

INSTANT INDIGENOUS COMMUNITIES

by

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A thesis submitted to the
Faculty of Architecture
in partial fulfilment of the requirements
for the degree of

MASTER OF ARCHITECTURE (FIRST PROFESSIONAL)

Major Subject: Architecture

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Halifax, Nova Scotia

1998

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Abstract

This thesis aims to explore issues of relocation, myth, and the cultural particularities of habitable space. These ideas are explored and tested through two community design projects, both consisting of cohesive migrations of groups of indigenous people. The first project is sited in Mexico City, and involves the design of housing and community infrastructure for 225 Otomi peasants. The second project is in Labrador and deals with the relocation of an Innu village of 500 people.

The main focus of the design work is the house. The definition of the domestic living environment touches on private and public space, infrastructure and services, and fixed and movable pieces. The house designs attempt to embody these symbolic or cultural qualities, while responding to site and climate conditions.

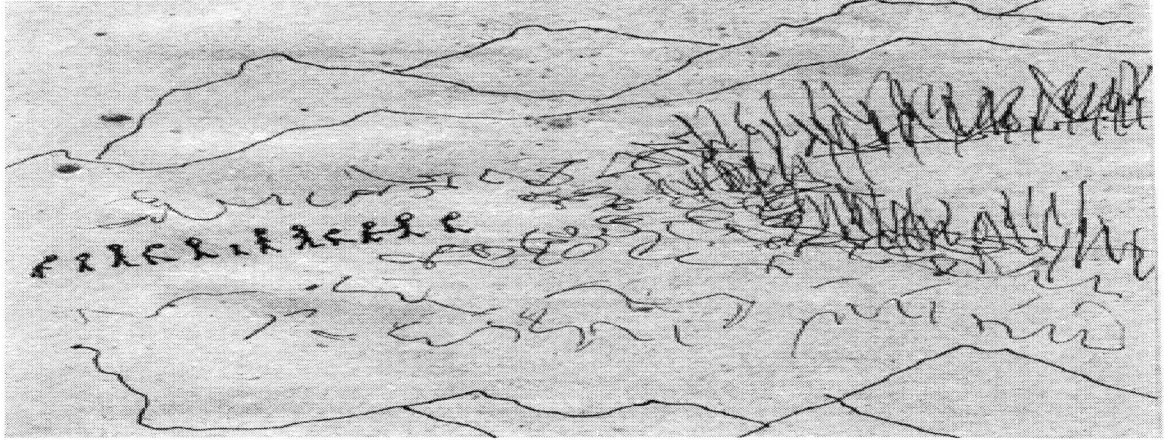
The design of the overall community is at the level of strategy. It includes general layout or settlement pattern, a definition of common infrastructure, and a proposal for communal indoor and outdoor spaces.

The designs aim to mediate between traditional values and new circumstances, with a view to engage the creative potential of change. Each piece is developed as a building block, a set of initial patterns or rules out of which a new community might grow. The potential for active interaction by inhabitants is both considered in the design development and suggested in the presentation format. The houses, community buildings, and settlement patterns are proposals for buildings, yet they are also narrative elements, part of a story about a possible future.

Acknowledgements

I would like to thank Richard Kroeker, Essy Baniassad, Neil Forrest, Georgina Sandobal and Leticia Salinas for their help, encouragement and wisdom. I would also like to thank the Guanajuato Otomi group in Mexico City for their insight and inspiration.

This thesis is dedicated to John Conrad Lashuk, my favourite carpenter.



Introduction

This is a tale of two collectivities finding themselves after a long journey. I am the instigator of an architectural search for these new realities, hoping to plant the seeds for a physical manifestation of culture.

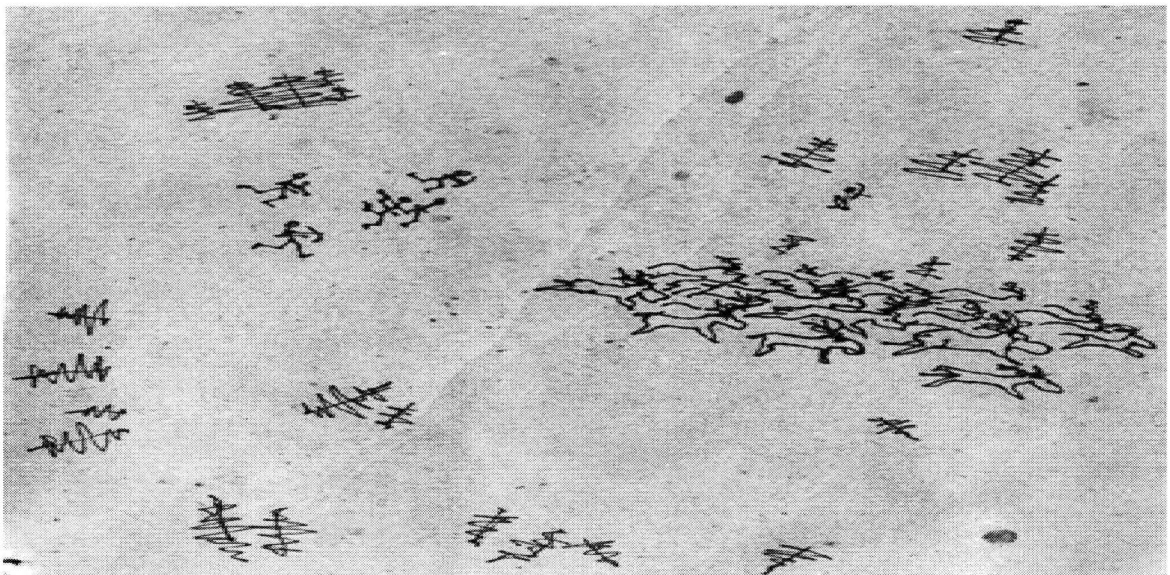
This thesis proposes designs for two small new indigenous communities:

- 1) in Labrador, the relocation of the Mushushua Innu from Davis Inlet, where they are currently housed in a government built town, to Shango Bay, in the region where they lived as nomads until 30 years ago;
- 2) in Mexico City, a group of 35 Otomi families from a village in the state of Queretaro have traded in their agricultural and rural roots for life as street vendors in the capital, currently housed in cardboard shacks on an invaded piece of high end real estate.

Both cases involve communities at a turning point, where there are no cultural/historical precedents for their housing or settlements (sedentary nomads, urban peasants). The tension created by comparing the two cases is very useful in the discovery of commonalities and divergences, and in approaching a method for the design of culturally referenced relocations. I have attempted to develop the project at the urban, building, and detail scales more or less concurrently.

Both of the projects I am exploring in my thesis are real. This allows the project to skip over the process of inventing situations or needs, yet the critical distance of designing for thesis will allow for the development of a more imaginative, idealised, and experimental solution to a concrete situation. My research has consisted of observation and interviews with community members and local architects, with some reading of ethnographic and historical material. I have investigated some aspects and invented others, making my perspective self-consciously biased. The work has developed slowly and meanderingly, drawing on instinct and the poetics of site and culture, while referring in an oblique way to the research.

The thesis touches on issues of relocation and new community planning, and perhaps by extension, reconstruction. In this context, I thought it worthwhile to comment briefly on some seminal manifestos written in this century. I have chosen texts from the early part of the century because of the parallel between approaches to the modern machine age and the underlying question about cultural change and modernisation in this thesis.



Issues

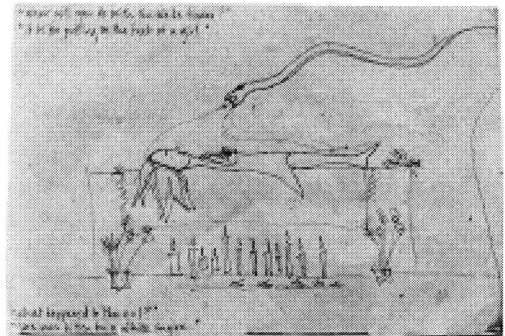
I. Tradition and modernity

In 1925, Le Corbusier wrote:

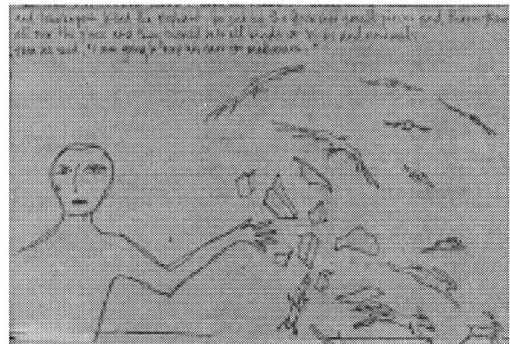
A town! It is an assault by man on nature. It is a human action against nature, a human organism designed for shelter and work...The town is a powerful image that activates our spirit. Why should not the town, even today, be a source of poetry?...The house poses the problem of architecture afresh by calling for totally new means of realisation, an entirely new ground plan adapted to a new way of life, an aesthetic arising out of a new frame of mind. ¹

Leaving aside the internationalist and highly modernist approach which these words spurred, the idea that a new formal expression, corresponding to a new way of life, can be poetic or have mythical proportions is very relevant to my design process. Unlike Le Corbusier's wilful destruction and reformulation of human settlement, the fact of designing an entirely new settlement is a defining characteristic of this project, a physical necessity, allowing me to borrow some of his observations outside of their intentional context. With reference to understanding a new way of life, I have taken the position that it would be impossible to develop a physical manifestation of new economic or physical realities for these two indigenous groups without reference to their pasts or the cultural underpinnings which colour their views of the world.

My design process began with a study of remembered history, exploring stories and pictures of mythologised pasts of things and ways of doing things, of relationships with land and each other. I took the stories at face value, that is to say without trying to decipher the "true" historical facts, as the telling of the events is at least as important as the events themselves.

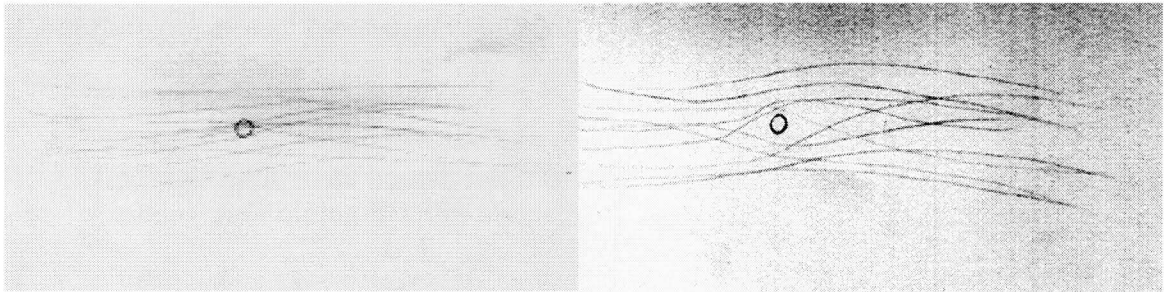


Illustrations of traditional
Otomi and Innu stories



I illustrated a representative story from each community as a means of cultural entry (see Appendix I). The stories, in short, are these: The Innu lived on the land with the animals in a symbiotic existence where people's presence was as important as the presence of animal masters and the seasons. The Otomi lived on small farms, where everything had its place and people were neighbours, where the houses grew out of the ground with the food and the universe whirled uncontrollably around them.

The stories and things were sifted to find solid cores of meaning within the narratives. In essence, I distilled simplified cultural slogans for each group. The Innu are part of the land and part of nature, and their actions have an impact on the functioning of the cosmos. The Otomi live in a cyclical world whose logic is that of life and death, of change and constancy, where their role in influencing events is minimal.



Otomi cosmos

Innu cosmos

II. Instant community

The design project explores the idea of instant community, especially as it relates to relocations or displacements of population. The issue of community² is crucial to settlements that are created in a short period of time. They are built without time for evolution or organic growth (as are many new housing projects and suburbs), and usually in traumatic and resource-poor circumstances. On an urban scale instant communities raise questions of appropriate complexity, ties to the past and the future, and the relationship to site.

One possible point of departure for a discussion of communities built in a day lies in the early modernists' manifestos on reconstruction and the reformulation of cities. Some of Gropius and Wagner's suggestions for city reconstruction towards the end of the second world war include:

Places of work and their relation to places of living should form the pivot of all reconstruction work. The administrative setup of a township should take the form of a self-contained unit with its independent local government. This will strengthen community spirit. It is suggested that the size of a township remain stable. Flexibility within its boundaries must therefore be achieved by making the housing facilities elastic.³

While the authors' overall intention was to relieve the "congestion and high blood pressure [of cities] by removing those who cannot be permanently employed" by resettling them into industrial townships, this form of megapanning, with its high degree of social engineering, nevertheless includes some general rules for the planning of new settlements which are useful in this context.

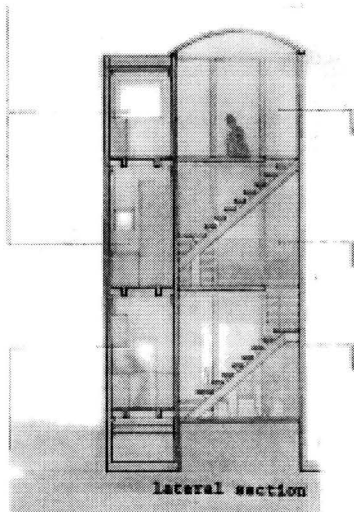
In the particular case of this thesis, the house is the workplace for many inhabitants. In Mexico, traditional crafts are fabricated at home for sale on the streets of the city. In Labrador, both subsistence hunting and leather craft production use the house as the main workshop space. The idea of the self-government of a community is also fundamental to this project, as reflected in the approach to communal space and the importance of a meeting hall in an institutional building. As to the flexibility of living spaces, this was a design priority for particular reasons on each site, as will be described in the section on design.

III. Relocations, migrations, promised lands

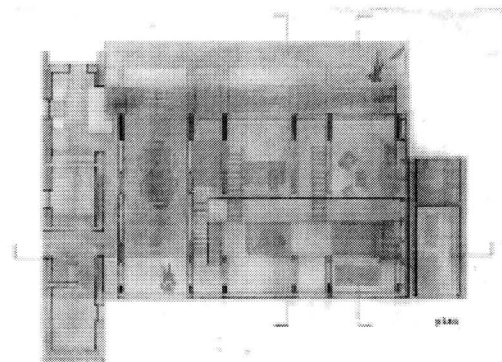
Migrations tend to take on somewhat mythical proportions as highly symbolic events. The Bible, North American pioneer stories, and native oral histories are a few examples. Settlement after migration should have a similar mythic quality, something almost spiritual, representing a new life.

I have attempted to deal with the issue of the mythical properties of place in two ways. Firstly, each of the designs provides space for indigenous self-expression, mainly through a determination of the placement of given elements. This might best be characterised as the design of a frame on which to hang symbols. In Mexico, the infill walls give character and enclosure to the inhabitable spaces, while in Labrador, the placement of modular house pieces around the service wall defines the living area.

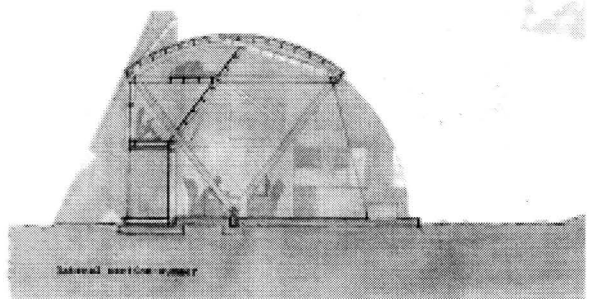
Secondly, the final design and its intentions are represented somewhat abstractly, colouring it in advance with possibilities for inhabitation. This might be framed as telling the memory of the future. In both designs, this includes an illustration of ways of assembling the kit of parts which composes each house. The plan, section and elevation of both Mexican and Labrador houses are underlaid with examples of the way space might be occupied.



Otomi house section with underlay



Innu house plan and section with underlays



The mythical-ness of the places designed is heightened through the development of certain spatial qualities which correspond to the ambitions and desires I have drawn from the study of each site. In Mexico, these include contact with the ground, privacy, places for children to play, personal washing areas, and windows as a new element in the house. In Labrador they include modern services, contact with the land, places for visitors, caribou treatment areas, fresh air, shared activities.

In 1945, Bernhard Hoetger wrote:

We want the whole wealth of the possible and justified, because it belongs as a necessary factor to our personality...What is decisive here will not be the width of the streets, nor the height of the buildings that line them, nor their fronts and outlines, nor their balconies, nor the shapes of their roofs, but solely and alone the creative longing of the citizens. There will be structures that thrust forwards and slide back in response to the habits of the occupants, in order to make it possible for them to see and feel the sun again. ⁴

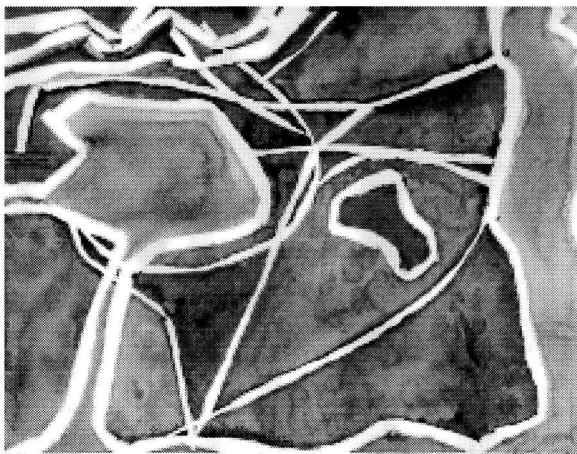
This text tends towards a sort of physical self-determination within the city, one which was elaborated by Lucien Kroll and Christopher Alexander later in the century. Yet this text is much more evocative and dynamic than their eventual application of this principle. In this design set, I have developed movable or adaptable pieces which allow some physical self-expression by residents. The story that is told is often more inspiring than the reality, and I suspect that my thesis also reflects this tendency. The corollary to this realisation is that the past is also more evocative in memory than the way it was lived. Each is a story which chooses and edits events, which colours them with dreams and aspirations and romanticism. Perhaps the poetic telling of the new place influences both the resolution and the eventual perception of the built communities.

The new lands and settlements inherent in a migration or relocation are a promise from one generation to the next. The choice to move carries minor immediate ambitions, but is focussed on a desire to provide better conditions for ensuing generations. In the case of these two relocations, the move implies better living conditions and better opportunities for coping with the dominant society. Also present is an intention to nurture traditional values, culture and language, which may seem

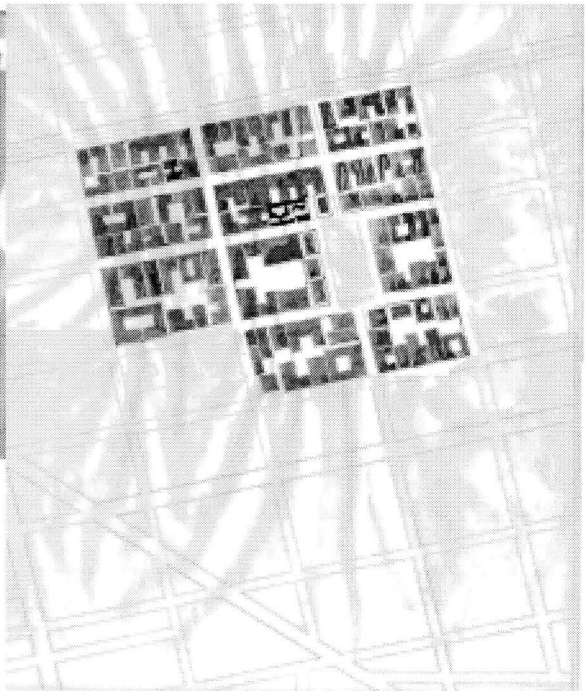
contradictory in a relocation project. Yet a new community designed with reference to local traditions and ambitions is in fact likely to be the best strategy for engaging the rest of society--on the community's own terms.

Each site, each of these promised lands, holds particular characteristics for the relocating communities. The first, the shiny new ground for a real winter town, promises running water and physical connection to the land where the caribou migrate. Perhaps more importantly it promises a fresh start in a place free of the ghosts of suicide, alcoholism, abuse and fire. The second, the city of possibilities and chaos, promises a chance to engage the national economy, infrastructure, and an educational and economic future for the children.

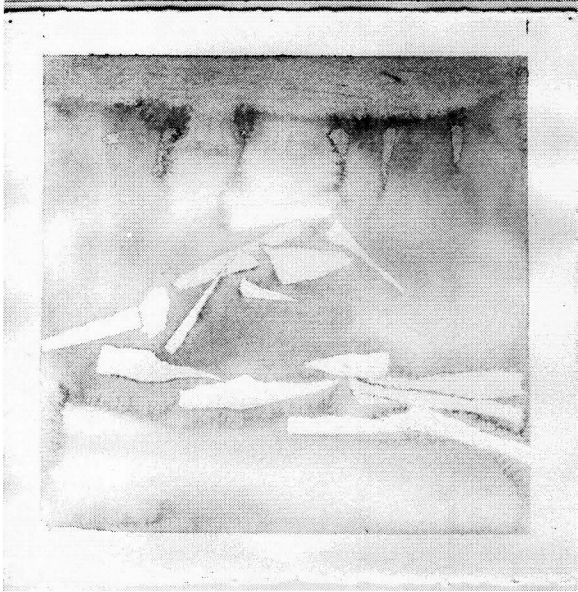
The physical characteristics of the two sites are very distinct, in terms of their ecosystems, their natural, cultural, historical and built conditions. One is climatically extreme and remote, set in the tundra on an estuary, in a shallow valley. The other is in the heart of the megalopolis of Mexico City, on a quiet street in an upper-middle class neighbourhood with history and high culture. The tension between the two sites has enabled a deeper understanding of the patterns underlying both urban and rural sites. It has also raised the question of universal vs. specific requirements for shelter and housing.



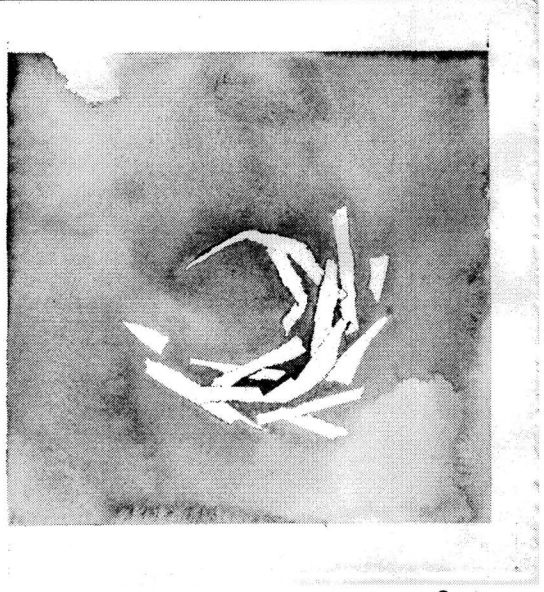
Labrador site: paths and seasonal camps



Mexico site:
neighbourhood
and density



Winter



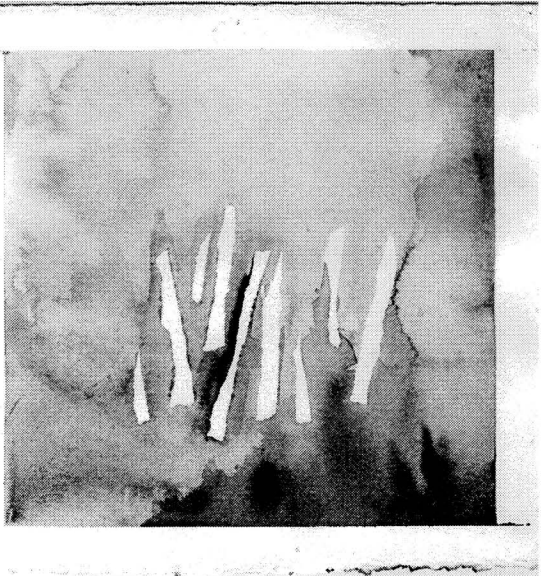
Spring

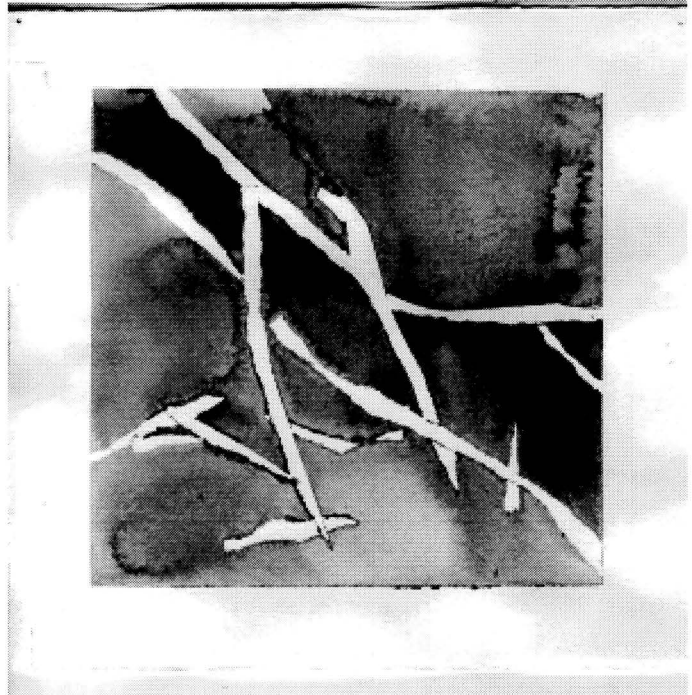
Initial paintings for the Labrador site, exploring the driving elements of the site and culture.

Fall



Summer





Change

Initial paintings for the Mexico City site, exploring the driving elements of the site and culture.

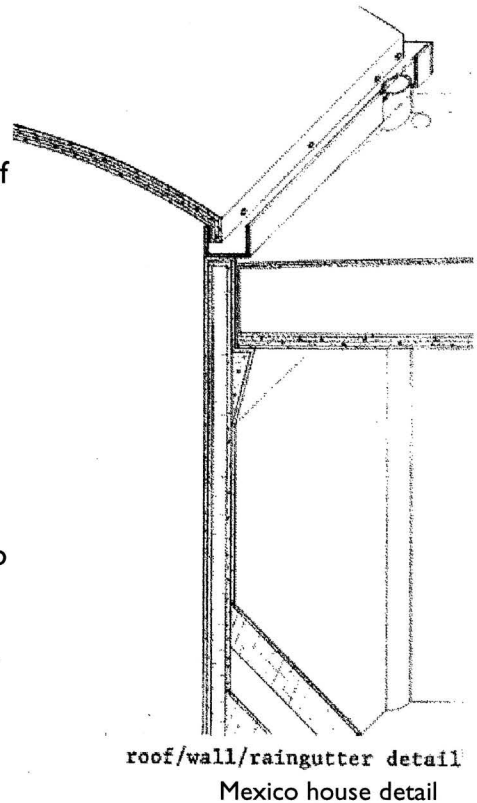


Progress

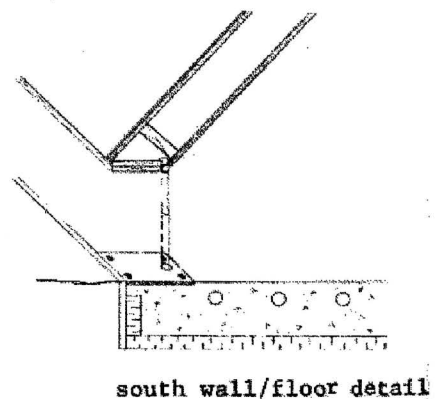
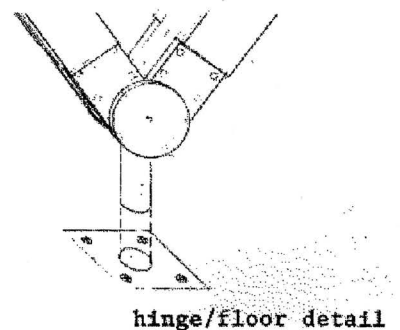
IV. Necessity of space—necessity of material

The definition of The House hinges on more than symbolic issues, or perhaps on a certain type of symbolic issue, namely necessity. The necessary elements in a house tend to vary depending on climate, class and culture, and I am actively exploring the fundamental core of each house. I have focussed on certain design issues relating to necessity: scale; flexibility and expandability; degree of specialisation of habitable space; and infrastructural services. This issue of necessity is also tied to considerations of economy in the house, both economy of function and economy of materials. These are priorities in both projects, which are aimed at economically and politically marginalised populations, and should be priorities in any project in an age of diminishing resources and increasing populations.

In terms of the particular issue of economy of materials, the use of local products and resources is relevant, yet I have allied myself largely with industrialised building processes in the parts of the buildings which I have worked on most intensively. The reasons for this are multiple, including a certain scarcity of resources for building on each site (financial scarcity in Mexico City where everything is for sale, and material scarcity in Labrador where the climate demands much and provides little). I have also chosen to use certain standardised building materials as part of an ongoing dialogue between scarcity and choice, or between tradition and poverty. In analysing the living conditions of marginalised populations, one is confronted with the



Labrador house detail

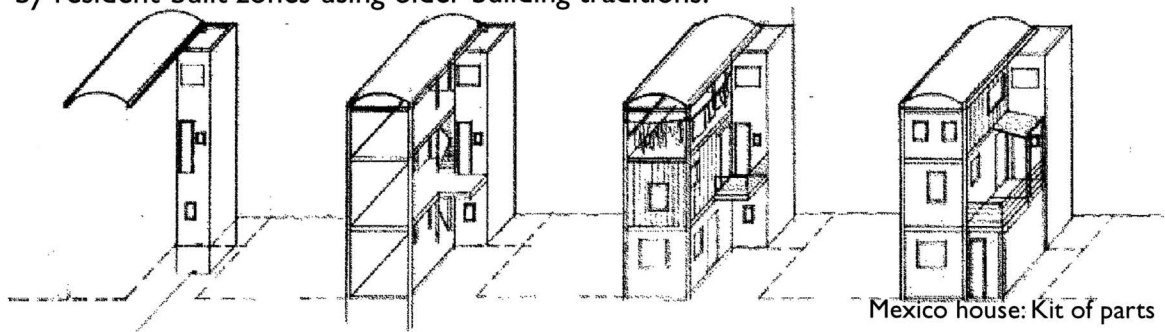


values and rituals and which reflect constraint of means: Given the choice and the need to define which practices stem from traditional resources, would people choose to do things differently?

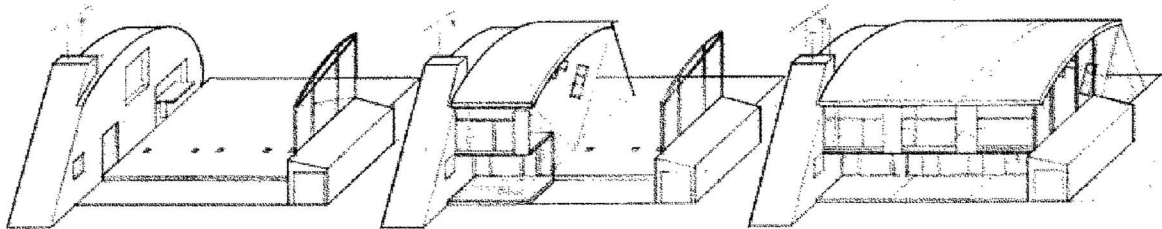
This thesis explores the relationship of traditional culture and modern ways of life, or alternately, how stories and half-invented remembrances can be used to develop a new material culture. However in studying Otomi and Innu history, I have chosen to focus more on esoteric cultural questions than on material culture, with the partial justification that ideas are more portable and adaptable than things. Because of this focus, the design of the new buildings has become uncoupled from building and craft traditions of the people. This may be an insurmountable omission, but it has been conscious, perhaps to avoid post-modern formal quotations whose role is symbolic at best (and cheap tokenism at worst). It would be interesting, on another occasion, to try instigating a similar design process based solely on studies of traditional craft and form.

Materiality is tied to the issue of modernisation, and the choice of materials reflects a certain reticence on my part to enforce a romantic notion of traditional lifestyle in an age of cellular phones and the internet. There is also a subtext to this choice relating to the appropriation of modern technology by marginalised groups. As Mendelson wrote in 1947: "Man, therefore, is not the automated appendage of the machine but its inventor, its master."⁵ Despite the peripheral relationship of the Otomi and the Innu to the society which created machines and industrialised construction, their appropriation and reinterpretation of these is crucial.

The designs for Labrador and Mexico each call for a combination of prebuilt and resident-built elements. This responds to concerns about individual expression in building and to a search for the essential components of the house. It has certain implications, however, for this discussion of economy and materials. The use of industrialised construction in the core elements of the house may, in fact, be balanced by resident-built zones using older building traditions.



In more specific terms, each design has been elaborated as a set of fixed and flexible elements. The fixed elements consist of a service core and habitable space in the house, and community markers, institutions and gathering spaces at the village scale. Structurally or infrastructurally, at the house scale, there are solid structural wall and floor elements, hinge pieces, and connectors (plug-ins). The flexible elements include the bulk of habitable spaces in the houses, as defined by adjustable infill walls and floors and weather shelters. I have attempted to identify site forces to which the buildings respond positively, such as northern weather and southern earthquakes, and to allow for movement up or out. These design elements parallel some of those set out by Buckminster Fuller and the GEAM (groupe d'etudes d'architecture mobile) in the early 1960's (see Appendix 2).



Labrador house: Kit of parts

Actions (design description)

Site action 1: two sites

The creation of a situation means the creation of a transitory micro-world and - for a single moment in the life of a few - a play of events. It cannot be separated from the creation of a universal, relatively more lasting, environment by means of unitary town planning. A created situation is a means for approaching unitary town planning, and unitary town planning is the indispensable basis for the creation - to be regarded both as a game and as a serious task - of the situation for a freer society.⁶

As stated above, the thesis instigates designs on two distinct sites, for two cultural communities in two extreme locations. I chose to investigate and pursue two sites for several reasons. In exploring two variations on the same theme, I gained a deeper understanding of both situations, through their similarities and differences. The initial similarity, of indigenous communities in new physical and socioeconomic conditions, is perhaps the clearest. It led me to attempt to define a strategy for mining cultural history and material technology, confronted with a new situation.

Each new community requires communal spaces and buildings, and considering the demographics of both communities, a school for the children seemed crucial. This applies to most relocation projects, which occur mainly in third world populations where children under the age of 15 are demographically predominant. And the ambitions which emerge in relocations often relate to the provision of new opportunities and a better future for younger generations. In communities with strong local traditions (beliefs, language, crafts, industry), it is also necessary to incorporate traditional skills and knowledge into the formal learning process. In both sites addressed in this thesis, the production of traditional crafts seemed an appropriate adjunct to the school. In Mexico City, the design for this central building also includes a gallery for the sale and display of these traditional crafts, in response to their new urban consumer context. In Labrador, the school is one of the functions which occupies the central community building. This building is defined by a long service corridor (housing solar collectors, batteries, generators, electrical, water and heat hookups) into which a series of rooms of varying sizes are plugged. The other community building is a

transmission and lookout tower whose base houses a radio and telephone transmission station.

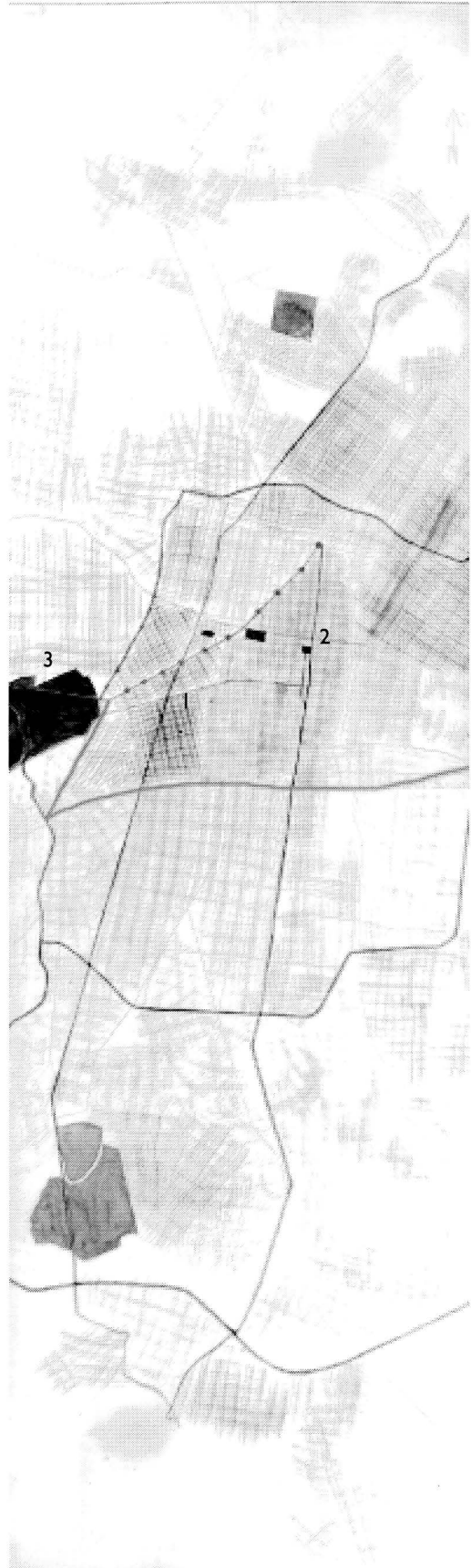
The houses respond to very different climatic and site issues, to extreme temperatures and vast lands, or to dense building and earthquakes. This implies certain very specific responses in terms of the design and materiality of the houses. There is also the issue of space use with reference to certain cultural traditions. One case draws on nomadic traditions, where collective shelter is used mainly for rest and sleep, and where private property was traditionally an irrelevant concept, both in terms of land and houses. The other is based on a peasant tradition, of small self-sufficient farming on family plots, where the house included collective living and sleeping spaces with separate cooking and washing spaces.

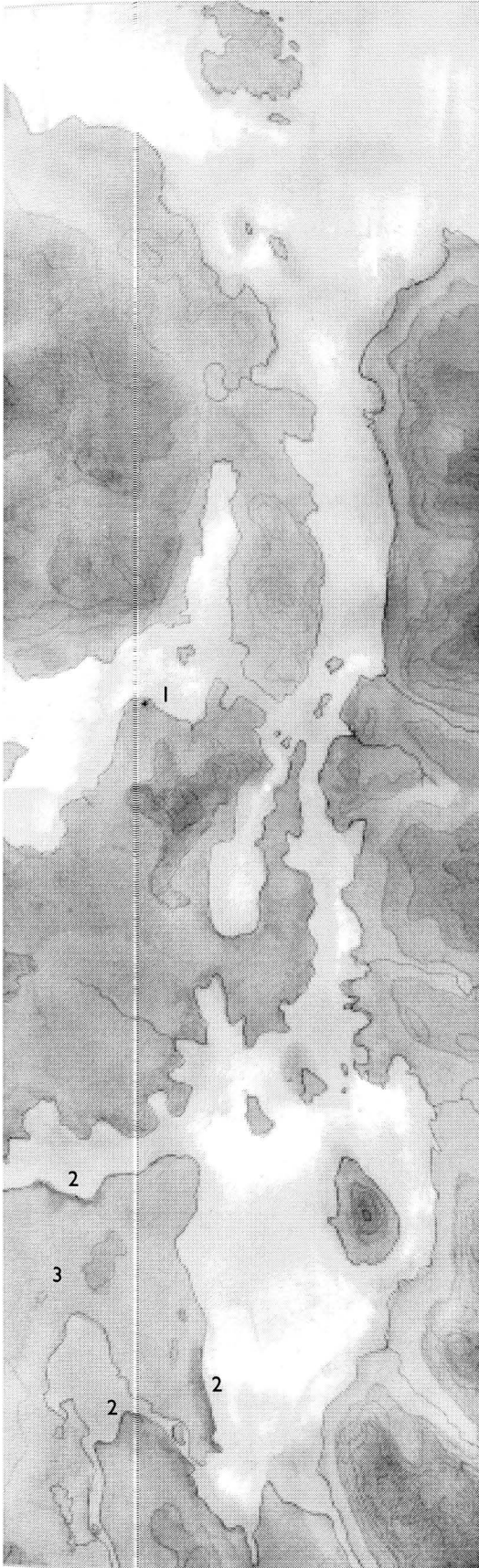
As the design is for a new settlement, a modern community, the issue of service provision is crucial in both sites, as it is in most marginal settlements. The definition of the house as a combination of fixed service core and flexible living spaces responds to this, while making reference in a very clear way to the organisation of traditional houses. In both Innu and Otomi traditions, cooking and washing are separate from multipurpose living areas. This thesis defines each house through a service piece and two types of sheltered living space (upper and lower). The definition of the set of services, the scale of the building, and the minimum requirements for shelter all respond to site conditions. There is also some reference to the cultural particularities of space. Yet the fundamental definition of the elements of a house are, in a certain sense, universal. The degree to which these conclusions would hold in other relocation conditions would require further testing of the ideas, but perhaps this thesis offers a strategic starting point for the design of such communities.

Sites

Mexico City

1:10 000 map of the city showing the locations of 1)the site for the Otomi community; 2)the central plaza of the city; 3)Chapultepec park.





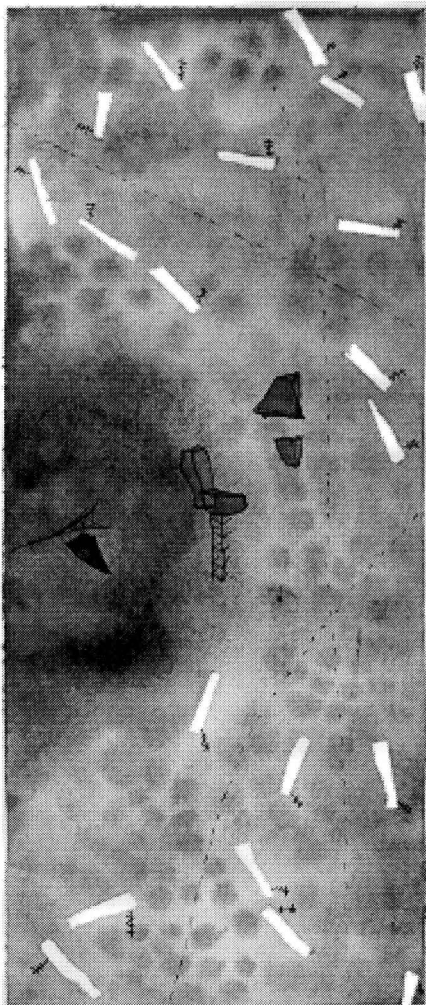
Labrador

1:10 000 map showing the locations of
1)the existing town of Davis Inlet; 2)the
seasonal camps used by the
community; 3)the site for the
relocation community of Shango Bay

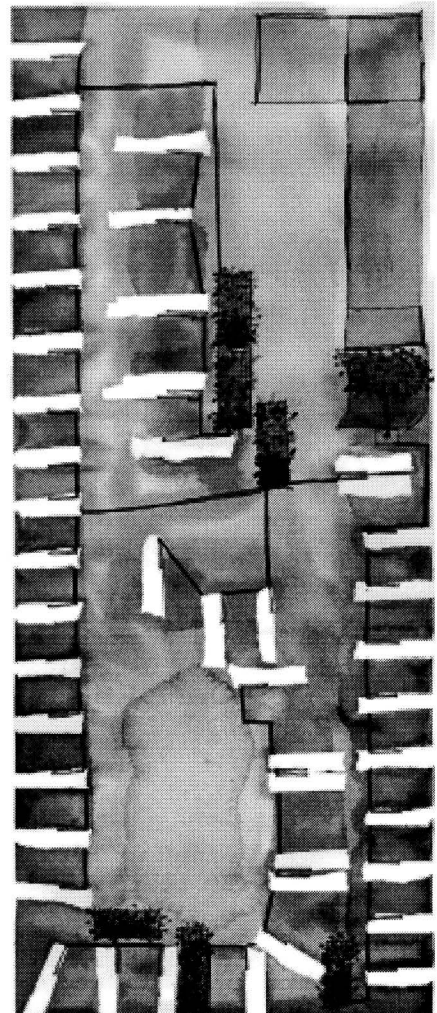
Site action 2: public buildings and neighbours

The public spaces in Mexico respond to the need for formal and informal gathering, the showpiece formal garden which houses the flowers and the virgin's altar, the small soccer field, and the pockets of informal gathering. The roof level is a secondary public space, where neighbouring roofs can act as workspaces and conversation platforms for the women.

In Labrador the entire wilderness is a public area, as are the houses to some degree, and so the formalised community markers of radio tower, school, workshop, caribou racks, and coop take on a more important role in the public life of the town. The issues of workplace and house relationships and of urban scale flexibility are present to varying degrees, as is an attempt to combine socio-cultural expression with physical reality.



Labrador site:
village centre,
infrastructure, and
settlement pattern



Mexico site:
common areas,
infrastructure, and
settlement pattern



Shango Bay, Labrador

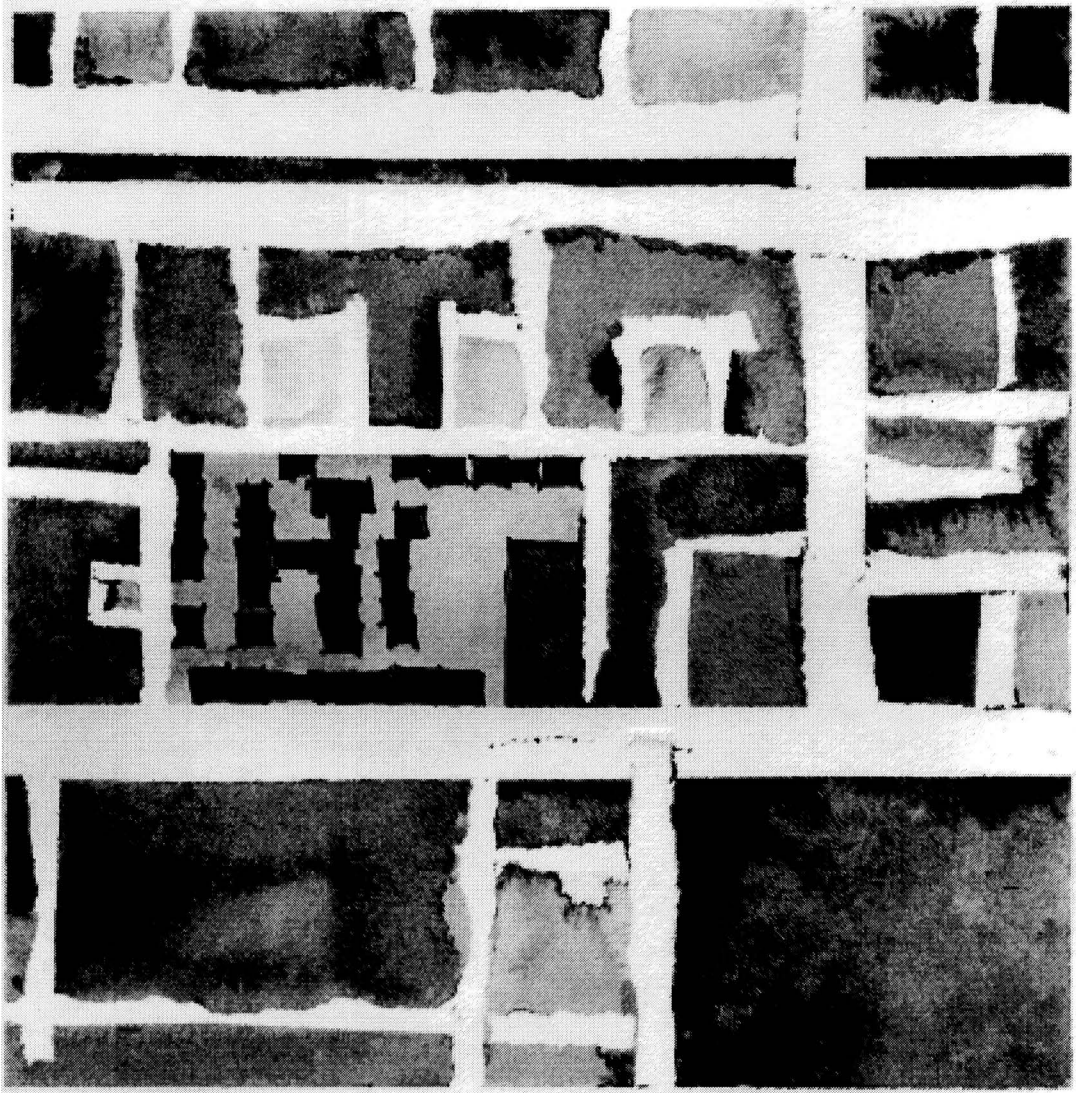
Initial exploration of the site showing seasonal camps, permanent houses, community buildings, relationship to the water.



Shango Bay site map (approx 1:15 000)

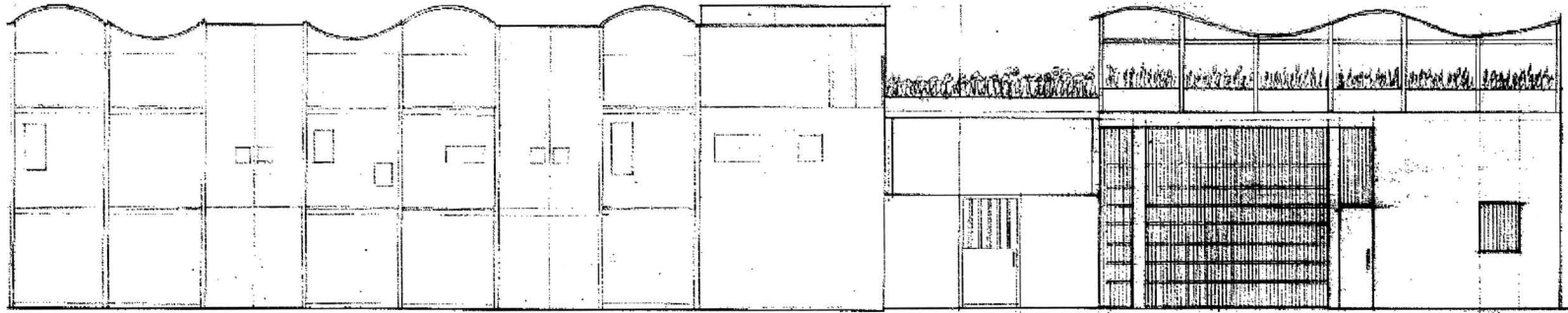
Settlement by view, availability of water, family grouping.

Community centre around hill, including transmission tower and community buildings based around an infrastructural corridor.



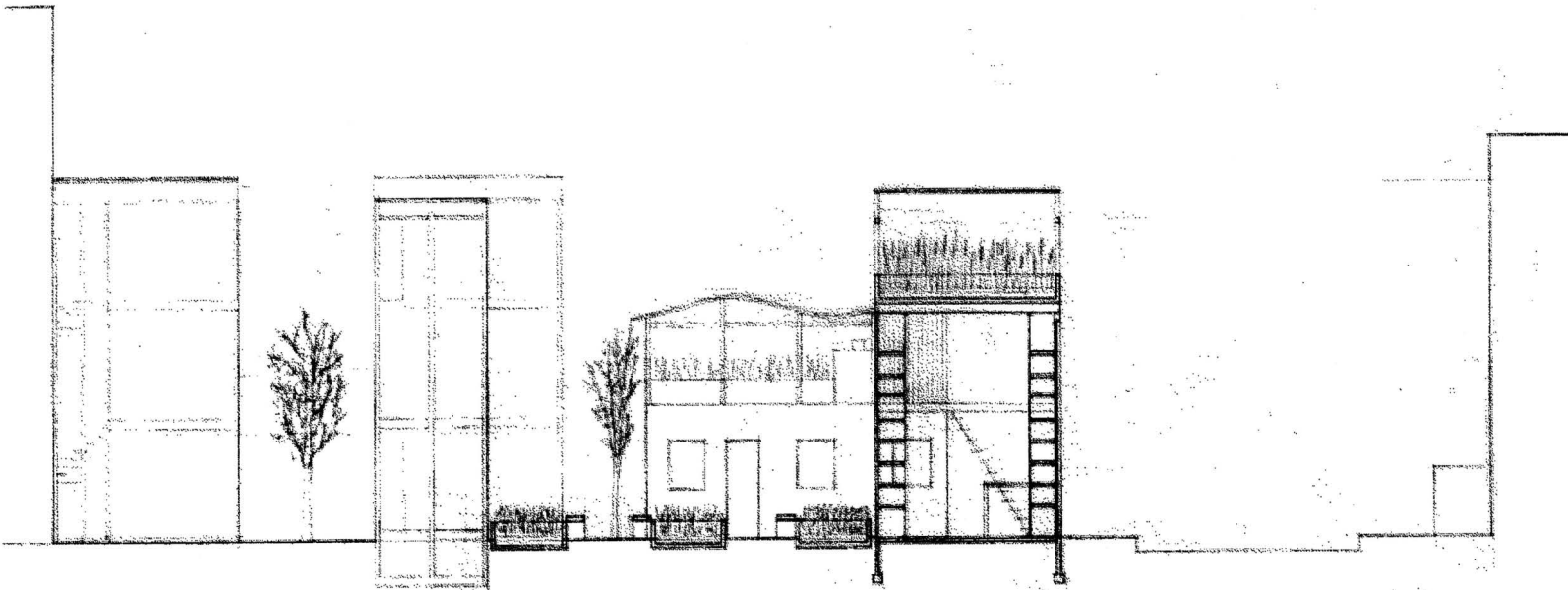
Otomi settlement, Mexico City

Initial exploration of the site showing surrounding neighbourhood, density, community buildings, settlement pattern.



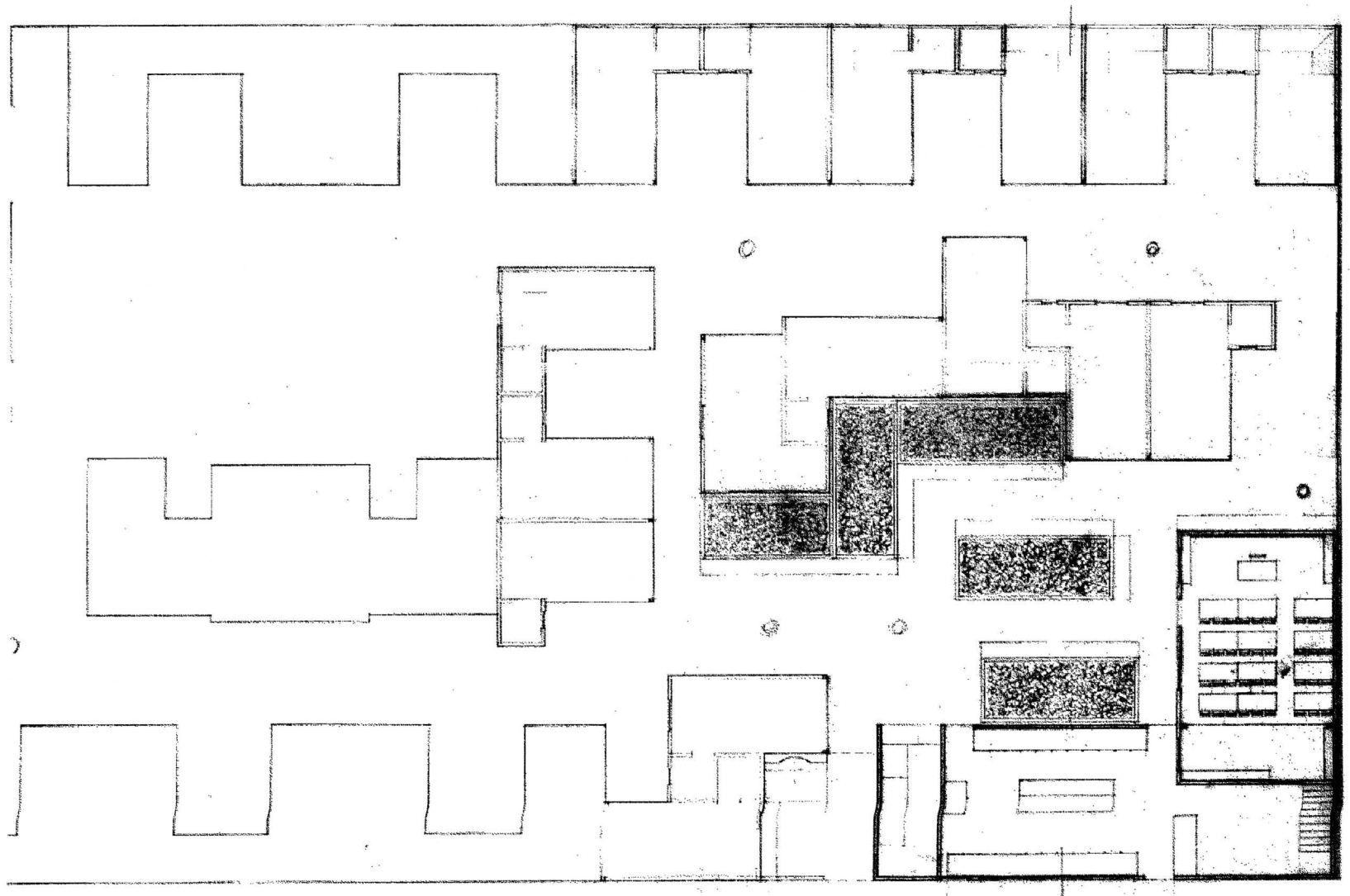
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Otomi settlement street elevation



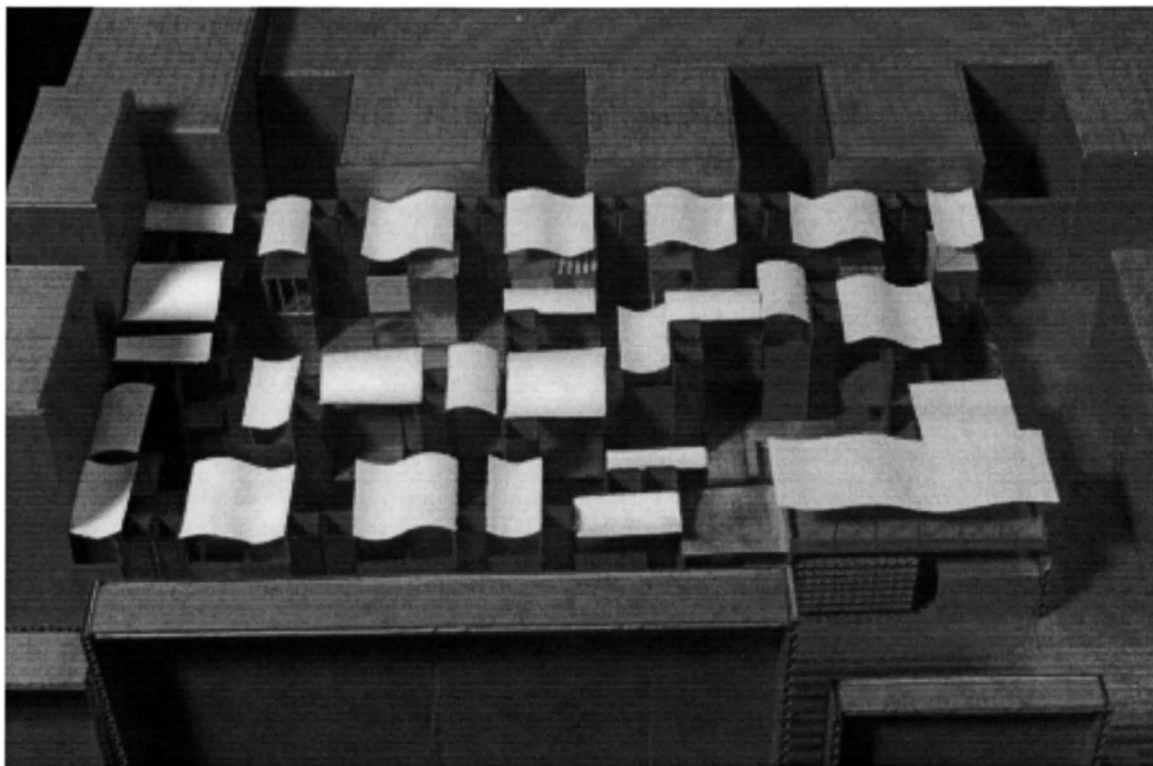
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Otomi settlement section

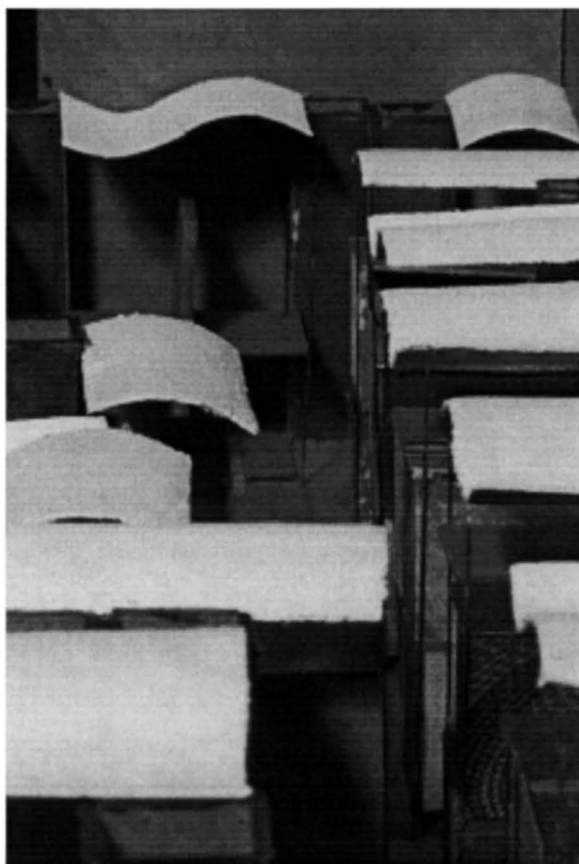


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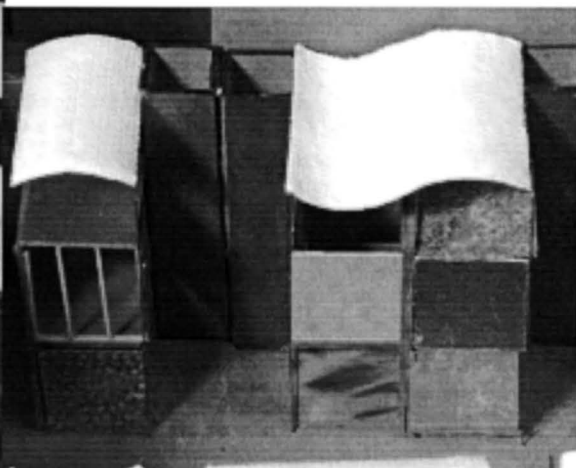
Otomi settlement plan



Otomi settlement: configuration of housing, public spaces and gallery/school



Interior pedestrian paths



Houses and shared courtyards

House action 1: service core

Each house is instigated with a core of modern amenities, an anchor tying the house to the community and the ground. It gives shelter, water and power to allow for the washing of clothes and children, the preparation of beans and caribou stew for the family.

The vertical service core in Mexico takes the rain and uses it before feeding it to common flower beds and back into the ground. It attaches the house to the ground, directly adjacent to a neighbouring house with its anchoring tower.

The horizontal service core in Labrador receives and transmits signals to friends and relatives and provides a physical locating device.

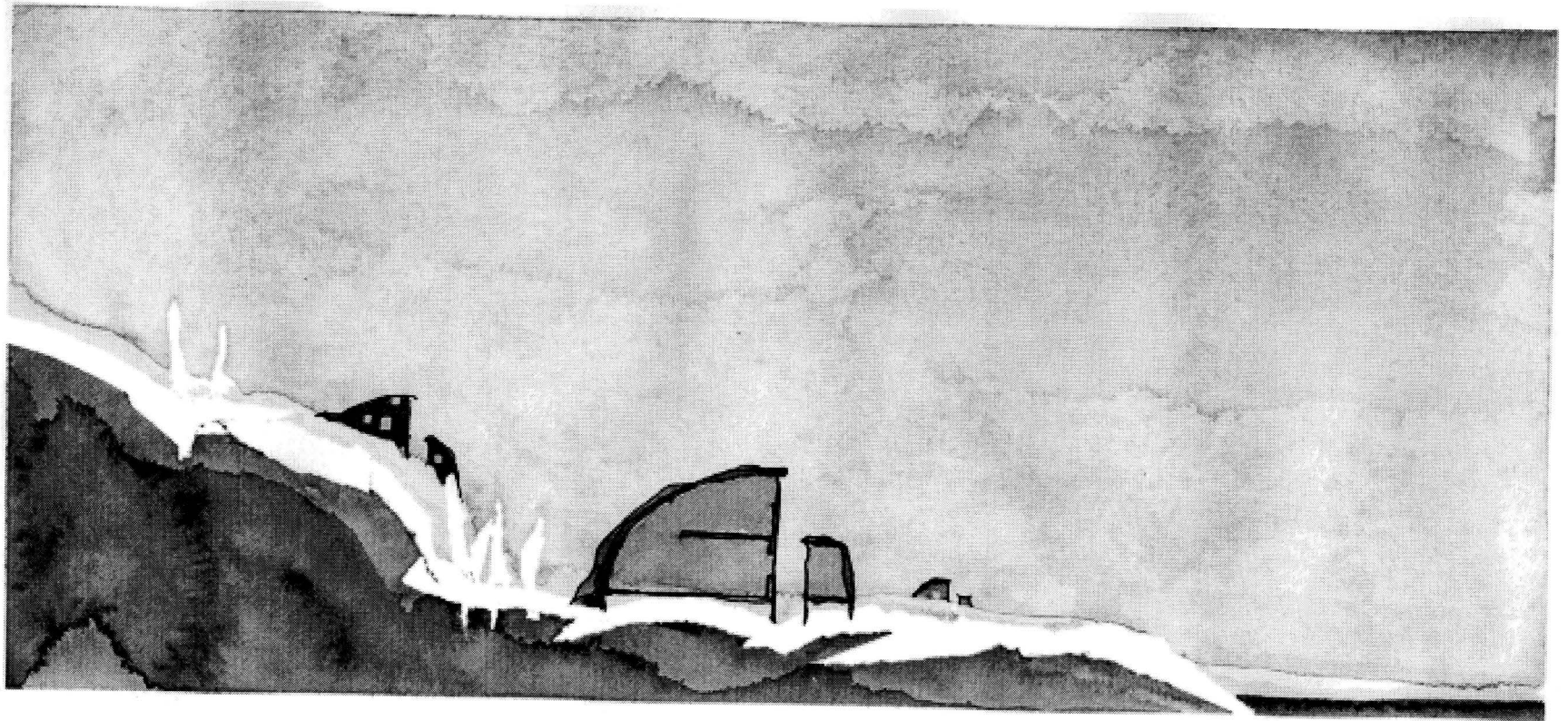
The houses attempt to address the relationship of fixed to flexible through services and spaces of inhabitation. The definition of discrete zones, the potential public and private areas, draws something basic from traditional ways of living in terms of the flexibility of spaces.

House action 2: direction of inhabitation

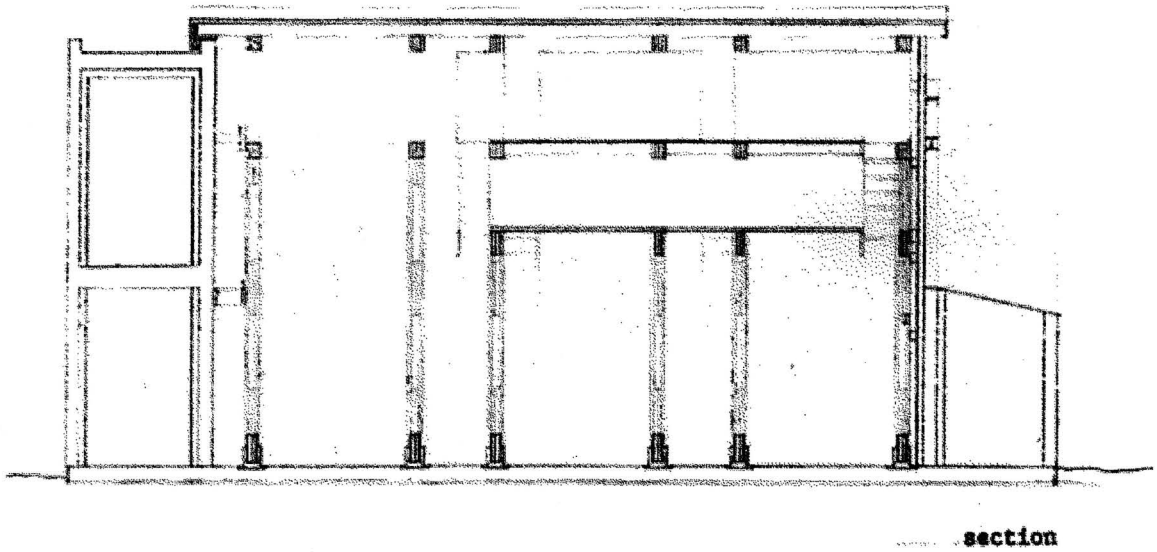
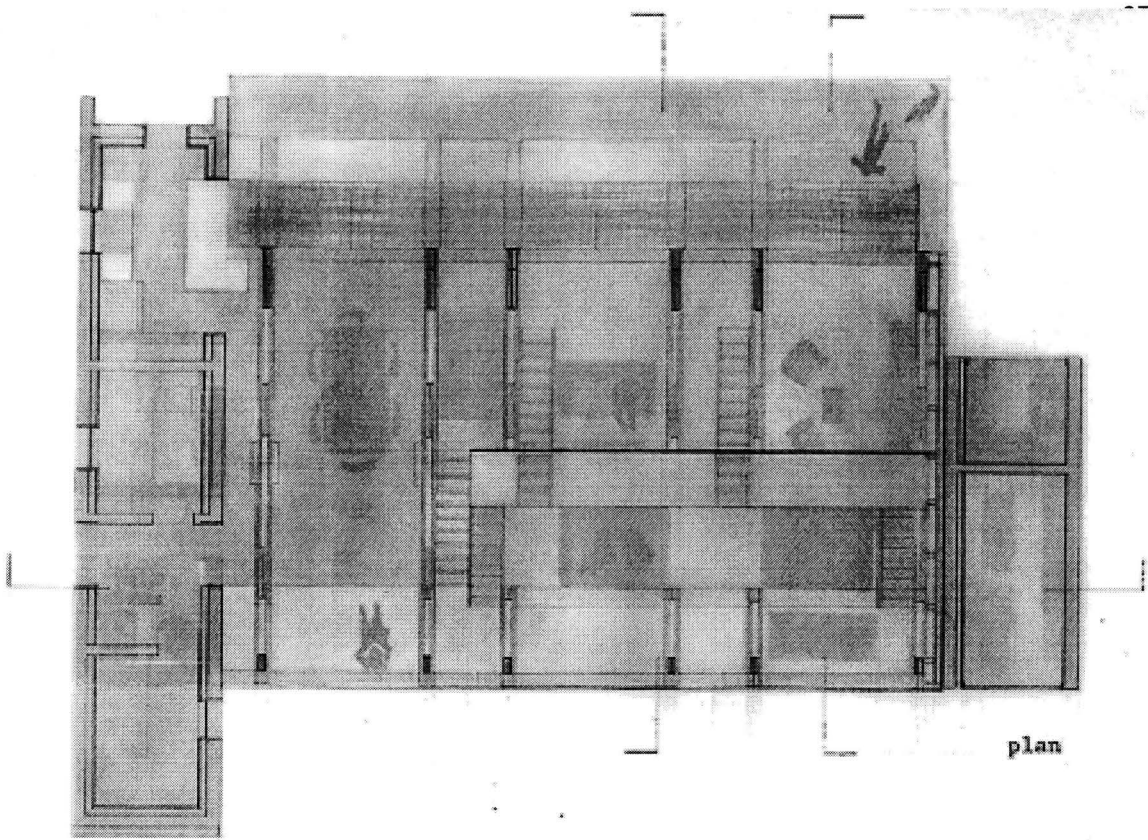
The service core acts as an anchor which germinates living spaces either up or out. The habitable house is a direction, a map for movement, with a minimal intervention to support the spaces. One house has a fixed site, marked by a water tower, and the other has a fixed building, defined by a hinged module.

The Mexican house has upward movement supported by stairs, columns, a party wall, a floor plate and a roof. These elements are meant as markers of inhabitable space which provide basic weather shelter and earthquake resistant primary structure.

The house in Labrador consists of modular units set on a concrete floor plate. The modules are changeable by season and can be moved when needed. The Innu house module, in combination with the service wall, is more complete and immediately inhabitable, leaving residents to determine the number and placement of the modules.

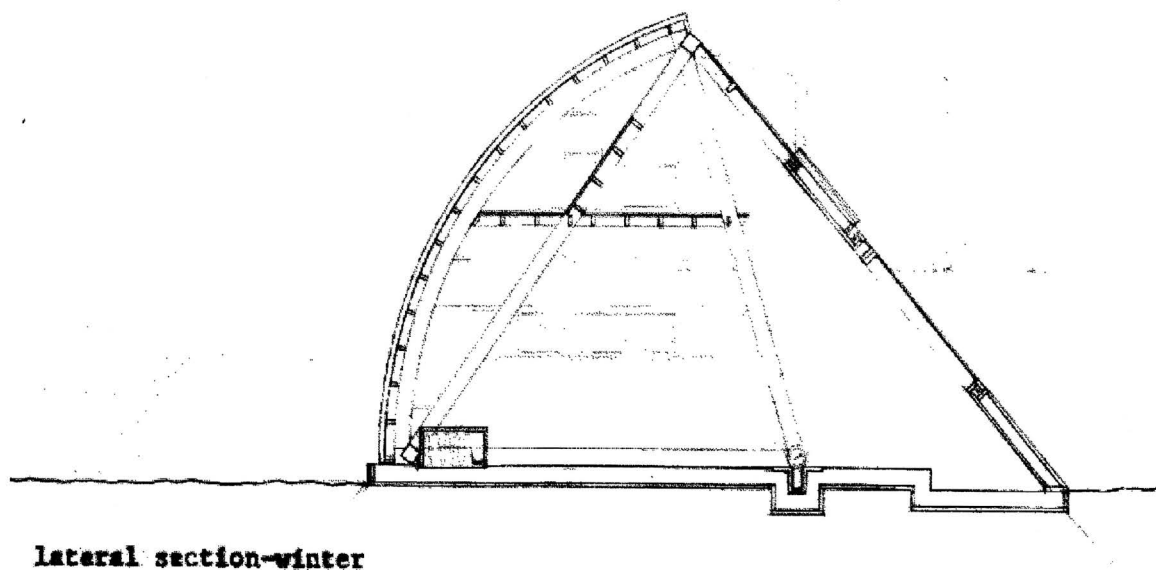
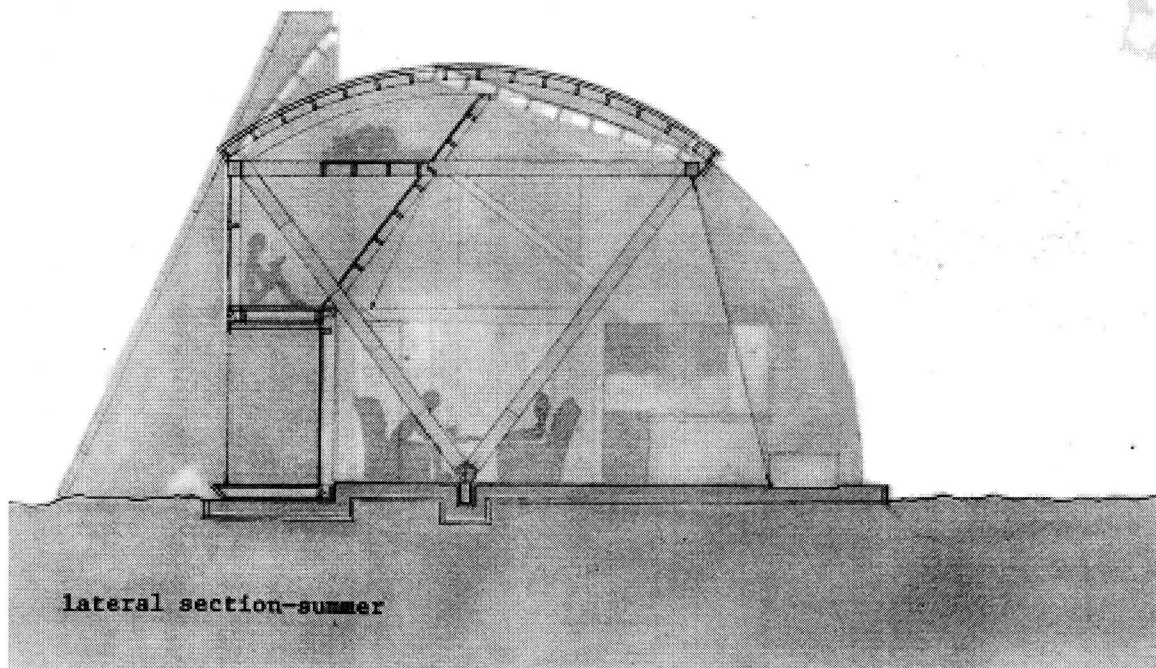


Innu house: initial painting of the house in the landscape



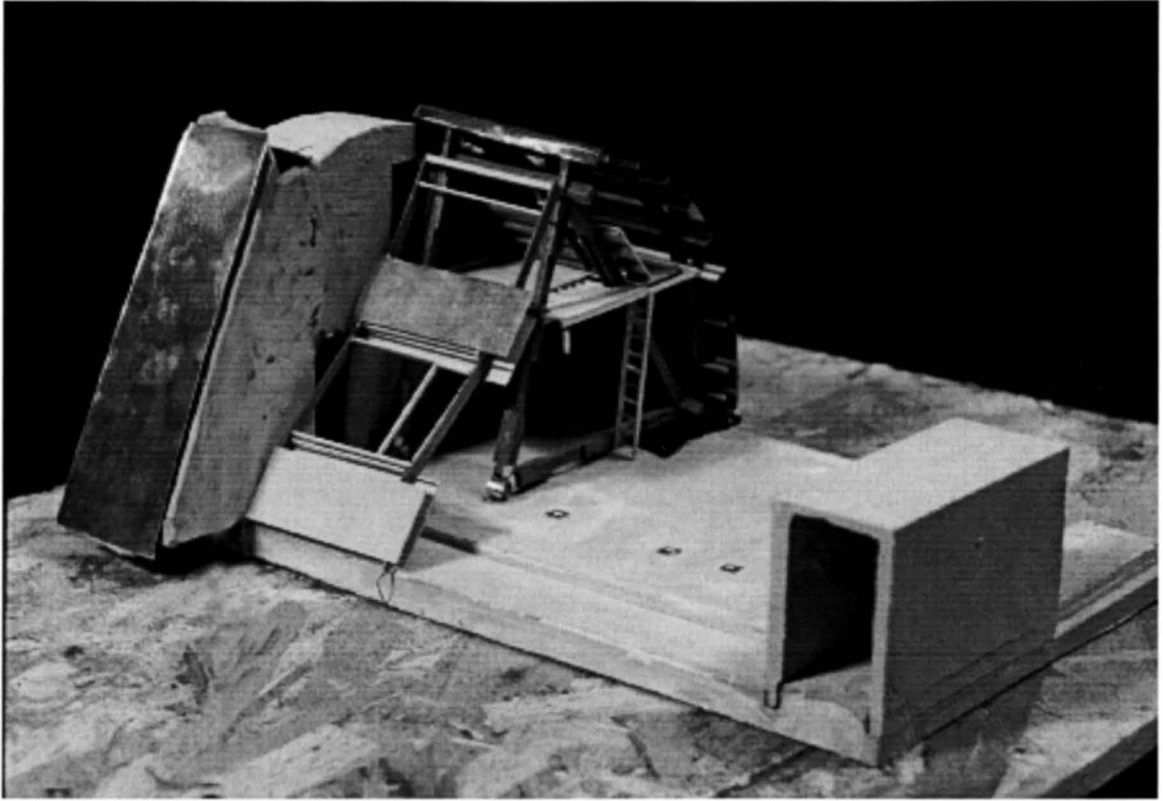
~1/8" = 1"

Innu house
Plan and longitudinal section

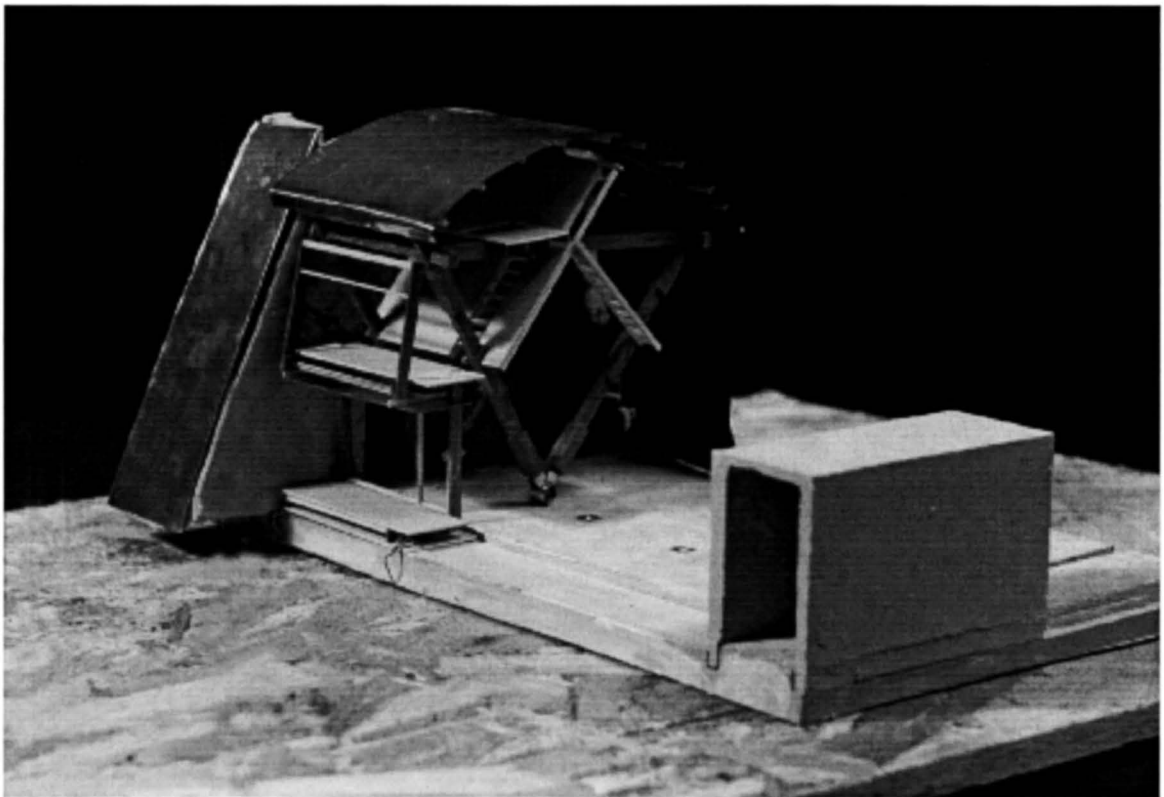


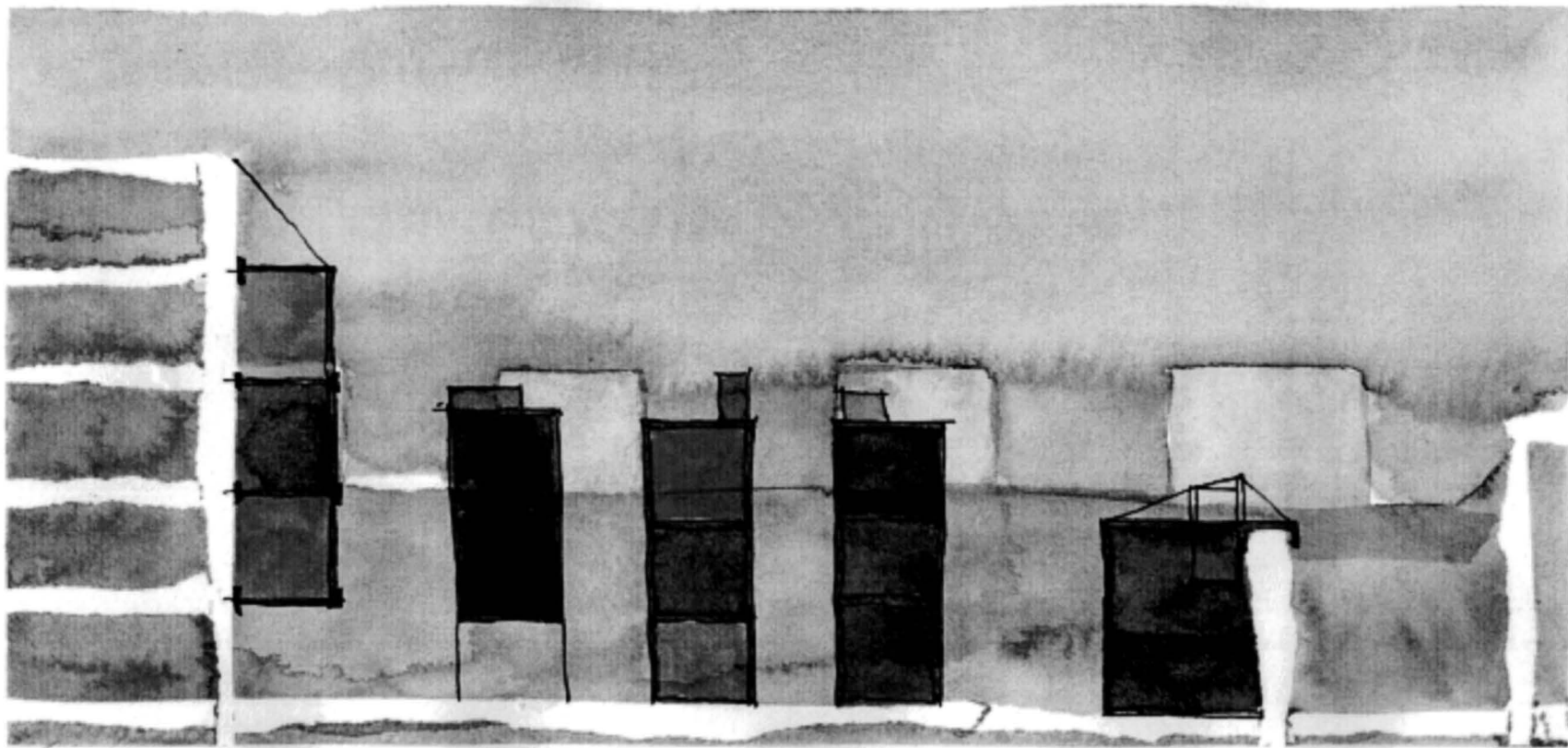
~1/8" = 1"

Innu house
Lateral sections: summer and winter conditions

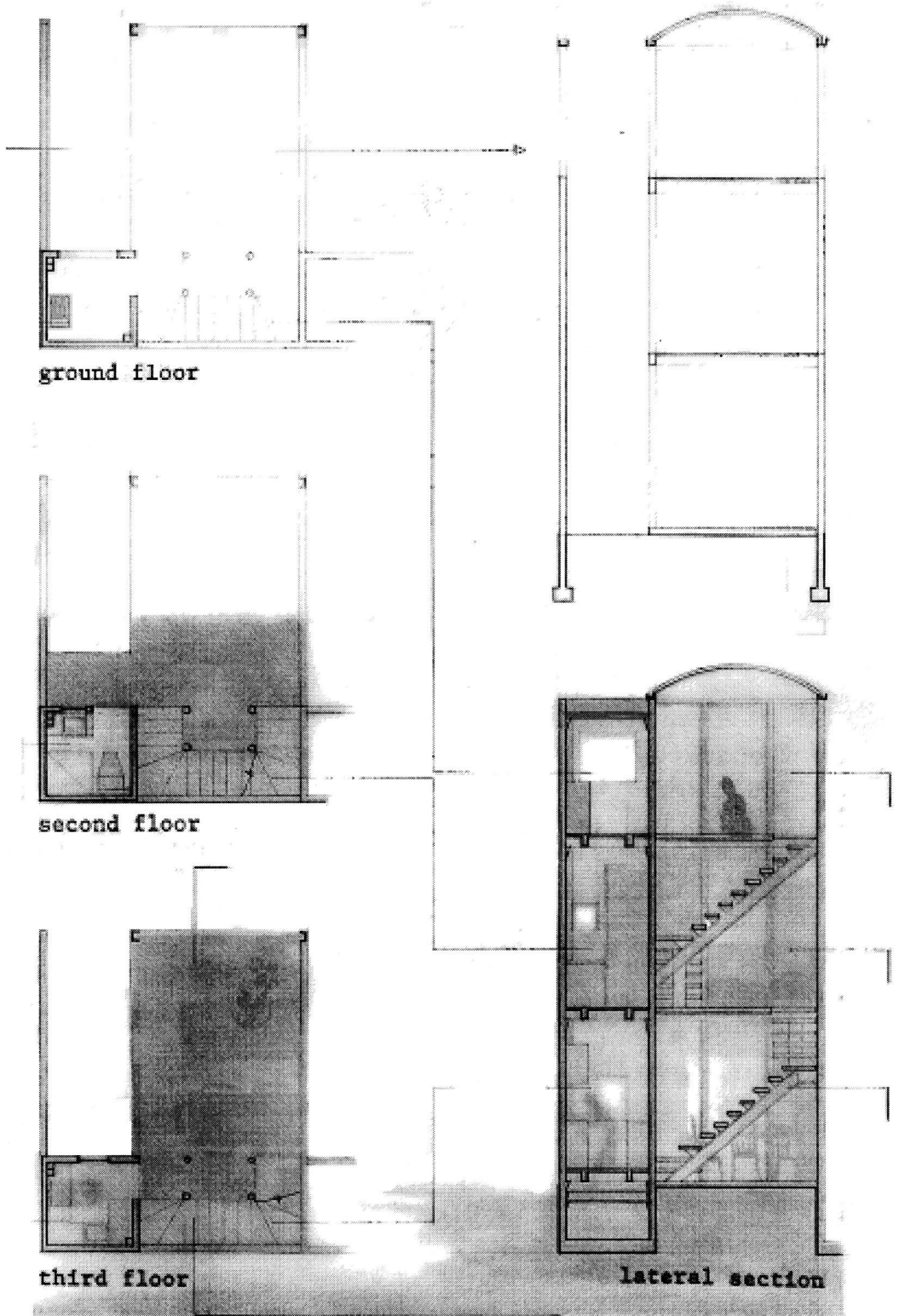


Innu house with service wall and one module, winter and summer positions.



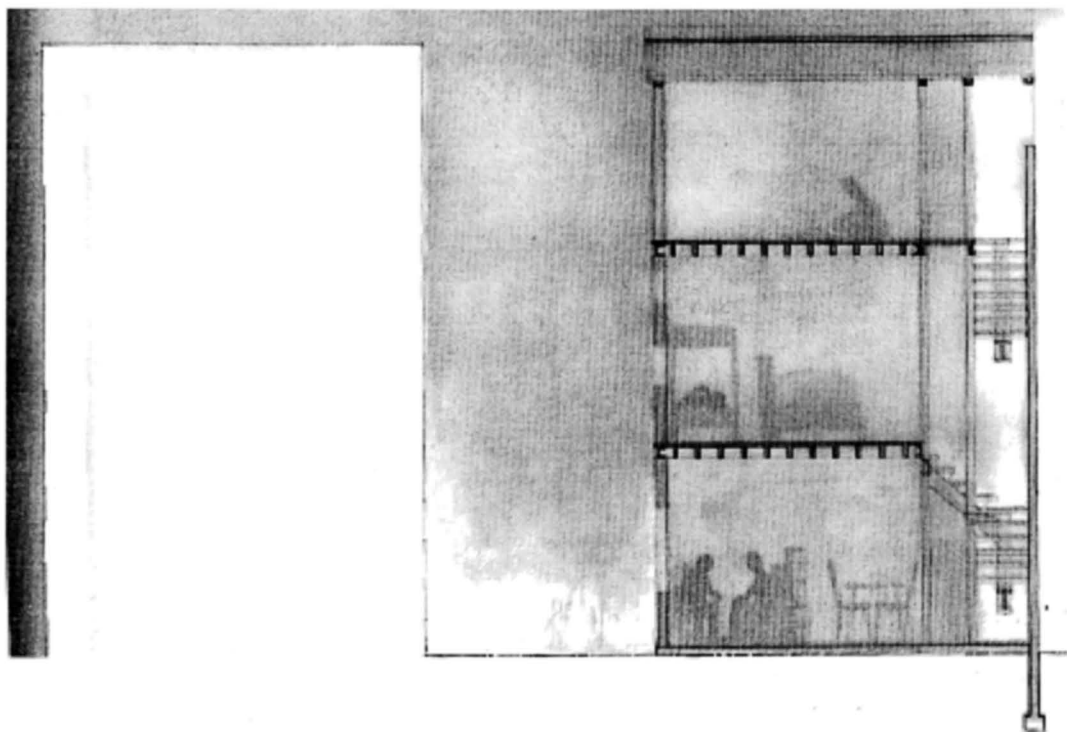


Otomi house: initial painting of the house in the urban landscape



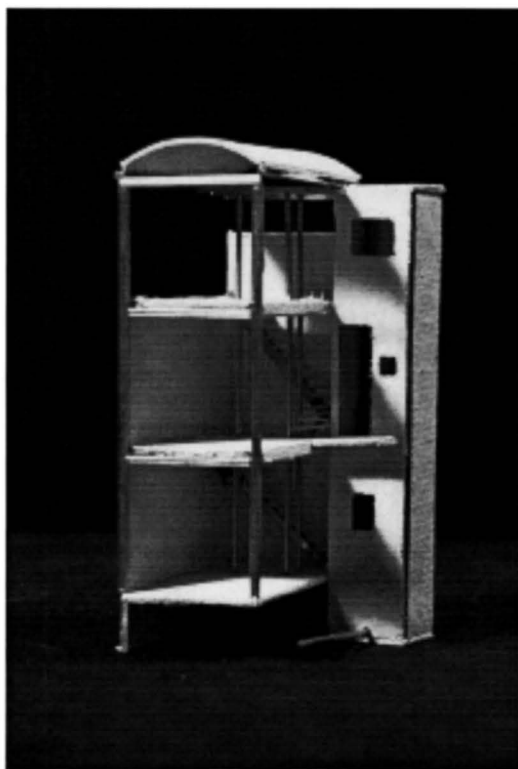
~1:100

Otomi house
Floor plans and lateral sections

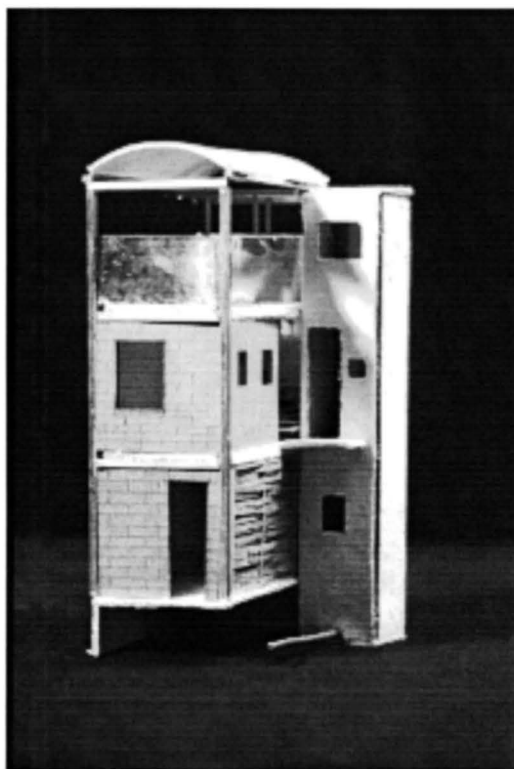


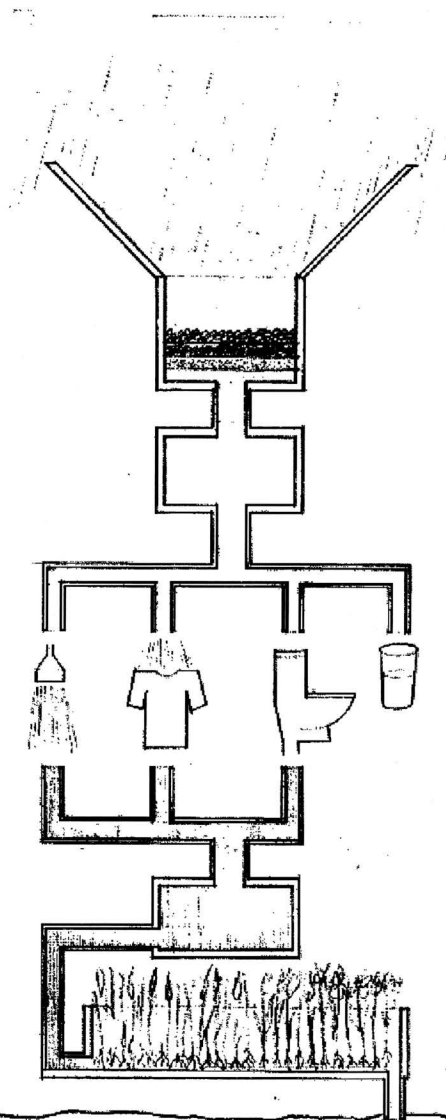
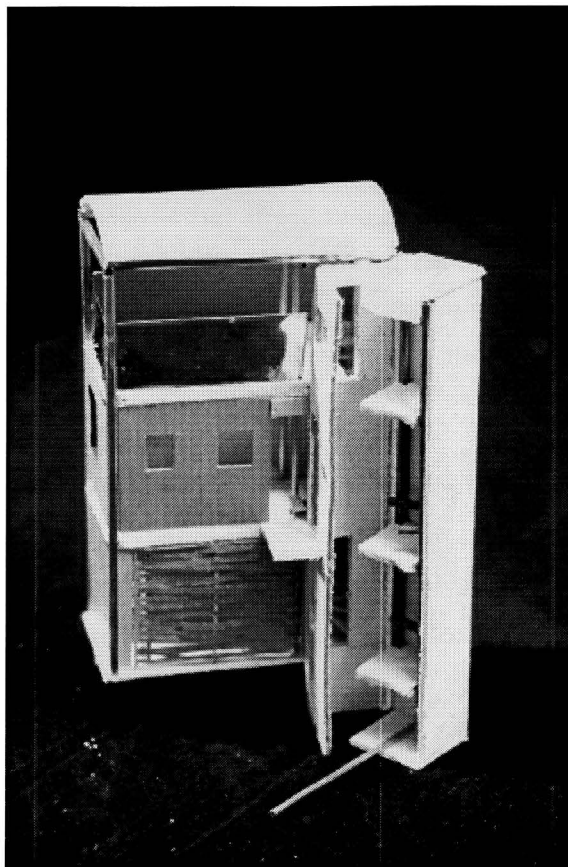
longitudinal section

Otomi house:
Kit of parts
(water tower, roof, structural frame)



Otomi house:
Kit of parts and infill walls





water system

Conclusions

Mythical truth

Perhaps the question arising from the project is whether these two extreme sites and peoples, these two relocation villages, provide some sort of model for other villages, whether the seeds of community and house are universal and in what way, whether the architectural interventions can be defined by the stories of place and people.

Action and change

In some sense, the thesis probes the physical manifestation of cultural change. The position taken in the design is one based on solid infrastructure which allows for growth, movement and change. The provision of modern amenities, as appropriate to site conditions, is a clear checkmark on the side of modernisation by which the modern remains a platform for the definition of the house. The spaces of the houses, the main zones of habitation, are very loosely defined, reflecting to some extent traditional Otomi and Innu ways of living, where visiting, working and living coexist while sleeping is given its own zone. In broad terms, the traditional houses and their adjoining outdoor spaces have a public zone and a private zone. The design intentionally does not progress beyond defining these as discrete places in the house. Apart from traditionalist references, this is meant to allow for flexibility and change. The House sets up a direction of movement into the future. Once this directionality and framework have been defined, what remains is the telling of a story about what might happen next, similar in some way to the histories which people tell in order to define and preserve their culture.

Indigenous communities in America (North and South) have been subjected to enormously significant change in the past couple of centuries, and this change has affected some communities most seriously in the past generation or two. This has meant that indigenous housing, if it is in fact a fundamental part of indigenous culture, has to face new situations and ways of life. In the north the transition between nomadic and sedentary ways of life means that a new form of shelter must emerge, as is also the case in urban migration of rural indigenous peasants in the south. This also raises the deeper question of the physical manifestation of culture, and of the concrete nature of cultural change.

Summary

The potential for this project to respond as a culturally specific mediator of change, or even as a building block for a new way of life, is somewhat difficult to evaluate. The houses, as interplays between fixed and changeable pieces, seem a good starting point for a cultural redefinition. They are defined enough to act as useful places of shelter, and yet as kits of parts, they provide joints for growth and change. In retrospect, the resolution of each of the pieces in these kits could be more detailed, leading to more convincing and pragmatic propositions for inhabitation. Yet the effort of developing two parallel projects to a strategic/mythical level resulted in a broader perspective on housing and culture. The universal elements of house and community which emerged over the course of this design might now be taken to a new project, confronted with a site and a culture (or cultures), in order to verify the essential nature of this particular kit of parts.

As I stated earlier, each of these projects is real. These designs were meant as real proposals for new communities and also as meditations on the issues raised by relocation and culture. With reference to their practical applicability, I believe the underlying logic of each design to be sound and the design elements to be the correct ones. As stated above, the material resolution of these should be further developed, particularly in the Labrador case. The details of water, sewage and solar systems and the resolution of some envelope issues would, I believe, lead to a tenable design proposition.

There is ample time to explore these models and settlement issues within the realm of architectural discourse. I hope that the communities of Shango Bay and the Mexico City Otomi will soon define their own futures, and the built environments in which those futures will play out. For them, and by extension for us, time is more pressing.

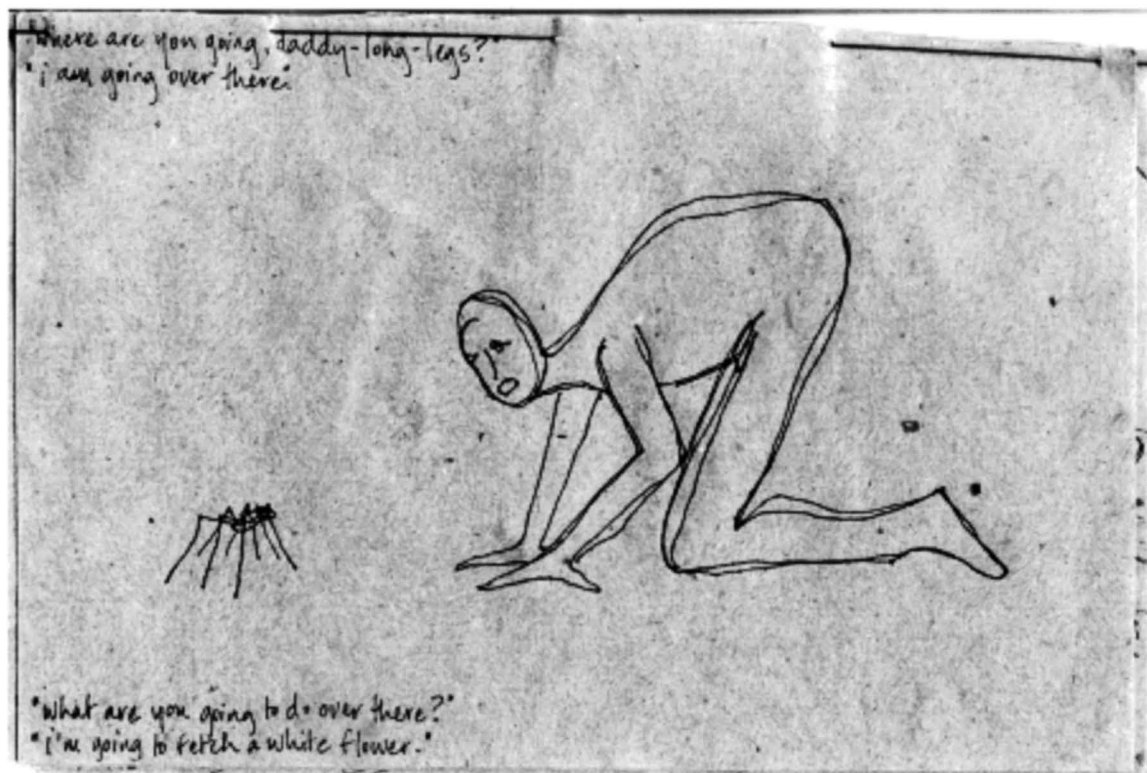
Notes

1. Le Corbusier, "Guiding principles of town planning" from *Collection de l'Esprit Nouveau*, 1925, as quoted in *Programs and manifestoes on 20th-century architecture*, Ulrich Conrads (ed.) (Cambridge, Mass: The MIT Press, 1964), p.89-90.
2. For the purposes of this discussion, community should be taken to refer to a group of people who share common values, goals and history. A community may exist without a site, but ideally should include shared physical (as well as philosophical) space.
3. Walter Gropius and Martin Wagner, "A programme for city reconstruction," 1943, as quoted in Conrads, p.146-147.
4. Bernhard Hoetger, "World architecture," 1928, as quoted in Conrads, p.108.
5. Erich Mendelsohn, "Synthesis," 1928, as quoted in Conrads, p.106.
6. International Situationists, "Programme for Unitary Town Planning," as quoted in Conrads, p. 161-162.

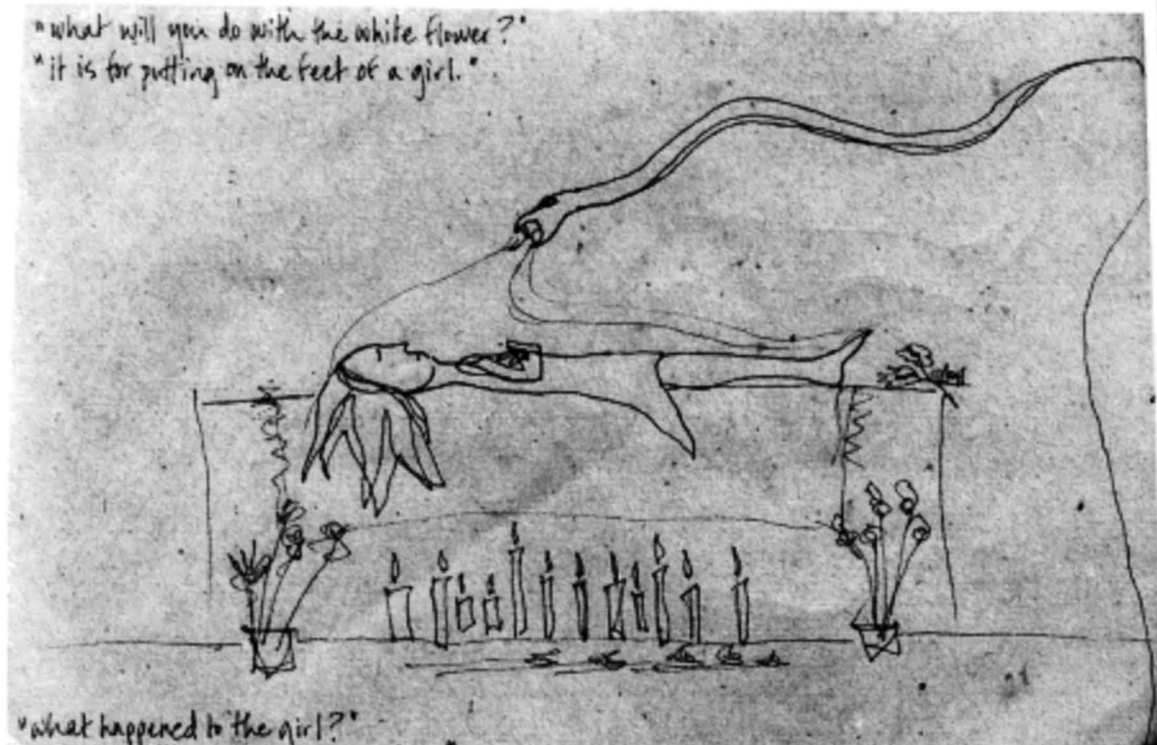
Appendix I:

a story
about the
daddy-long-legs

an otomi tale — as told by jesús salinas pedraza

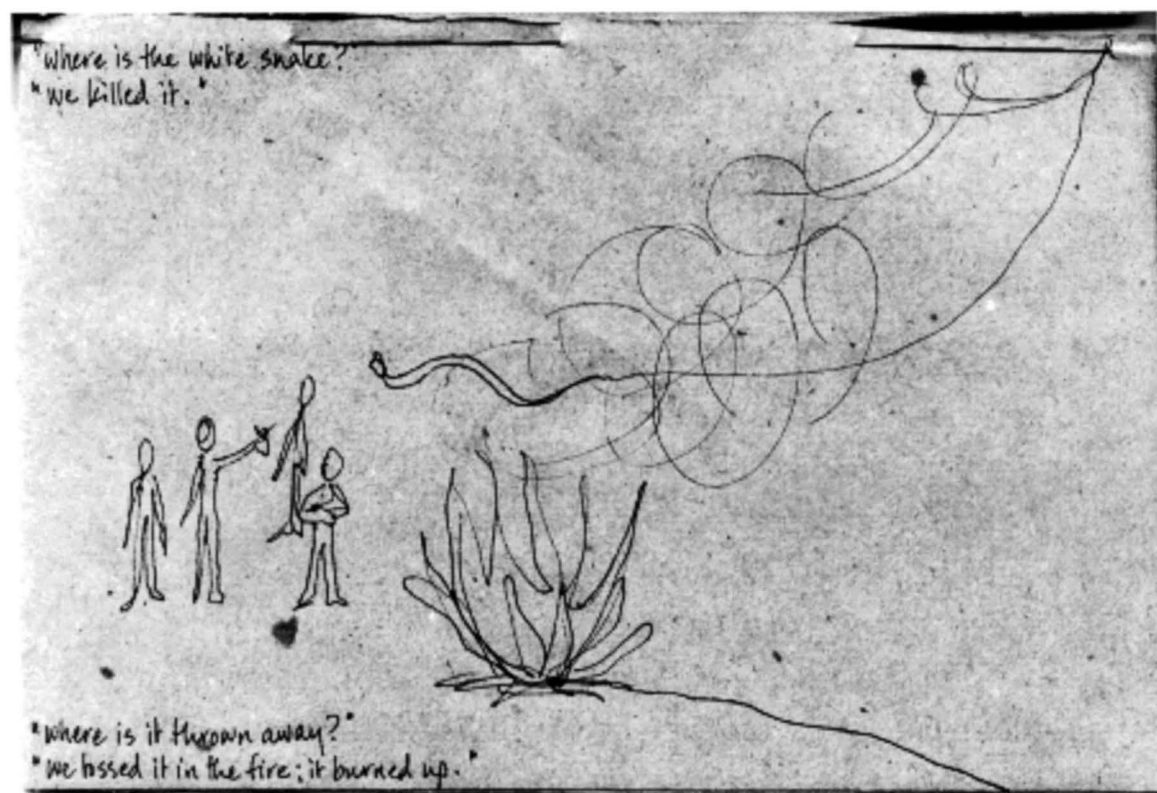


"what will you do with the white flower?"
 "it is for putting on the feet of a girl."



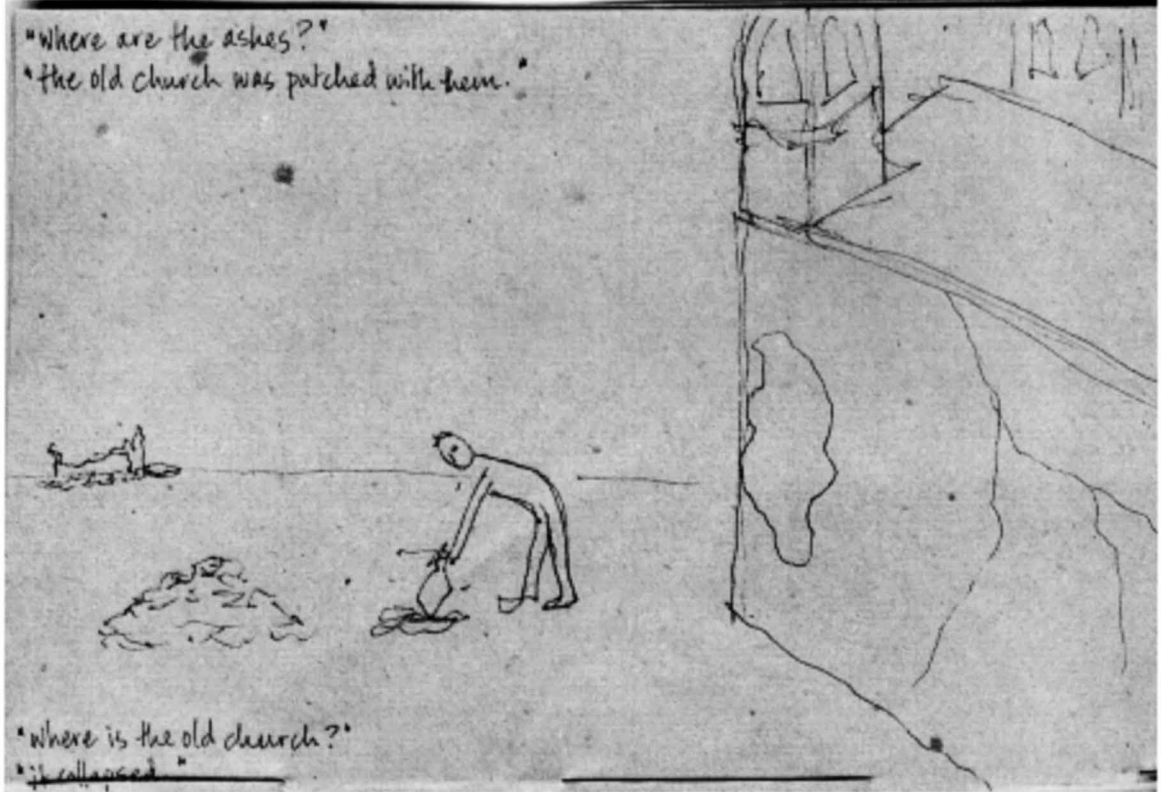
"what happened to the girl?"

"where is the white snake?"
 "we killed it."



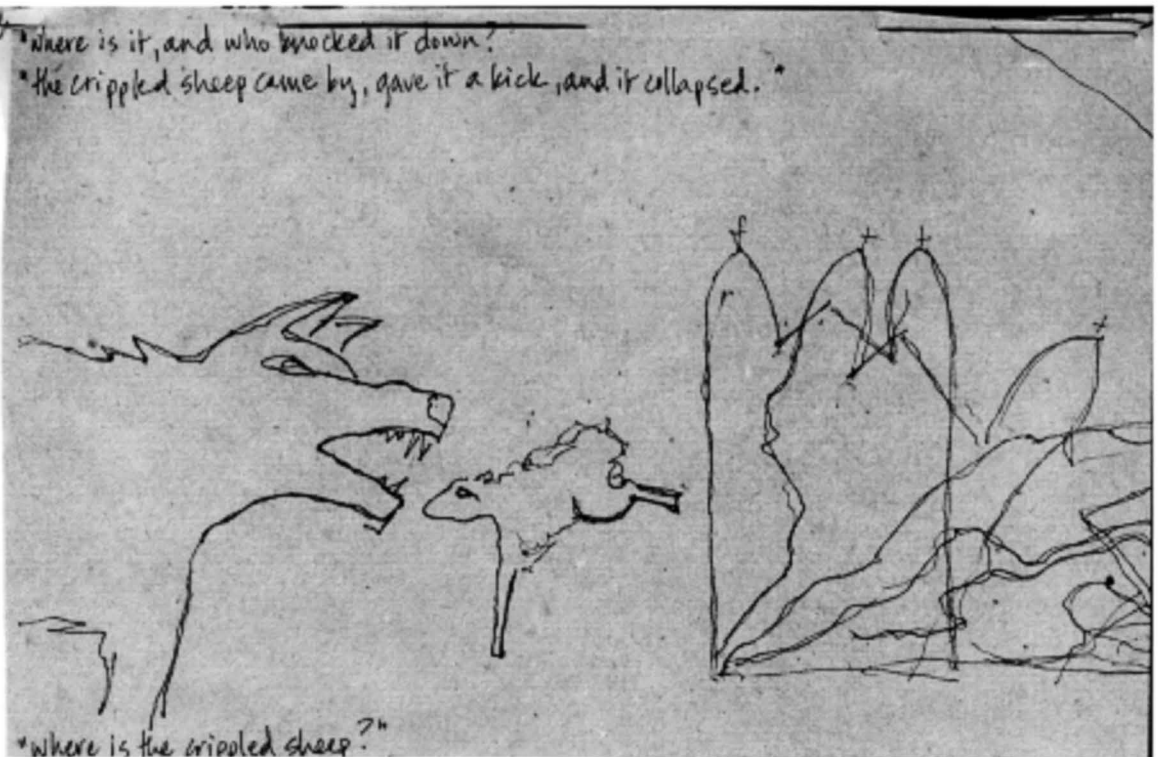
"where is it thrown away?"
 "we tossed it in the fire; it burned up."

"Where are the ashes?"
 "the old church was patched with them."

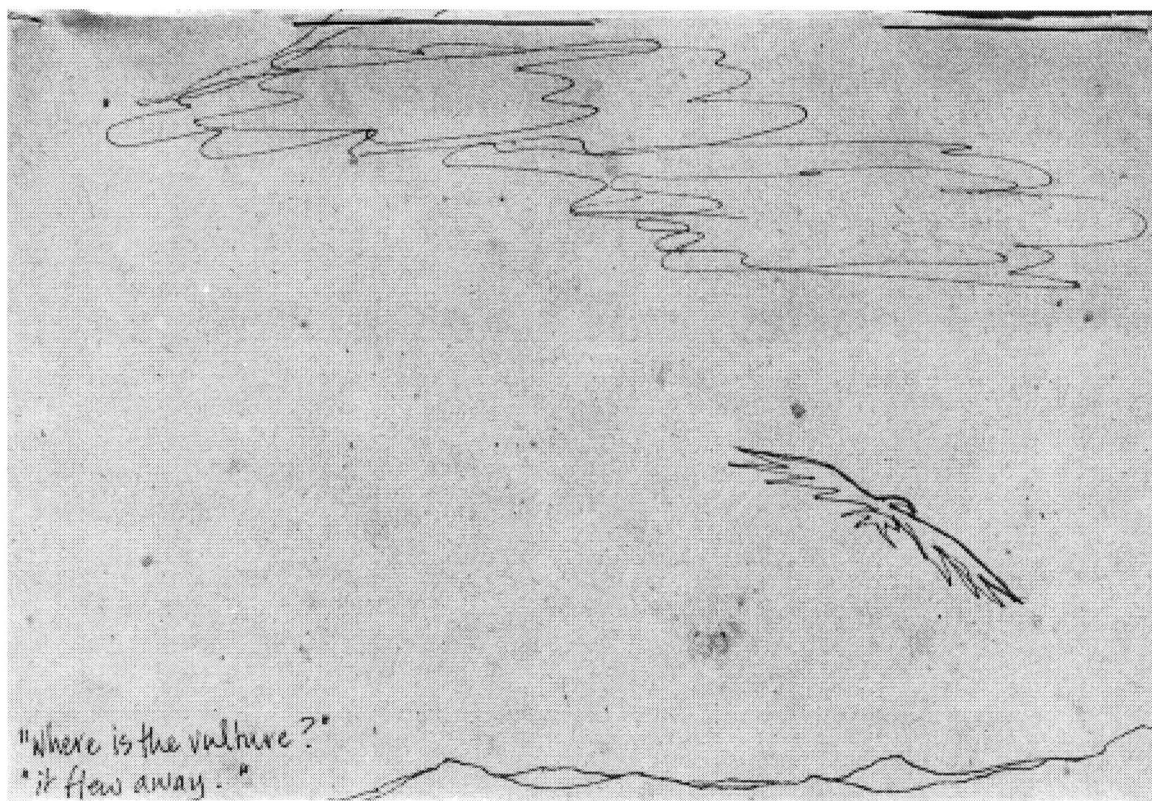
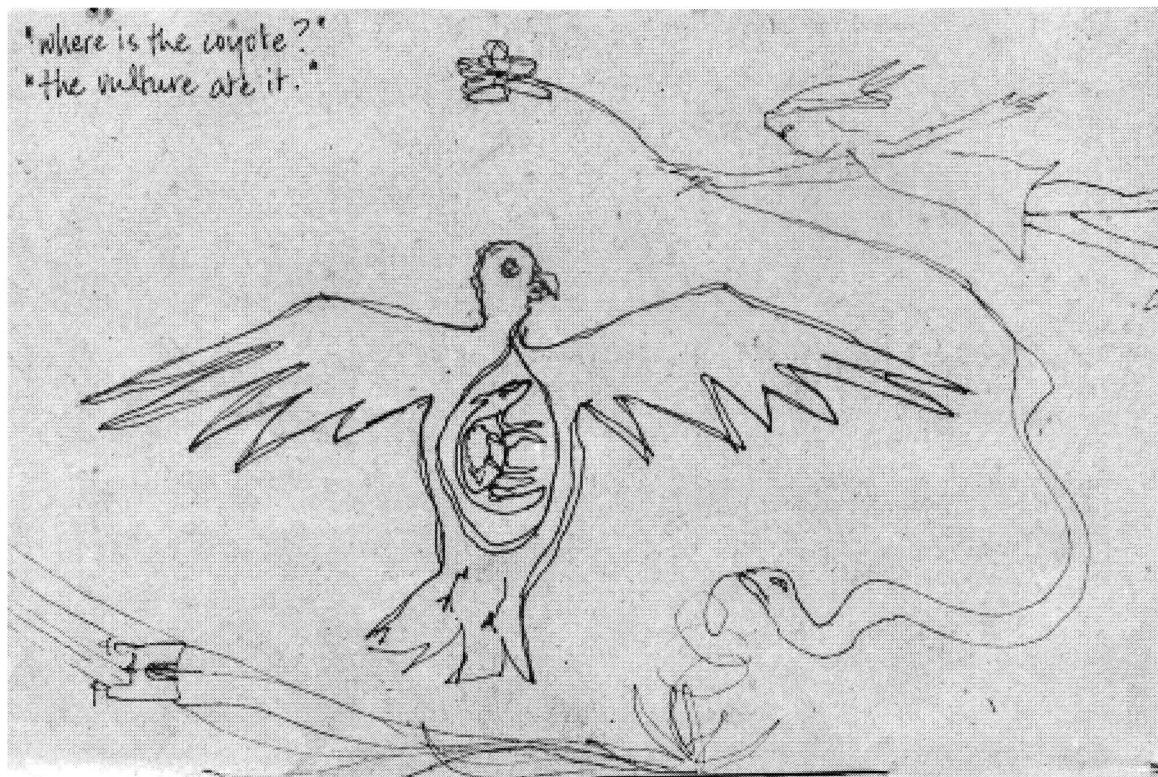


"Where is the old church?"
 "it collapsed."

"Where is it, and who knocked it down?"
 "the crippled sheep came by, gave it a kick, and it collapsed."



"Where is the crippled sheep?"



tshakapesh and the elephant monster

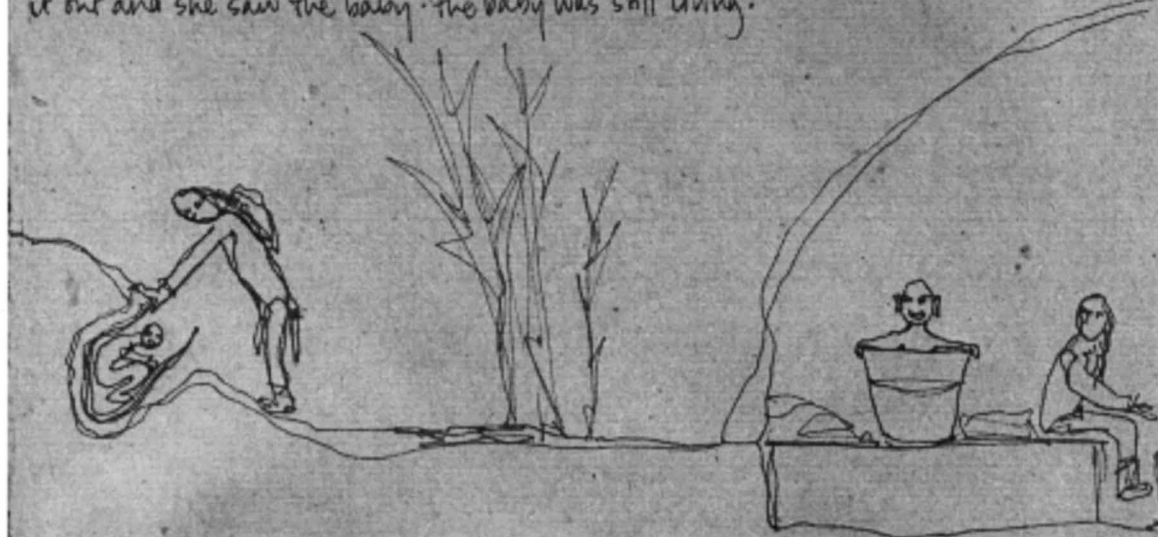
an innu tale — as told by joseph rich

An innu man went out to get snowshoe frames with his wife. they left their daughter at home



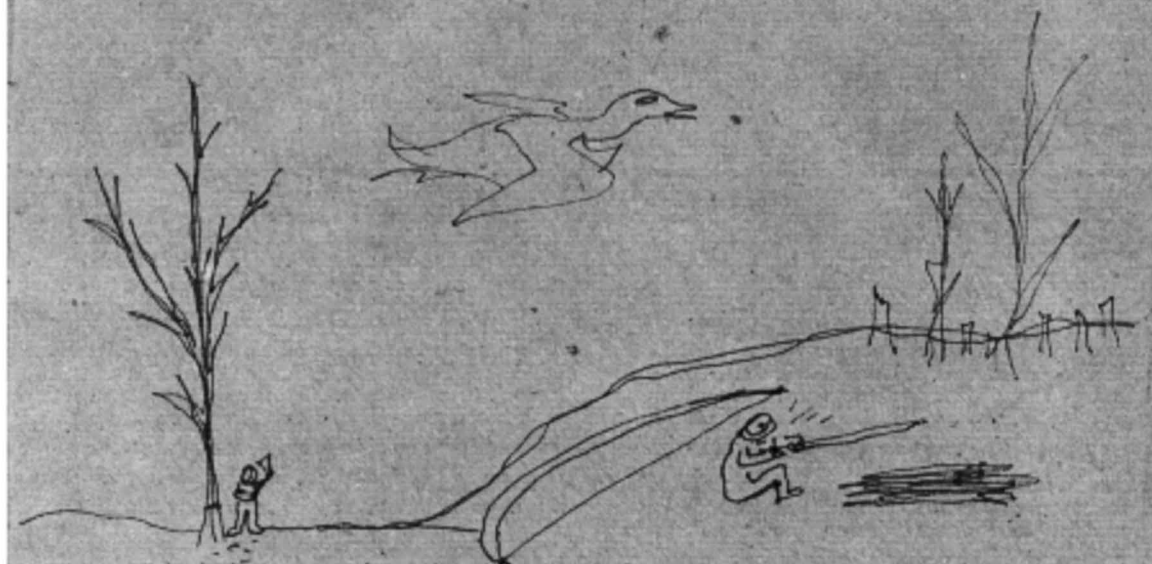
and the elephant monster heard someone cutting trees. he went out to search and he saw the man and the woman making snowshoe frames. then the elephant killed and ate them. he ate the man first. when he started to eat the woman, he saw inside her and thought she was crippled. he took out her womb and threw it in a snowbank. he did not know that there was a baby inside. the baby was called tshakapesh.

The little girl wondered why her parents did not come home. then she knew that they had been killed by the elephant. she wondered what had happened to the baby that her mother was going to have. the girl started looking for the baby and she saw the place where her mother and father had been killed. then she saw the womb in the snowbank. she dug it out and she saw the baby. the baby was still living.



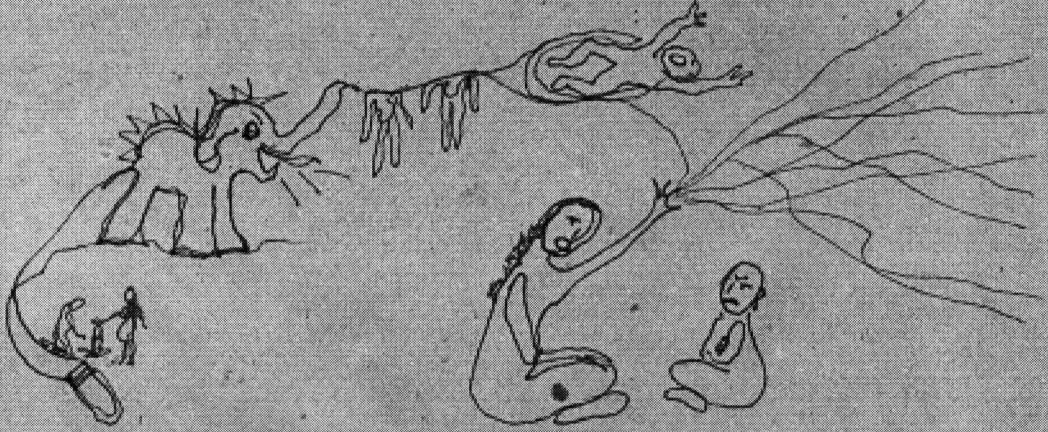
she took him home and she put him in a bucket and raised him and the baby grew up very fast.

she made a little bow for the baby but the baby broke it and tshakapesh said to his sister, "I am going to make myself a real bow."



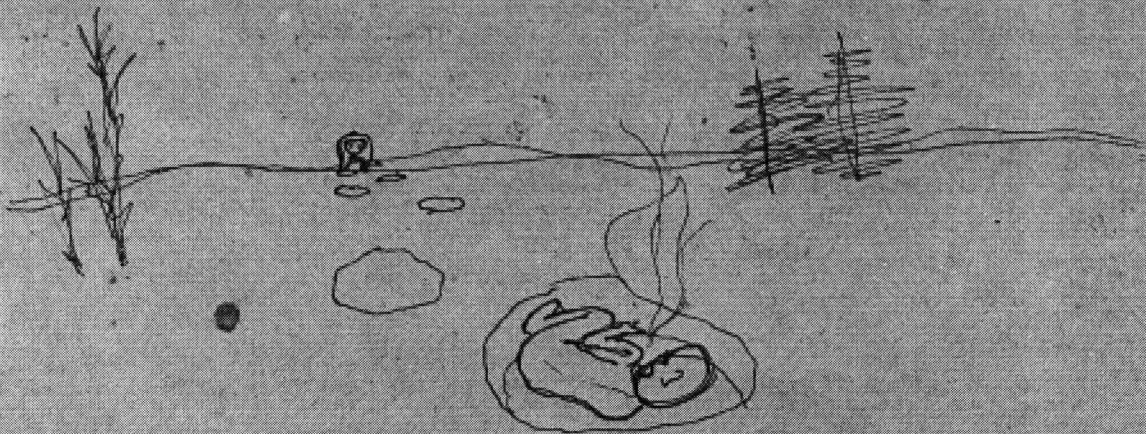
tshakapesh took the axe and went out. he cut down a big bird tree and he used the whole tree for his bow. he cut small trees for arrows and he carried them home. when he finished his bow and arrows, tshakapesh said, "now i can go hunting for squirrels."

then he remembered seeing a crooked knife in the house. he wondered how his sister had gotten the crooked knife, and he started to wonder where they had been born. when he asked his sister where she had gotten the knife, his sister told him that his father and mother had been killed by the elephant. "but the elephant did not eat you," she said. "so i went out and looked for you and saved your life." and tshakapesh said, "sister, shut up. you're making me frightened."



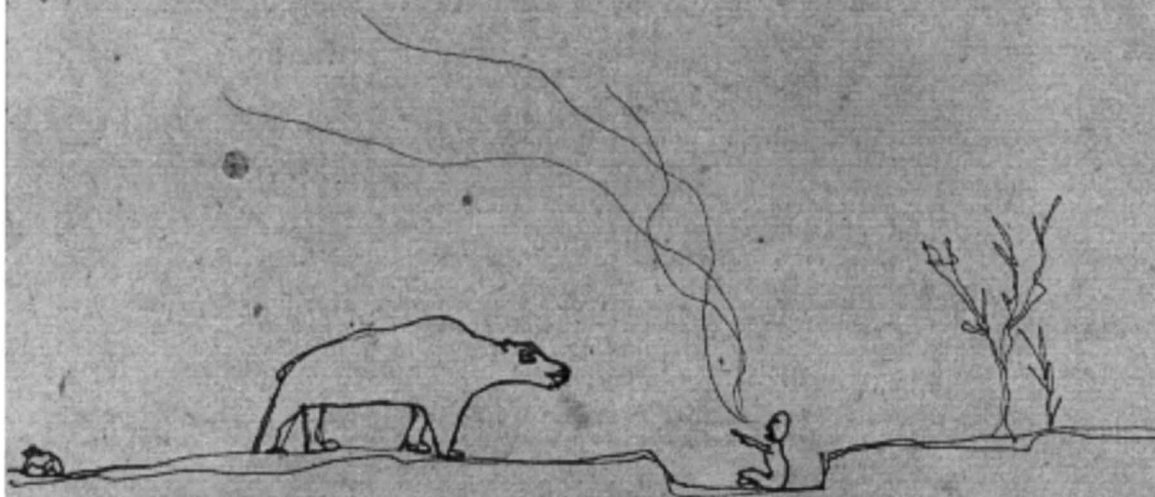
his sister said "don't go near that place." "okay," said tshakapesh. "i will not go over there."

then tshakapesh went over there, to the place where his father and mother had been killed. he saw the tracks of the elephant and tshakapesh sang, "i want to meet the elephant."



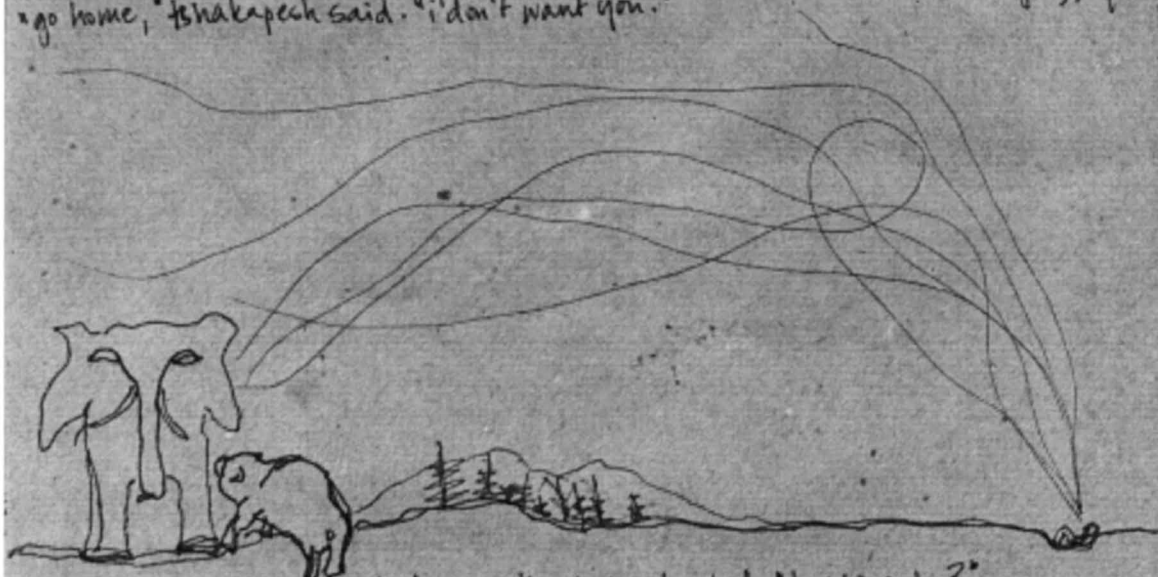
the elephant heard tshakapesh singing and he said to the black bear, "go out and get him and break him up." tshakapesh was lying down in the elephant tracks when he saw the bear coming.

"are you the elephant?" he said. the bear said "no."
 "go home," said tshakapesh. "i don't want you. i want the elephant."



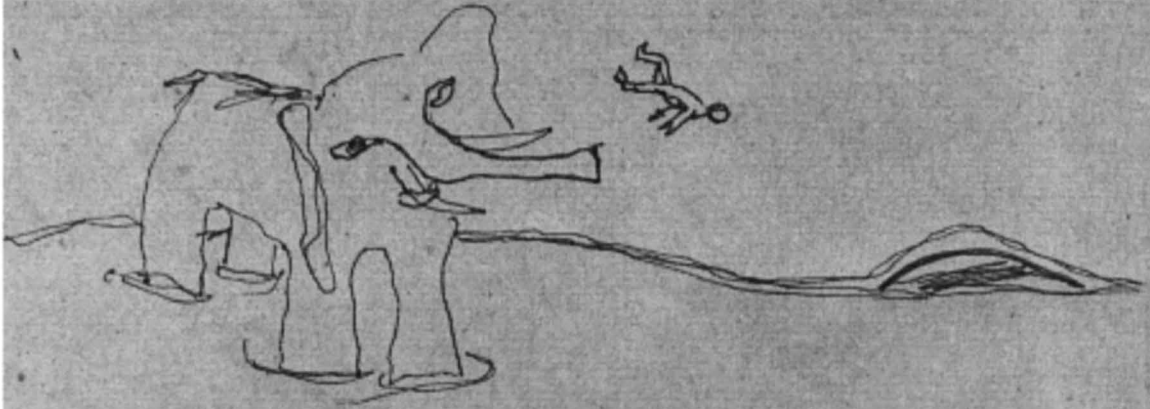
and tshakapesh sang again. "i want to meet the elephant." so the elephant sent the polar bear to go out and break him up. when tshakapesh saw the polar bear, he asked, "are you the elephant?" "no, i am not the elephant. my name is polar bear."
 "go home," tshakapesh said. "i don't want you."

tshakapesh sang again. this time he sang louder. the elephant told the grizzly bear to go out and break him up. tshakapesh saw the ugly grizzly bear coming toward him but he was not afraid. "are you the elephant?" he asked. "no," said the grizzly.
 "go home," tshakapesh said. "i don't want you."



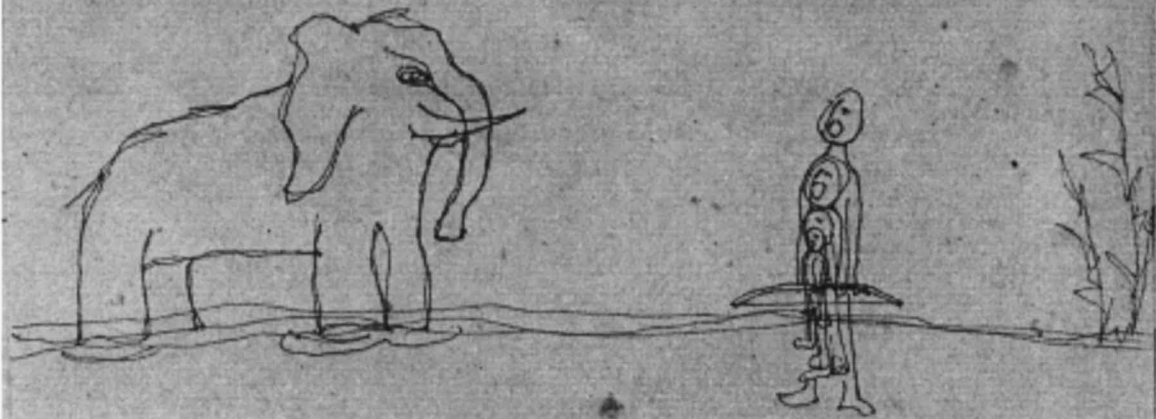
when the grizzly bear reached home, the elephant asked, "how big is he?"
 "he is not big," the grizzly bear said. "he is lying down in your footprint."
 "if he wants to see the elephant," said the elephant, "i shall see him."

the elephant got up and took a step and shook the earth. tshakapesh knew when the earth shook that the elephant was coming, but he still sang. when he saw the elephant he stopped singing and he wished that the elephant would not bite him and he wished that the elephant would throw him to the place where he had buried his bow and arrows. the elephant picked up tshakapesh and threw him.



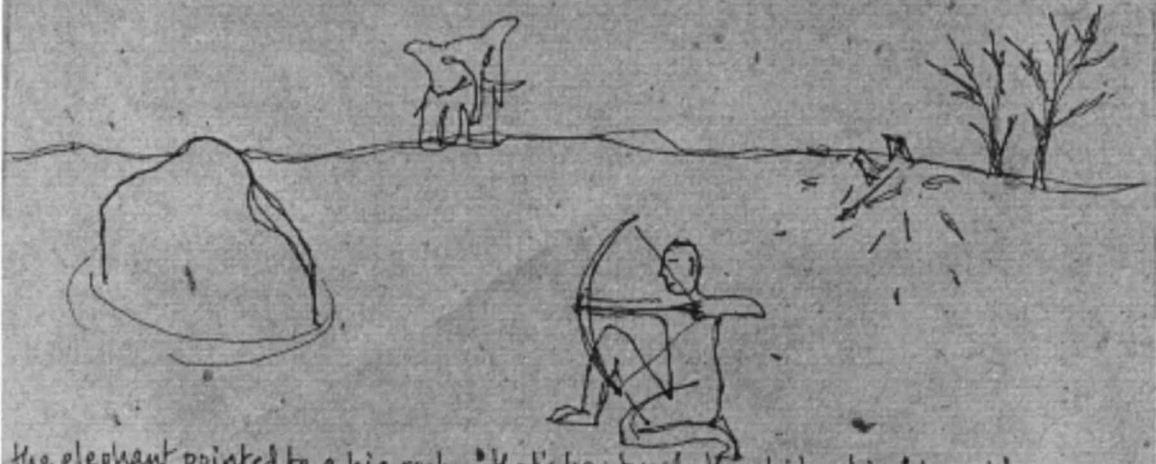
this time he threw him right to the place where he had buried his bow and arrows.

tshakapesh picked up his bow and arrows and started to talk to the elephant. as he was talking to the elephant he began to grow.



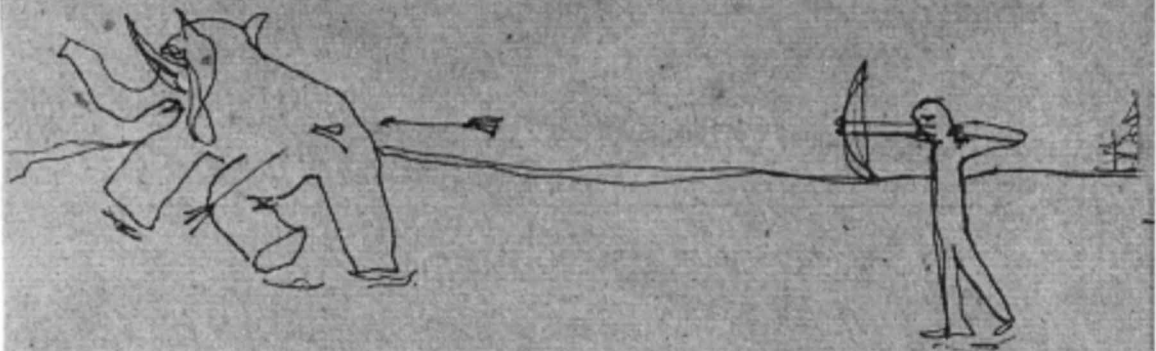
he asked the elephant how far he was.

"see that big tree over there?" said the elephant. "that's how tough the elephant is." tshakapesh shot an arrow at the big tree. when it hit the tree it knocked it down and broke it into pieces.



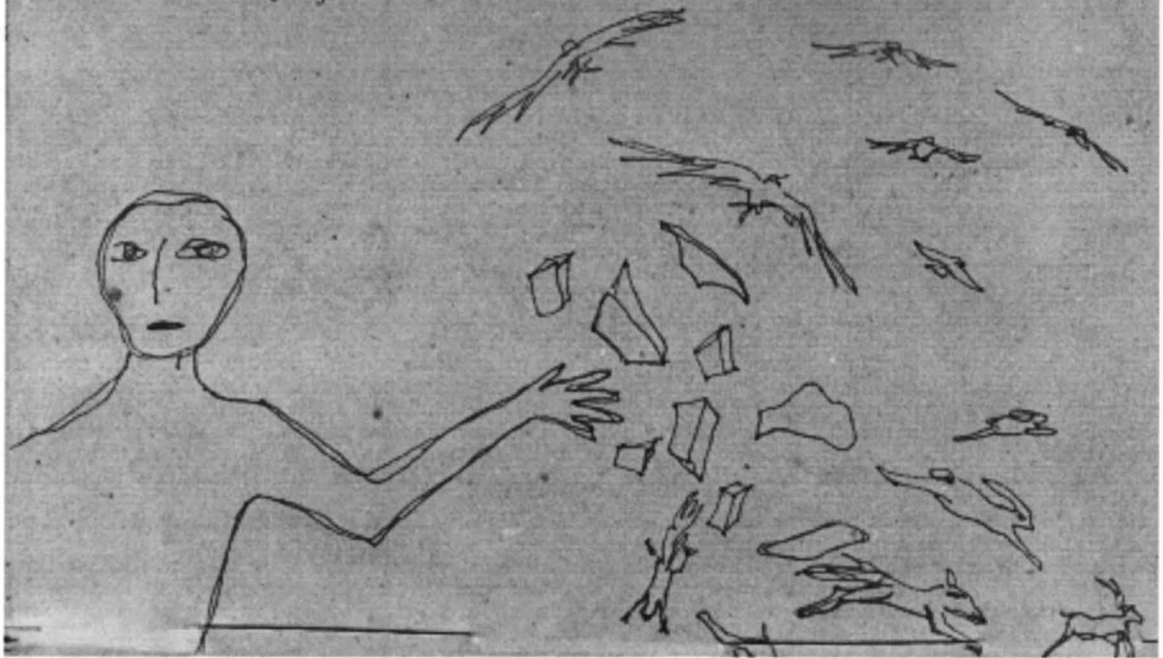
the elephant pointed to a big rock. "that's how tough the elephant is," he said. tshakapesh shot the rock with his bow and arrow and broke it into pieces.

when the elephant saw this, he began to be frightened. he tried to run away from tshakapesh. tshakapesh shot the elephant in the hip. then he hit him in the other hip and the elephant went down.

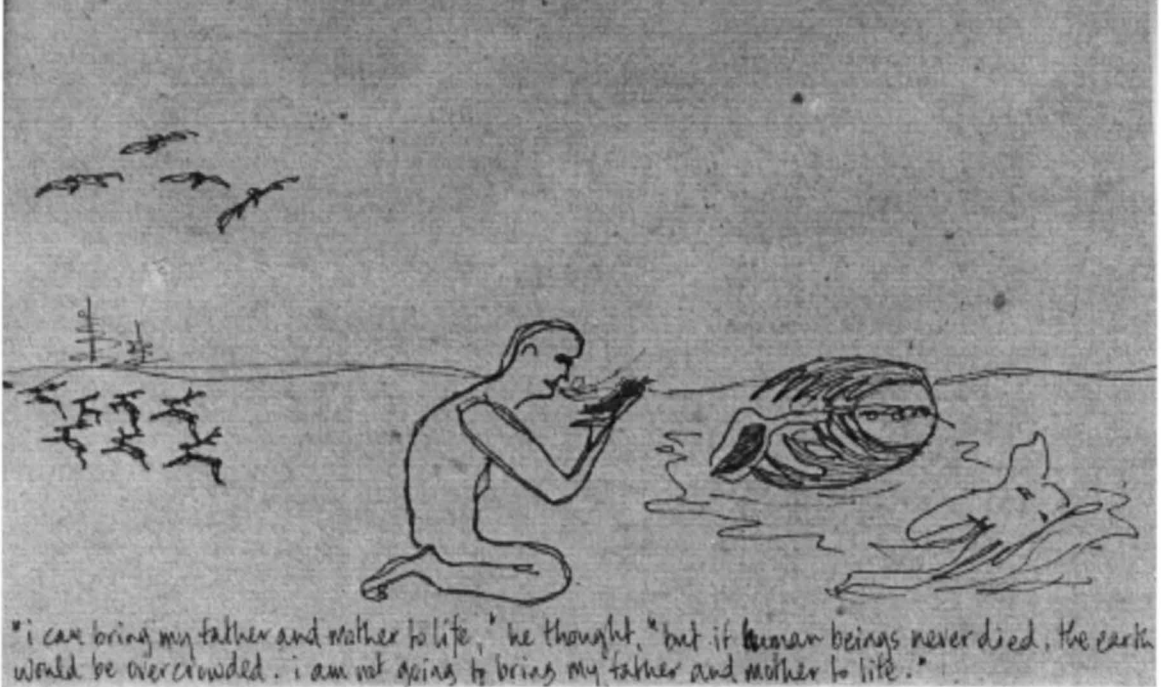


"you got me," the elephant said. "after i die, cut my flesh in small pieces and throw the pieces all over the place. take home only my ears and my head."

and tshakapesh killed the elephant. he cut up the flesh into small pieces and threw them all over the place and they turned into all kinds of birds and animals. then he said, "i am going to keep his ears for mattresses."

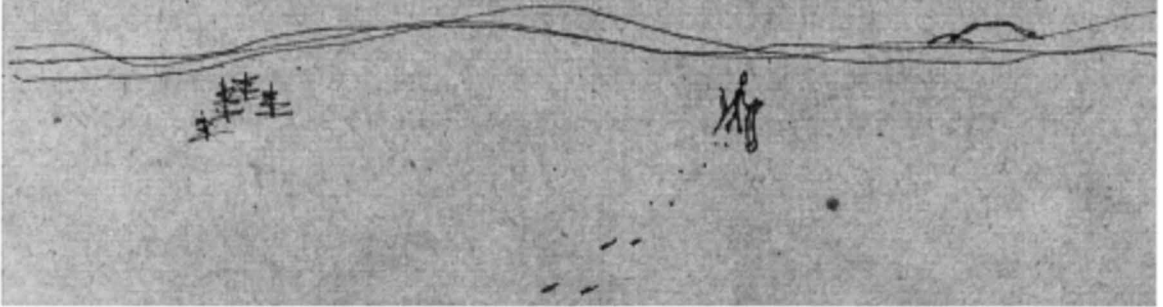


when he cut open the belly of the elephant, he saw hair inside. it was from his father and mother. tshakapesh blew on the hair and it was still alive.



"i can bring my father and mother to life," he thought, "but if human beings never died, the earth would be overcrowded. i am not going to bring my father and mother to life."

then he went home.



Appendix 2

A. Buckminster Fuller's Typical language of design of essential philosophy universal architecture

B. GEAM's Programme for a mobile architecture

A: R. BUCKMINSTER FULLER,
TYPICAL LANGUAGE OF DESIGN OF ESSENTIAL PHILOSOPHY
UNIVERSAL ARCHITECTURE

Angular modulus of unification.

Metrical measure for radial or time distances.

Flexible joints for force intercourse.

Unity of assembly contact = 'hook up'.

Segregation of function with specific solution in terms of dynamics, with transportability, availability, workability.

Centralisation of mental activity - decentralisation of physical activity (either personal or communal or industrial).

Maximum lightness - consistent economy.

Up and out (fountain like = delinquency).

Use forces - do not fight them.

Material structure essentially functional - harmonies mobile and abstract from zero to selective sense limits.

Progress by creation - by increase in volume.

Complete independence of survival and sustenance bespeaking communities of choice not imposition.

No secrets.

High longevity through flexure and load flow in tension.

One for all and all for one.

Specific longevity consistent with economic adequacy and industrial continuity, citable each unit of composition.

Relatively immediate availability in time or space - mutability and mobility.

Whole composition or unit thereof.

from "Universal Architecture," 1932, as quoted in Programs and manifestoes on 20th Century architecture, Ulrich Conrads (ed.)

B: GEAM (Groupe d'études d'architecture mobile)

PROGRAMME FOR A MOBILE ARCHITECTURE

A. The catastrophic difficulties of modern town planning are the outcome of a series of factors that may be characterised as follows:

1. Existing constructions and those still being put up today are too rigid and difficult to adapt to life as it is lived.
2. The growth of the population is unpredictable and cannot be planned for.
3. Traffic is increasing beyond all bounds.
4. Property rights are outdated and patterns of ownership have in many cases become petrified.
5. The price of dwelling units is too high.
6. There is an ever increasing discrepancy between town and town planning on the one hand and the rapid advance of science and technology on the other.

B. The daily life of the population is suffering as a result of these conditions. This may be seen from the following phenomena:

1. Traffic is congested and at certain times of day comes almost to a stop.
2. Dwellings have to some extent become brick prisons for families.
3. The weekend flight into the open air is constantly assuming greater proportions.
4. The rhythm of the individual's life is imposed upon him and it is virtually impossible to mould one's own environment.
5. A great number of city dwellers feel lonely and isolated.
6. Neighbourhoods have come into being entirely haphazard and remain difficult to influence.

C. For the general improvement of these conditions GEAM has established certain principles and makes the following proposals:

1. Reform of property rights in building land and air space with a view to achieving easier interchange. Introduction of a system of stratified utilisation of air space by the inhabitants.
2. Constructions should be variable and interchangeable.
3. The spatial units produced by these constructions should likewise be alternable and interchangeable in their use.
4. The inhabitants must be given the opportunity to adapt their dwellings themselves to the needs of the moment.

5. Industry and prefabrication must be utilised to the full in the manufacture of the constructions as a means of lowering prices.
6. Town and town planning must be capable of adaptation to the development of traffic.
7. Residential and work places, as well as areas for physical and spiritual culture must be intermingled throughout the individual sections of the city.

D. In order to put the aforementioned principles into practice, GEAM proposes elaboration of the following techniques:

1. Development of variable and interchangeable elements of construction, as for example:
 - (a) exterior walls
 - (b) interior walls
 - (c) movable floors and ceilings.
2. Development of easily altered means of supplying buildings with power and water and the disposal of garbage.
3. Development of larger town-creating spatial units, such as:
 - (a) interchangeable containers (travelling, flying, floating)
 - (b) buildings on rafts
 - (c) buildings bridging over spaces
 - (d) air conditioned open spaces.

“Programme for a mobile architecture,” 1960, as quoted in Programs and manifestoes on 20th century architecture, Ulrich Conrads (ed.)

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