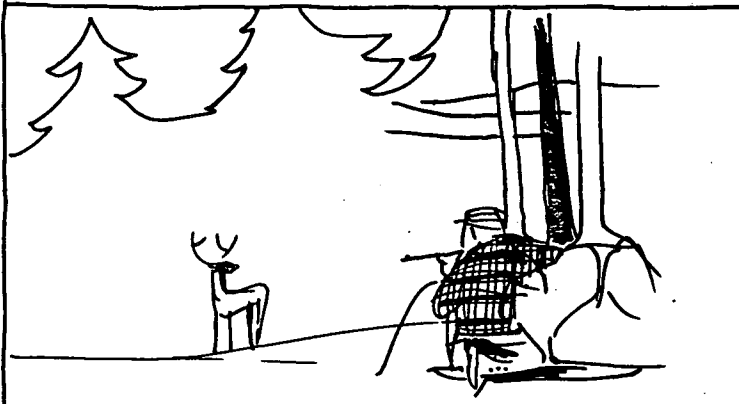
SOUNDS OF ANIMALS, MACHINERY  
SMELL OF ANIMALS, MANURE, CHICKENS  
TOUCH OF ANIMALS, EARTH, WOOD  
COMMUNITY OF FARM WORKERS, NEIGHBOURS  
RHYTHM OF PLANTING, HARVEST, BREEDING



farm



SMALL LOG HUT. UNLIMITED SPACE

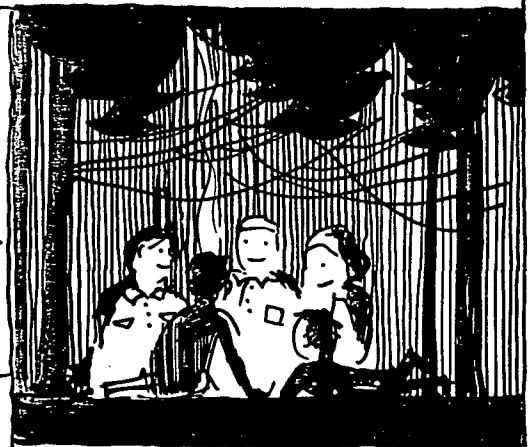


HUNTING . FISHING GARDEN PRODUCE PIGS . HENS . DUCKS



Steaming

SOUNDS OF NATURE . CHOPPING  
SMELL OF THE WILDS, WOODSMOKE,  
TOUCH OF ANIMALS, EARTH, WOOD, FROST  
COMMUNITY OF FAMILY, ANIMALS  
RHYTHM OF SEASONS



wilderness

Life Styles. Test your own experiences and your own preferences in the following personal comparisons of life styles in city, suburb, farm and wilderness.

1. The City Apartment Way of Life

Shelter: Apartments of various sizes, with balconies, no garden or personal outdoor space.

Eating: Small kitchen precludes elaborate meal preparation. Meals can be ordered and delivered. Many restaurants in apartment vicinity. Packaged lunches eaten in public parks. Some apartment blocks have a communal room which can be used for parties.

Provisions: Can be obtained daily. Shopping in delicatessen stores and boutiques and specialty shops a feature of city dwelling. Storage in the apartment is minimum, small cupboards and small refrigerators.

Fuel: Electricity or gas. Central heating thermostat control.

Toilet: Modern bathroom.

Laundry: In basement, coin operated. Laundry companies delivery and pick-up service.

Repair and Maintenance: Undertaken by management; service companies, cleaning companies.

Travelling: By bus or mass transit train or car.

Study: Schools within walking distance or reached by public transport. Bedroom for study. City library.

Workshop: No provision in dwelling. Evening classes, clubs.

Recreation, Entertainment: Theatres, restaurants, stores, playhouses, movie theatres, very close at hand. Art galleries, parades in streets and civic squares, museums. Parties limited by small space in the apartment: friends are met in restaurants and places of entertainment. Camping, horse riding, boating, beaches, golf sometimes available in public parks. Travelling long distances by car or bus usually required. Athletics available at schools and community centres. Professional sport in stadiums within city limits. Organized groups in schools and community centres. Libraries, colleges, studios, clubs, Adult Education classes. Clubs are organized for skiing and hiking and nature rambles.

#### Perception

Light - Night lights, in streets and stores, soft light in restaurants. Not much sun.

Space - Limited personal space. Varying spaces of parks, streets, stores.

Sound - Little control over sound - will sometimes reach irritating levels.

Touch - Limited to household chores, creative hobbies, hand rails, doors.

Smell - Various and uncontrolled; pollution reaching irritating levels.

Social - Observation of activity everywhere. Participation optional. Immigrants like to live in an area with

their own people to maintain language and customs from their own home. Their shops and restaurants and schools reflect their origin.

Time - Spontaneous, no need to plan ahead, extended day into night life.

Aura - Man-made, sophisticated, often inhuman, built by specialists, huge scale, tense.

## 2. The Suburban Home Way of Life

Shelter: The suburban dweller is defined by his acceptance of the need to commute by train or car, and in return expects a more spacious home than that available in the city. Single family homes with varying lot sizes. Large homes with elaborate gardens, small compact homes with a "backyard." Duplexes with communal play areas for young children; Townhouses with communal play areas for young children.

Eating: In the family kitchen or dining room, outdoor barbecues, picnics on the grass. Occasional snacks at the local shopping centre restaurant or coffee shop or snack bar in a drug store. Occasional celebrations at a downtown restaurant.

Provisions: A weekly trip to the supermarket, local shopping centre to fill refrigerator and freezer, large storage areas.

Delivery of milk and bread essential since the car is the only means of transportation. Shopping in the evening is popular unless the family has two cars, or a train service takes the breadwinner to the city.

Fuel: Oil-fired furnace, electric or gas heating. Open log fire in many homes.

Toilet: One complete bathroom and a toilet and washbasin constitute a 1/2 bathroom. Newer homes contain a master bedroom bathroom with shower.

Laundry: Basement utility room with automatic washer and dryer.

Repair and Maintenance: Much of this undertaken by homeowner, landscaping often by a firm in larger gardens.

Travelling: Train, bus or car. Suburban areas with poor train or bus services require two or three cars per family.

Study: School within walking distance. Bedrooms are usually large enough to make into study rooms.

Workshop: Basements are outfitted as workshops.

Recreation, Entertainment: Camping - tents set up in the garden for "sleep over" parties for young children. Long trips are necessary to reach park areas for overnight camping. Picnicking in the garden or local park or on long trips. Hiking, climbing, boating, fishing, skiing, horse riding, golf - in some suburbs are within walking distance. A short drive would bring most into range. Sport - organized hockey - soccer - football, baseball, indoor skating rinks and playing fields exist in most suburban areas. Professional games require a trip to stadium. Track events, swimming and cross country competitions are easily arranged between suburban schools. Entertainment mostly from the people's own resources. School

plays, drama groups. Movie theatres are becoming popular in some suburban areas. Live theatre and music require a trip to the city centre. Parties and visiting have adequate space and facilities. Organized groups are often centred on the churches and use the space provided; that is, Keep-Fit class, Brownies, Scouts, Art and craft classes, Badminton, bridge clubs. Schools are also a focal point of the community and are in great demand after school for many organizations. The P.T.A. provides group involvement. Ceremonies, festivals and parades take place from shopping centre parking lots or public parks.

### Perception

Light - Daylight, sunlight, firelight, bright highway lights, bright shopping centres.

Space - Varied - adequate indoor and outdoor space for small families. Monotonous repetition of same spaces, same volumes.

Sound - Good control of noise.

Touch - Household chores and gardening and creative work and maintenance in and around property gives some variety.

Smell - Under control, flower gardens, trees, grass.

Social - Participation unavoidable. Neighbours close and to some extent competitive. Sometimes difficult to control social pressure. Some suburban areas will be a mixture of immigrants, some representing as many as

thirty-three countries. Others will have a high proportion of one country and this will reflect in their customs and schools.

Time - Preoccupied with transportation time.

Aura - Small scale variety of gardens. Personal gardens and backyards. Personal interiors and basement decor. Family atmosphere.

### 3. The Farm Way of Life

Shelter: Single family homes, often housing three generations, large farm house or smaller cottage. Orchards and pastures, barns, vegetable gardens surround dwelling. (In Eastern Canada the woodlot forms a feature - where the wood cut to burn in a wood stove is replaced each year by new growth.)

Eating: Family kitchen, summer kitchen, outdoor barbecue, picnics. Visiting neighbours, snacks in village coffee shop. Wood stove used often in emergency - food preparation and cooking for many leads to large kitchen with much time spent in it.

Provisions: Canning and bottling fruit and vegetables. Reliance on delivery of bakery and dairy produce, large storage areas. Deep freeze, pantry, basement, shed. In bad weather food stores have to last for many weeks. Shopping - by catalogue order - occasional trips to shopping centres and city centre. Local village stores - general store - visited weekly.

Fuel: Oil, wood, electricity, hot water radiators.

Toilet: Earth closets, indoor bathrooms converted from a bedroom.



Laundry: Machines in kitchen or basement.

Repair and Maintenance: These skills usually practised by the owner; much time given to it.

Travelling: Truck, pick-up, car, jeep-tractor. Snow plow.

Study: School far away, reached by bus. Study in bedrooms or dining room.

Workshop: Workshop in barns and out-buildings to house machinery and tools.

Recreation, Entertainment: Fishing, camping, picknicking and horse riding - on lakes, streams and woodlands near the farm. Beach, boating, rock climbing, golf and athletic events - may mean travelling some distance. Skiing cross country on own land. Downhill skiing at a resort. Entertainment space at home and in the garden for parties and dinners, barbecuing outdoors, picnics. Television. Organized groups of weekly activities in community buildings, church halls. Barn dances, Brownies, Guides, Cubs and Scouts. Social groups dependent on church organization. Some rural areas are served by a travelling library. Festivals related to churches, rodeos, country fairs.

### Perception

Light - Daylight, sunlight, firelight, moonlight.

Space - Outside space ordered, aesthetic and varied. Personal space good, sometimes limited. Barns and sheds.

Open sky.

Sound - Certain noisy activities, good control of noise.

Cattle and birds.

Touch - Various use of tools and materials, earth and garden produce. Food preparation.

Smell - Various and controlled, natural smells, fresh air.

Social - Involvement in community necessary for survival - reasonable control of social pressures because of isolation from neighbours. Rural areas reflect the character and customs of immigrants.

Time - Involved with seasonal tasks, certain sense of pressure. Day and night defined.

Aura - Large scale buildings. Calm. Unpretentious.

Builders part of the community.

#### 4. The Wilderness Way of Life

Shelter: Cabin or shelter self made. Tent for temporary dwelling.

Eating: In hut, barbecuing, picnics.

Provisions: Simple and in large quantities. Some food grown. Hunting and fishing. Storage in hut and suspended from trees in cache. Underground storage with ice cut from lake.

Fuel: Wood, cut and sawn by self.

Toilet: Water carried from lake or stream, heated on stove. Earth closet, dug by self.

Laundry: In hut, dried outside or on lines in hut. Iron heated on stove.

Repair and Maintenance: By self, upkeep of tools, care and storage

of great importance.

Travelling: Long car journeys, canoe, horse, mule or foot.

Study: School far away, reached by bus. Correspondence course.

Workshop: Outdoor shelter to store and protect tools and wood.

Recreation, Entertainment: Camping, picnicking, nature hikes, skiing, boating, fishing, hunting, horse riding. These become a necessity, where in other environments they are pleasures. Athletics, sport contests and competitions of skills - logging, shooting. Reading. Occasional visits from neighbours. Observation of wild life. Hand crafts, painting. Trips to nearest village. Entertainment is mostly that which nature and one's own resources provide. Record player, transistor radio. No organized groups. Ceremonies and festivals at annual celebrations and fairs the occasion for a visit to local town.

### Perception

Light - Daylight, sunlight, firelight, moonlight.

Space - Unlimited outside, cramped conditions for housekeeping and chores.

Sound - Complete control over noise.

Touch - Unlimited handling of materials, tools, food.

Smell - Wood smoke, cooking, fresh air, trees, earth closet.  
Control over odour.

Social - Contacts limited. Complete control over social involvement.

Time - Absorbed in chores, getting food, preparing and cooking it, maintaining and improving dwelling.

Aura - Natural and harmonious. The pride of personal humble constructions.

By considering your preference for each part of the day you build a picture of your future way of life and the picture forms the description for your contribution to the design of Crown City.

The choices in the survey are not an "either," "or" choice. Several alternatives might be chosen at different times. This may apply to alternatives in total environment so that a person may choose wilderness living in the late summer or for skiing in the winter, and the city for the rest of the year. The chosen environment is to be the main base, the home. Choose an activity and proceed through typical and special days. Start with a consideration of what is done now in the present environment. Define that which pleases you now so that the same conditions can be recreated.

Describe, as accurately as you can, the effects in your design that you perceive through the senses in relation to the list that follows:

Touch: Of wind, of water, and of textures, of foliage and animals and people. Heat from the sun, from fires, or from central heating.

Sound: Of men's or women's voices, of traffic, of activity. Specific sounds as in poetry, music or the sounds of nature.

Degrees of silence in order to hear specific sounds.

**Light:** Daylight, night light and all variations of translucence, sparkle, glare, flash, reflection, etc. Form. Surface texture. Colours, bright, warm, restful.

**Odour:** Smells and tastes of nature, of food, of people, of traffic, smells of materials, smells of fire and of manufacturing processes.

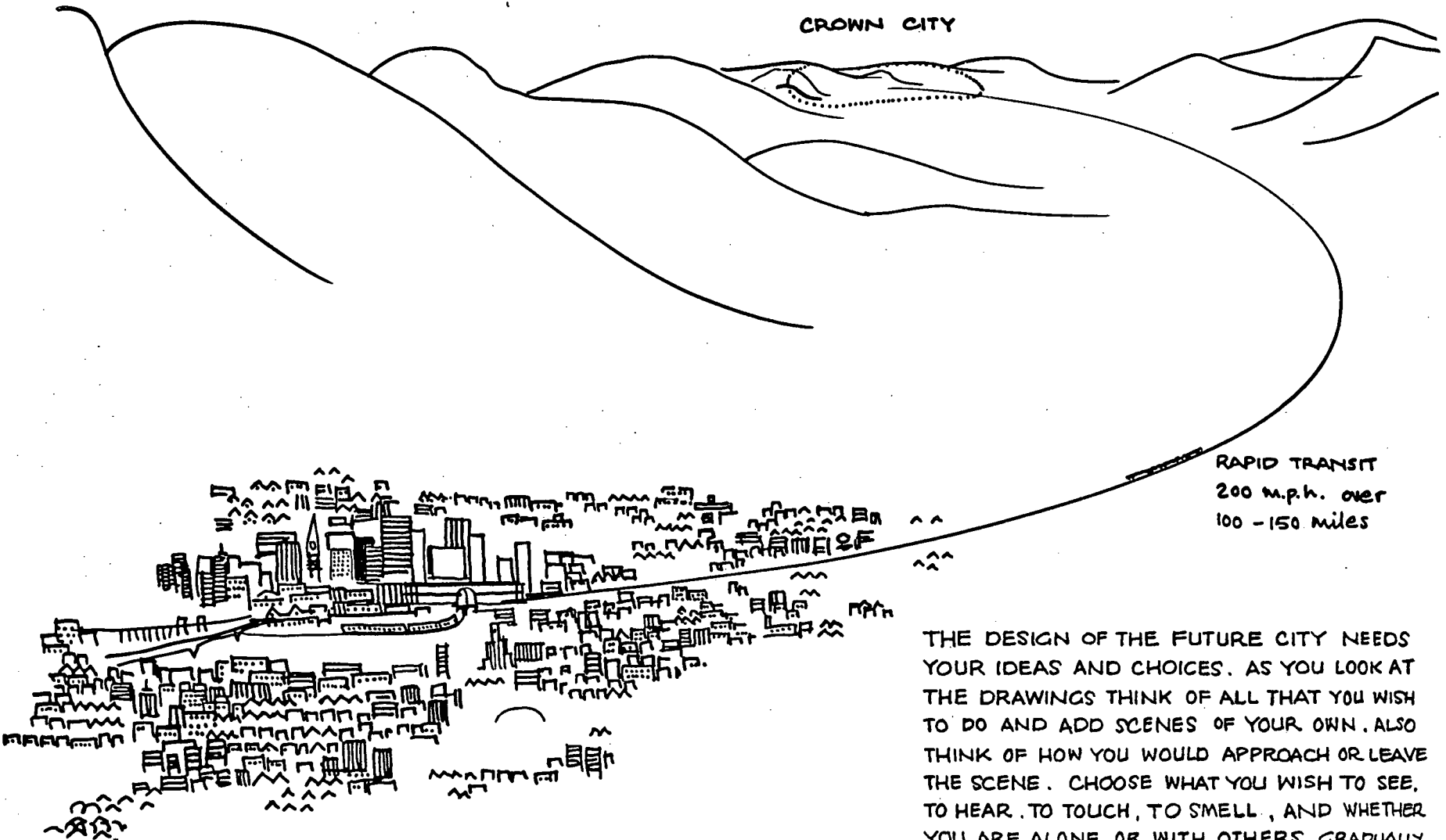
**Time:** Duration and frequency of activities. Hour. Season. Night or day. Orientation and the sun's movement.

**Space:** Movement in space, travel in space, size and degree of enclosures, both natural and man-made, both interior and exterior. The view of space.

**Community:** The number of people around the activity, crowds, family, couples or solitude.

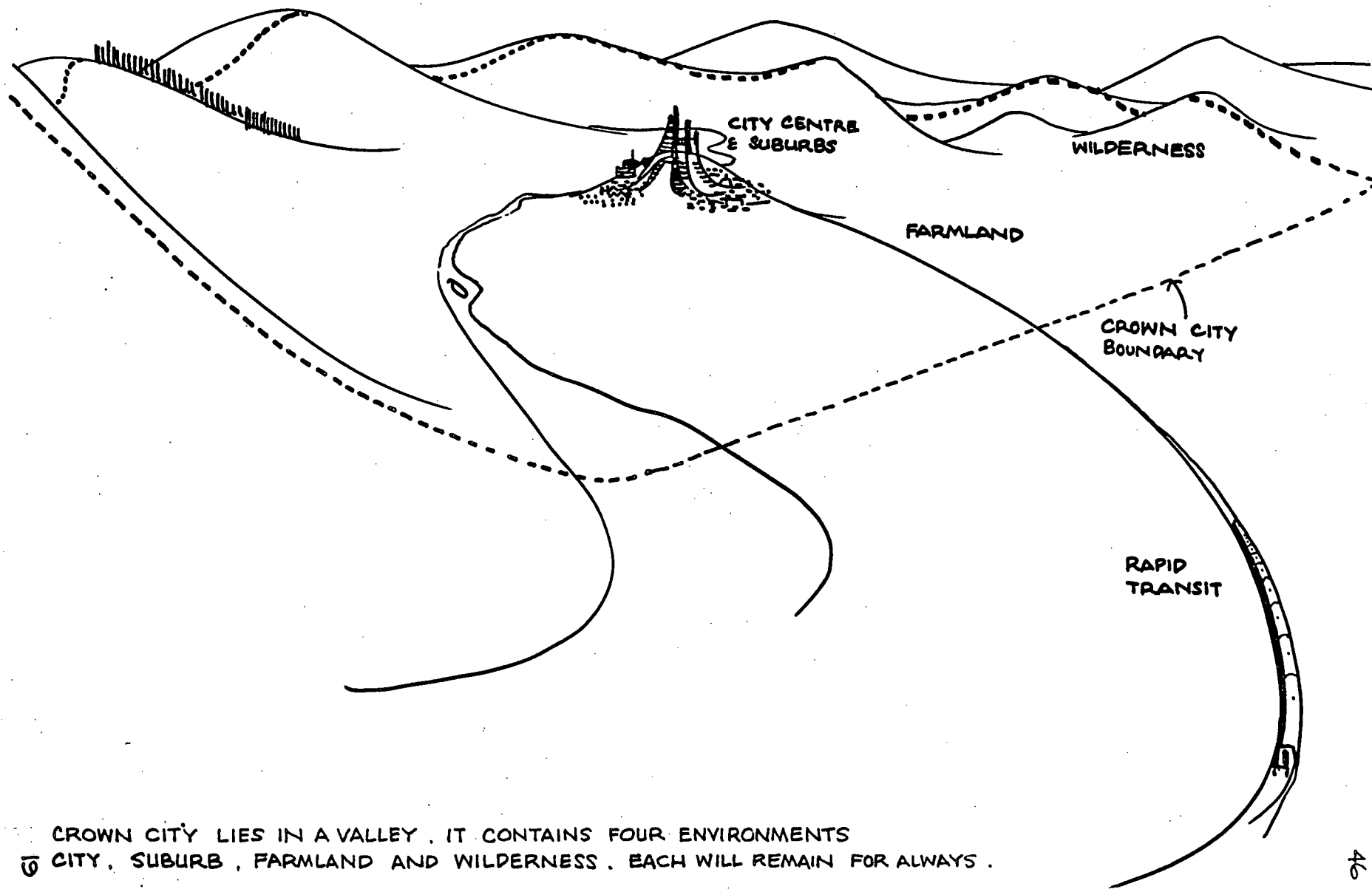
**Aura:** The total sensations of the place that make one feel secure or excited, or to have sensations of majesty or dignity. The expression of criteria of aura includes the aesthetic design of buildings. It includes expressions of beauty in nature and in works or art, of harmony and discord.

Journey now into the future with your choice of life styles and with a mental picture of the surroundings you would wish to perceive. Apply them to the description of Crown City that follows. Phrase your own ideas whenever the pictures do not meet your own image.

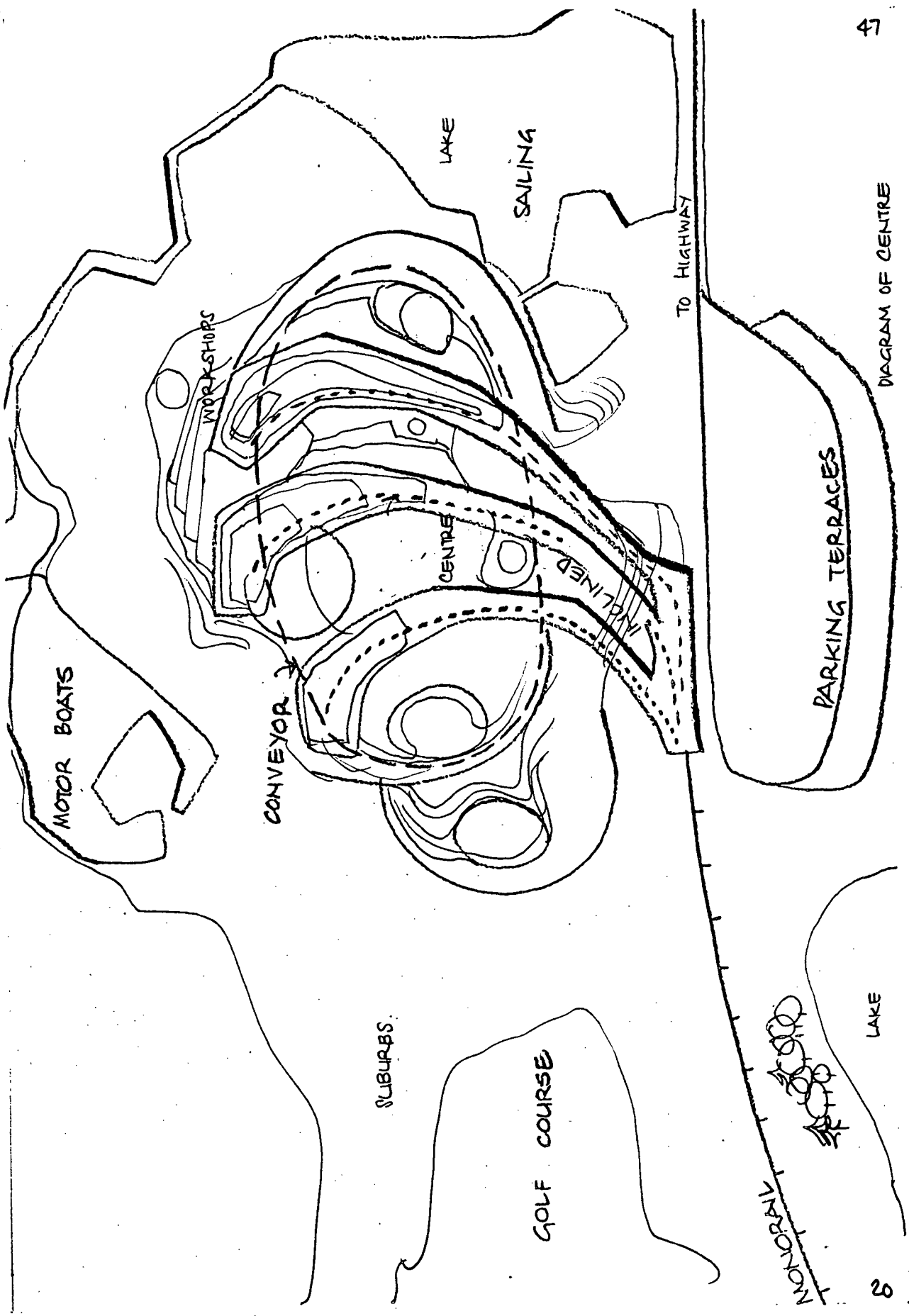


THE DESIGN OF THE FUTURE CITY NEEDS YOUR IDEAS AND CHOICES. AS YOU LOOK AT THE DRAWINGS THINK OF ALL THAT YOU WISH TO DO AND ADD SCENES OF YOUR OWN. ALSO THINK OF HOW YOU WOULD APPROACH OR LEAVE THE SCENE. CHOOSE WHAT YOU WISH TO SEE, TO HEAR, TO TOUCH, TO SMELL, AND WHETHER YOU ARE ALONE OR WITH OTHERS. GRADUALLY DEVELOP YOUR DIRECTIONS FOR THE DESIGN OF

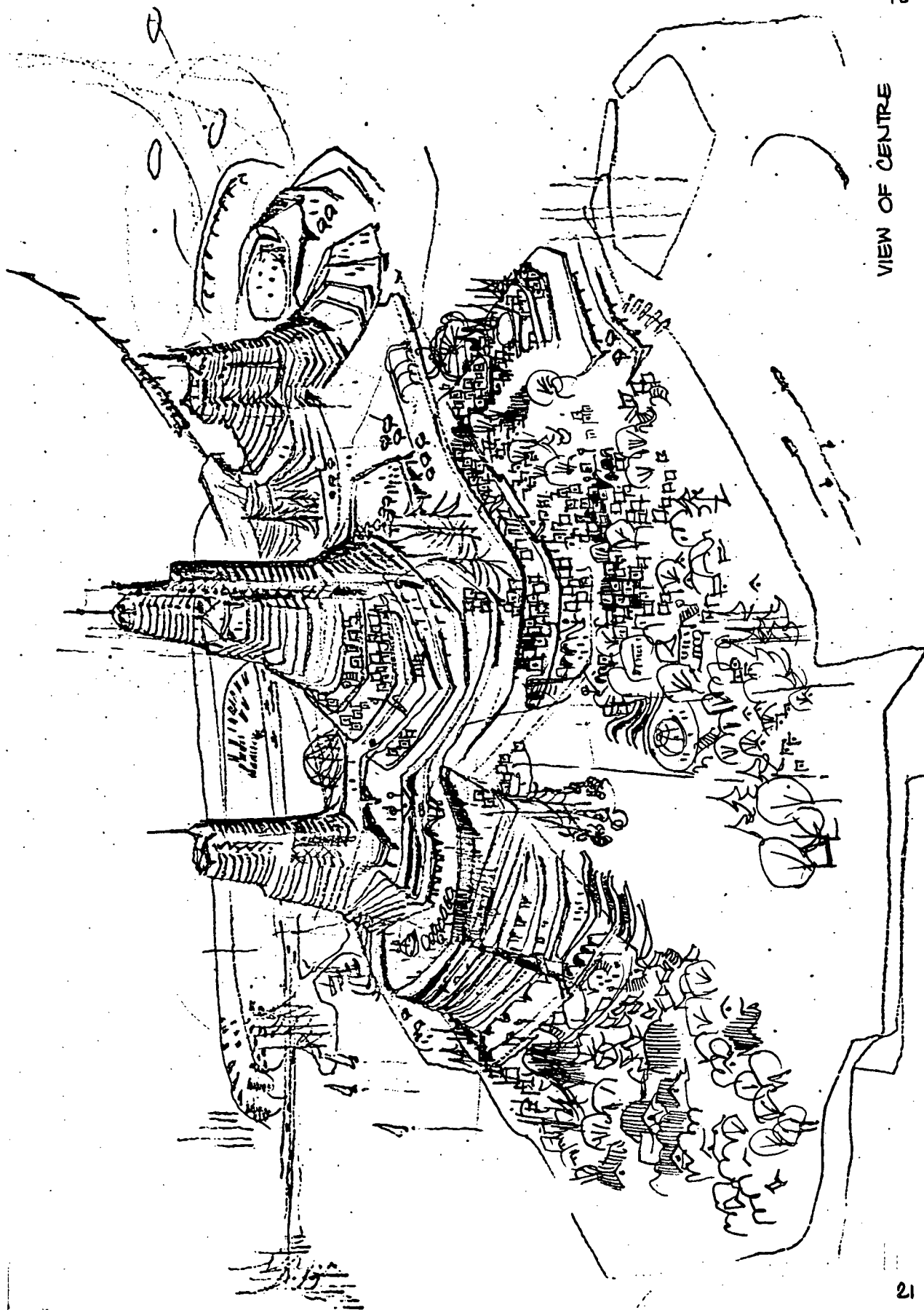
# CROWN CITY

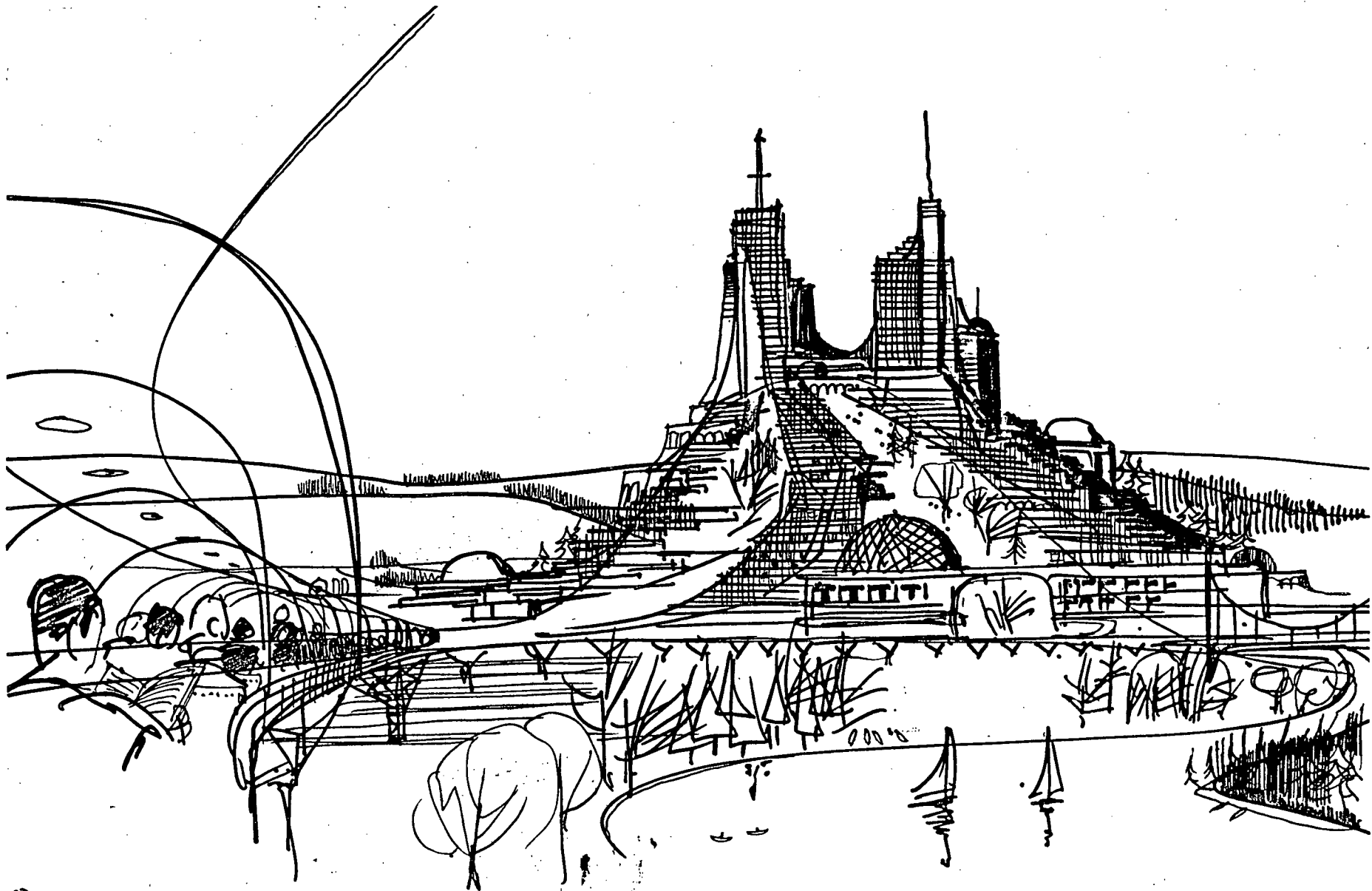


CROWN CITY LIES IN A VALLEY . IT CONTAINS FOUR ENVIRONMENTS  
⑥ CITY , SUBURB , FARMLAND AND WILDERNESS . EACH WILL REMAIN FOR ALWAYS .



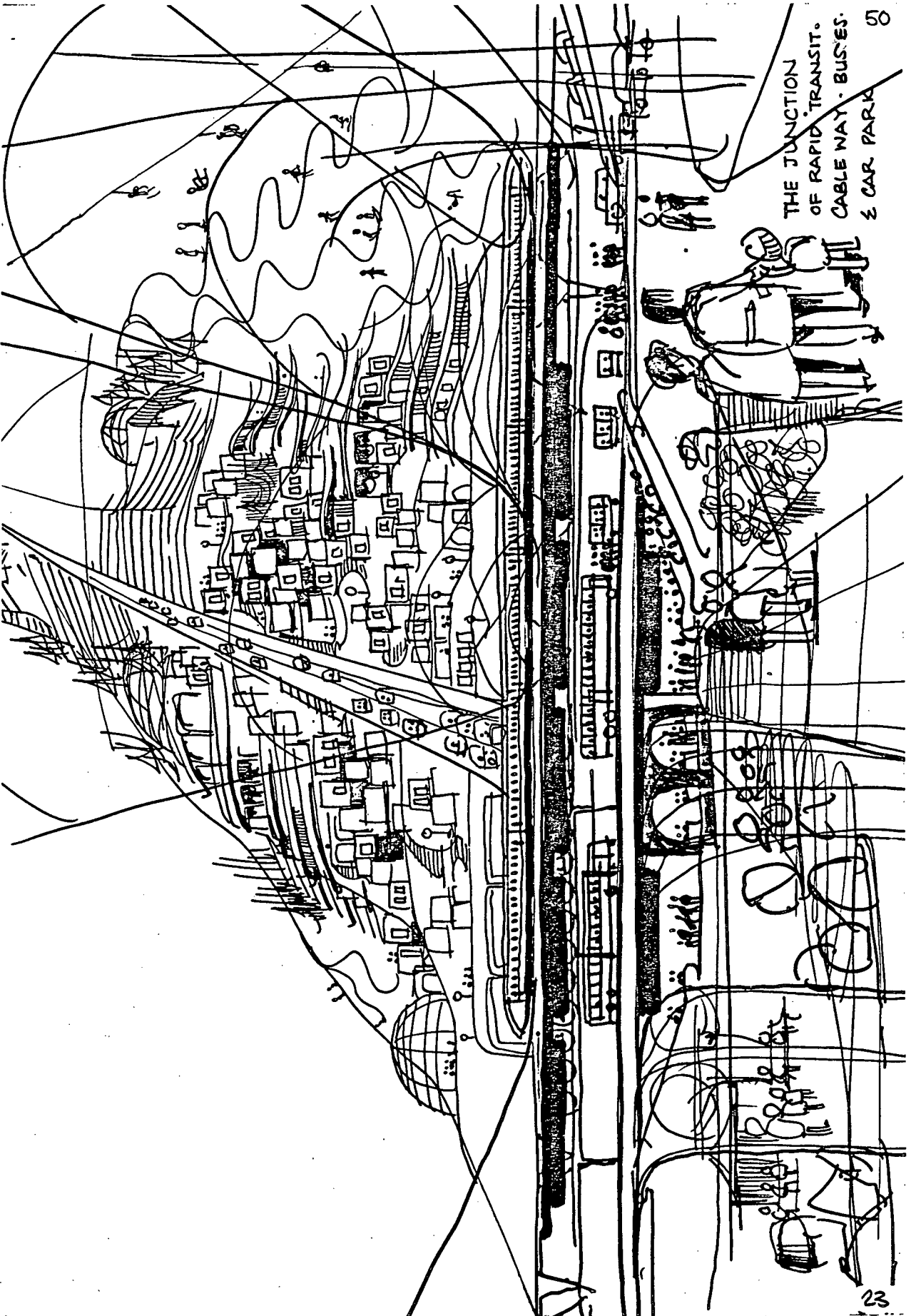




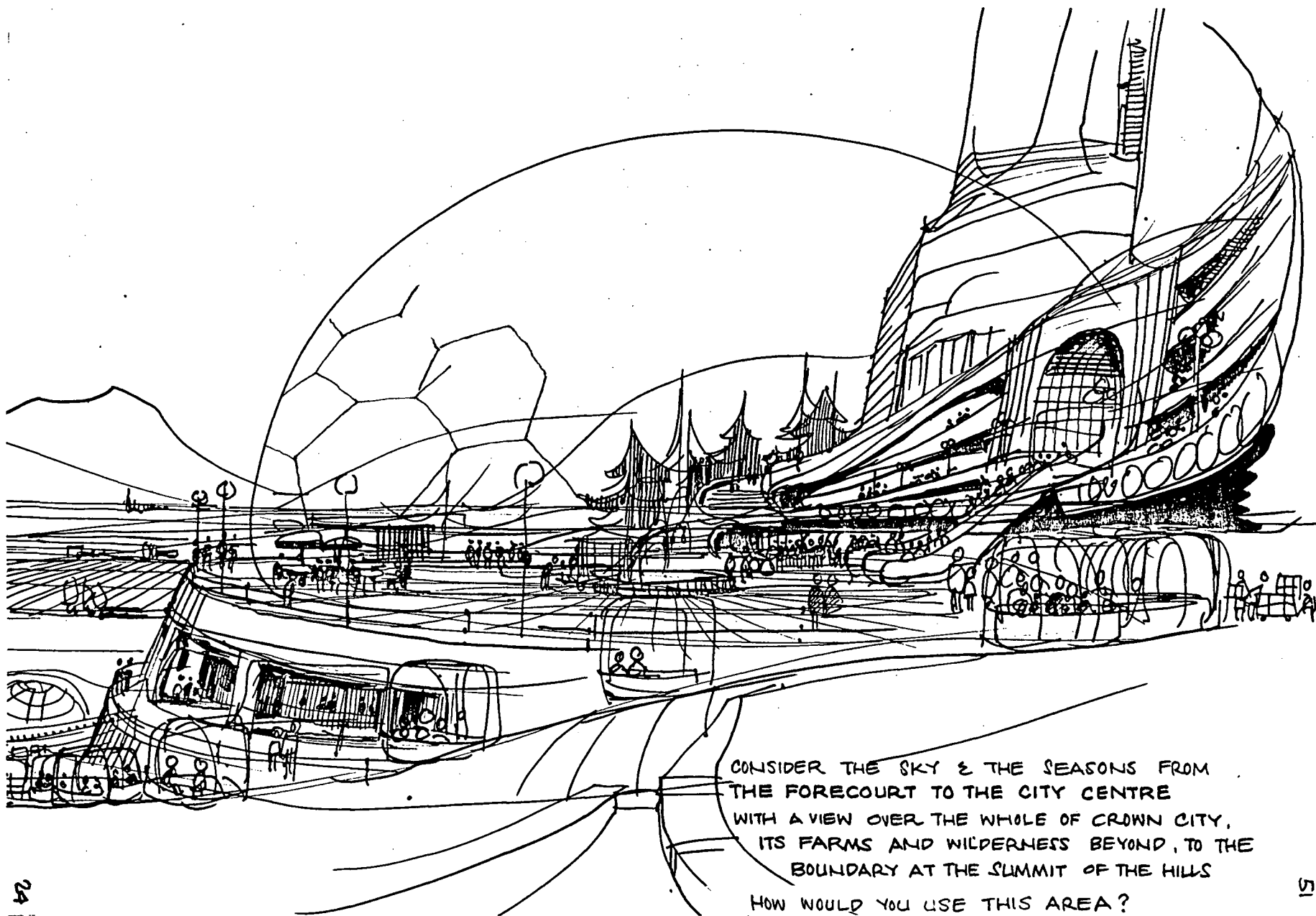


THE JUNCTION  
OF RAPID TRANSIT.  
CABLE WAY - BUSES.  
CAR PARK

50

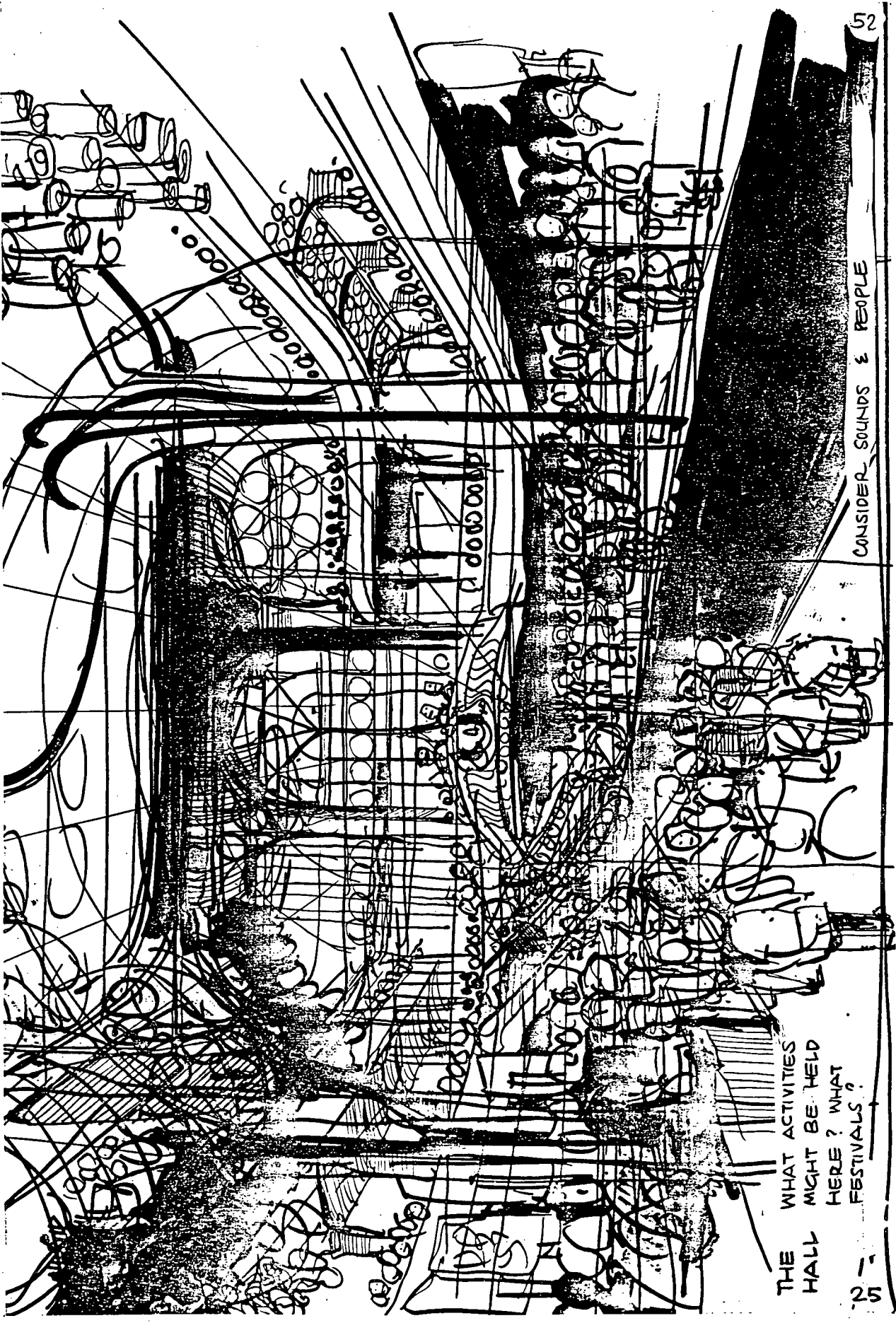


23



CONSIDER THE SKY & THE SEASONS FROM  
THE FORECOURT TO THE CITY CENTRE  
WITH A VIEW OVER THE WHOLE OF CROWN CITY,  
ITS FARMS AND WILDERNESS BEYOND, TO THE  
BOUNDARY AT THE SUMMIT OF THE HILLS

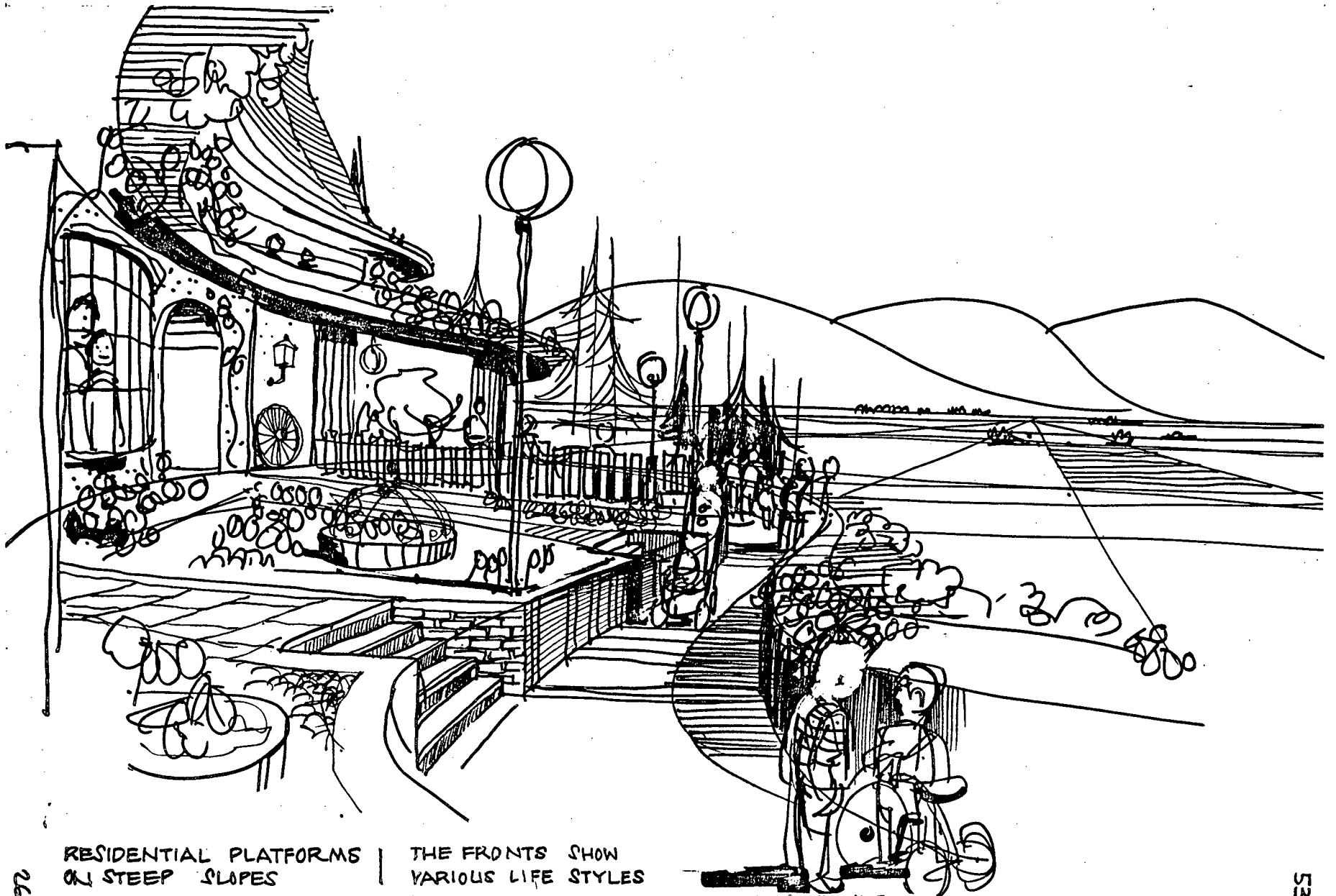
HOW WOULD YOU USE THIS AREA?



THE WHAT ACTIVITIES  
HALL MIGHT BE HELD  
HERE? WHAT  
FESTIVALS?

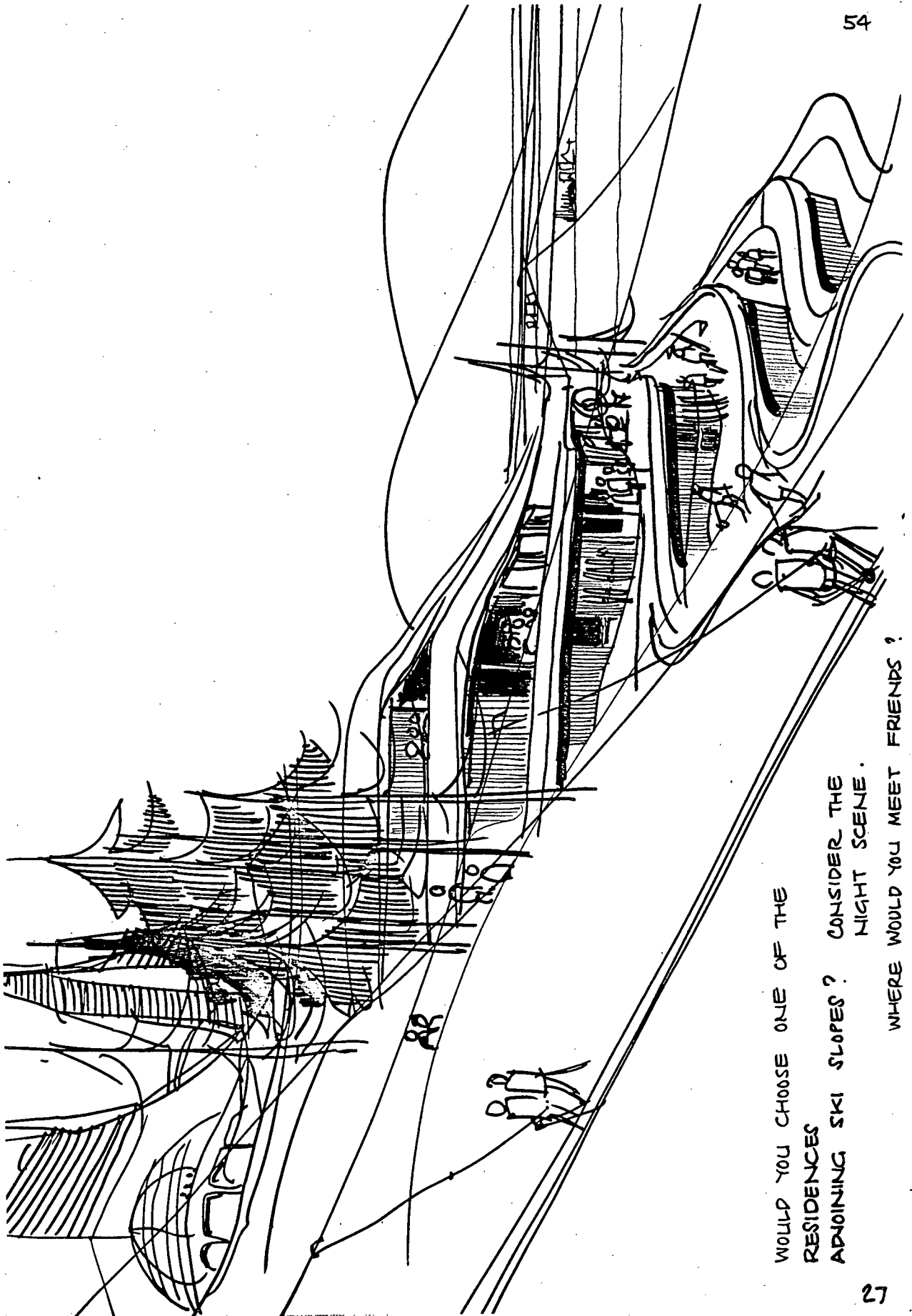
1'  
25

CONSIDER SOUNDS & PEOPLE

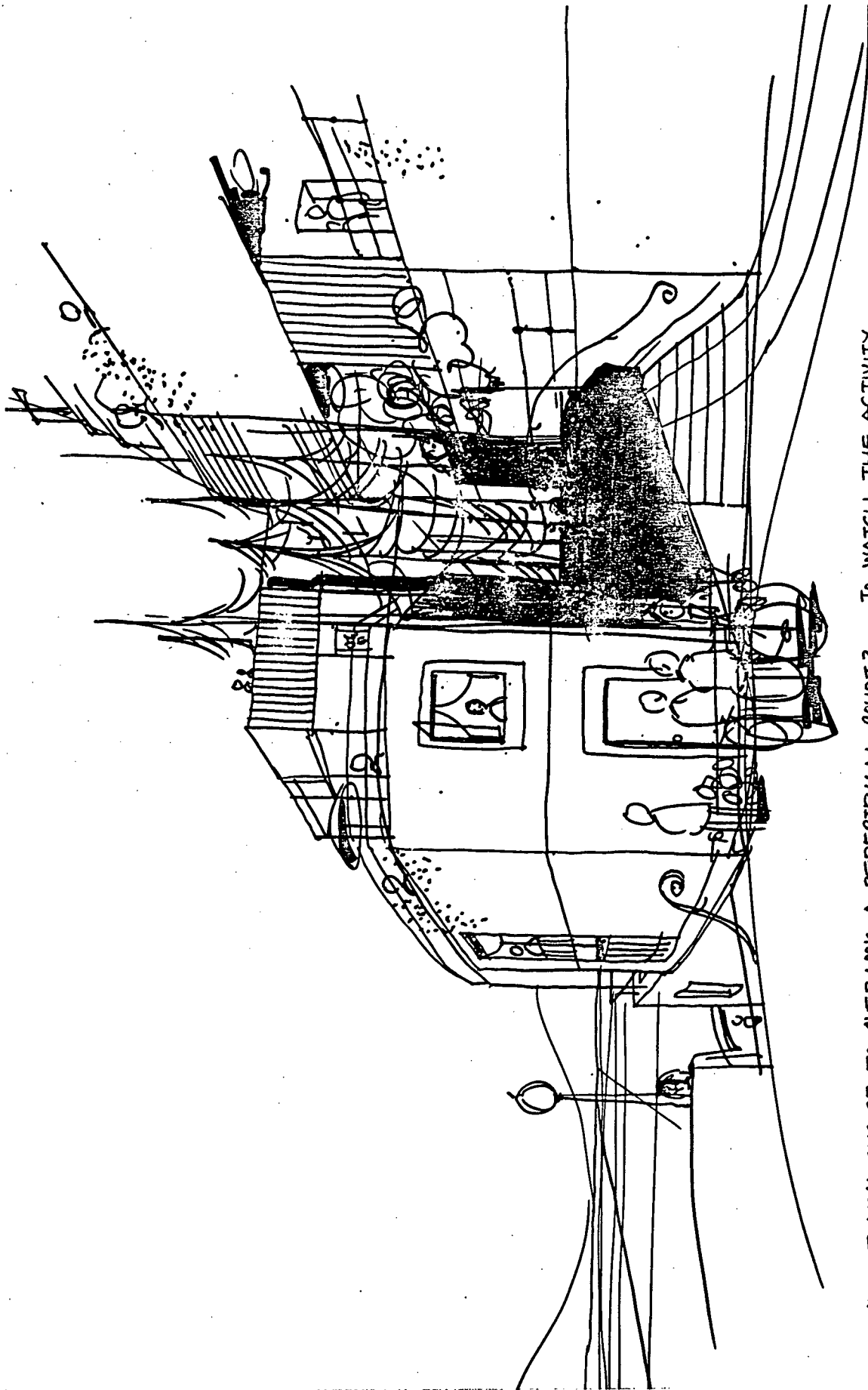


26. RESIDENTIAL PLATFORMS  
ON STEEP SLOPES

THE FRONTS SHOW  
VARIOUS LIFE STYLES  
WOULD IT ACCOMMODATE YOUR LIFE STYLE

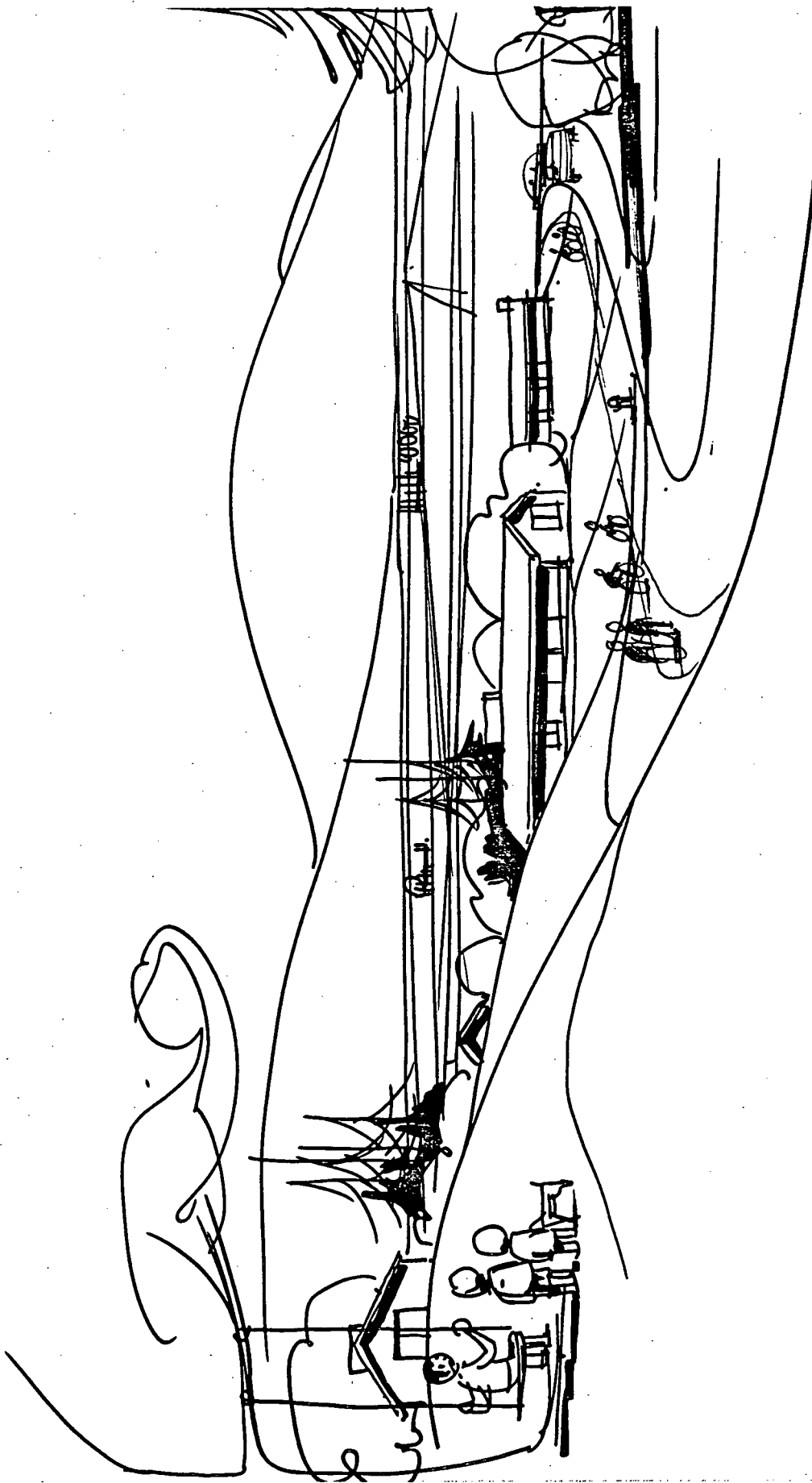


WOULD YOU CHOOSE ONE OF THE  
 RESIDENCES CONSIDER THE  
 ADJOINING SKI SLOPES? NIGHT SCENE.  
 WHERE WOULD YOU MEET FRIENDS?

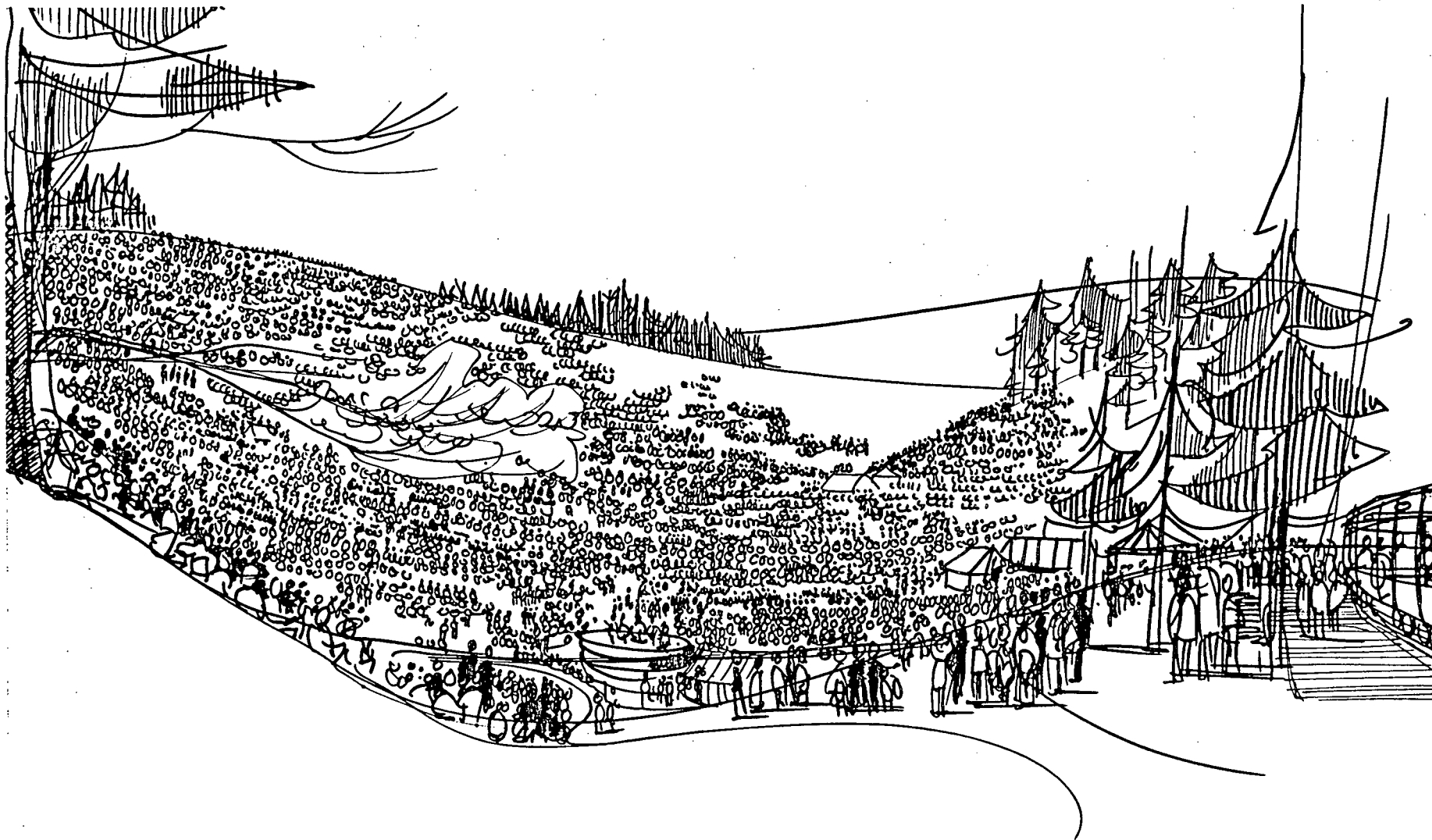


WOULD YOU CHOOSE TO OVERLOOK A PEDESTRIAN COURT? TO WATCH THE ACTIVITY  
 TO WALK & CYCLE WITH FRIENDS? WHAT WOULD YOU CHOOSE TO SEE ABOUT YOU IN THE COURT?  
 WHAT ACTIVITIES MIGHT YOU WATCH & JOIN? WHAT SOUNDS MIGHT YOU HEAR?





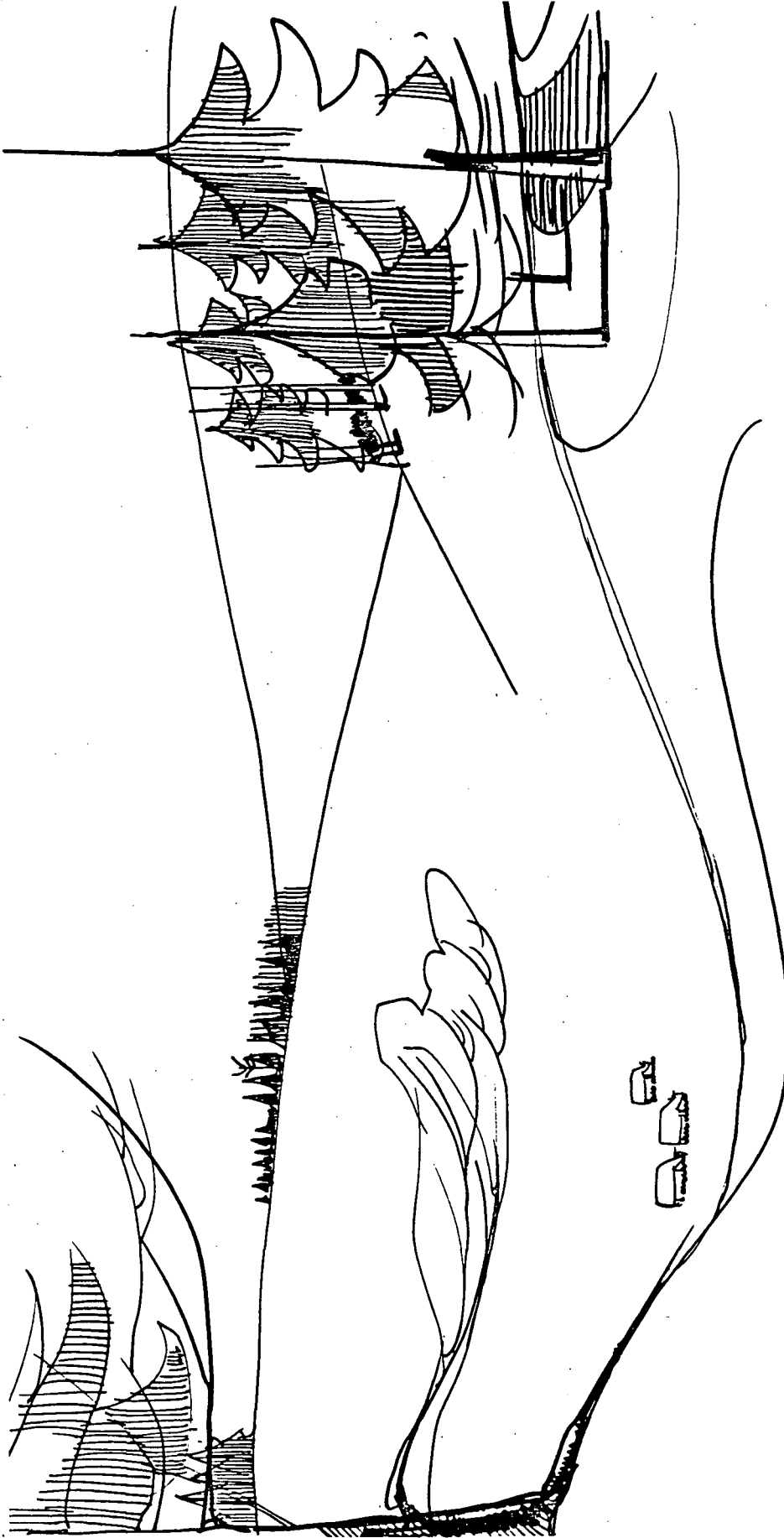
DOES YOUR STYLE OF LIFE SUIT . . . WHERE WOULD YOU GATHER WITH YOUR FRIENDS ?  
 OPEN SUBURBIA AT THE BASE OF THE HILL . . . HOW NEAR SHOULD STORES BE ? HOW WOULD YOU REACH THEM ?  
 WHAT DIFFERENCES WOULD YOU HAVE  
 COMPARED WITH TODAY'S SUBURBIA ? WHAT SIMILARITIES ?



IF YOU ORGANISED  
A GATHERING FOR A FESTIVAL.

WHAT SHAPE OF LAND WOULD YOU CHOOSE?  
WHAT SERVICES AND CONTROLS?

WHAT TRANSPORTATION?



IN SOLITUDE  
 ARE YOU READY NOW TO BEGIN THE DESIGN OF YOUR FUTURE?  
 DO YOU NEED MORE TIME TO CONSIDER YOUR PREFERENCES?  
 TIME IS LIMITED: DEVELOPMENT APPROACHES THIS SCENE.

#### FOOTNOTES

<sup>1</sup>Stanley King, "Elegy," *Habitat*, Vol. V, No. 5 (Ottawa: Central Mortgage and Housing Corporation) September-October 1962, pp. 12-13.

<sup>2</sup>Stanley King, "Revival," *Habitat*, Vol. VI, No. 1 (Ottawa: Central Mortgage and Housing Corporation) January-February 1963, p. 19.

<sup>3</sup>John Ruskin, *Edinburgh Lectures Vol. 1*, quoted in *The Lamp of Beauty*, Selected and edited by Joan Evans (London: Phaidon Press, 1959), p. 258.

<sup>4</sup>Robert Furneaux Jordan, *European Architecture in Colour* (London: Thames and Hudson, 1962).

<sup>5</sup>Sir Kenneth Clark, *Civilisation*, *The Listener*, 1 May 1969 (London: B.B.C. Publications), p. 608.

<sup>6</sup>Jane Jacobs, *The Death and Life of Great American Cities* (New York: Vintage Books, 1961), p. 372.

<sup>7</sup>Sigfried Giedion, *Space, Time and Architecture* (Cambridge, Mass.: Harvard Univ. Press, 1963), p. xxviii.

<sup>8</sup>Lewis Mumford, *The City in History* (New York: Harcourt Brace and World, 1961), p. 570.

<sup>9</sup>Giedion, *loc. cit.*

<sup>10</sup>Ian McHarg, *Design with Nature*, (Garden City, N.Y.: Natural History Press, 1969).

<sup>11</sup>Clark, *op. cit.*, Vol. 81, No. 2084, p. 309 and 312.

<sup>12</sup>Frank Lloyd Wright, *Architecture* (New York: Doubleday and Company Inc., 1962), p. 11.

<sup>13</sup>Humphrey Carver, *Cities in the Suburbs* (Toronto: University of Toronto Press, 1962), p. 117.

## REFERENCES

## REFERENCES

The quotations that follow, in chronological order corresponding to the stories of Some City, indicate the type of material that might be found locally and indicate sources for further reading. They support some parts of the allegorical stories of Some City, the remaining parts are conjectural.

Sakolski, A. M. *The Great American Land Bubble*. New York: Harper and Bros., 1932, p. 7. From *Washington's Interest in Western Lands* by Herbert B. Adams-Johns.

George Washington wrote to a Captain William Crawford in 1763, 'Any person, therefore who neglects the present opportunity of hunting out good lands, and in some measure marking and distinguishing them for his own, in order to keep others from settling them, will never regain it. If you will be at the trouble of seeking out the lands, I will take upon me the part of securing them, (as soon as there is a possibility of doing it), and will, moreover, be at all the cost and charge of surveying and patenting the same.'

Sakolski, A. M. *The Great American Land Bubble*. New York: Harper and Bros., 1932, p. 4. From the British Government Indian Agent in Northern Colonies, The Sir William Johnson Papers, Vol. V, p. 129.

'One half of England is now land mad,' wrote George Croghan, of Philadelphia, one of the land schemers, to Sir William Johnson, on March 30, 1766, 'and everybody there has their eyes fixed on this country.'

Howiston, John, in *Sketches of Upper Canada*, quoted in N. Sutherland and E. Deyell, *Making Canadian History*. Toronto: W. J. Gage Ltd., 1967, p. 75.

It contains only one house and a sort of church; but a portion of land there has been surveyed into building-lots, and these being now offered for sale, have given the place a claim to this appellation of a town. There are many towns like Chatham in Upper Canada, and almost all of them have originated from the speculations of scheming individuals. When a man wished to dispose of a piece of land, or to render one part of his property valuable by bringing settlers upon the other, he surveys a few acres into building lots. These he advertises for sale at a high price, and people immediately feel anxious to purchase them, conceiving their situation must be very eligible indeed, otherwise they would not have been selected for the site of a town . . .

Wade, Richard C. *The Urban Frontier*. Cambridge: Harvard University Press, 1959, p. 16.

St. Louis was . . . surveyed and laid out in 1779 in 1/2 acre lots 12 blocks along the river but only 6 away from it. In 1783

there was an attempt to keep 30' along the river as a common street but this too passed into private hands. By 1800 all but a few scattered plots of land had been sold.

Wade, Richard C. *The Urban Frontier*. Cambridge: Harvard University Press, 1959, p. 281. From Pittsburgh City Council papers February 9, 1818.

'The injury complained of . . . is wholly occasioned by Butchers, and a lot of mongrel merchants who attend regularly the ferrys and market place in the evenings preceding market days and then and there monopolize pork, beef, flower (sic), meal, cheese, honey, butter, eggs, potatoes and in short every commodity for table use.' The next day they sold at an advance of 30 to 50%. Convinced that the municipality could act, the signers urged 'your interference in some way to lessen the intolerable evil.'

The cities responded by increasing fines on forestallers, rigidly enforcing trading hours, and restricting the activities of traders in the market.

Samhaber, Ernst. *Merchants Make History*, trans. E. Osers. London: Geo. G. Harrap, 1963, p. 321.

In every small settlement there was a merchant--the most important and most powerful man in the village. His store would look odd enough: barrels of syrup standing on the floor, sausages hanging from the rafters, mice scurrying about, nibbling the sacks of flour, ploughshares and scythes stacked against the



wall, knives of every size, bales of cotton, woollens and linens, paper, nibs and ink. Anything a farmer needed he would find at the store. The shopkeeper himself was away most of the time. He might be riding his mule from farm to farm, offering cloth or buying up grain: he might be taking his covered wagon along the bumpy Cumberland Trail to Philadelphia, New York, or Baltimore to stock up with ploughshares or to sell wheat. He would always grant credit. He would chalk up a man's debt. Accounts were settled when the harvest was in. As a rule his customers would pay not in cash but in kind--with the grain or the wool they had produced and which the merchant would accept against the farmers' inflated debts.

Wade, Richard C. *The Urban Frontier*. Cambridge: Harvard University Press, 1959, p. 281. From St. Louis, Ordinances May 21, 1822, and St. Louis Minutes May 3, 1824.

St. Louis prohibited any 'grocer, huxter or any other dealer in provisions from buying more than six pounds of butter, six dozen eggs, or fifty pounds of bacon or hams before ten o'clock. In addition, local officials kept control over vendors through rental of stalls, revoking the privileges of those who violated regulations.

St. Louis Mayor Lane--'The whole secret of improving a market consists in producing fair competition; and that is done by simply bringing all the vendors and purchasers together.'

Wade, Richard C. *The Urban Frontier*. Cambridge: Harvard University Press, 1959, p. 283. From Missouri Gazette July 13, 1816, and Missouri Republican April 9, 1823.

In St. Louis: As early as 1816 one editor declared that 'several streets are rendered impassible by the want of common footway or drains to carry off the rain water. Nuisances are to be met with in every shape from one end to the other.'

Seven years later: 'Jonathan' annoyed by the delay of officials on the question satirically gave 'Hints for the Mayor and Aldermen.'

By all means prevent the paving of Main Street. That Street is the only navigable water-course THROUGH the city for craft of larger size, though there are several that will answer well for scows and dugouts.

Wade, Richard C. *The Urban Frontier*. Cambridge: Harvard University Press, 1959, p. 84. From Lexington, Trustees Book, August 5, 1805, and Cumins, "Sketches of a Tour" in Thwaites, ed., *Western Travels*, Vol. IV, p. 76.

In Lexington, for example, the trustees hired 'Davy,' a free negro to take 'four dead cows out of the street.'

Wade, Richard C. *The Urban Frontier*. Cambridge: Harvard University Press, 1959, p. 284. From the Cincinnati Advertiser June 4 and July 30, 1823.

The swarms of hungry hogs . . . are ready to swallow our young

children and half grown young men and women' as soon as the 'usual supply of garbage' declined.

--a month later one child was mangled and another attacked--

Wade, Richard C. *The Urban Frontier*. Cambridge: Harvard University Press, 1959, p. 284. From Frances Trollope *Domestic Manners*, p. 39.

In truth the pigs are constantly seen doing Herculean service in this way through every quarter of the city, and though it is not very agreeable to live surrounded by herds of these unsavoury animals, it is well that they are so numerous, . . . for without them the streets would soon be chocked up with all sorts of substances in every stage of decomposition.

Stegner, Wallace. *Wolf Willow*, which is the story of the Saskatchewan town. New York: The Viking Press, 1962, p. 246.

It began crude, but it began strenuous. The first meeting of the village council was held on March 30, 1914, when the population was 112. Its first act was to establish the town nuisance ground on land donated by Pop Martin. In doing so it corroborated a truth known whenever men have gathered into permanent communities, we are the dirtiest species and must make provision for our wastes. At the end of May, when we arrived, Whitemud was a straggle of shacks, a general store, a frame hotel, a railroad boarding house, and some derailed dining and box cars rigged for housekeeping. In wet weather the town's one street was gouged and furrowed; in dry it was a river of gray powder, with saddle

horses and teams dozing at the hitching bars and flies rising and settling over mounds of dung. By July 9 a live-wire Board of Trade had opened bids for plank sidewalks, thereby earning the gratitude of every woman in the place.

Sakolski, A. M. *The Great American Land Bubble*. New York: Harper and Bros., 1932, p. 275. From *The Gilded Age, A Tale of Today*. Mark Twain and Charles Dudley Warner.

Mr. Biglers' plan this time, about which he talked loudly was the building of the Tunkhannock, Rattlesnake and Youngwomanstown Railroad, which would not only be a great highway to the west, but would open to the market inexhaustible coal fields and untold millions of lumber.

The plan of operations was very simple. 'We'll buy the lands' explained he, 'on long time, backed by the notes of good men: and then mortgage them for money enough to get the roads well on . . . and sell the lands at a big advance, on the strength of the road.'

Sakolski, A. M. *Land Tenure and Land Taxation*. New York: Robert Schalkenbach Foundation, 1957, p. 231. From Alfred N. Chandler, *Land Title Origins*.

Regarding his City of Brotherly Love, Penn wrote in 1683: 'Within one year of my arrival, the value of the least desirable lot in Philadelphia increased to four times their value when first laid out, and the best lots were worth forty times, without any

improvement thereon. And though it seems unequal that the absent should be thus benefitted by the improvements made by those that are upon the place, especially when they have served no office, run no hazard nor as yet defrayed any public charge, yet this advantage does certainly redound to them, and whoever they are, they are great debtors to the country.'

Shultz, Earle and Walter Simmons. *Offices in The Sky*. Indianapolis: Bobbs-Merrill, 1959.

. . . office building was a primitive affair. Practically no service was provided. Elevators were still in the future; a man had to clamber up as many as five flights of stairs to his office.

Plodding upward, wheezing and snorting, this luckless fellow carried fuel for his stove or fireplace, for there was no central heat.

Shultz, Earle and Walter Simmons. *Offices in The Sky*. Indianapolis:

Bobbs-Merrill, 1959, p. 23. From a letter to Aldis and Company dated February 5, 1881, from Peter Brooks.

Having thought over a building on the 89-1/2-foot lot on Monroe Street next west of the First National Bank, I think, by utilizing all of the space on the main floor and by building up eight stories with also basement--if the earth can support it in the opinion of the architect--that it may be large enough to warrant

an elevator. If you can get this lot for \$100,000 cash I am rather inclined to purchase it.

Shultz, Earle and Walter Simmons. *Offices in The Sky*. Indianapolis: Bobbs-Merrill, 1959, p. 23. From a letter dated 22 March 1881 to Aldis from Peter Brooks.

Tall buildings will pay well in Chicago hereafter, and sooner or later a way will be found to erect them.

The quotations that follow relate to the structure of Crown City, and to perception, as a sample of the contents of the books consulted.

Faltermayer, Edmund K. *Redoing America*. Toronto: Collier-Macmillan Canada Ltd., 1969, p. 77. He refers to efforts by the State of Wisconsin to bring about a static rural environment.

The government's power to bring about land-use changes by paying money or, alternatively, to prevent change, has taken on some sophisticated refinements in recent years. In some instances, local and state governments, instead of buying land outright, have acquired 'less than fee simple' interests, i.e., easements for picnickers or fishermen to traverse the property or a sayso over the land's future use. The state of Wisconsin, for example, has purchased 'scenic easements' from rural landowners to protect the view from the Great River Road along the Mississippi River, and some experts have advocated that governments buy 'development rights' from farmers and others in order to preserve open space near urban areas. In 1965 a Wisconsin

circuit court upheld the state's right to use its eminent domain powers to purchase scenic easements, partly on the grounds that the protection of the motorist's view is a legitimate 'public purpose.'

Giedion, S. *Space, Time and Architecture*. Cambridge: Harvard University Press, 1963.

Ebenezer Howard wrote in 1898 in his book *Tomorrow: a Peaceful Path to Real Reform* of a co-operatively organised society. 'The city was planned as a series of concentric circles. In the centre a group of civic buildings surrounded by a common, then a circular grand avenue 400 feet wide with trees and greenery. At the outer circle lies the agricultural belt, and an area is set aside for manufacturing.'

Carver, Humphrey. *Cities in the Suburbs*. Toronto: University of Toronto Press, 1962, p. 36.

A city *in* a garden, a compactly built town surrounded by pastoral landscape. . . . 'The clean and busy streets within, the open country without' quotes Howard from Ruskin's *Sesame and Lilies*.

For all practical purposes the cost of land would be wiped out as long as the townsite remained the property of the community. Howard sums up in these words the two simple expedients by which his scheme would bring immense economic benefits to society:

First: by buying land *before* a new value is given to it by migration, the migrative people obtain a site at an extremely low figure, and secure the coming increment for themselves and those who come after them.

Second: by coming to a new site they do not have to pay large sums for old buildings, for compensation for disturbance and for heavy legal charges.

Howard's vision of *Tomorrow* (the title of his book in its first edition) had a clarity and originality that made an immediate appeal.

Carver, Humphrey. *Cities in the Suburbs*. Toronto: University of Toronto Press, 1962, p. 118.

There must be an institutional embodiment of the future 'we' who come to live in the suburbs, a form of public trustee to represent the interests of the future residents while the suburbs are in the making. This must be a public body with powers to buy the community land, to make plans for each Town Centre, and to start developing its building and open spaces.

The quotations on light refer to the images of perception.

Appleyard, Donald, Kevin Lynch and John R. Myer. *The View from the Road*. Cambridge, Mass.: M.I.T. Press, 1964, p. 7.

The quality of light will also affect what is seen, so that a view against the sun, emphasising silhouette, will be grasped



quite differently from one with the sun at the side, where texture and detail become distinct. Artificial light is a resource for directing attention, for changing apparent spatial form, for producing visual sequences. At night, the familiar daytime landmarks and activities may be picked out to give a reassuring sense of continuity. The lights of other vehicles indicate and enliven the road. On special occasions a new world of light may be made.

le Corbusier. *The Chapel at Ronchamp*, trans. Jacqueline Cullen.

London: Architectural Press, 1957, p. 47.

The key is light and light illuminates shapes and shapes have an emotional power.

--observe the play of shadows, learn the game . . . precise shadows, clear cut or dissolving. Projected shadows, sharp. Projected shadows, precisely delineated, but what enchanting arabesques and frets. Counterpoint and fugue. Great music. Try to look at the picture upside-down or sideways. You will discover the game.

## CHAPTER II RESPONSE

The Current Attitudes of the Students

The Change in Attitudes through Participation

Participation in the Classroom Setting

Design Participation

The Taxonomy of Educational Objectives

### The Current Attitudes of the Students

The drawing by students of the development of the city encourages them to express their concerns for its future. The result is shocking. It reveals an awful emotional stress in children about the future and about the city.

The city seems to represent overpopulation, increased pollution, loss of natural areas, increased crime. In open suburban areas I have found worry about the population explosion. Tied to this view of the city is the view of the world running out of food, poisoning itself with smoke and insecticides, and ending in a vast explosion of hydrogen bombs. News reporting must be partly to blame. Marshall McLuhan's concept that reported news must always be bad to balance the good advertising and P.R. releases is very evident.

Even the very young appear to view the city as an approaching ogre to be feared, whose presence results in the loss of one vacant lot playground after another to the bulldozer.

My experience has been that the children can ask very cogent questions at about the age of six. At this time the children venture into their surrounding neighbourhood of play-worlds that are often the fallow land of the developer and when the children's play-worlds are destroyed and built over they very bitterly want to know the rules.

Do we teach children to fear the city? We communicate anxiety by our tight hand-holding, don't get lost, cross now, hurry; the fear that we transmit to a child that might get lost in a downtown street or

be killed by the traffic. We teach them that beyond our protection lies a world to fear in the city. When we drive in the city we communicate anxiety to the child. Father comes home ragged from his battles downtown.

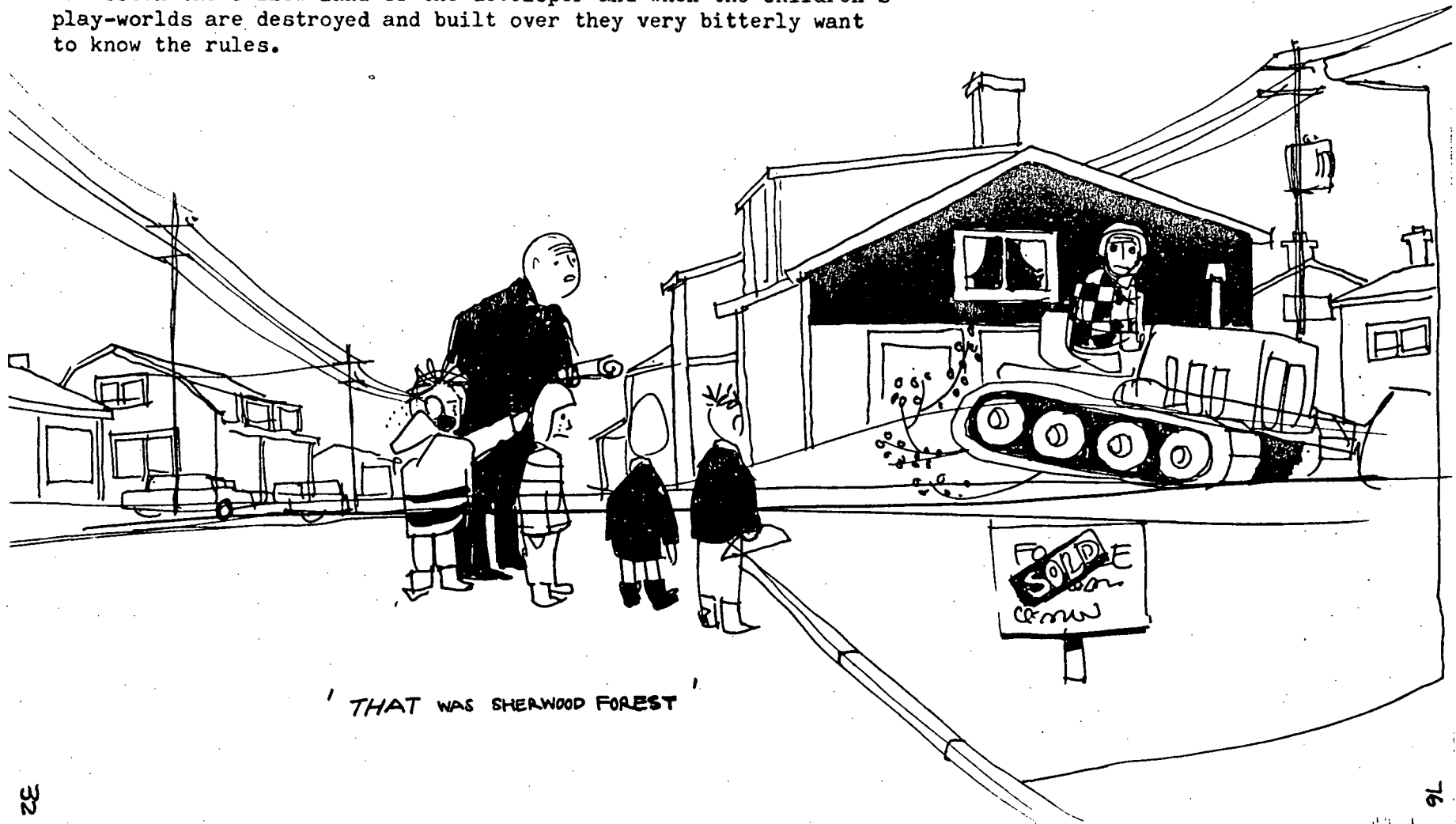
As a corollary consider the effect of the dog and the mailman. A friend knocks at our door, we greet them with cries of joy, take their coats and talk and sit with them. The dog knows by this that the visitor is a friend, and wags its tail and nuzzles up. There is one visitor whose rattle at the door is not answered, who leaves, through the letter-box, droppings that we pick up and tear apart, whom we allow to depart unchallenged and never invite into the house. This visitor must therefore be an enemy, to be attacked with courage and chased away.

The intensity of the outcome from our inadvertent teaching of the dog about the mailman suggests the source of an intense reaction in children against the city. I have been shocked at its intensity when I have given it release. I have seen groups of adults, when conversing with young students about the future city, shocked to silence by the students' expressions of concern.

Expressions of disliking of the city and hopelessness for the future have become so commonplace in my visits that I accept this condition as basic in my approach to affecting the children's attitudes. At the same time, the children show a fascination for both the city and for the future.

The stress appears to be emotional. The children are not in any very bad situation. They appear well-fed, well clothed and live in good suburbs.

My experience has been that the children can ask very cogent questions at about the age of six. At this time the children venture into their surrounding neighbourhood of play-worlds that are often the fallow land of the developer and when the children's play-worlds are destroyed and built over they very bitterly want to know the rules.



Recently, at a local school, twelve-year old children held a debate on the motion, "man will eventually destroy himself." The motion was carried. I was disturbed that such a subject should form the motion for a debate in children so young. When I enquired further, the children answered, "The teacher asked us if we would like to hold a debate and, if so, what subject would we like to debate. Someone said--Man will eventually destroy himself. The teacher asked who else wanted to debate that motion and we all did."

Another example occurred in the popular selection of a charming book called *The Little House*, by Virginia Lee Burton,<sup>1</sup> that is a favourite of seven to ten-year olds. It tells of a house in the country and its place in the family and in the seasons. A cloud appears on the horizon, and heralds the approach of the city which eventually surrounds the little house. Some descendants of the original family find the house and arrange to have it taken out of the city and find it a haven similar to its first situation in the country. The library at my daughter's school contained a copy, which was usually out on loan, and she asked that I buy her one of her own. The popularity of the book provides a measure of their feelings of sympathy with the story.

In mixed classes of up to twelve years old, the unruly, rebellious boys often sit together and they are easily identified. I find them to be most responsive and to be full of questions, and alive with interest. I have found Indian children readily helpful with the mass drawing, and most able to extend their thoughts from the drawings to the sounds and smells and touch suggested in the picture.

The children of ages twelve to sixteen years with learning difficulties seem to find the city intolerable, and horrifyingly noisy, dirty and confusing. They tend, in self-defense, to criticise the city.

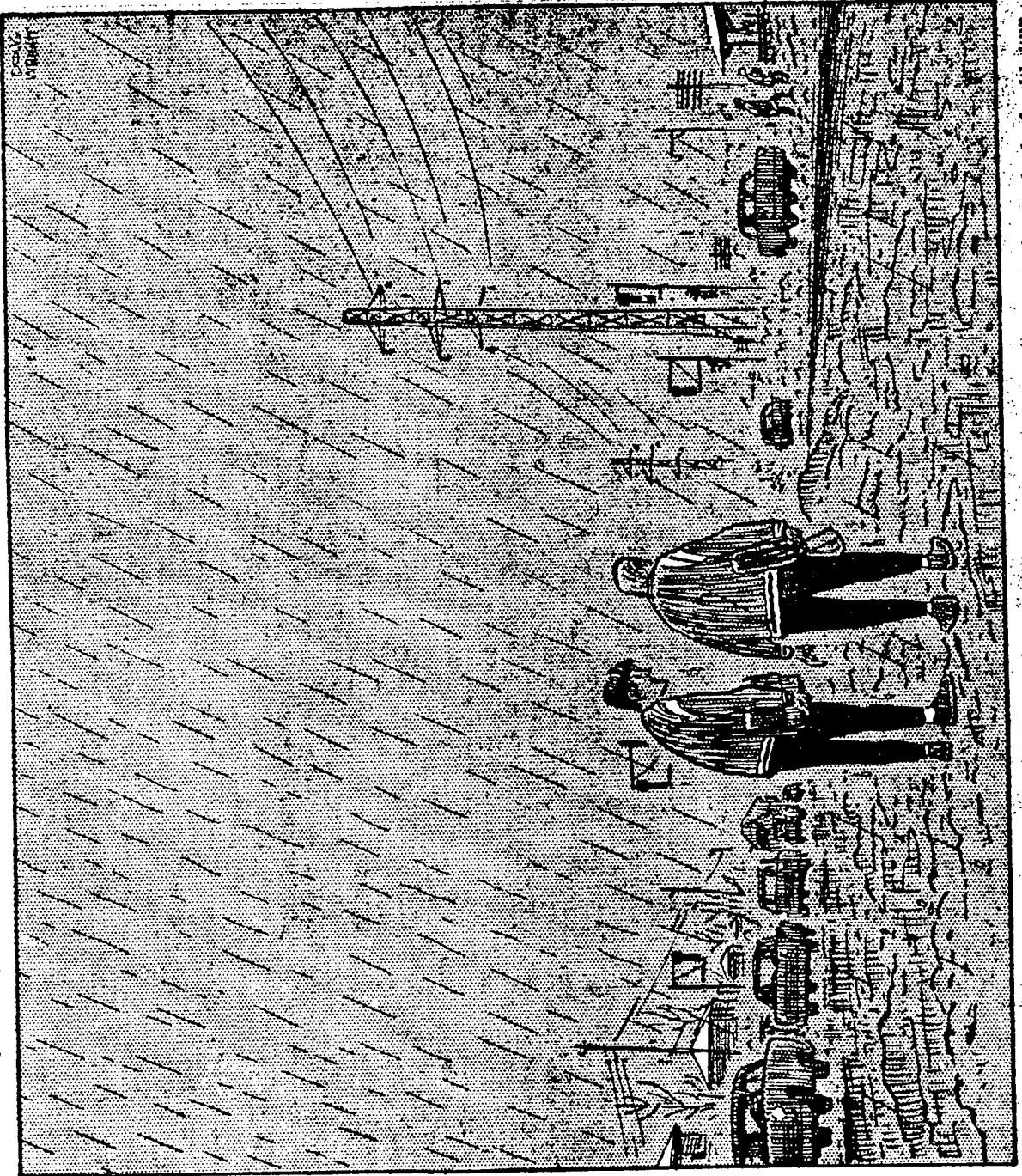
Girls of nine to thirteen often express a desire for the bucolic life of ponies and parkland and at the same time a desire for happy milling crowds, and for lively shopping streets.

Amongst boys from nine to twelve years old I have found great interest in physical systems of transportation and new city forms and a surprisingly high degree of knowledge. In many cases children knew all the information that, to my knowledge, had been published in the popular press and on T.V., which indicates that they are very receptive to this type of material. They seem to be at home with the thoughts of rapid trains travelling at two hundred mph, of Plug-In cities and underwater cities, and space satellites.

The academically bright boys have shown fascination with the intellectual considerations of city management, land and building investment and commerce.

Students as young as twelve and thirteen years have shown an interest in political structures of the city. In one case a group of children defined in some detail the political and administrative structure that they required for their ideal city. They desired a City State under a dictatorship, with its own city army, and parents and children separated, with workshops instead of schools and all children with I.Q. of less than one hundred being banished from the city. I have met this in similar form in Montreal and in Vancouver.

# No Easy Way



"This is one of the mornings I'm tempted to say 'Getting an education is just too doggone difficult . . . the heck with it!'"



I have discussed with children aged thirteen of a mathematics bent the possibility of having an exercise in different forms of taxation and they were very eager to pursue the study. Any information that I gave them on costs of development, income from development and costs and income of different transportation systems interests them intensely.

Children aged fourteen to eighteen have shown an interest in the social aspects of the city, dwelling on the problems of the slum and of the uneven distribution of wealth.

Boys, more than girls, express a wish to make plans and models and to design city forms. Girls, more than boys, comment on the sophistication of city life.

A surprisingly large number of students have never travelled beyond their home city. I have found many children up to the age of thirteen and fourteen who have not travelled beyond their district to visit other areas of the city. Those who have travelled widely contribute the most to the discussions. Usually this marks the difference between rich and poor districts.

#### The Change in Attitudes through Participation

The search for material on the future city has taken a definite direction as a result of the reaction of students. At first, I referred briefly to the future. The early stages of my work emphasized the present city and an explanation of the past that led to the present. The students showed interest in the fact that the changes that appeared in the drawing occurred in one geographical location. They enjoyed the

stories, laughed at the drawings, but they displayed most interest whenever I touched on the future. I have asked students, who four or five years before had been with me during these lessons, what they could remember and they have answered that my description of the future cities has remained fresh in their minds. I have had parents speak in public in support of these lessons saying that the future city had been the main topic of conversation at meal times for years after my talk to the children.

During lively discussion of the future amongst the students there is often a sense that the children have entered a time zone of their own and the adults can only wait and follow them as they enter a future of communications and rapid transit systems that would enable them to avoid the city altogether.

They question the worth of the city. They see it as a growing entanglement of problems. "Why go to all the trouble of downtown development?" they say. "It just seems to create more problems." "With video-phones and new inventions in communication you won't need to go downtown to meet people," said a student. "And," said another, "with automation, and I.B.M.'s doing all the work, why go into downtown to sit around and look at each other all day."

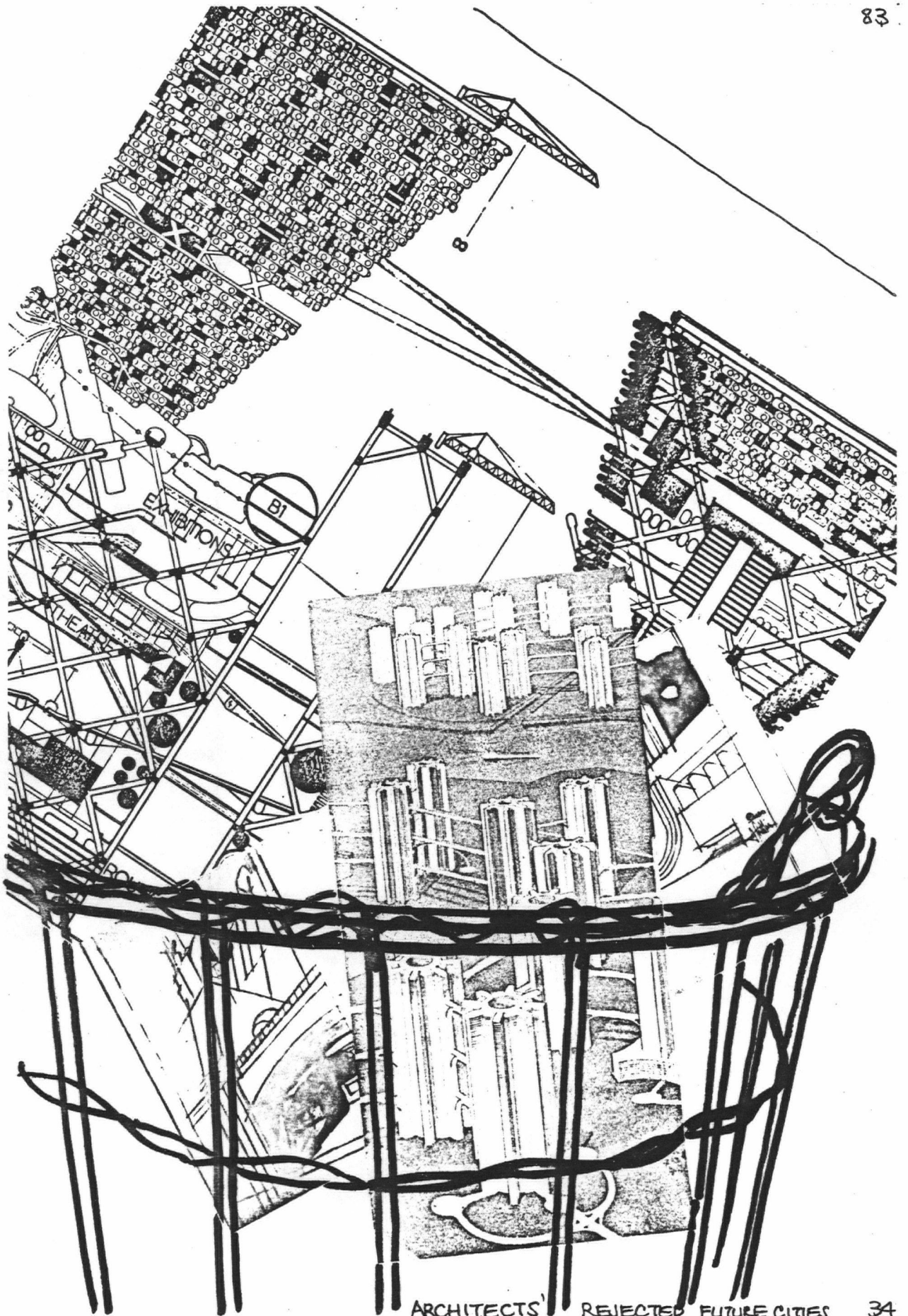
With the lessons of change still in their minds their thoughts fly away from the familiar city and suburb to something new, somewhere else, and they ask about new forms of city.

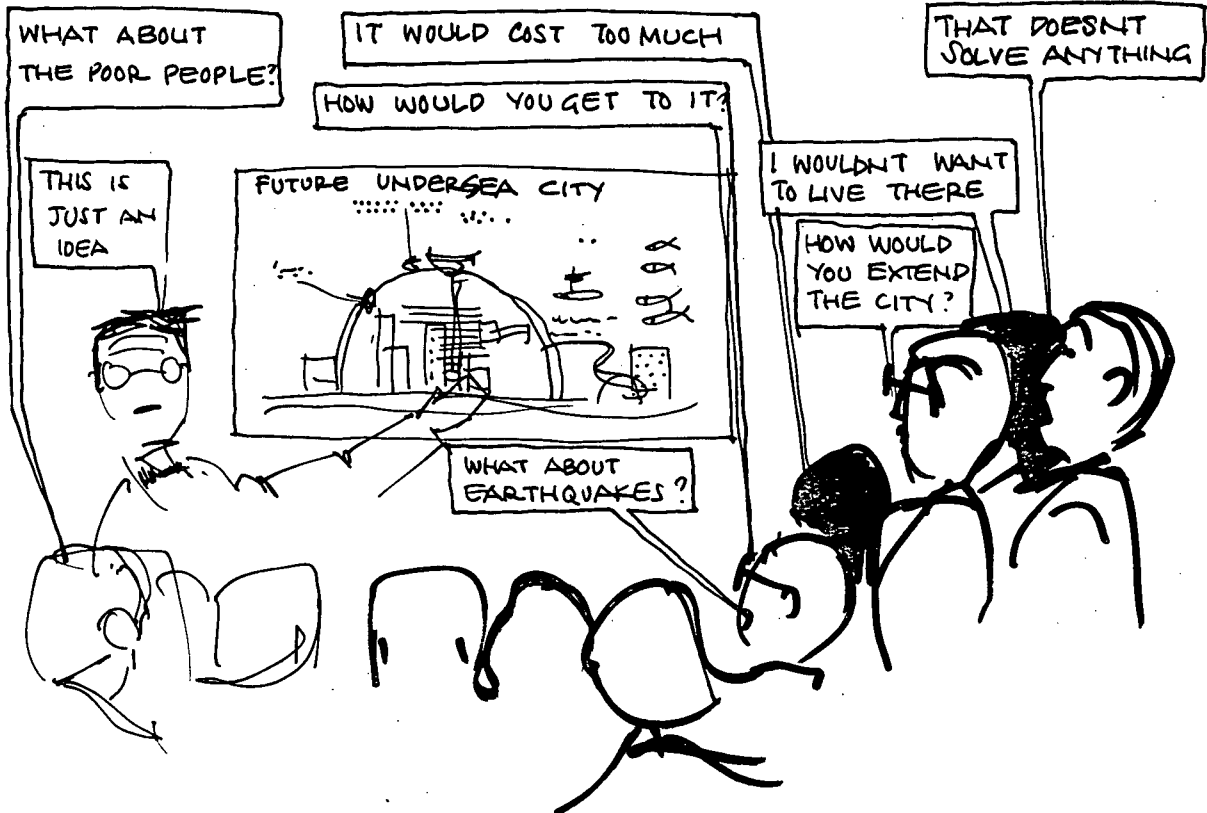
The ideas of Ebenezer Howard, Radburn, and Geddes, of garden cities, green belts and satellite towns interest the students greatly,

and they approve of the ideas. But the ideas of Le Corbusier, Santa Elia, Peter Cook and others, of dwelling in apartments in tall buildings so that the countryside around is open, without houses, are turned down flat. The idea of living in an apartment is out. Any suggestions of an applied city design that does not allow for individual freedom of choice of housing design is also out. I have found this reaction constantly. The first group to react in this way were nine years old. They were very firm. Two boys, who had recently moved from apartments to houses in the suburbs, were loquacious. Since then their views have been echoed by students of all ages.

Their reaction put a lot of highly esteemed architectural solutions for the future in the waste basket. For some time afterwards I was diffident about suggesting solutions but let the students develop their own ideas in discussions. I found that they thought of nothing new, and that they derive all their ideas from actual experience or from publications. I found also that their ideas for the future, while they were regarded by the proposers with affection, antagonized the other students.

They needed guidance to avoid stalemate. They accepted certain parts of the various planning and architectural solutions. They accepted the principle of the satellite town and approved the green belts around them. They approved the principle of Plug-In dwellings, providing that the unit that was plugged in was not pre-designed but could be designed by the individual. They disliked the massive structures of Peter Cook's Plug-In City; for them the better structure was the lower In-Line City though with reservations on its uniformity.





STUDENTS' REJECTED  
FUTURE CITIES.

I should mention that though the studies were in Montreal, we were in the pre-Expo era, before Habitat had been conceived. Later, when Habitat was built, the students had the real experience of walking around, running around, a structure of the future. Invariably they loved Habitat. They recalled it with delight. Their hope was real of some alternative to the apartment slab. Of all that was said of Habitat, it should be noted that the child experiences therein a fashion of living of the future by a total touch and sensory learning experience. All other countries make do with paper illustrations of the future; only Canada provides a real example.

To return to the pre-Habitat days, the qualified acceptance by the children of a modified Plug-In-In-Line form of future structure led to another and more acceptable form of future city. It is called Crown City. Crown City grew as a child of the Montreal district, of the attractive farm land and villages of Quebec and the ski slopes of the Laurentians. The Laurentians have a micro-climate better by far than the micro-climate of Montreal. Summers shine clear and fresh while Montreal swelters; winters sparkle clear blue and white while Montreal is cold, grey, overcast and dirty. Any skier and any aspiring voyageur regrets the wasted hours spent away from the Laurentians. Therefore a future form of city that took advantage of the skiing, the better climate and the view of the surrounding farm land soon came to mind. Once the idea had formed enough to be sketched and described, it became a shining hope in the minds of all my friends who shared the love of the Laurentians.

The children took to it, and took it over, immediately. Consequently they modified it to suit themselves and in its modified form, which soon emerged, it has served as a base for the design of the future for students in Montreal and Vancouver. In Montreal the name applied to the situation of the city on the crown of a hill. In Vancouver, the name Crown has been taken to mean Crown land. Pictures describe the architectural form of Crown City. Defined plans and densities that I had made were never shown to the students. I intend to present a city of questions, not of answers, which are for the students to pursue. The City however had a basic structure.

Crown City weathered the first storms of appraisal by the students. Perhaps the local origin of birth gave it strength. The recreation properties attracted the students. Above all I believe it succeeds by the fact that it avoids the objections to other city forms.

The first queries were associated with the flight from the city and concerned wilderness areas. "Where would you keep a horse if you had one?" I would draw a horse on the hills across the valley. "Ah, you could see it from the city." "I want it so that I can build a place of my own somewhere, have some land conquering," said a student. This suggestion has reoccurred often. It may arise from the preceding exercises which show the pioneer development, which children find attractive.

I have found students to become totally absorbed in the collection of ideas for inclusion in the new city. As a result the population of Crown City has never been discussed. Nor has its size been mentioned, nor its location fixed. Were the question to arise, study of the

"feeling" of different densities and populations would follow.

The rarity of new ideas from students emphasizes the function of Crown City, not as a place for new ideas but to provide a place to put the old ideas as they are rediscovered. The students walk backwards to Crown City. They sit on its slopes and think about the old city. They bring to mind all the good points of the old as features for the new. They recollect features in group discussion and generate a greater degree of recollection among themselves.

In this way they cast the old, that means the existing, in a better light. Thoughts of departure encourage an awareness and a fondness for the existing environment. The existing city, and the future, offer values that apply personally to the student. As Patrick Geddes, in his book *Cities in Evolution*, writes:

In short, here, as elsewhere children and artists may see more than the wise. For as there can be no nature study, no geography worth the name apart from the love and the beauty of Nature, so it is with the study of the city.<sup>2</sup>

The achievement of such a stage by a student who formerly viewed both the city and the future with horror is an enormous improvement in attitude. Were it just a betterment for learning it would be reward enough. The evident happiness among the students about Crown City makes it still more rewarding. On occasions the change in attitude has brought emotional relief, as if a terrible fear that had hung over the child for years had been removed. I have seen this occur, not only in young children but in eighteen-year-old students. It marks this whole



exercise as important beyond academic measure, touching on mental stresses of alarming proportions in the young people.

### Participation in the Classroom Setting

I have often found the classroom to be an awkward place for response. The rigid rows of desks and the discipline imposed on the students to speak only when given express permission discourages a free exchange of ideas.

On one occasion, partly by accident, ideas flowed from a group aged seventeen to eighteen years at University Hill, who were intelligent but who were inclined to be unresponsive and had a reputation for being uncooperative. I had planned a drawing to encourage a flow of idea. I expected that the drawing would spark the usual objections in the girls who would favour non-building, non-development. I wanted to record their comments. The tape recorder, I had noticed, picked up low frequency sounds well but not the high frequency sounds and I was afraid that I would lose the girls voices. To get a better grouping for the sound I placed the roll of brown wrapping paper on the floor and unrolled the paper below and in front of the recorder. The group gathered to watch the drawing, made with thick charcoal sticks.

The room was slightly darkened because I projected slides on a screen at one side of the room. I knelt to draw which reduced any authority I had brought with me, and the teacher Helen Sherrif knelt beside. Soon we had a row of people, each side of the paper, drawing ideas while those who spoke stood beside and watched. Within fifteen minutes we had

a drawing over forty feet long full of ideas and the girls who spoke described clear verbal images. The drawing flowed into the corridor, and we held it up between us. It showed, apart from all else, a fount of ideas among the students.

Drawing on paper rolled out on the floor succeeded on another occasion at Alpha School in Burnaby, with the help of the teachers Gary Onstad and Judy Doyle, also with students of seventeen to eighteen years old. Several classes joined together number about one hundred and sixty students in a double sized classroom. We rolled out the paper in three pieces, one about thirty feet long, the others of fifteen feet each. The present city filled one fifteen foot sheet. The future filled the other fifteen foot sheet. The third, half used, showed ideas for recreation.

The drawings of ideas for recreation at Alpha School and the drawing at University Hill were both similar in subject matter. They consisted of a collection of separate ideas. It appears that an idea develops in about four feet width and can exist without troubling a neighbouring idea. It is important to avoid the need for organising the conjunction of ideas in this stage of the exercise. The drawing on the floor has an important aspect when used in the classroom. The students participate more readily in a drawing on the floor than in a drawing on the blackboard. I found that students were uneasy when standing at the blackboard. This appears to be a danger zone for them. Drawing on the floor overcame their uneasiness. Another aspect may be the relation of the drawing to the sand patch which is, and always has been, a satisfactory surface for doodling with a stick or with a foot. A place for

the universal language that Walt Disney's Professor Von Duck calls "sandscript."

The Alpha School had one other aspect which I consider a very important element in the success of the exercise. The floor was carpeted. The students had no hesitation in lying and in sitting on the floor to draw. They had a relaxed air which would possibly have been different if they could only squat for short periods. At University Hill, on a tile floor, that discouraged close contact, the students relaxed less easily.

Without the drawing on the floor the rigidity induced by the rows of desks can be softened by asking the students to arrange themselves before the blackboard without desks, sitting on the floor if possible, or with chairs and no desks. Often the seats cannot be detached from the desks and the desks form a barrier. The students show great reluctance in moving through the barrier of desks to join me at the drawing board. Slides, when shown to one side of the room throughout the draw-in, screened very small, bring the students forward to see the pictures. They arrange themselves informally and the draw-in proceeds more easily.

#### Design Participation

Many expressions of zoning or density are too abstract to support the personal identity of the student, and I have found that students identify themselves with their expressions to a powerful degree. When their plans for the future concern their own life style and their own appreciation of the surroundings they can rely on their expressions as

an extension of their identity, and can, if necessary, defend them when they are attacked. I found this to be an important factor.

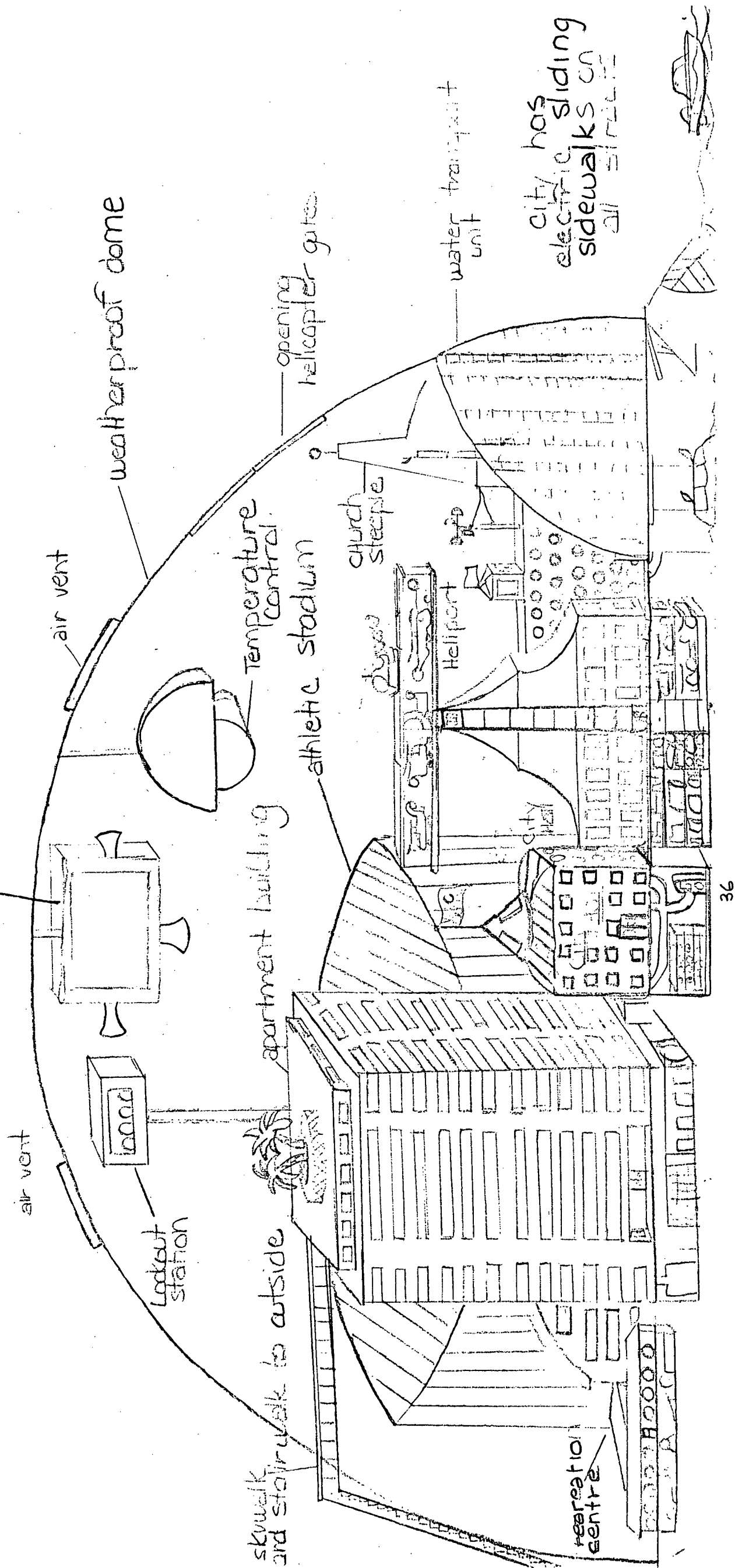
For example, I had one instance with some boys of thirteen to fourteen years of age that brought out strong emotions from an identity with a plan for the future. The boys, who were very bright, living in a suburban area to the south of Vancouver, were eager to draw up their own ideas for the future. They mentioned underground cities that would leave the landscape untouched on top of the city. The teacher expressed interest and though the boys protested, "Oh, Sir, you will grow all furry like a mole," and "bits of mud will drop into your soup," most of them designed underground or underwater cities.

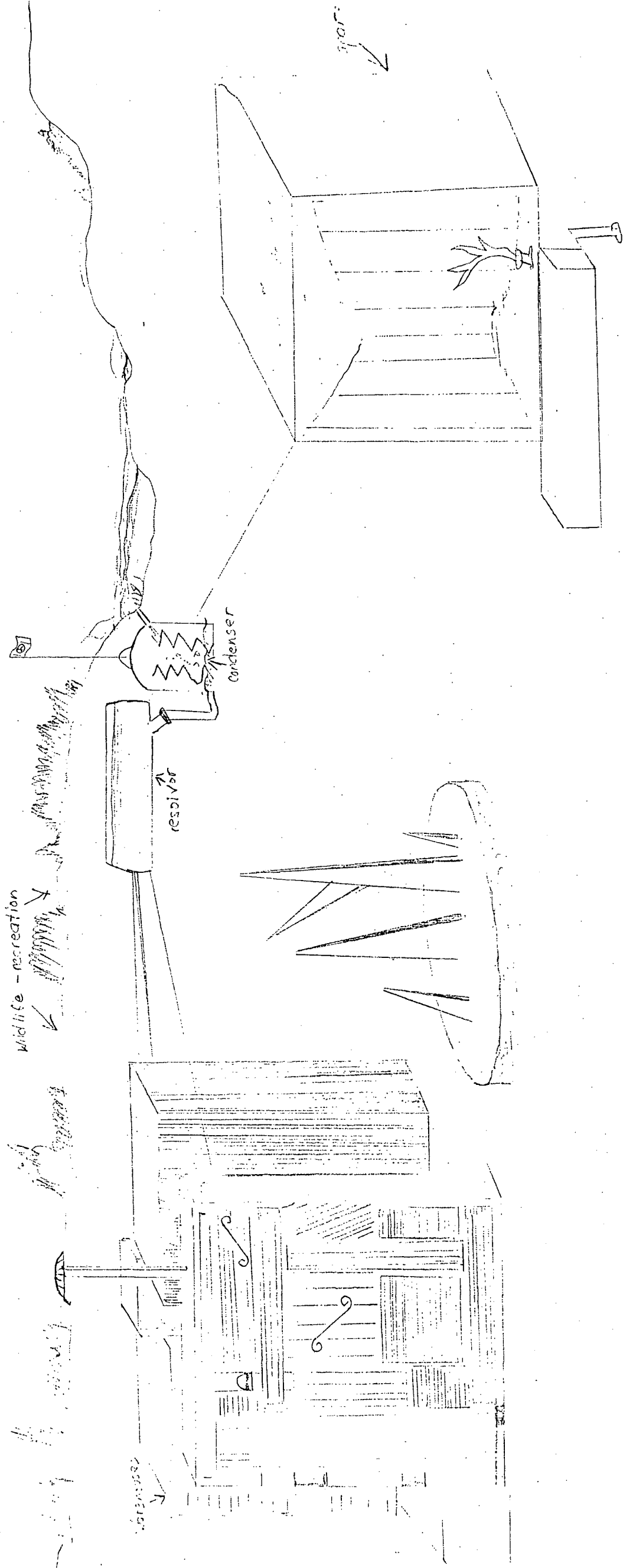
I held the designs up before the class and asked the designer to tell us more about his city. It soon became clear that the boys all had their own ideas about the organization of the city and attacked rival concepts. As a result, the more detailed drawings drew the heaviest criticism. The boys that had tried hardest were the most severely criticized and were nearly reduced to tears.

Lewis Mumford in his book *The City in History* writes a chapter on the underground city that might be guiding us past this point. He writes of the bellicose nature of man that pursues technical goals, and creates underground cities, as an art of war. He writes, "We must not only unlearn the art of war, but acquire and master, as never before, the arts of life."<sup>3</sup>

A few examples follow of the type of design that caused the furore.

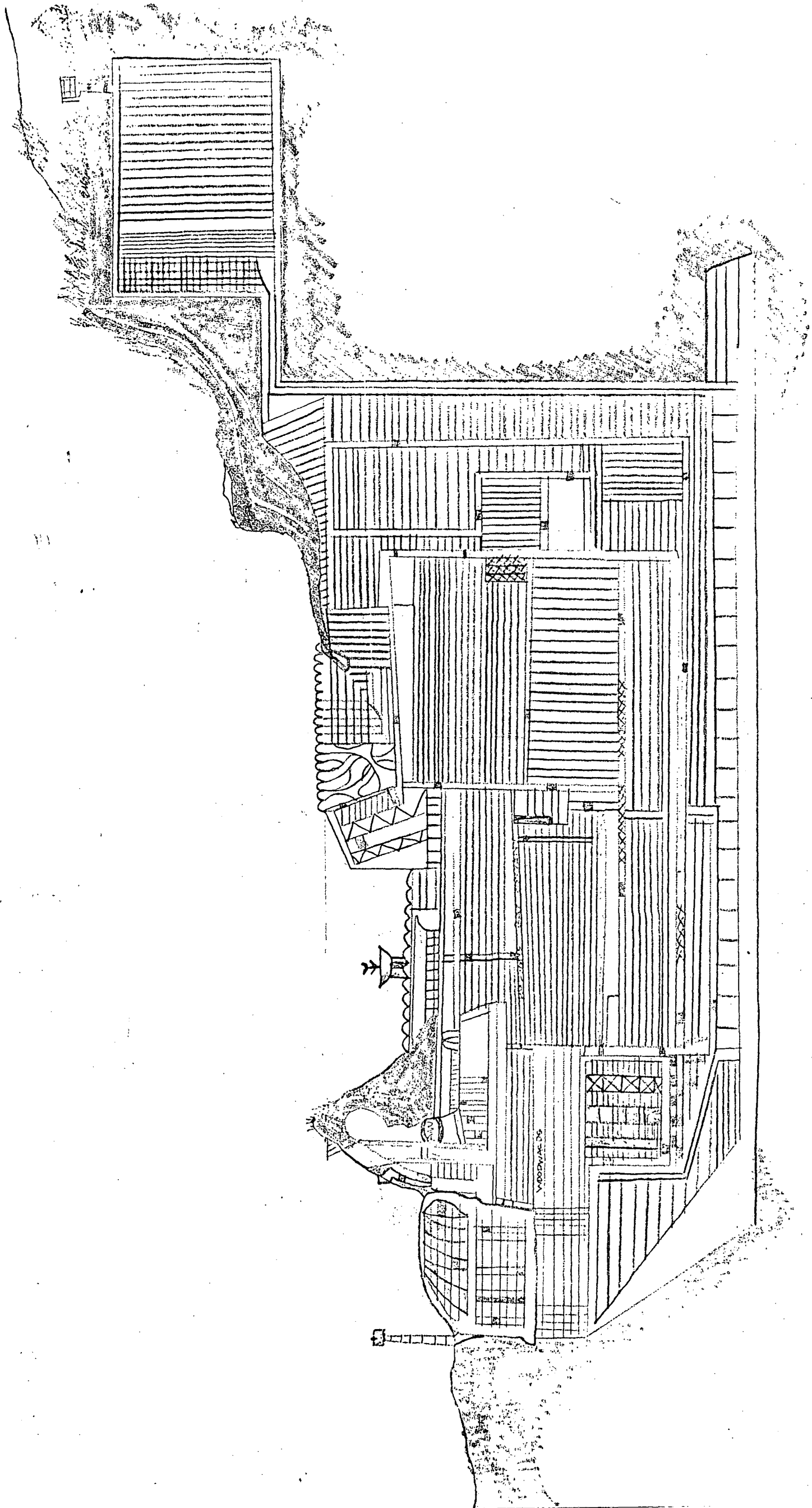
speaker system & television announcement screen






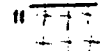


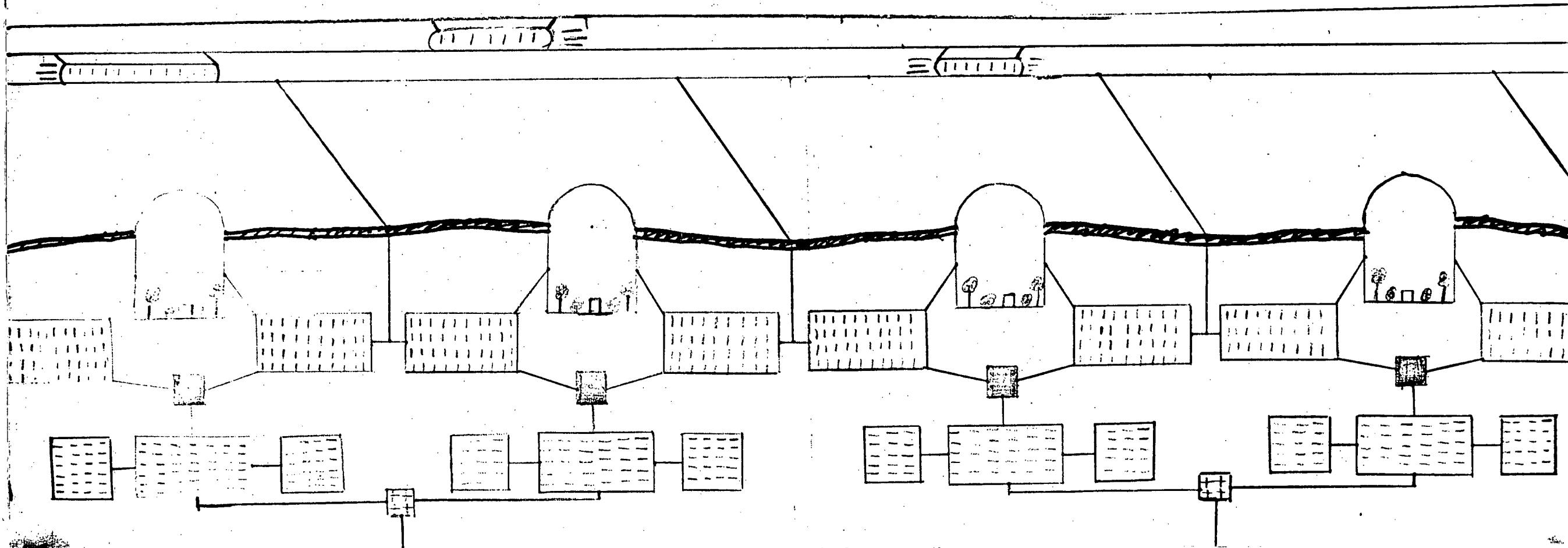
14th April

monorail



Paul Pottery

Residential Buildings   
 Government "   
 Commercial "   
 Water and Sewage " 





Also, I have observed that students who are wrestling with a problem of fitting two ideas into a design are upset by the arrival of a third idea and reject it.

Conflict over rival planning concepts has occurred many times, and I find that conflict can be expected to occur as a natural course of events unless the discussion is guided away into safer areas. The discussion of concepts occurs later but premature discussion is fruitless on the following counts:

1. The most energetic students who have provided full designs for discussion lay themselves open to attack on grounds that they are unqualified to defend. They tend to become discouraged from offering a lead in further discussion.
2. The discussion of abstract planning terms results in the need for expert advice beyond the scope of the group of students, and discussion is postponed.

The study of the urban environment is obviously an enormous task and the enormity itself is discouraging. The introduction aims to simplify and reduce the size of the problem so that the student can take the first steps easily.

The students express their criteria for design in terms that

1. require no expert knowledge of terms,
2. encourage further enquiry,
3. give the designer useful guidance.

Planning concepts and systems are not examined until a later stage. The responses concentrate discussion on areas in which students of any age can join. They encourage awareness of the present environment and encourage skills of expression. The students choose a future activity and compare it with the present forms of the activity. They enjoy the thought of eating, and extend their thoughts to other parts of the day:

at home resting and sleeping,	eating,
getting provisions,	work,
play,	travelling.

More detailed headings include cooking, laundry and repair and maintenance of the home.

The headings provide a way of comparing life styles in different environments, city, suburb, farm and wilderness, and in other cultures. The comparisons form a design process. Jane Jacobs writes of this design process in her book, *The Death and Life of Great American Cities*:

City designers should return to a strategy ennobling both to art and to life: a strategy of illuminating and clarifying life and helping to explain to us its meaning and order--in this case, helping to illuminate, clarify and explain the order of cities.<sup>4</sup>

The tendency to see the city apartment as merely a cramped version of the suburban house changes when students see the restaurants, city parks and theatres as part of a life style.

They compare a meeting of friends for a meal at home in the suburb with a meeting of friends in a favorite restaurant in the city. The

restaurant extends the home.

The method also encourages the students to search for those features in the city that match the features of the suburban home. They search for the rich features of city life, the places where people gather to enjoy themselves.

The emphasis on the richness of the city life helps children who are depressed by thoughts of overpopulation. I have known cases when children have been excited and exhilarated by a sense of relief at thoughts of the rich sides of life in a dense population.

Problems of the poor people and of their future usually arise in the discussions. The questions, "What would you do as a poor person, what conditions would be necessary for you to enjoy life without much money?" guide the student into deeper research. They imagine an environment suited to their pockets and enjoyable without spending much money. The emphasis on public and free amenities appeals to children. A short walk to work or to the park, rather than a drive, means freedom to the child as well as a necessity for a poor person. I have found the consideration of the activities of everyday life more fruitful than the presentation of the problems of slums as a blight, and as a social planning problem.

The students next consider the surrounding of their activities. They analyse the stimuli of the environment on their senses, and then design a surrounding to enhance the activities of their future daily life. In effect they become their own architects. Does this seem novel? Over a century ago John Ruskin, lecturing at Edinburgh, invited people

to each become architects:

'Well, but what are we to do?' you will say to me; 'we cannot make architects of ourselves?' Pardon me, you can--and you ought. Architecture is an art for all men to learn, because all are concerned with it; and it is so simple, that there is no excuse for not being acquainted with its primary rules, any more than for ignorance of grammar or of spelling, which are both of them far more difficult sciences.<sup>5</sup>

I have found that students need help to perceive their surroundings. The guiding principles that follow consider each stimulus on the senses separately. Movement, touch, hearing, smell and sight join other elements that architecture, as a social art, brings to the perception of life; the considerations of the effects of people around one, of occasion, and of beauty and harmony.

The list that follows can be used in the classroom to encourage mental images and to enlarge the recall of experience, and can be used to analyse the perception of a place.

Touch: Of wind, of water, and of textures, of foliage and animals and people. Heat from the sun, from fires, or from central heating.

Sound: Of men's or women's voices, of traffic, of activity. Specific sounds as in poetry, music or the sounds of nature. Degrees of silence in order to hear specific sounds.

Light: Daylight, night light and all variations of translucence, sparkle, glare, flash, reflection, etc. Form. Surface texture.

Colour: An extension of the sense of Light. It is listed as a

separate item to help the formation of mental images because colour is usually regarded by the students as a separate item from light. The specific colours are avoided and instead such adjectives as "bright, warm, restful" are requested. The avoidance of specific colours avoids the arguments that accompany public discussion of colour.

**Odour:** Smells and tastes of nature, of food, of people, of traffic, smells of materials, smells of fire and of manufacturing processes.

**Time:** Duration and frequency of activities. Hour. Season. Night or day. Orientation and the sun's movement.

**Space:** Movement in space, travel in space, size and degree of enclosures, both natural and man-made, both interior and exterior. The view of space.

**Community:** The number of people around the activity, crowds, family, couples or solitude. This sense of Community and Space is closely connected; as one student wrote, "a you and me space."

**Aura:** The total sensations of the place that make one feel secure or excited, or to have sensations of majesty or dignity. The expression of criteria of aura includes the aesthetic design of buildings. It includes expressions of beauty in nature and in works of art, of harmony and discord.

The students use the same list to build an image of the future. The kind of expressions that are sought from the students are listed

after the senses. The number of words that appear after the senses varies for the different age of student. Students aged fourteen years have found the list that follows acceptable and added many more descriptions.

Touch: Warm, rough, smooth, granular, jagged, brittle, wet, slimy, cushioned, silky, malleable, wind on the skin, sun on the skin, of grass, of foliage. . . .

Sound: Loud, sharp, grating, soothing, hypnotic, resonant, stimulating, startling. . . .

Light: Hard, soft, smooth, intense, glare, direct, filtered, dappled, translucent, dull, even, flickering. . . .

Colour: Bright, soft, pale, warm, cool, calm, tranquil, saturated, stimulating. . . .

Odour: Pervasive, strong, pungent, unpleasant, suffocating, fresh, relaxing, comforting. . . .

Time: Brief, spontaneous, long, weary, boring, sequential, ordered, periodic, seasonal. . . .

Space: Open, enclosed, fenced, vast, horizontal, long, cramped, claustrophobic. . . .

Community: Privacy, crowds, groups, separation, leisure, clubs, structured. . . .

Aura: Calm, stimulating, majestic, dignified, festive, tranquil, gay, expensive, disturbing, religious. . . .

I have found that the completion of the exercise brings great

satisfaction to the students. The image that they create in the mind of a future place gives them vision, where before their minds were blank. It is obviously a great achievement of imagination.

The students who have tried the whole exercise have shown an urge to express their ideas in other forms than words. I have ventured very little into this next stage, only to produce television programs which featured charcoal drawings on brown paper. I have felt that the motivation to create expressions is very strong at this point and should be guided into media that are exciting and expressive. Students at Alpha School, Burnaby, in a program of urban study conducted by Gary Onstad and Judy Doyle which used the group drawing and slides, have recently produced expressions in drama, dance and song in addition to some practical proposals of development.

The study of perception increases the importance and effectiveness of field trips. In their book *The Child's Conception of Space*, Piaget and Inhelder point out that "perception is the knowledge of objects resulting from direct contact with them."<sup>6</sup> The kinetic and sensorial effects that the students perceived by direct contact on the site are recalled in the classroom, and vice versa; lessons in perception conducted in the classroom are recalled on the site. It is an extremely difficult task to relate abstract concepts to an actual site or vice versa, and to approach the study through perception gives the students a direction for the first easy steps.

The study of the senses therefore encourages field trips and encourages the students to experience the real places and not to rely on

simulation. It also encourages the students to get out of the bus or car that conveyed them to the site in order to study the whole effects.

The real experience of a community activity, for example, a parade, relates to the parade street or square as an example of perception of sensorial and kinetic effects, in the same order that solitude relates to landscape. The attractive qualities of gathered crowds are therefore highlighted and contrasted with other occasions of solitude. "Principles": writes Le Corbusier in *Concerning Town Planning*, "sun, space, verdure; Architecture develops from within outwards (the key of modern planning)."<sup>7</sup>

The following example, composed by Anne Wolverton, thirteen years, of University Hill, Vancouver, shows how the list guided the student to a full specification of her idea.

#### CRAFT STUDIOS

These Craft Studios should be in a building up above the ground preferably with the available materials for extensive work in the fields of drawing, painting, ceramics, graphic and other such courses.

#### SENSES

1. Space: large, airy, free

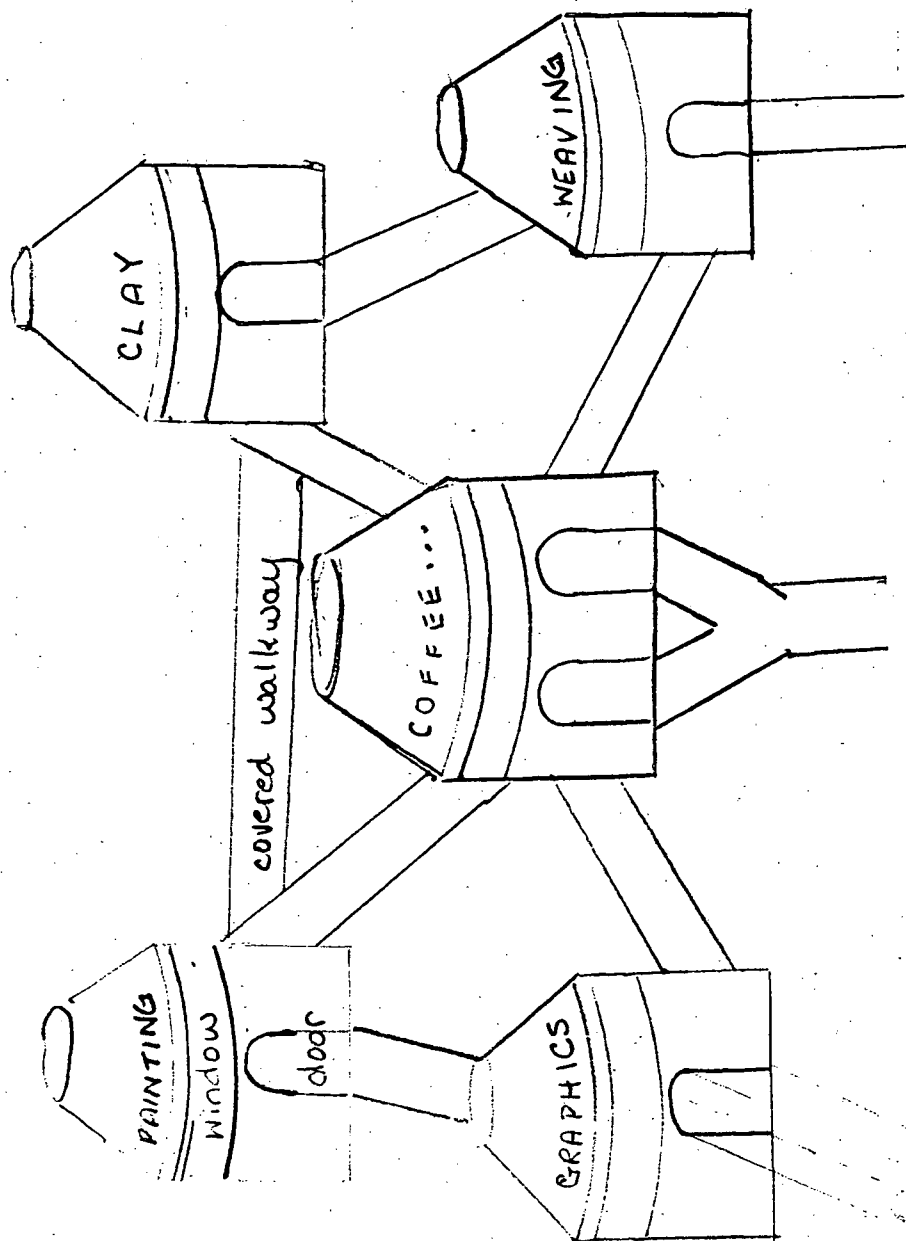
These rooms should be in a building which is very free, natural. It should be very textured and should be built from very natural elements.

2. Colour: warm, comfortable, friendly

If it is to be painted it should be done in very warm, rich colours maybe in some places stained so it shows the natural texture of the wood.

3. Touch: rough, natural, unobstructed





## CRAFT STUDIOS

These craft huts will be accessible from all sides with covered walkways leading to and from each hut. There is a domed window on the top with one continuous window around the hut.

Everything should be very textured, rough walls, doors and ceiling.

4. Aura: warm, friendly, comfortable

The feeling here should be that of a friendly no limit atmosphere. There should be a friendly, helpful relationship going on.

5. Light: natural, many windows, sunlight

Here there should be many windows with sunlight coming in at its best advantage. If there is other light needed it should be warm, glowing light.

6. Smells: non-antiseptic, fresh, painty

There should be busy but fresh smells floating around.

7. Time: day, going, free

There should be a time limit here. It should be in the day.

8. Sound: busy, hum, voices, machines, quiet, breathing, whispers

There should be a variation of sounds here, depending on the room.

9. Community: young, old, groups, separate

There would be individual projects but what we want is a group response towards helping each other.

### The Taxonomy of Educational Objectives

The method relates to the Affective Domain of the Taxonomy of Educational Objectives by B. S. Bloom<sup>8</sup> as follows:

1.0 Receiving - Attending

1.1 Awareness - of Change

- A demonstration of change by recollection of childhood.
- Awareness of change in existing streets.

1.2 Willingness to Receive - That existing settlements are subject to change.

- The idea that early settlements had much the same problems as we face today.
- The drawn evolution of the early settlement.

### 1.3 Controlled or Selected Attention - On the parts that change.

- On the various stories of the social and economic evolution of Some City.

## 2.0 Responding

### 2.1 Acquiescence in Responding - To picture in the mind the image of today's city and suburb.

### 2.2 Willingness to Respond - By calling out the objects in the image in their minds that go to change the drawing of the early settlement to a drawing of the city of today.

- By some who join me in drawing or who entirely make the drawing themselves.

### 2.3 Satisfaction in Response - By drawing their version of the future city that is their own design.

- In that they can make no error.

## 3.0 Valuing

### 3.1 Acceptance of a Value - That the future must be considered.

- That the existing city contains features that are necessary and desirable in the future.

### 3.2 Preference for a Value - In the existing environment by the examination of present environment by considering life styles.

### 3.3 Commitment - To a life-style - "the kind of person I am - the kind of life I wish to live."

## 4.0 Organisation

### 4.1 Conceptualisation of a Value - Of the effects on the senses that are appropriate to the particular part of the life style being considered.

- Representation of the values in drawings, words or other media, that describe an activity, or occupation and its immediate surroundings, its place.

### 4.2 Organisation of a Value System - The gathering of the separate parts of the life style into a time continuum.

- The selection of an overall activity environment.
- The appropriate overall environment is described.

## 5.0 Characterization by a Value or Value Complex

5.1 Generalized Set - Of values and priorities of life style and surroundings by which all choices of environment can be judged.

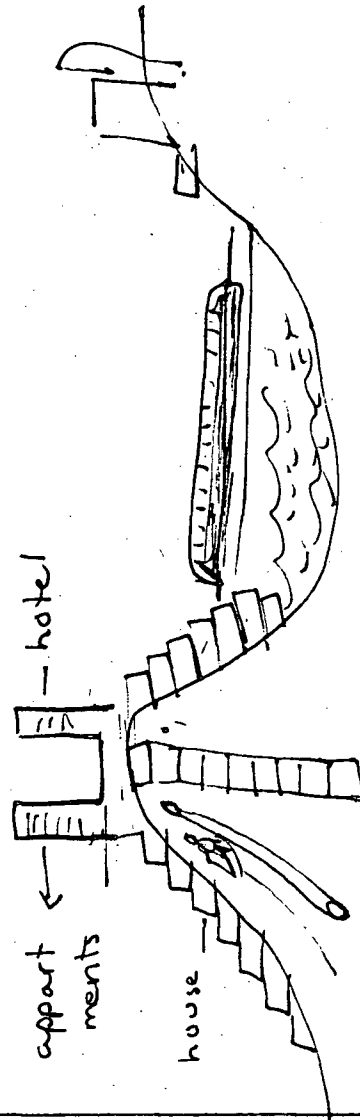
5.2 Characterization - By a regard for ways of life, life styles, both ones own and others.

- By an awareness of surroundings.
- By a sensitivity for the effects of the surroundings.
- By an approach to impending change at the level of the effect on life and on the senses.
- By a respect for the opinions and aspirations of the other people involved in changes to the environment.

What sort of city or life do you want  
in the future.

- I would like my town or city to be  
alive. Traffic, tall buildings. I'd like  
it to be like San Francisco.

his idea I like





## FOOTNOTES

<sup>1</sup>Virginia Lee Burton, *The Little House* (Boston: Houghton Mifflin Company, 1942).

<sup>2</sup>Patrick Geddes, *Cities in Evolution* (London: Ernest Benn Ltd., 1968), p. 321.

<sup>3</sup>Lewis Mumford, *The City in History* (New York: Harcourt Brace World, 1961), p. 481.

<sup>4</sup>Jane Jacobs, *The Death and Life of Great American Cities* (New York: Vintage Books, 1961), p. 375.

<sup>5</sup>John Ruskin, *The Lamp of Beauty, Writings on Art by John Ruskin*, selected and edited by Joan Evans (London: Phaidon Press, 1959), p. 258.

<sup>6</sup>J. Piaget and B. Inhelder, *The Childs Conception of Space*, translated from the French by F. J. Langdon and J. L. Lunzer (London: Routledge and Kegan Paul, 1956), p. 17.

<sup>7</sup>le Corbusier, *Concerning Town Planning*, translated by Clive Entwistle (London: Architectural Press, 1947).

<sup>8</sup>B. S. Bloom, *Taxonomy of Educational Objectives: The Affective Domain: The Cognitive Domain* (New York: David Mckay Company, 1967).

## **CHAPTER III MEDIA**

### **Media Related to Participation Exercises**

**Cartoons**

**Film**

**Television**

**Generic and Drawn Images**



### Media Related to Participation Exercises

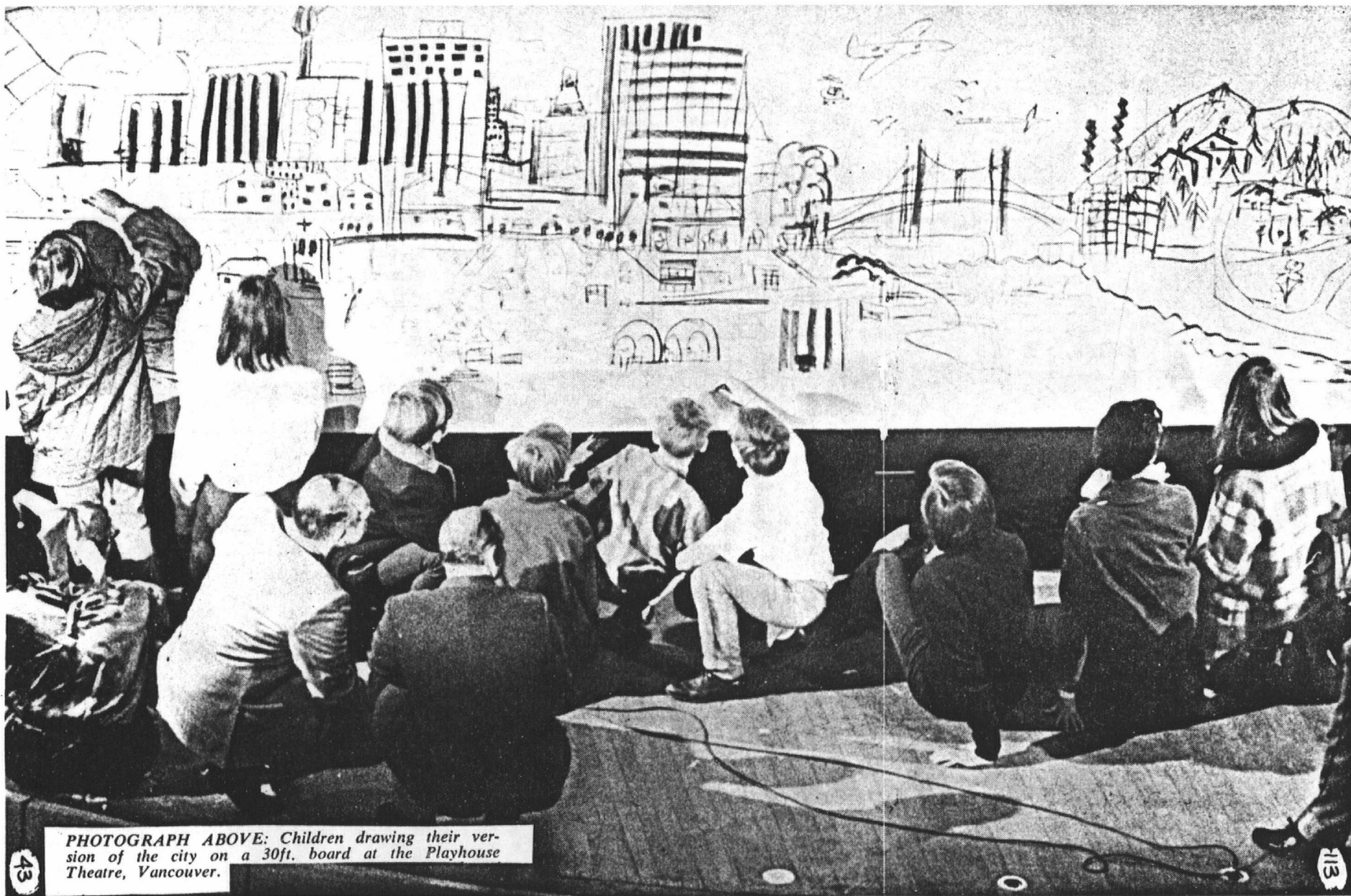
Format. An unexpected aspect arose in the change of format from the blackboard to the T.V. and film screen and the overhead projector. The blackboard measures four feet high by some sixteen feet long. The T.V. screen and film screen are of the ratio four to three.

Urban development grows mainly in a horizontal movement and participation in drawing by the children can be easily encouraged on the horizontal board. The classroom blackboard is horizontal in the ratio of four to one. At the "Adventures in Architecture" in the Playhouse in Vancouver the board on which the children drew measured four feet by twenty-four feet, a ratio of six to one. The students require no skills in perspective or in picture composition for a drawing of a growing city on such a format.

In contrast, the four to three ratio of the T.V. and film screen and the square ratio of the overhead projector call for perspective and composition skills that no child could be expected to command at the pace of drawing required for the introduction of dynamics of city growth.

A small horizontal strip, which ignores the space above and below, means that the drawing has to be very small in the case of the overhead projector, and it is difficult to draw speedily to a very small scale. In the case of the film, which can be a film of a large and long drawing, the space above and below the drawing distracts the eye.

The horizontal dimension appears to have an effect on the type of discussion that ensues. A board thirty feet long was tried out at the



PHOTOGRAPH ABOVE: Children drawing their version of the city on a 30ft. board at the Playhouse Theatre, Vancouver.

Playhouse Theatre on April 4 of this year. The discussion that ensued considered the types of development and types of life style possible in the future. At a taping in the C.B.C. studios in Vancouver for "Hourglass" five days previously, the students drew on a board twenty feet long. They discussed overcrowding and pollution in the future. In a school classroom a few weeks earlier, the students drew on a board sixteen feet long. They discussed the existing city.

The difference appears to be caused by the amount of horizontal space on the board that the students need to participate in the drawing of the existing city. They draw the future on whatever space remains. If there is not enough space, the future becomes over-developed. Concern for an over-built future follows.

The size of the drawing within the board has to be large enough so that a human figure can be drawn, and seen by a crowd of students. The drawing of a human figure with the spoken words, "there's you sitting on the fence," or some other occupation, appears to be an essential element in involving the student. They laugh, and enter into the drawing. The size of such a figure has to be about two inches high to be seen by a group of thirty to fifty students. This makes the first settlers' huts about six inches high. These heights set a scale of drawing. The students do not stick to the scale, difference in scale does not upset them, but their drawings are consequently large. I have found that they require more than fifteen feet to make, without my assistance, a drawing of the existing city. Below this I have to organize them to some degree. Most classrooms have a sixteen foot board on

one wall and extra board space on another. The existing city fills the sixteen foot board and the future fills the other board.

In the taping at the C.B.C. studio, the students were confined to a twenty foot long board. They had insufficient space; a mere five feet remained for the future. As each student contributed, the previous open spaces changed into built up areas, and all parks disappeared under buildings. They filled water areas to make more land. The future grew as crowded and messy as the present. The students expressed real concern that this indeed reflected the prospect for the future. The board had looked enormous before they started. Should I say, the land had looked enormous?

With a board thirty feet long the future develops less densely with room for the parks and open spaces that come to mind as being a necessary contrast to the crowded drawings that represent the present. An attractive style of life looks possible. Alternatives have room and can be discussed.

Models, Maps and Plans. Many children enjoy making models, and I encourage those who wish to do so. Models of balsa wood, cut with scissors and tacky-taped together have proved successful. Cardboard boxes are equally successful and can take drawing and colour.

The model communicates very powerfully and should only be used in association with the actual physical experience of the area it portrays.

Models are strong agents in the formation of attitudes, as every architect who has used models in presenting designs to clients knows.

There are dangers in its strength; the attitude encouraged is that of detached omnipotency, or as the child relates to the toy farm or dolls house.

The viewer does not relate to the model as if suspended above it as in an airplane, but rather as a giant to a miniature land. As a test, try out the difference in perception by sitting in a chair and lying on the floor and imagining yourself ten inches tall. The aspect is entirely different and the perception entirely different. A model represents this complete difference by a small measure, less than one tenth of an inch in a model of fifty feet to the inch scale. A child standing beside such a model is relatively three thousand feet tall, and surely this means a total abstraction from reality.

The map and the model both represent scenes from high view points. They must be closely related to scenes from more common view points.

As an architect I am familiar with the use of models, plans and maps in my daily work. I have acquired a great respect for their power to communicate, in a precise way, general information. This means also, the power to mislead. That these media do often mislead is one cause of the appearance of today's cities. As an example, apartments are designed to a scale of thirty-two feet to one inch. The drawing is put up on a wall and approved from about four feet to six feet distance. This represents a distance from the real building of about two thousand feet. As a consequence, the apartments of Vancouver's West End look at their best when seen from across English Bay at about two thousand feet distance.

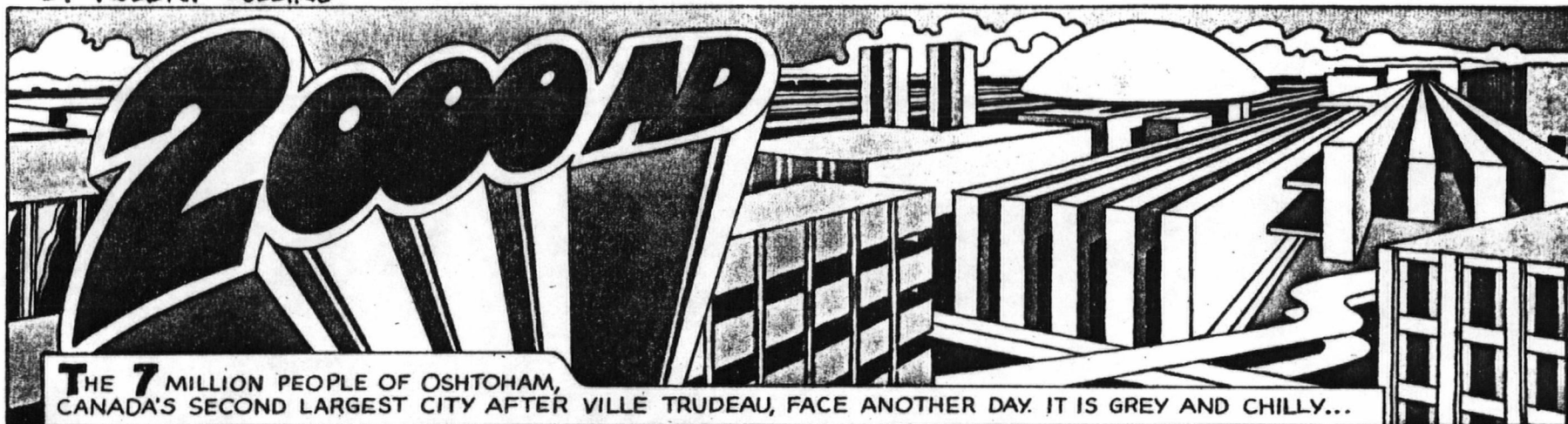
Plastic models of buildings look garish in colour and look well in tones of grey. The approved design which is presented in model form is approved in muted grey, more often as an incident than a main point. Most new downtown buildings are grey, however. In the era before the plastic model, when water colour sketches were the media of presentation, red roofs and white trim and green landscaping looked better on the drawings and resulted in a different environment.

The plan, the most used graphic image of the future, affects the viewer with less power than the model but the greater frequency of use more than makes up for its weaker power. It often misleads us and the saddest words of the planner and architect might be, "It looked well on plan." I fear that excessive use of the plan and map and model, as a main element of communication, may mislead children's thoughts from the real effects that make personal values.

Marshall McLuhan, in *Understanding Media*, quotes Prince Modupe on this point, who, in his autobiography "I Was a Savage," tells how he had learned to read maps at school and how he had taken back home to his village a map of a river his father had travelled for years as a trader:

My father thought the whole idea was absurd. He refused to identify the stream he had crossed at Bomako, where it is no deeper he said, than a man is high, with the great wide spread waters of the vast Niger delta. Distances as measured in miles had no meaning for him. Maps are liars, he told me briefly. From his tone of voice I could tell that I had offended him in some way not known to me at the time. The things that hurt one do not show on a map. The truth of a place is in the joy and the hurt that come from it. I had best not put my trust in anything as inadequate as a map, he counselled. . . . I understand now, although I did not at the time, that my airy and easy sweep of map-traced staggering distances belittled the journeys he had measured in tired feet. With my big map-talk, I had effaced the magnitude of his cargo-laden, heat weighted treks.<sup>1</sup>

BY ROBERT COLLINS

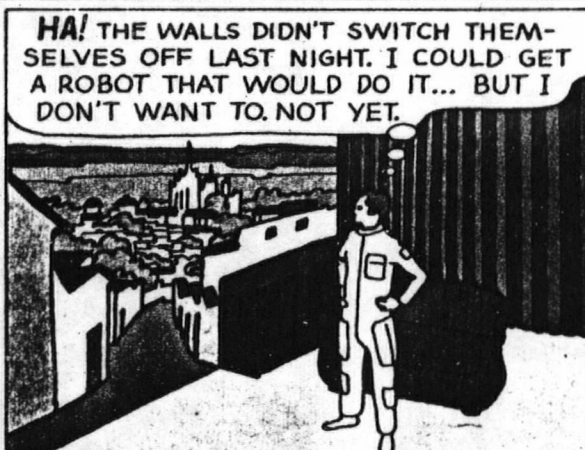


**T**HE 7 MILLION PEOPLE OF OSHTOHAM, CANADA'S SECOND LARGEST CITY AFTER VILLE TRUDEAU, FACE ANOTHER DAY. IT IS GREY AND CHILLY...



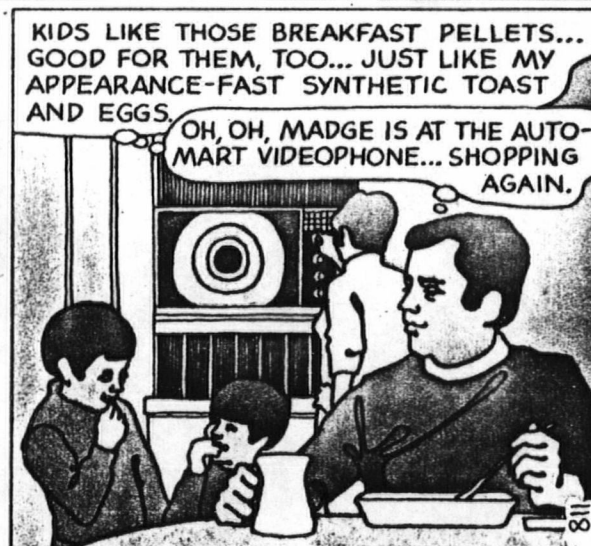
...CHILDREN ARRIVE FROM THE MOON COLONY TODAY TO BEGIN EARTH-ORIENTATION.

...BUT THE BEDROOM OF CITIZEN GEORGE DAEDALUS IS FILLED WITH ARTIFICIAL SUN-LIGHT, AS HE REPLAYS THE TV MORNING NEWS.



**HA!** THE WALLS DIDN'T SWITCH THEMSELVES OFF LAST NIGHT. I COULD GET A ROBOT THAT WOULD DO IT... BUT I DON'T WANT TO. NOT YET.

THIS MONTH, GEORGE HAS RENTED A 3-D HOLOGRAM WALL OF A SLEEPY MEXICAN VILLAGE.



KIDS LIKE THOSE BREAKFAST PELLETS... GOOD FOR THEM, TOO... JUST LIKE MY APPEARANCE-FAST SYNTHETIC TOAST AND EGGS.

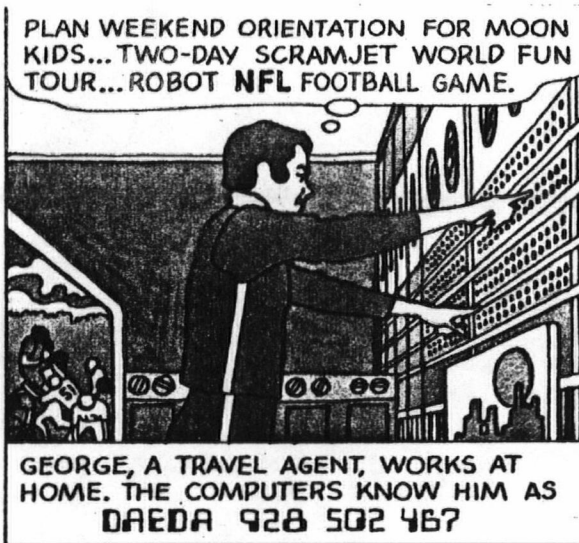
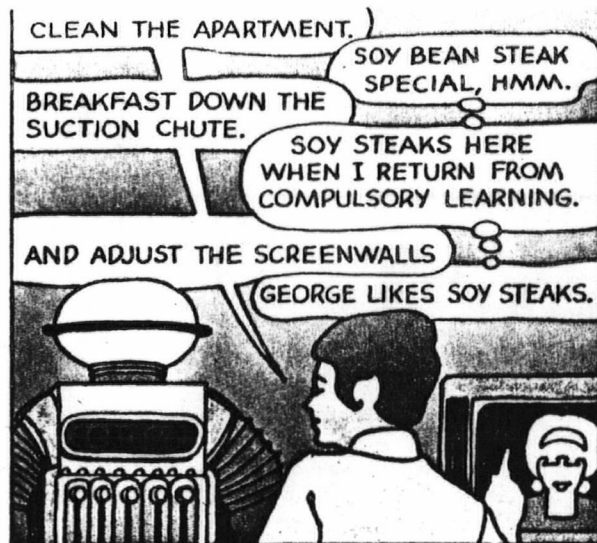
OH, OH, MADGE IS AT THE AUTO-MART VIDEOPHONE... SHOPPING AGAIN.





NEXT DAY, FRED (COMPUTER NAME MACDON 391 888 504) RETURNS TO VILLE TRUDEAU.





# CHILDREN'S TALES

## 3910-16<sup>th</sup> Ave.

### PART 2

**E**LEVATORS ARE THE GREATEST. ONLY APARTMENT HOUSES HAVE THEM. NOBODY EVER USES THE STAIRS UNLESS THE ELEVATOR IS BROKEN. WE USE THE STAIRS ALL THE TIME TO HAVE CLUB MEETINGS 'CAUSE NO ONE'S EVER THERE.



**A**ND GARBAGE. NO WALKING OUTSIDE IN THE RAIN WITH PAPER BAGS, SOGGY ON THE BOTTOM READY TO SPILL ALL OVER THE PLACE.



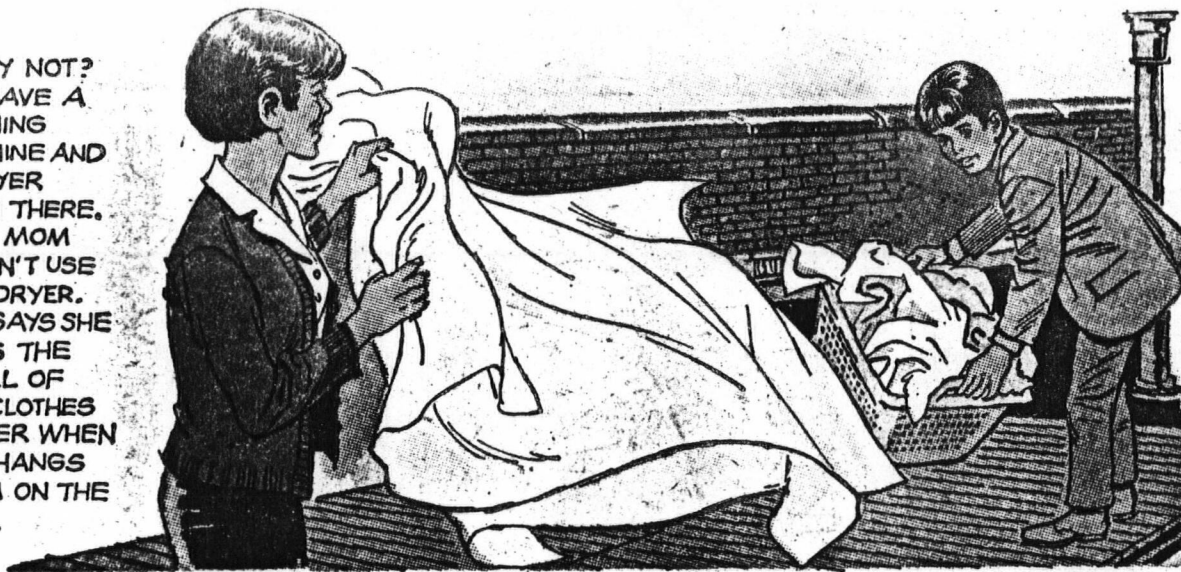
**R**IGHT DOWN THE HALL IS THE INCINERATOR CHUTE. YOU JUST DROP EVERYTHING AND IT GOES STRAIGHT DOWN! **BAM!**

**I**N THE BASEMENT WE HAVE A MILK MACHINE. YOU NEED MILK, EVEN WHEN THE STORES ARE CLOSED, JUST PRESS B AND THE ELEVATOR TAKES YOU RIGHT DOWN. ONLY I STILL GOTTA GO TO THE STORE FOR BREAD. I WISH THEY HAD A BREAD MACHINE.





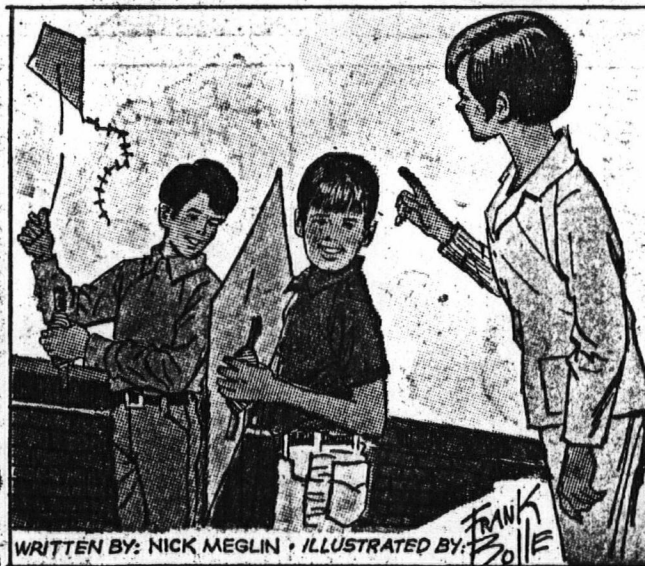
**W**HY NOT? WE HAVE A WASHING MACHINE AND A DRYER DOWN THERE. ONLY MOM DOESN'T USE THE DRYER. SHE SAYS SHE LIKES THE SMELL OF THE CLOTHES BETTER WHEN SHE HANGS THEM ON THE LINE.



**T**HAT'S UPSTAIRS ON THE ROOF. PRESS R ON THE ELEVATOR. NOW THAT'S A GREAT PLACE. YOU CAN LOOK AROUND AND SEE THE TALL BUILDINGS DOWNTOWN OR A JET AIRLINER OR FIREWORKS IN THE SUMMER.



**O**NCE IN A WHILE PIGEONS FROM THE COOP A FEW BLOCKS AWAY COME UP TO OUR ROOF. WE GIVE THEM BREAD AND IF YOU DO IT SLOW AND DON'T SCARE THEM THEY'LL COME RIGHT UP TO YOU AND EAT IT OUT OF YOUR HAND. IT FEELS CRAZY.



**S**OMETIMES WE PLAY UP THERE, BUT MOST OF OUR MOTHERS DON'T LET US UNLESS THEY'RE HANGING CLOTHES OR TALKING. WE TRY AND GUESS WHICH ANTENNA BELONGS TO WHOM OR LAUGH AT MR. KIMPLE'S LONG UNDERWEAR. HE WEARS THESE WOOLLY, ITCHY KIND THAT FLAP AROUND IN THE WIND. IT'S A RIOT.



WRITTEN BY: NICK MEGLIN • ILLUSTRATED BY: FRANK ZOLLE

NEXT WEEK: PART 3  
A SPECIAL HIDEOUT

# CHILDREN'S TALES

## 39/0-16<sup>th</sup> Ave.

### PART 3

**S**OMETIMES WE TAKE A BOTTLE OF WATER AND TRY TO SPURT IT OUT SO THAT IT REACHES THE SIDEWALK WITHOUT HITTING THE SIDE OF THE BUILDING, BUT NOBODY'S DONE IT YET.



**I** CAN DO IT EVERY TIME FROM MY FAVORITE PLACE OF ALL--MY FIRE ESCAPE.

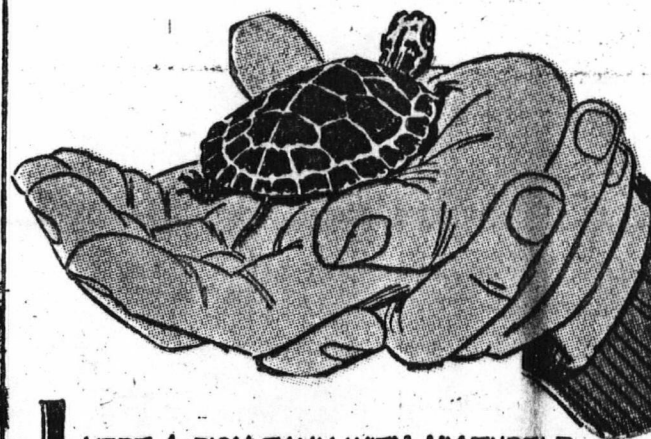


**I** JUST GOT IT THIS YEAR. I USED TO BE IN MY OLDER SISTER'S ROOM AND SHE HAD THIS ONE, BUT WHEN WE HAD A BABY SISTER THE TWO GIRLS GOT MY OLD ROOM 'CAUSE IT WAS BIGGER AND I GOT THE FIRE ESCAPE.

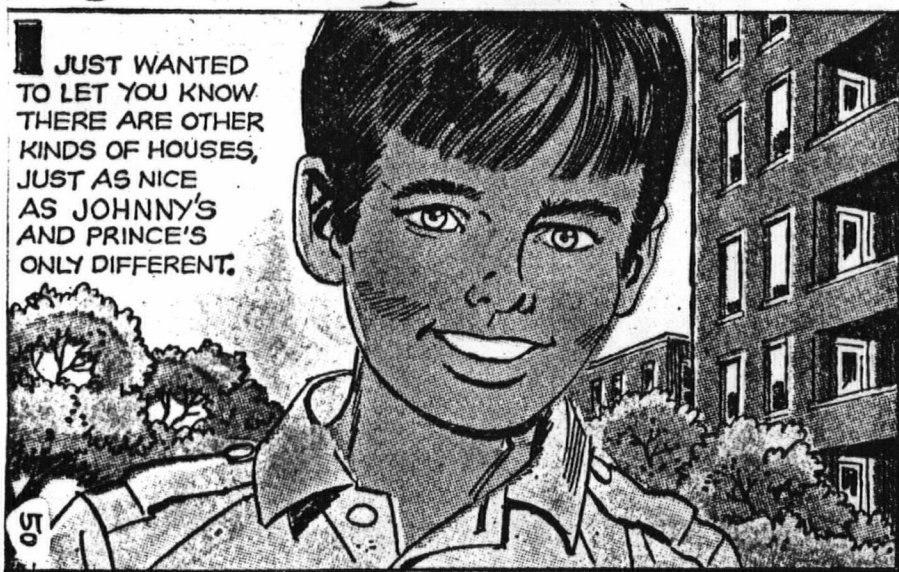
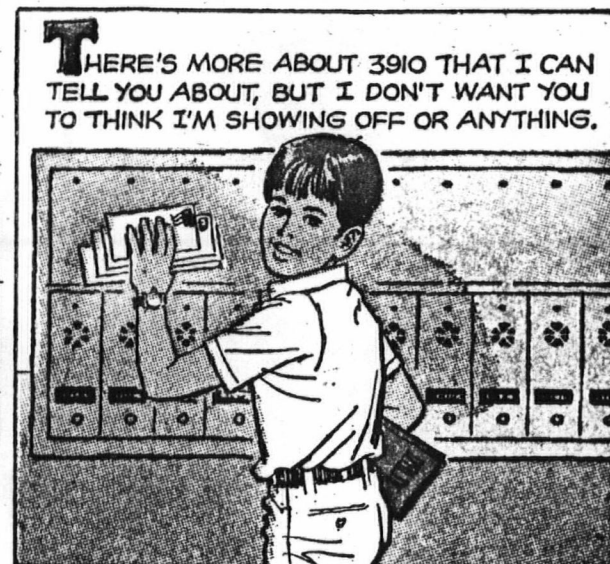


**I**T'S LIKE MY OWN SPECIAL HIDEOUT. IN THE FALL AND SPRING, WHEN IT'S NOT TOO COLD, I CAN READ AND DO MY HOMEWORK OUT THERE.





**I** KEPT A FISH TANK WITH MY TURTLE THERE, TOO. I NAMED HIM JASON ROBARDS, JR. AFTER AN ACTOR I SAW IN A MOVIE ABOUT THIS KID. ONLY THE TURTLE DIED.



WRITTEN BY: NICK MEGLIN • ILLUSTRATED BY: Frank Zile

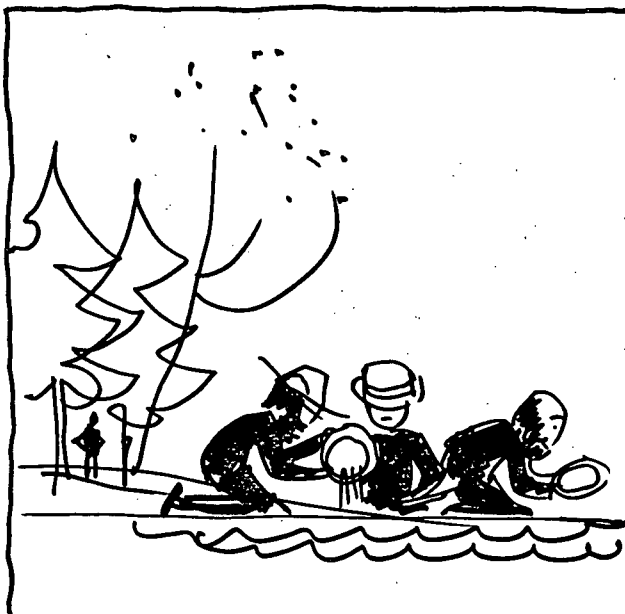
NEXT WEEK:  
A NEW STORY

## Cartoons

Strip cartoon may be very suitable for the communication of the historical material and human actions, being popular with children and having the quality of pace. The graphic development of the changing city form requires pace to bring about a projection into the future and to show the rhythm of social development. By pace, a continuity can be achieved. Science fiction slips in whenever the gap widens between the present and the future.

I do not know how quickly a comic strip can communicate. Serial stories told by comic strip appear to be slowed down to lengthen the stories. The pace becomes laboured and the medium lacks depth for long attention. The use of capital type rather than lower case may be a device for slowing pace. Nearly all comic strip lettering is in capitals, WHICH MAY BE A CONVENIENCE FOR PHOTOGRAPHIC REDUCTION, BUT I WOULD ASK THE READER TO CONSIDER WHETHER OR NOT THE USE OF CAPITAL LETTERS HAS MADE THE READING OF THIS PARAGRAPH SLOWER UP TO THIS POINT THAN WOULD HAVE BEEN THE CASE WITH lower case letters. If so, we are agreed. Most comic strips have their brakes on.

The use of the cartoon to gain response may have possibilities. I have tried one example in the series of drawings that follow. They were to accompany a story published in a book, with the intention that the students would read the story, and then add captions to the cartoons and colour them. By first intimations the story in the book is too boring, and the drawings are not defined enough to guide the colouring.



It tells of miners in the Cariboo Gold Rush surprised by an Indian, who invites them to a feast, and, shocked by their offer of whiskey to a maiden, throws the whiskey on the fire, to a reaction of chagrin, education and esteem.

### Film

Film includes the motion film and slides and filmstrip. All are suitable for showing the growth of the city, the stories of social development and the life style and perception. I have made examples of each in slide and filmstrip and examples of the physical growth in motion film.

Viewers participate quite differently when shown film than when shown the blackboard drawing. Nevertheless a form of participation is possible with slide and filmstrip showing. I have conducted film showings myself and they have been used by several teachers in my absence at different schools, and with different grades. The results encourage the continued production of film as an alternative to the draw-in.

The size of projection and the speed of showing are both variable. The stories of Some City I usually show projected at about two feet width and run at intervals of four seconds to show the cycle of development. Some of the slides have been shown for a long period, of fifteen minutes or more, while aspects of social development were discussed.

The slides of urban physical growth gain much more response when shown on a very large screen fifteen feet width, though smaller screening down to five feet width gains a response. The intervals have been



similar to Some City, run at about four seconds for sequences and also as stills over a longer period for the more complex drawings.

The scenes of streets, and the drawings of streets and interiors, have more effect and greater response when shown very large. When screened five feet width and below, the drawing or photo itself is remarked upon but when screened six feet to fifteen feet the content gains more notice.

I have practised film making and video tape productions using drawing, both in direct application filmed as I draw and, tentatively, in stop frame drawing. The direct drawing has had to be very quick in order to come within the twentyminute period for use in the classroom.

I have increased my speed of drawing so that the phases from virgin country to modern city, from modern city to the immediate future and from the immediate future to the distant future each take approximately three and a half minutes of drawing. Three and a half minutes of film fits the cassette used in projection from the Super-8 film loop.

At this speed I am moving too quickly for the speed of the Super-8 film of eighteen frames per second and a distractive strobing flicker of arm movement appears on the screened film. This means that I must confine my movements or use sixteen mm film at twenty-four frames per second, which is both more expensive to buy and more cumbersome to screen. The solution may lie in filming at twenty-four frames and screening at sixteen to eighteen frames per second.

Stop frame drawing can be adjusted to any particular time required but I have found difficulties in stop frame work, which require a drawing

of a quarter of an inch line and then photographing one frame of a movie camera. I find it difficult to maintain a lively continuity; a drawing can take by this method some thirty minutes to draw peck by peck and when shown on the screen will last ten seconds. I intend to try more stop frame filming. Not every line need show, several buildings might suddenly appear without interruption to the continuity, and bursts of development would be similar to real city growth.

The use of cuts to reality in filming, changing from drawings to shots of a real street scene, has been considered and will be tried when the three films already produced are edited and have the sound track added for showing in the classroom. There seems to be some reason to doubt that this would be entirely successful. The photographs of actual streets would cause a break in medium from the drawing and the return to the drawing after the finish of the photograph of reality would mean another period of mental adjustment.

Showing the street in coloured moving film, with sound track, would seem a better way of communicating "street" than would a quick line sketch, but this has to be considered in the light of the objectives. Firstly the film aims to show the continuity of trends from the past, through the present and into the future. Continuity in media is necessary. Coloured moving films with sound track are easy to produce to show the present but require actors and actresses and sets to show the past and the future. Secondly, the classroom communication of "street" is not intended as a substitute for a visit, but as an explanation of cause and effect in preparation for a visit. It lays a groundwork by a focus

on specific elements and on specific causes that lead to the visual effects.

Film made by students has additional and special qualities. It has properties of time between filming and screening that make it different from other responses. The students respond to the environment in the selection of subject matter for filming. They edit as they respond to their own film. The viewing students respond to the final screening differently than for other films. The pride of the students who manage the showing of their film brings involvement and commitment of the students to their views shown on the screen.

The media channel of student filming is less readily available and not as manageable as the chalk talk for the particular speed of image formation and response that is needed for the encouragement of conversations and the demonstration of change. I have found it different, not just in the content and making of the film, but in the whole aspect of film showing. Important elements of communication that do not relate to the film content affect the response. They change the normal method of teaching and every aspect is important. The operator of the projector attracts most attention and then attention turns to the projector (which may not work), then on the pulling down of the screen, then on the room, darkened, which brings a sense of privacy and relaxation. The film then proceeds, and afterward, there is a return to the brightly lit classroom and the surveillance of the teacher. Obviously, these are powerful aspects of communication and the use of them requires more study.

## Television

Television promises to be the best media channel for the stages that involve the students. It has advantages over other media both in the showing and in the making. It emphasizes the students' part in the exercise, gives their views a sense of immediacy that is lacking in film. The making of the television program inspires the children to respond and to express their views.

Buckminster Fuller refers to television as the Third Parent. He observes that television, because it employs the most articulate among us, and because the child thirsts for information, becomes a more powerful feature than the other two parents. Perhaps this explains the eagerness of young people to participate in television production. It gives them an opportunity, at long last, to converse with their third parent.

Two television programs involving students, taped at the U.B.C. Faculty of Education, have been shown to many audiences of teachers and the general public. The tapes are unfinished and were made for research rather than public viewing, yet they are popular and often requested.

Teachers ask for the tapes for classroom showing, and I am preparing to make them ready, with a questionnaire to gather an assessment of their effect on the students.

One shows the growing city drawn by myself at the dictation of the students. The duration is eleven minutes. The second television tape of designs for False Creek shows the method of approaching a planning

problem through the consideration of activities and perception. Students describe their drawings. The duration is twenty-five minutes.

The purpose of the first tape is to prompt a response from the students in the classroom as if I were present and for this reason I kept the camera on to the drawn image and avoided shots of the studio and avoided shots of the children.

The second tape shows how students tackled an adult question. It demonstrates a method. The drawings were prepared in the classroom and it is a classroom exercise; the first part describes a journey in a bus to the site of False Creek, and as the students recall their impressions, I compose a picture of the area to include their recalled images.

I have found difficulties in the making of the television program. The added items of lighting and camera must be borne in mind while guiding the students and encouraging responses. Shadows must be avoided, the drawing must be visible and not obscured by myself or the students. The students' faces have to be visible and they have to be arranged without checking the spontaneity of their response. I have to avoid tying myself up with cables.

These difficulties are nothing when set against the vitality in the students when we are in the studio compared to their inertia in the classroom. The studio attracts them and they come for taping after school hours and in holidays with eager excitement. They respond strongly. A minor stipulation on dress adds interest in a charming way: they are asked not to wear white as it disturbs the setting of the tones in television and causes a bloom on the screen. This affords an

opportunity for the girls to discuss what they will wear. Dressing down to colours and informal wear gives the girls and the boys pleasure. The result on the colour television screen is a relaxed informality and variety of colour.

They draw with charcoal blocks which are sold under the trade name CHARKOLE. Artist's charcoal is too thin. Paper and charcoal has greater contrast than chalkboard drawing, and greater tonal differences than felt pen. Different tones can be made by pressing lightly or by pressing hard. The past can be drawn faintly and the present drawn heavily over it to represent the development of one location. The television transmission increases the tonal differences and gives the picture greater depth.

Erasing is not necessary. This marks an important difference between the charcoal paper drawing and the chalk on blackboard drawing of the classroom. I believe the totally additive nature of the charcoal drawing creates a better image of the rapid growth of the city. Where erasing is necessary a greater control is also necessary over the students to prevent accidental erasing by one student of another's drawing.

Also, the drawing has a greater presence if it cannot be erased, and building (that is, drawing) becomes appropriately deliberate and immovable.

The paper must not be white but coloured or toned. Usually I use ordinary matt brown wrapping paper in several layers. The C.B.C. prepared an orange paper board which looked magnificent in colour transmission.

The television program proceeds in the same way as the exercise in the classroom. The students do not rehearse and their responses are the livelier for the spontaneity.

### Generic and Drawn Images

The visual presentation that prompts, for example, the mental image of "store" in the viewer has one important property. It must avoid being the wrong store. Each viewer has a different mental image of this one store that represent them all. The image is a concept made by recalling memories of many stores. A photograph of a store could never hope to avoid reference to details in which stores differ. A photograph of a scene is not as useful as a simple drawing in producing a mental image in the mind of the viewer. The image of the store that comes to mind is not a general image of all stores but *one* store that *represents all stores*. The students call out "Eatons" to represent all department stores and "Coca-Cola" signs to represent advertising.

There are strong indications that the image that viewers form in the mind, when calling out what they recall, is their own image.

A small girl calls out "dripping cars." Her eye level is low, her concern is to avoid an oily mess.

A man calls out "lines on the road for car parking." This suggests a recall of an image. A car driver looks for such lines; they form part of the image of the city of one who drives a car. No child has referred to them. Similarly, young children seldom call out "traffic lights," whereas adults usually do. Young children call out "dogs" and "animals." Elderly people call out "hospital" and "Medical Centre."

This suggests that people call out recollections from experience, much as children draw what they know rather than what they see.

The recalled images encompass a wide area. In the discussions that follow, other cities are referred to, as an explanation of an image that has come to mind.

The following quotes are by students of twelve to thirteen years old, taken from transcripts of lessons. They illustrate the range of images to other areas. I had drawn a residential area and the question of costs arose.

When I was in California, I saw, well, they had like an urban renewal project. A mass low cost housing project and it became so gruesome, like every house is the same, the same colour, everything, and it's so ugly when you go out on this freeway and all you see for miles around are the exact same type of house, exactly, you know, the same colour. I guess it helped the problem but it ruined the landscape.

In another case, I had drawn a freeway system entering the city.

Down in Seattle, I think they've made a drastic mistake with their multi-level freeways. They've got them right down the waterfront and they've got this urban decay setting in, its coming; everything is being run down and you just have all this smog coming from three levels of traffic, four lanes, till there's twelve lanes of traffic, constant, all the time its there, causing this problem, and it's an eyesore really, and, but their problem is, if they'd gone underground, see, they have done this in one spot, but they haven't done this enough. It was too expensive, so they built overhead and now they've got a problem of this urban decay setting in.

In the next example, I had drawn a house and connected it to a store, with the comment:

Upstairs can be the bedrooms up here . . . when you go along the street sometimes you can see over the top of the store and you can



see bedroom windows behind which are now being used as offices . . . but there comes a stage where the old building is pulled down and a new building is put up and this is when the city starts to look modern.

A student commented:

I think that's when the city starts to look terrible because that's what they were doing in Montreal and all over the place there were piles of rubble all the time and I think that's bad.

Note that the remarks from the students indicate a recall of images of real scenes, far removed from the scenes that were drawn on the board.

The reactions to drawings seem to indicate that the images that form in the mind while watching the drawing in process do not depend on an accurate simulation of an urban scene. It is enough that a representation of the scene is indicated.

The lack of finish in the drawings is no impediment, rather it is an advantage. The children get a better sense of participation in the evolution of the city described in drawings that they feel they themselves could have done.

To quote Bettinghaus, "As a general conclusion, we can say that the closer the match in communication skills between the source and the receiver, the more effective will be the communication."<sup>2</sup>

More than that, the "general" representation of the parts of an urban scene more nearly matched the kind of image in the mind than an accurate representation of a particular scene.

Rudolph Arnheim writes in *Image and Thought*, of the conjecture by psychologists that fragments of photographic images occurred in the

mind's eye which then formed a mental generalization, and their discovery that the image itself was general.

When, early in our century, the experiment was actually made, several reputable investigators found, independently of each other, that generality was precisely what observers attributed to the appearance of the images they saw. Alfred Binet, the father of intelligence testing, subjected his two young daughters, Armande and Marguerite, to prolonged and exacting inquiries. At one occasion, he had Armande observe what happened when he uttered the word 'hat'. He then asked her whether she had thought of a hat in general or of a particular hat. The child's answer is a classic of introspective reporting: 'C'est mal dit: en général--je cherche à me représenter un de tous ces objets que le mot rassemble, mais je ne m'en représente aucun.' ('In general' expresses it badly: I try to represent to myself one of all the objects that the word brings together, but I do not represent to myself any one of them.)<sup>3</sup>

The "general" representation that was made by the students of the parts of the environment, because it matched the "generality" of the mental image, also brought to mind other sensations that belong to the scene. This helps to explain the great success of the drawn image of the city made with the participation of the students. The evocation of the mental image brings recall of the sensitivity to the feel, the sounds, the smells of the environment and of our movement in its spaces that forms the base of all our learning.

The communication based on a mutual level of experience of learning becomes more powerful. As Wilbur Schramm, in *The Process and Effects of Mass Communication*, says: ". . . a message is much more likely to succeed if it fits the pattern of understandings, attitudes, values and goals than a receiver has; or at least if it starts with this pattern and tries to reshape it slightly."<sup>4</sup>



The analysis of the first lessons and the readings on the Theory of Communications have not shaken my faith in the use of drawing.

In terms of "cueing" that draws the eye to the desired place on the board or screen, the chalk at the end of an evolving line excels as a cynosure of all eyes. The sense of anticipation caused by watching a person draw, wondering what will evolve, increases attentiveness. A vigorous drawing that the viewer feels he could himself have drawn encourages involvement. It can be altered at whim. The photograph, on the other hand, permits no addition or alteration.

Drawings show the evolution of the city from past through present into future in one medium which maintains the momentum of change. Photography can only show the present and the past.

Drawings are linked with fun. The cartoons in the paper are called "comics" or "funnies." A drawing and caption is a medium for the joke.

The humour of the drawing helps to dispel the gloom in the student's mind about the city and the future. The presence of humour and fun does not mean that the serious points are overlooked. Humour makes a good weapon in the fight for any cause. For example, Jack Paar once described a cartoon which was his favourite and it makes the point well. The drawing showed a patio or balcony of an apartment and around about were other apartment blocks. On a patio a table was laid for a meal and a lady beside it was calling, "Honey, come and sit down, your soup's getting dirty."

## FOOTNOTES

<sup>1</sup>Marshall McLuhan, *Understanding Media* (Toronto: Signet Books, 1967), p. 145.

<sup>2</sup>Erwin P. Bettinghaus, Notes for inclusion in the manual, *Research, Principles, and Practice in Visual Communication*, National Project in Agricultural Communications (East Lansing: Michigan State University, 1960).

<sup>3</sup>Rudolph Arnheim, *Image and Thought* from G. Kepes *Sign Image and Symbol* (New York: George Braziller, 1968), p. 67.

<sup>4</sup>Wilbur Schramm, *The Process and Effects of Mass Communication* (Urbana: University of Illinois Press, 1955), p. 16.

## CHAPTER IV LESSON EXAMPLES

### False Creek

False Creek

University Hill Secondary School, Vancouver; January to February 1970. The following notes and essays represent the experience in many classrooms. A project carried out with Grade Eight and Grade Twelve with Mrs. Helen Sherrif, teacher of Social Studies, concerned the south side of False Creek near downtown Vancouver. The City owns the area, now nearing the end of its industrial and lumbering era. It may be turned into parkland, residential or industrial land depending on the wishes of the public who were invited to submit their opinions by the City Planning Department.

The occasion served as an opportunity for a project of study without at first intending to submit ideas from the students. However, the results from the students reached a high calibre and they were submitted. To the surprise and disappointment of ourselves and City officials no other Vancouver school submitted ideas.

University Hill Secondary School

January 8, 1970

Teacher: Mrs. H. Sherrif

Grade 8 Social Studies

20 students

Aim: To relate current planning investigations in False Creek to the students recent studies of the Renaissance City.

Method: Chalk Talk

Sketch map of False Creek on blackboard.

Drawing of False Creek with skyline of Vancouver beyond.

Industrial use described.

Some City slides shown.

Description of senses related to future development.

Discussion by class of various ideas.

Division of class into clients and architects.

Clients instruct, architects draw. Natural Park, music centre, adventure playground, craft centre, riding stable, gym and health centre, stadium.

As a Research Project the students were asked to write about a Renaissance City and to find cities that do not feature open water.

Notes of the first lesson:

9:00 a.m. - Map of False Creek and bridges recognized immediately - rough sketch map drawn on blackboard.

In Vancouver the City Planning Department is asking Civic groups for opinions about development of south side of False Creek. Renaissance period is being studied by the class - the R city depended on water.

Renaissance water city - ceremonies - processions - festivals - commerce.

Question: Do all towns have water in the form of river, lake or sea? High Prairie - does it have a river - can the class find a city which does not have open water?

No recognition of False Creek area or its activities - no recognition of Cambie bridge.



9:15 a.m. - Drawing in buildings North of False Creek.

Recognition of building shapes quick. Hotel Vancouver -

Q.E. - Post Office. Scale of skyscrapers drawn in.

One child had visited False Creek for boat building.

Question - Describe different kinds of qualities of water -

tidal - still - canal - bridge buildings built up to

water - boats - floating buildings - floating gardens.

Qualities of Water - Sound laps, tinkles, roars, crashes,

echoing - reflects .

9:30 a.m. - Light shimmer, sparkle, blinding, reflections,

light bounces upwards.

Space view - distant space - quiet - silence - open

open sky - mountain - horizon - space on the ground -

long view.

9:40 a.m. - Logging - history of development - industry -

covered in Some City slides.

Some City slides shown quickly.

9:50 a.m. - Senses listed for students to consider: Space -

Light - Colour - Warmth - Touch - Smell - Aura - Time -

Sound - Community.

Question: Is there a city which has not been built around open water?

Select a city, built extensively in the renaissance period,

and describe how the water was used. Describe the buildings.

### Developing the Waterfront on False Creek

Clients - architect process collection of ideas.

Question: What would you want to do yourself or participate in?

Students call out ideas which are written on the board:

Food - restaurant; bowling recreation hall; nightclub;  
boating; music centre; adventure playground; natural  
park; small childrens' park; sport; cinema; Tom Sawyer's  
Park; Sudden Valley (park) - build your own house of  
natural materials - recreational hall - library - data  
centre - riding stable - mini car - drag strip - pedestrian  
transportation - no roads - domed dance hall - gym and  
health centre - hockey rink - sports centre - open sports  
stadium - covered walkways - rain protection - underground  
- stores - services.

10:20 a.m. - Select one activity - relate it to survey of the  
senses.

Mrs. Sherrif comments - Professional skills wasted on Grade  
Eight level. Students are insufficiently aware of their  
surroundings.

Grade Twelve would respond and are nearer leaving school  
and taking their place in society. This could be related  
to Economics Course. Grade Twelve to be included in the  
bus tour of False Creek.

Second Lesson: A trip to False Creek by bus on Thursday January  
15th.

Grade Eight students, who were present at previous lesson, and  
Grade Twelve students.

Clear and sunny weather.

2:30 p.m. - Bus was forty-five minutes late and visit to Marathon office was cancelled.

The route led along Broadway across Granville Bridge, down Granville to Dunsmuir to Cambie Bridge, along Sixth Avenue to West Coast Salvage and Vancouver Iron and Engineering Works. Students alighted and strolled around the area, visiting the West Coast Salvage Works. Then around Granville Island and back to the Planetarium. They again alighted and walked around the landscaped garden.

4:30 p.m. - Returned to school by Spanish Banks.

Each student carried the following drawings.

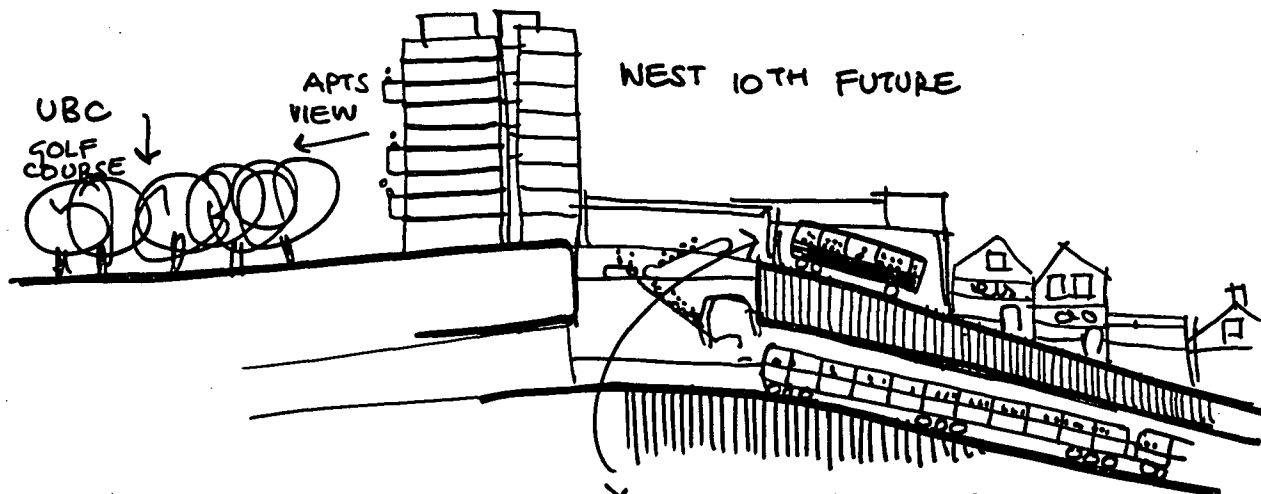
The bus contained a microphone for a commentary during the journey. In addition we arranged for a recording but I omitted to switch on the receiver extension. The following notes, written immediately after the journey, give an outline of the commentary.

Notes made prior to bus trip:

Land use is a state of transition - Industrial use changing to high density residential use. (North of False Creek going through the same transition.) High land value forcing industry to go.

As land becomes very valuable, economic trends lead toward reducing and eliminating water areas. This trend is being checked by public interest in False Creek area. (Refer to Vancouver Iron and Engineering Works lease controversy.)

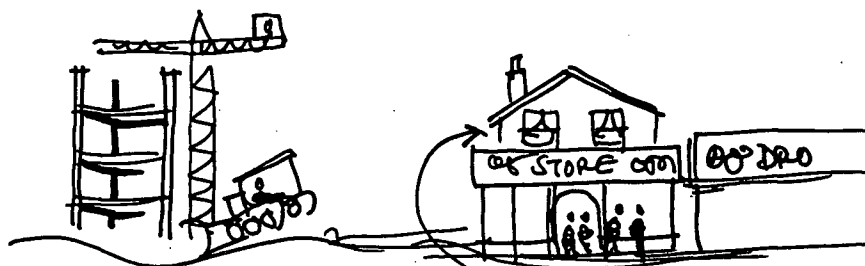
PARKLAND/HIGHRISE - OFTEN SEEN TOGETHER.



YOU ARE NOW IN A BUS

IN THE FUTURE YOU MIGHT TRAVEL  
IN A SUBWAY TRAIN.

WHAT DIFFERENCES WOULD YOU PERCEIVE?



NOTE SIGNS OF CHANGE

Ⓐ NEW BUILDING STARTS

Ⓑ CHANGES SINCE 1969

Ⓒ DWELLINGS CHANGED TO STORES.  
(BEDROOM WINDOWS OVER)

IMAGINE PRESENT HOMES & THEIR GARDENS CHANGED TO STORES  
& SHOPPING STREETS.

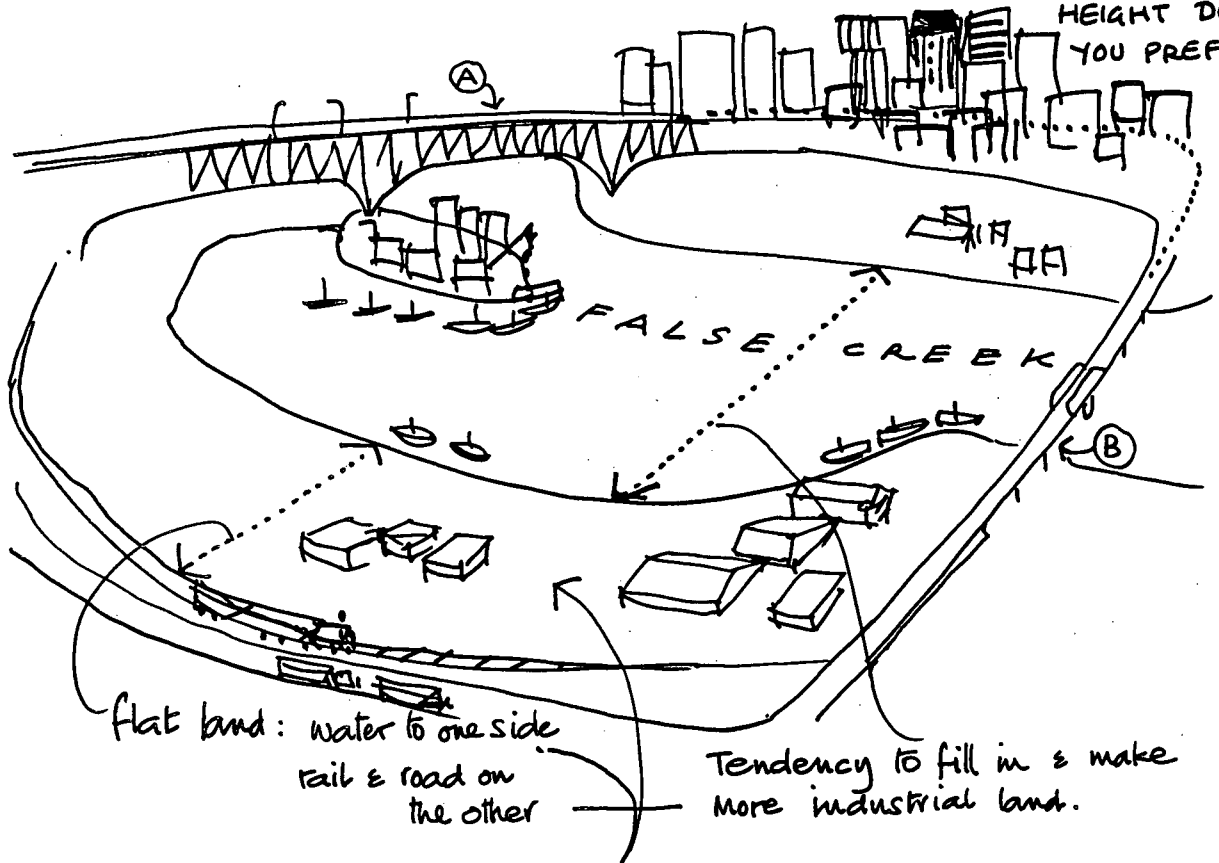
FALSE CREEK TRIP Jan 15. 1970

WE JOURNEY OVER GRANVILLE BRIDGE (A), AROUND DOWNTOWN & OVER CAMBIE & CONNAUGHT BRIDGE (B). THEN TO THE INDUSTRIAL AREA.

BRIDGE (A) IS 100' HIGH. BRIDGE (B) IS 20'.

NOTE THE DIFFERENCE IN VIEW, WHICH

HEIGHT DO YOU PREFER



VANCOUVER CITY OWNS THIS LAND. THE PLANNING DEPARTMENT ASKS 'WHAT DO THE CITIZENS WANT DONE WITH IT?' WHAT IS YOUR ANSWER?

CONSIDER :-

1. WHAT ACTIVITIES WOULD YOU LIKE TO JOIN IN AT FALSE CREEK ?
2. WHAT EFFECTS WOULD YOU WANT AROUND YOU . TO SEE , TOUCH , SMELL etc.

History of lumber mills, commercial fishing boats, mixed industry Leases on land owned by the city on (South Shore) leases expire 1970 to 1973.

Commentary:

- On the route we will imagine a ten year projection. The scene that might then apply will be described as if it existed now.
- Apartments gather round open space (note Beach Avenue and Stanley Park) also at the gates of U.B.C., two new blocks under construction opposite golf course.
- Note link between bus route and commercial area. If another form of mass transit was introduced the location of stations would alter the pattern.
- Note evidence of change (construction in progress or recent completion). These changes in the past year will help you to imagine the possible immense changes in the next ten years.
- West Tenth - shopping areas are grouped around important nuclei such as Safeway and in ten years' time this shopping area may look more like Park Royal in West Vancouver. The whole of Broadway is a commercial strip, the liquor store and food stores forming centres around which small stores and services gather. These again may develop with pedestrian walkways above the streets, and offices above the stores.
- Conversion of residential areas to commercial can be seen by a house windows on the second floor and a store underneath. If you spot one of these alterations note the name of the street and if possible the number of the house.

- How many buildings under construction have we passed - make a note of the name of the street.
- A change in mass transit - we would all be travelling underground, seeing nothing of the areas through which we are travelling today - only aware of the stations of entry and arrival.  
Which would you prefer?
- Using a List of Perception you can analyse this bus journey.  
Taking a ten year projection, what would you prefer - think of the sights and sounds and smells - use of Lists of Perception  
- where would the station be - on Broadway? On Tenth Avenue?  
The area from the station to the largest store will be economically fertile and support many small stores.
- Downtown will become more crowded. The Provincial government building will contain eight thousand people. All will require lunch. Where will they eat? Where will they stroll in the lunch hour?
- The water edge at False Creek encroaches on the water. Look at the view. Consider the future. The whole area can be changed in a short time to landscaping to the standard of the Planetarium garden. What would you like to enjoy on False Creek? Consider the feel of the ground, the sounds and smells. Consider the sun and shade.

Later the students made recordings of their impressions. They commented on my remarks at the beginning of the journey and spoke at length of their impressions received when they had alighted from the bus.

Their response suggests that the visual interest of downtown obscured my commentary and that they perceive incomparably more when on the ground away from the bus.

Third Lesson: At University Hill Secondary School, Friday January 16th, to Grade Eight.

Review of the site visit and of the list of activities suggested by the students.

Perception considered.

Division of class into architects or writers for future development. Class given period to write and draw. Both drawing and descriptions collected. Research material collected - Venice - London - Rome - Copenhagen.

Fourth Lesson: On January 21st to Grade Eight.

Ideas for future development of False Creek:

Described by children from the list of perception in the several senses: Craft Studios; Adventure Playground; Amusement Park; Theatre - recreation - dwelling over (Denman Place); Music Room; Park (natural, open space); Underground city shopping recreation (drawing); Restaurant; Gym (drawing also); Data Centre; Office and apartment tower (drawing); Dwelling.

Verbal discussion into tape recorder, one at each end of the room. Discussion slow - students hesitant. Charcoal and paper ready but unused. More drawings and descriptions collected.



University Hill Secondary School, Grade Eight, lessons on January 8th, January 15th, January 16th. Research projects in progress - January 21st. Design projects in progress - February 2nd. Taping of discussion - February 2nd. Rehearsal of descriptions of drawings for T.V. tape - February 12th. A.V. Studio 10:30 to 12:00, Tape made - February 13th.

The video tape features the ideas of the students and showed their drawings. It demonstrates the method. It lasts about twenty minutes. The students showed excitement and nervousness and enjoyed the replaying of the tape.

University Hill Secondary School

January 22, 1970

Teacher: Mrs. H. Sherrif

Grade 12 Social Studies

21 students

Half the number of students had visited the downtown area and False Creek on the bus trip.

The Plan of the Lesson:

- 1) To explain the City's policy to enquire of public opinion on the future of False Creek.
- 2) To show the slides that are shown to the public groups by City Planning Department.
- 3) To explain architect/client relation in house building and relation to City.
- 4) To ask for activities they personally would wish to join in on False Creek.

Notes on the Lesson:

- Tried my own projector and found a small spring broken in ejector's slide.
- Two school slide projectors were fetched, tried and found unworkable, the third was usable after minor adjustment, but remained jerky and most of the slides stuck.
- False Creek area sketched on blackboard, heights of existing skyscrapers established - relative heights of proposed high rise developments sketched in.
- The importance of orientation demonstrated - sunlight on buildings, shadows cast by skyscrapers.
- Slides were shown of use of city areas for different functions:
  - a) The city street for processions and festivals.
  - b) The use of enclosed waterway. Reference to Venice and Expo. The relation of buildings to enclosed water area. Night use of this area - concerts, shows, a sheltered public arena.
  - c) Orientation, sunlight and shadowed areas.
  - d) Enclosure under bridges. Activity on pedestrian bridges.
  - e) Harbour and marina activities - shipping goods.
  - f) Rapid and mass transit within complex building forms - commercial shopping and residential.
- Students were asked for their ideas for developing False Creek - activities which they would like to join in. Three minutes

only remained. The two tape recorders did not pick up the students' voices.

Second Lesson: January 23rd, twenty-one Grade Twelve students.

Slide projector and screen at front of classroom, tape recorder near screen. Students stood or sat near screen. Slides shown of Some City and False Creek future. Slides shown briefly.

The students discussed their ideas for the future:

White paper pulled across the floor from a roll. Charcoal drawing as the students called out their suggestions.

Lights still out, one slide still on screen showing a harbour area, pedestrians, dwellings, trees, marina.

Students enjoyment and participation excellent. Articulate description of their ideas. Audio-tape successful - students nearer mike, sound bounced up from floor and from blackboard.

List of student's spoken comments while drawing:

- Orientation/ bright buildings on north side of False Creek to catch sunlight.
- Tall trees open, natural sort of Park - in front of highrise.
- Boat tours - sound will reflect from high buildings - no motor boats - paddle boats - no noise.
- Revolving restaurant.
- Architectural comment on unity of design.
- Pedestrian bridges - covered bridges.

- Don't like it junky - Pacific National Exhibition is too junky - no race course near parks.
- Maintenance.
- Design control.
- Not realistic (access too difficult).
- Hovercraft noise too much.
- Rowing races for eights - has a special quality.
- Enclose lagoon.
- Living area.
- Amphitheatre.
- Mixing too many ideas together.
- Quality of environment.
- Open squares.
- Foreign area - sidewalk cafes - benches - umbrellas - canopies.
- Mixture of cultures and architectural styles.
- Ponds. Japanese sort of ponds.
- No bustle of city - a slow up area.
- Underground parking.
- Lots of planting and trees.
- Atmosphere ruined by gobs of people.
- Gradual change/physical change from area to area - bowling greens or cricket - beach around - tennis.

Paper now stretches across classroom and out of door. About forty feet long. It is held up in corridor and students walk along looking at ideas.

Notes by the teacher Helen Sherrif: Unit on Urbanization in Economics.

- Aim: 1) In depth study of False Creek area with view to current activities and especially future developments.
- 2) With False Creek as a base an examination of other sections of Vancouver as "areas" - that is, industrial, financial, international trade, land value, land utilization, government finance and zoning by-laws (civic participation).

Materials:

- 1) Slides - Some City and False Creek.

Explanations - a) descriptions

b) fast growth

c) cartoons

d) False Creek today.

Interruption re PA

- 2) Carbon on paper -

Notes by Helen Sherrif on the Second Lesson:

Ideas called out - good atmosphere - many catching idea - more and more participation - students involved - putting ideas into form - seeing Mr. King on hands and knees and drawing with charcoaled hands - reduces expert aloofness - but respect is still there - ideas caught, added to - Drummond, Delile, Jane, Craig drawing - change in atmosphere with Delile saying "I wouldn't have any of this if I lived there" - others aware of problems - pollution - maintenance - negatives dominant - maybe

they know what they don't want but need assistance to consider positive possibilities.

False Creek Submission to Vancouver City Planning Department. The following ideas were submitted to the Vancouver City Planning department as a result of the previous exercises.

Ideas from Grade Eight:

- A park designed by six students with these comments: Free and natural, no restrictive signs. Picnic tables at intervals. Areas for "Adventure," with construction possibilities and supervision. A commando-type training ground, with rope nets for climbing, rope swinging, etc., also supervised.
- Amusement Park.
- Riding stables.
- Animal Foundling Centre/Children's Zoo.
- Health and Recreation Areas with gymnasium and covered Olympic Pool.
- Music Dome with listening chairs.
- Tourist facilities.
- Underground shopping.
- Dwelling areas.
- Craft Studios.

Ideas from Grade Twelve:

- Parks - secluded oriental contemplation area. Playground equipped for young children. Water oriented park, canoes, rowboats, paddle boats. Rowing Eights course (with stipulation

that there be no motor boats in the creek at all.)

- Shopping Plazas and boutiques - Open market by waterfront - Pedestrian bridge with boutiques.
- Recreation - International Plaza with foreign restaurants and boutiques - Dome and Marina - Apartment houses - Granville Island, bird sanctuary (No cars in this area, totally pedestrian area. Transport below grade.)

Some examples follow:

#### Hideaway Parkland:

Completely surrounded by bamboo - secludes area - cuts out noise.

Big mound of earth moved in - rock facing.

Huge waterfall streaming down. Japanese cut-leaf maple cascades down with water.

Cave behind waterfall with incense burners, primitive art on walls - wise man (long white beard). Entrance to cave around back.

Waterfall runs into a large pond with croaking bullfrogs, a stone lantern in the middle and Japanese goldfish.

The place is so beautiful that no one will litter in it - it'd be like littering in your own living room.

Wooded trails - feeling of serenity - working people should be able to come here and forget the dirty polluted cities and relax - their cares will be a million miles away.

#### Market Place:

Coleen Wilks - Debbie Clarke

Along the edge of the lagoon, lie open fruit stands, benches, tables, small trees. In addition to the above, painters and balloon salesmen, etc., take part in activities on the plaza surrounding the market place. In the centre of the lagoon, lies a double-spouting fountain, bordered with fantastically coloured spotlights for evening viewing. Gondeliers also take people for tours of the lagoon.

Above the lagoon is a bridge for shops and pedestrians only. No vehicles! The shops would make up a sort of a European village. The shops would sell wine, cheese, European souvenirs etc. They would be colourfully decorated and styled in a very unique way.

Trees would be scattered throughout the entire area to give it a relaxed park-like atmosphere.

The entire area would be free of telephone poles, overhead wires, signs overhanging the thoroughfare, etc.

The sidewalks and plaza would be brightly coloured.

#### Rowing Eights Course:

Because of False Creek's natural water environment I believe that at least part of the development should be water orientated. There is no reason why the water cannot be cleaned up so that even swimming would be possible. Near the entrance of the creek, I would like to see a marina. A series of floats with finger floats running out of them could jut out from along the shore. A concrete apron would border the shore. As well as being useful to boatmen, a marina is a very interesting place for walking around in. A marina does not need to become oily or dirty. Some marinas are this way but just through neglect.

In connection with the marina I would like to see a boat rental operation. This could rent sailboats, peddle boats, row boats and canoes. In this, people could explore farther into the creek. This would be quite unique in that people could explore for themselves by water right into the heart of the city. To help preserve the peace of the creek I think that powerboats should be kept out of the creek except for the entrance where the marina would be.

Down the middle of the creek is an ideal place for a rowing eights course. The water is calm and there is sufficient width for three or four side by side. The Granville St. and the Cambie St. bridges provide an ideal place to view such races.

On land behind the marina there would be a few low buildings in connection with the marina. Behind the marina and stretching all along the shore would be a park. Through this park would run canals and streams. Up some of these, canoes would be able to navigate. These could be bridged by natural rustic looking bridges.

The park, away from the marina would be comparatively



undeveloped. An air of peace and tranquility would prevail. The area would be well used for Vancouver sadly lacks parks near the center of the city.

### "False Creek"

The False Creek area has the potential of being a beautiful escape route for thousands of Vancouverites; especially those who spend most of their days in tall, carbon-copied apartment buildings.

I feel that there should be no apartment buildings close to the water and that all transportation to the area should be underground along with other necessary wires and pipes. The atmosphere "False Creek" should present should be "au naturel." The outlying area around the creek could consist of Botanical Gardens or Oriental Gardens. A system of canals running inland from the creek, little islands, little bridges, flowers and tea houses all be possibilities. A great area of parkland (NO ZOOS included) should outly the area and quietness should be the theme.

The land immediately around the creek would be landscaped, possibly sandy beaches with shade trees and with the shoreline divided into different cultural areas. However this area should not be overcrowded with buildings. There should be well spaced sidewalk cafes, possible without display, antique shops or even beer gardens. A central plaza would be another suggestion.

The creek, of course, would have to be kept perfectly clean as there would be swimming in certain areas. The amount of privately owned boats would have to be carefully controlled and an ultra-modern marina developed. Public cruises across False Creek by paddle steamer or sail boat could be arranged. Motor boats would be forbidden due to exhaust fumes and noises. Boating events such as rowing races could be staged and a floating band stand could operate in the creek.

In concluding I feel that any activity or excitement should be oriented right at the creek and that the outlying area should gradually turn more and more towards nature until once again one runs up against the apartments.

## CHAPTER V CONCLUSION - FURTHER STUDY

The Language of Architecture

Life Styles in Other Cultures

Proposal for Continuing Work

The design of the method has followed the process of architectural design, advancing gradually in close collaboration with the users, in this case the students and their teachers. As with architectural design the most important stage, its use, follows next.

The method has these properties. The future images show the students the need for effort to avoid chaos, and show their unreadiness for the effort. The past of Some City indicates the cycle of problems and solutions, of cause and effect. The life styles show the comparisons and possibilities of various ways of life. The study of perception sets the students on the path of awareness and preparedness, one on which they can gather confidence in their own impressions and experience.

At heart this work teaches communications. Acuity of perception forms a part, as does the expression of ideas and of feelings. In turn the ideas consist of creativity and technology. Neither part stands on its own. The perception requires expression which requires understanding. The study of society requires its architecture. The work crosses the boundaries of many school subjects.

To be of practical use in schools, the application of the work to each school subject must now be detailed. Some suggestions for study follow. Appropriate teaching material is now available or under preparation through my company King Graphics Limited.

Geography: The choice of site for Crown City and for the various parts of it, related to land, water, climate, sun and vegetation.

History: Periods of social history bearing qualities that students

find attractive today: to consider a recreation of past conditions for Crown City.

Economics: The economic feasibility of Crown City. Effects of transportation and land use on its parts.

Mathematics: Dimension related to human use, time and space related to vertical and inclined travel in Crown City. Historical variations in measure to achieve effects as in Greek and Egyptian and Renaissance architecture.

Sciences: The skin of buildings. Physics of acoustics, light and heat related to structure. Perception of the environment. Ecological maintenance of Crown City.

The Arts: Expressions of perception of nature, people, time by the masters and by students in language, drama, drawing and painting and music and film. Drawing and modelling of designs of Crown City and its parts. The effects of media on design.

### The Language of Architecture

*It is almost a truism to say that architecture reflects society. It does more. It is a most precise indicator of the whole political, economic and cultural world to which it belongs. It is an equally precise indicator of the geological or climatic region to which it belongs.<sup>1</sup>*

The following examples and other examples require description and illustrations to be made available to teachers with the intention that they guide students into their own search for clues.

1. The bedroom window set back above a store indicates a change from a dwelling to a store and therefore a change from a garden, with flowers and trees and lawns and children playing, to a shopping sidewalk; the change from a quiet lane to a noisy traffic artery with traffic lights and controlled street crossings.
2. The run down commercial area with parking lots and unpainted stores in the downtown centre indicates a development plan in the offing with tall buildings and perhaps a courtyard with fountains and expensive restaurants and stores.
3. The wide entrance doors and entrance porches of older houses indicate an active social life among families before the cinema and television.
4. The predominance of common English brick in certain areas indicates a growth of development during a one way trade of lumber to England and brick as ships ballast on the return to Canada.

#### Life Styles in Other Cultures

The invitation for ideas on various life styles and the expression of the ideas in drawings and through perception may make involvement easier for newcomers to our culture. The natural dominance of those who articulate fluently and have familiarity with our culture is reduced. To pursue this thought a program has begun in collaboration with Professor Frank Hardwick of the Faculty of Education, University of British Columbia, and a group of teachers who are together proposing a

publication. I am concerned with these two points of study:

1. The description of life by the students from different cultures related to life styles and to perception.
2. The development of designs by students on local geographical areas in a manner appropriate to various cultures.

Evaluation of Response. Evaluation of responses is required from young people of (a) each age group; (b) various aptitudes; (c) different cultures; (d) different socio-economic backgrounds. The evaluation would aim to learn more of:

1. Their attitudes to society and their environments.
2. The appropriate levels of understanding and expression.

Assessment of Method. Assessment of the method and of the effectiveness of various media for the purposes of achieving:

1. Increase of understanding.
2. Acuity of perception.
3. Abilities of expression.

The assessment would direct the design of further teaching aids and direct modifications to the method.

Study of Teaching Environments. A study of the effects of various teaching environments is required. The study would examine and compare teaching environments for the effects of (a) the presence of visiting experts; (b) space and room size; (c) group size and disposition;

(d) floor and ground surface; (e) lighting and sound. The range of teaching environments to be examined would cover:

1. The classroom.
2. Open public areas.
3. Places devoted to a definite civic purpose.
4. Television studios (for program production involving the students).

The aim of the study would be to define optimum environments for the different phases of the method.

#### Proposal for Continuing Work

The continuing work requires the cooperation of civic groups, of Planning Departments, of developers, of School Boards, teachers, students and visiting experts. It requires central facilities containing audio visual studios, resource library, and discussion areas, and arrangements for data collection and measurement. Preliminary discussions have begun for the organisation of the continuing work by the formation of a Centre for Participation in Environmental Design. The Centre would serve as:

1. A forum where young people may
  - a) express their views on the future,
  - b) learn of current and proposed changes to the environment,
  - c) meet with experts in planning.
2. A studio for the preparation of a television series for general broadcasts of the images and views expressed by the young people.

## FOOTNOTES

<sup>1</sup>R. Furneaux Jordan, *European Architecture in Colour* (London: Thames and Hudson, 1961), p. 12 and 17.



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