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**UMI**



# **mobile home**

by

**Keith Tetlow**

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

**MASTER OF ARCHITECTURE**

**Department of Architecture  
University of Manitoba  
Winnipeg, Manitoba**

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**MOBILE HOME**

**BY**

**KEITH TETLOW**

**A Thesis/Practicum submitted to the Faculty of Graduate Studies of The University  
of Manitoba in partial fulfillment of the requirements of the degree**

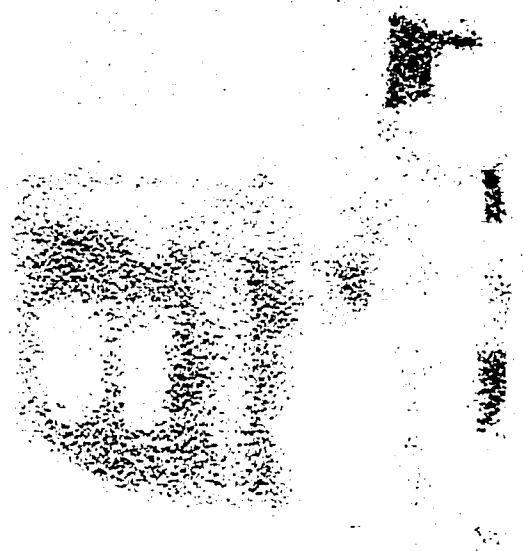
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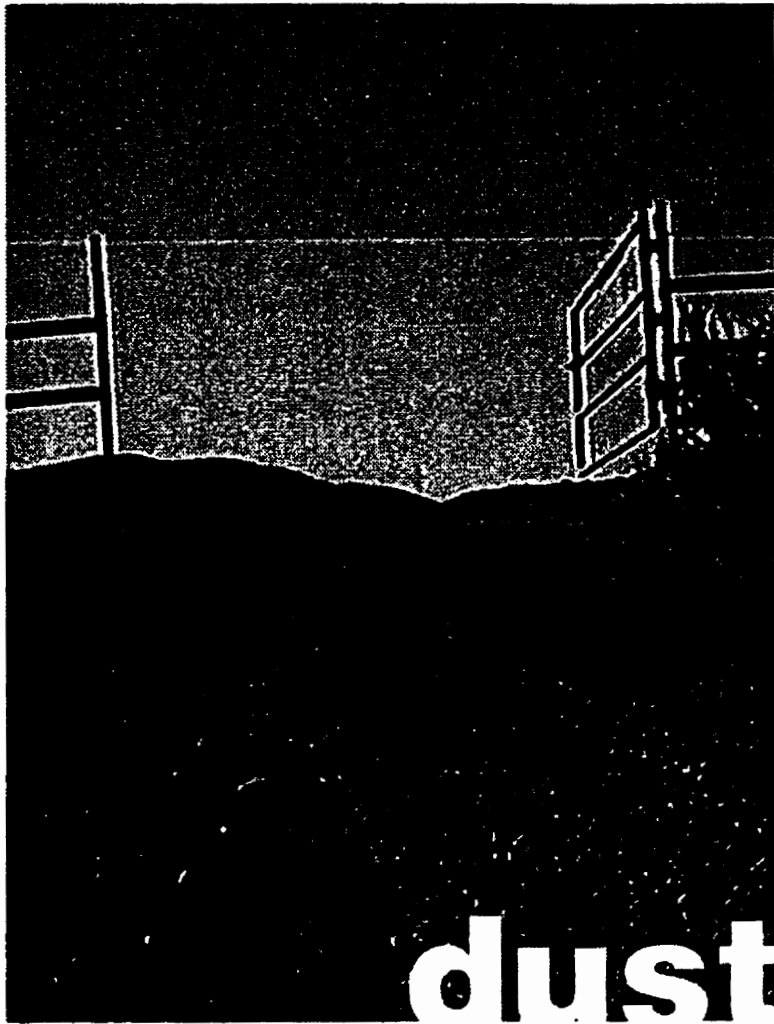
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### **abstract**

This thesis is an exploration of the transversality of and between the concepts 'mobility' and 'home' that is embodied in the Mobile Home as a building type. This is investigated through the work of Le Corbusier, Allan Wallis, Iain Chambers, Paul Virilio, Gilles Deleuze and Felix Guattari, Nigel Thrift, Tim Cresswell, Marc Augé, Brian Massumi, Kim Adams, Andrea Zittel, Richard Misrach, David Rigsbee, Bruce Chatwin, and others. It is an ambulatory voyage through the works of these artists and authors, set against the evolution of the Mobile Home as conceptual framework and American industrially manufactured building type. The work is written from the perspective of one interested in uncovering the implications for the theory, understanding, and design methodology of architecture and design.



**...trailers are famous for what they do not  
do (except once),**

dust.



**as though in deferring the freedom that  
mobility advertises, they perpetuate a  
fantasy of flight**

dust.



**not a fantasy that necessarily crystalizes  
into (even) a dream,**

dust.



**but one that lurks in the backwaters of  
consciousness, prepared to move to the  
forefront in the shape of hope, should the  
need arise...**

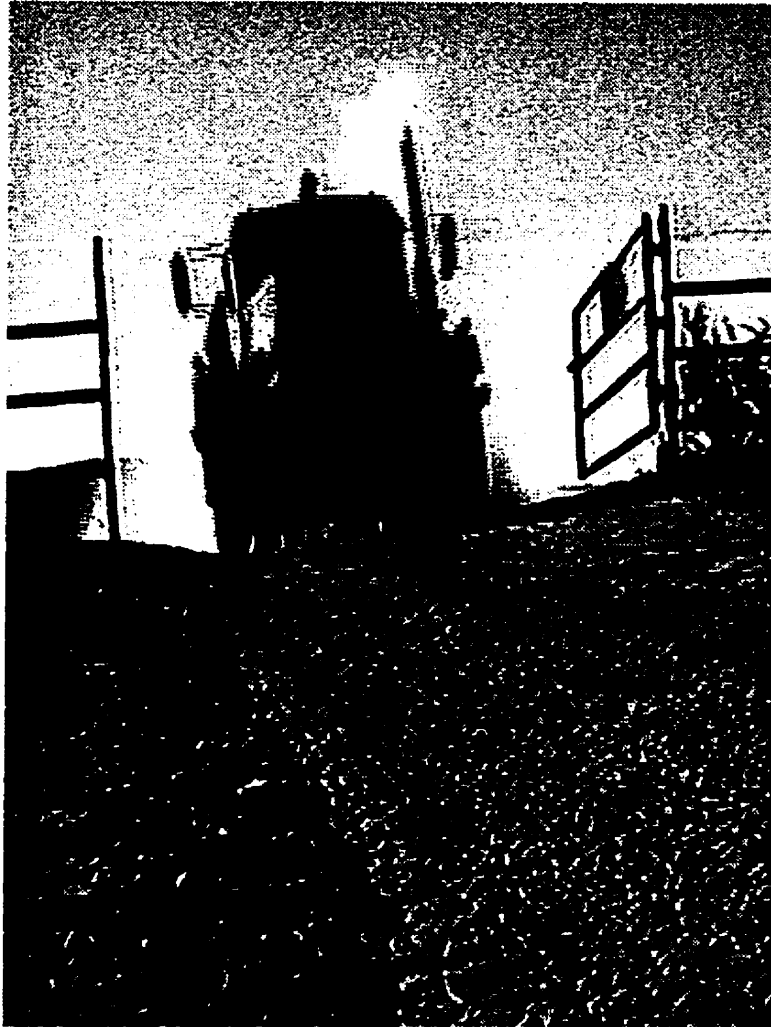
dust.



**The fact of the matter is that the need  
arises constantly.**

dust.





**It has already risen many times over, and  
it stands to rise again.**

*Just.*



**This need, like the fantasy of flight, stays  
aloft within the consciousness the way  
dust raised behind a truck  
maintains its virtual levitation long after the  
truck has driven away.**

dust.



**One wonders what prevents the dust from following, except that it is part earth, part air, part light and darkness, nothing of its own. Always borrowing, expanding,**

**depending, devoid of any essence, it constitutes a perfect dreaming range, not the property of anyone in particular, so the air can never be said to be really clear of it.**

*dust.*

**we also recognize the image of ourselves.**  
**in this dust, in which we recognize the**  
**shape and dream of our need,**  
**dust.**

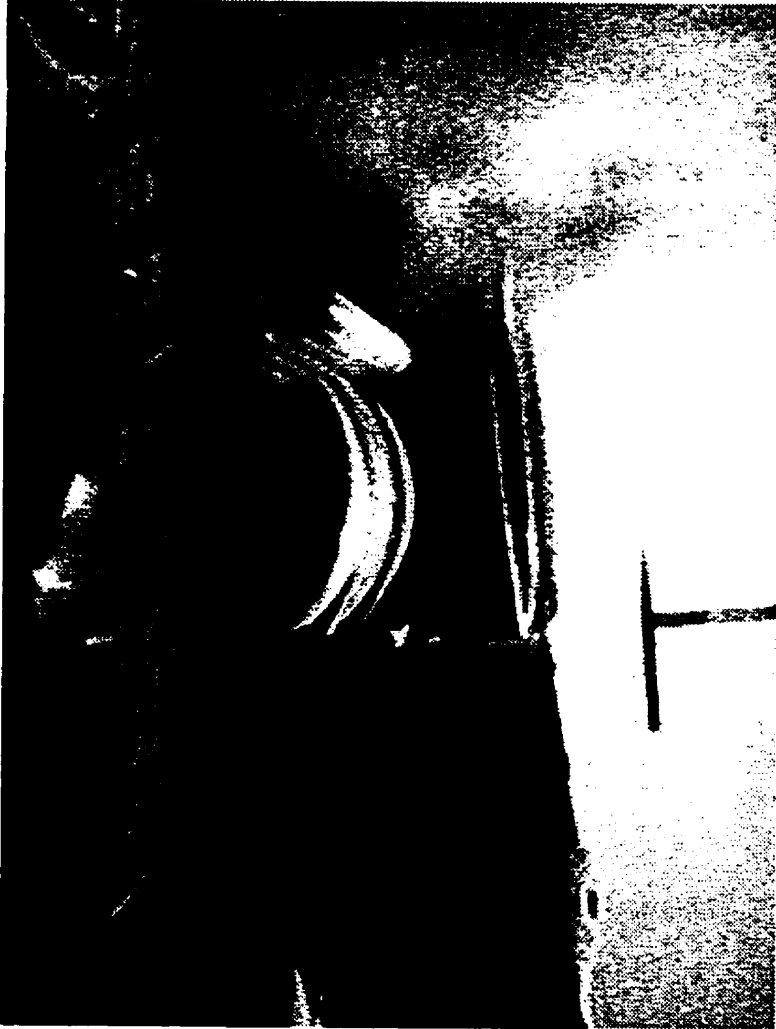




**We are dust.**

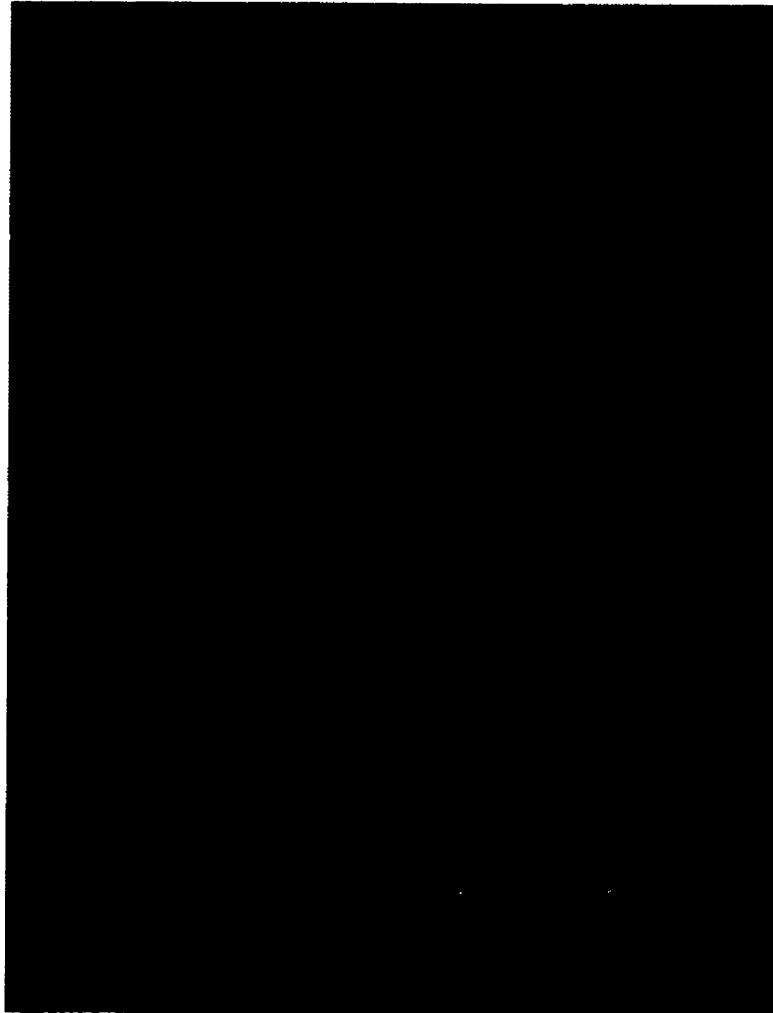
dust.

**So are our creations,  
including structures  
both "mobile" and  
earth-bound,**  
dust.





**for indeed, since we make them from our  
own inadequacies,  
why should they fare better than we?**  
dist.



**text by David Rigsbee, *Trailers*, p.44**  
**images from the movie *Duel*, 1974**  
dust.



# mobile



photo by Carol Burch-Brown, Trailers, p.7

by Keith Tetlow

# home

Give me Land, lots of land under starry skies above,  
Don't fence me in.  
Let me ride through the wide-open country that I love  
Don't fence me in.  
Let me be by myself in the evening breeze,  
Listen to the murmur of the cottonwood trees,  
Send me off forever, but I ask you please,  
Don't fence me in.

Just turn me loose,  
Let me straddle my old saddle underneath the western skies.  
On my cayuse,  
Let me wander over yonder till I see the mountains rise.  
I want to ride to the ridge where the west commences,  
Gaze at the moon till I lose my senses,  
Can't look at hobbles and I can't stand fences,  
Don't fence me in.

Cole Porter



photo by Ansel Adams, Yosemite National Park

**“If a man owns land, the land owns him.”**

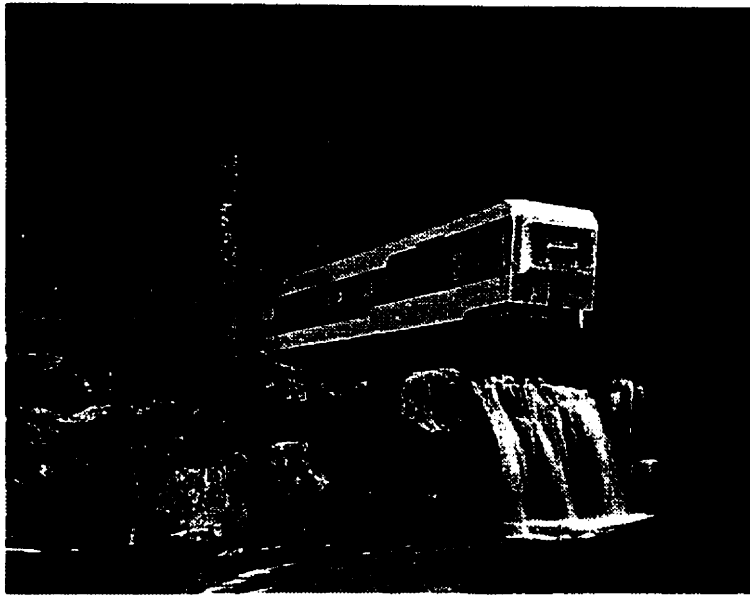
Ralph Waldo Emerson Wealth 1860



photo by Ansel Adams, Yosemite National Park

**“Architecture must be *of* the hill rather  
than *on* the hill.”**

Frank Lloyd Wright



**“Less is More.”**

**Meis van de Rohe**





**special thanks**

**to Rafael, Rob and Richard. (Reading Riting and Rithmatic...  
there's a joke just waiting to happen there...) The best as well as the  
most interesting thesis committee that I could have ever wished for.**

**And most especially to Laine who has not divorced me.**

**Useless to ask a wandering man  
Advice on the construction of a house.  
The work will never come to completion.**

Chinese Book of Odes



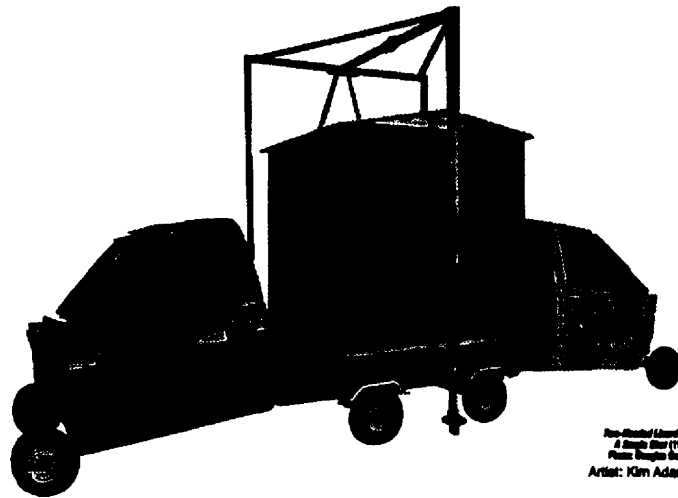
**August 1999**

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# Table of Contents

<b>12</b>	Dust	<b>1</b>
<b>15</b>	Renovations	<b>14</b>
<b>0</b>	<b>Introduction</b>	<b>26</b>
<b>1</b>	<b>Castles</b>	<b>33</b>
<b>2</b>	<b>the Mobile Home</b>	<b>43</b>
<b>3</b>	<b>Timeline</b>	<b>49</b>
<b>4</b>	<b>the US Mobile Home Industry</b>	<b>65</b>
<b>5</b>	<b>Mobile Modern Home</b>	<b>111</b>
<b>8</b>	america	<b>129</b>
<b>6</b>	<b>Postmodern</b>	<b>142</b>
<b>14</b>	smooth space	<b>144</b>
<b>7</b>	<b>Lightening Architecture</b>	<b>166</b>
<b>11</b>	screen	<b>170</b>
<b>13</b>	lightning	<b>185</b>
<b>9</b>	<b>Cause and Effects (mobility)</b>	<b>198</b>
	1. Blurring and Excess Mobility	<b>200</b>
	2. Displacement of Fixity: Non Place	<b>203</b>
	3. Spectacle and Solitude	<b>217</b>
	4. Nomadic Perception and Ontology	<b>223</b>
	5. Lightening: Virtualization: Form	<b>229</b>
<b>7</b>	<b>Lightening Architecture (con't)</b>	<b>233</b>
<b>10</b>	<b>Fogs and Doppelings</b>	<b>241</b>
	<b>Bibliography</b>	<b>256</b>



Two-Wheeled Cabaret and  
A Simple Star (1987)  
Plexiglas, Enamel, Brass  
Artist: Kim Adams

## **introduction**

The character of the Mobile Home is represented perfectly in its name. The terms 'mobile' and 'home' represent a pair of polarized opposites. 'Home' houses conservative issues of identity, meaning, attachment; whereas 'mobile' insinuates action, mutability, fluidity, dynamism and potential. When put together, these terms possess a tension - a charge - that creates a field of disturbance. This book is an investigation of this field.

The Mobile Home as a building type is removed from monumentality by all counts. It is mass-produced, quickly and cheaply manufactured, non-personal, and most importantly holds on to the potential of displacement. It therefore casts away any romantic pretense of attachment to place. Rootless by definition the mobile home is the antithesis of the castle, although what it is exactly to those who inhabit them defies easy definition. The mobile home does retain an almost schizophrenic spirit, coming as it does from the recreational vehicle, it retains a nomadicism which acts in conjunction with the actual thinness of the walls to create a kind of neutrality which borders on disappearance. However, they are homes, and as such are subject to the extremely demanding personal and idiosyncratic housing requirements: requirements that are generally associated with rootedness, permanence, and the establishment of the intrinsically conservative nature of place and place attachment. The mobile home industry, partially in response to market demands from the general public, and partially to eliminate the 'mobile' in the 'mobile home', is moving away from implied mobility and towards the 'manufactured house' - a quality-controlled but cheaply made factory-built parody of the site-built stick-frame detached single family home that is so dear to the hearts of North Americans.

The Mobile Home has not enjoyed a positive image in the collective imagination of the public representing many of the negative stereotypes of the poor and the disenfranchised. But is it not conceivable that this prejudice is blinding the potential of the mobile home which lies not in how it compares to the traditional house, but

rather in how it does not? That is: does its 'weakness' of 'lightness of being' not in fact represent its greatest asset?

What this book attempts to do is to respond to this question by probing the foundation of Western values, attitudes and prejudices to see if there is any possible way of loosening some of those stones. What happens to the structure if the foundation is removed? Can it stand without bearing on its foundation - can it be free of the 'crushing weight' of monumentality and history?

To begin the investigation, Architecture's relationship with permanence, reliability and stasis must first be investigated. Is there a less territorially motivated way of building and habitation? If so, what are the architectural manifestations of this? What is the nature of a building that has no defined and permanent relationship to a particular place?

The 'permanent' or 'territorial' prerogatives are arguably so deeply ingrained into the social fabric of western culture that they represent core values that are often taken as an unspoken and assumed foundation of our social makeup. It may be that these values unconsciously limit the scope of vision, and prevent seeds of other perhaps incompatible ontologies from taking root, or better yet, from being 'seen'.

Such may be the case for the Mobile Home and its peculiar relationship to Architectural theory and practice. This relationship is characterized not so much by aggressive marginalization or subjugation (although that, too, is apparent) as by an inability to 'see' the value of such a building type. There is overwhelming evidence within the last few years that the mindset that permits the mobile home to be 'seen' as a subject worthy of study is developing: at least within the theory of the architectural 'avant garde'. The shared characteristic of this ontology is a decreased valuation of the formal composition of a building, a basic distrust in stylistic concerns in favour for processual, non-formalized, topological approach. It makes a habit of relinquishing the territorial prerogative that places, the ownership of land, the domination of the environment, and the monumental heaviness of

building in question. It offers, perhaps obliquely, an opportunity for a 'nomadic' approach which is predicated upon potential, rather than on defensive posturing, protective hunkering, and retractive carapacing. It presents a lightning.

To be properly subjective about this analysis, I should be clear that I this investigation has taken on a North American perspective: borrowing as it is want to do from certain European precedents, (which is inevitable for the study of western Architecture), and infusing it with its own peculiar brand of interpretation. The arguments form not so much a static point of view to be 'defended', but rather an interpretation which has by the nature of the work taken on a certain rhizomatic serendipity which, to be honest, has lead to a number of headaches for the author, who has been thoroughly schooled in linear thought. From this path that I have woven through the subject, it is my hope that the nature and potential of 'mobile home' will come out of the work not so much as a series of neat checklist of points to be cross-referenced at the time of design, but as rather a feeling for the subject that borders on intuition. Perhaps a tall order, but one can hope.

Of course, this text is an offering: there is no right or no wrong. I was not, through the course of the writing and researching of this thesis, trying to become a raving lobbyist for the Mobile Home industry. I do not suppose to fundamentally change the way Architecture is seen and appreciated by everyone involved, nor erode the validity of the current or prevalent modes of understanding. I say this not as an advocacy of position or a weakening of stance, but as a purposeful positioning which allows for the appropriation of ideas by the reader as necessary based upon not a dictatorial 'showing of the way' but rather as an introduction to a mode of thinking that could possibly lead to a conscious awareness of the point of view we employ in our understanding of the built environment. To this end, I have avoided reference to specific works of 'famous' architects, for they carry with them a great deal of baggage that may interfere with the path being followed.

A quick note on my use of the term 'mobile home'. As I am using the

**Mobile Home as a vehicle for the investigation of mobility and Architecture, there exists two meanings for the term: one specific to the phenomena of the actual building type, and the other to the conceptual tension between mobility and home. They are heavily intertwined and never completely free from one another, but I have taken to the convention of using capitalization when specifically referring to 'the Mobile Home' as a building type, and purposefully omitting the capitalization when referring to the more generalized, conceptual notion of the term.**

**A final note should be made on the media of the presentation of the thesis. As it is an academic paper submitted to partially satisfy the requirements for a Master's degree in Architecture, this paper was required to satisfy a number of requirements issued by the Department of Graduate Studies at the University of Manitoba. It was my original intention to produce the thesis in the form of a multi-media compact disc which could be viewed over the Internet (which partially explains the abundance of video-captured images). However, due to the unrealistic complexity of such a maneuver for the requirements of the thesis in the given timeframe, it was decided to produce this paper-based document, which has its own set of potentials and difficulties, and which although presenting a linear argumentation, is not necessarily meant to be read in a linear fashion. It's up to you.**

**However the piece is ingested, enjoy lightening up.**





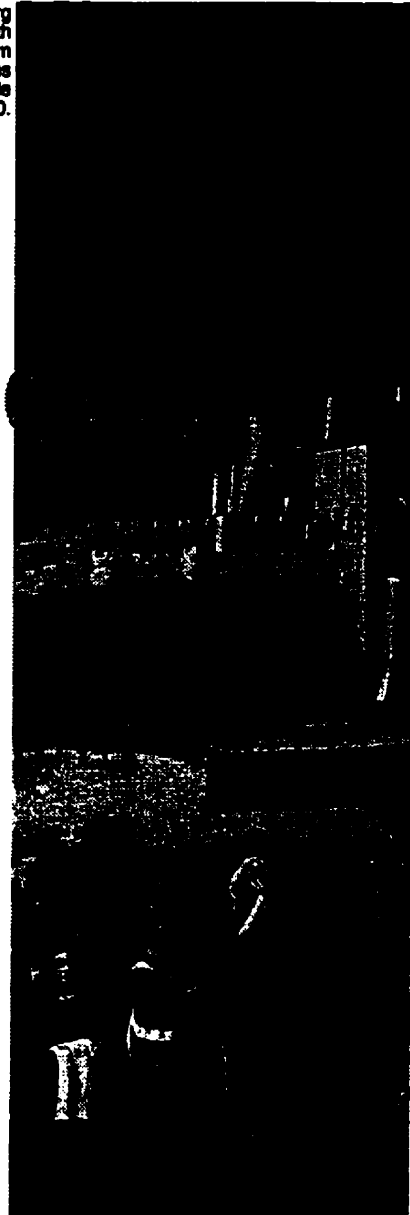
mobile

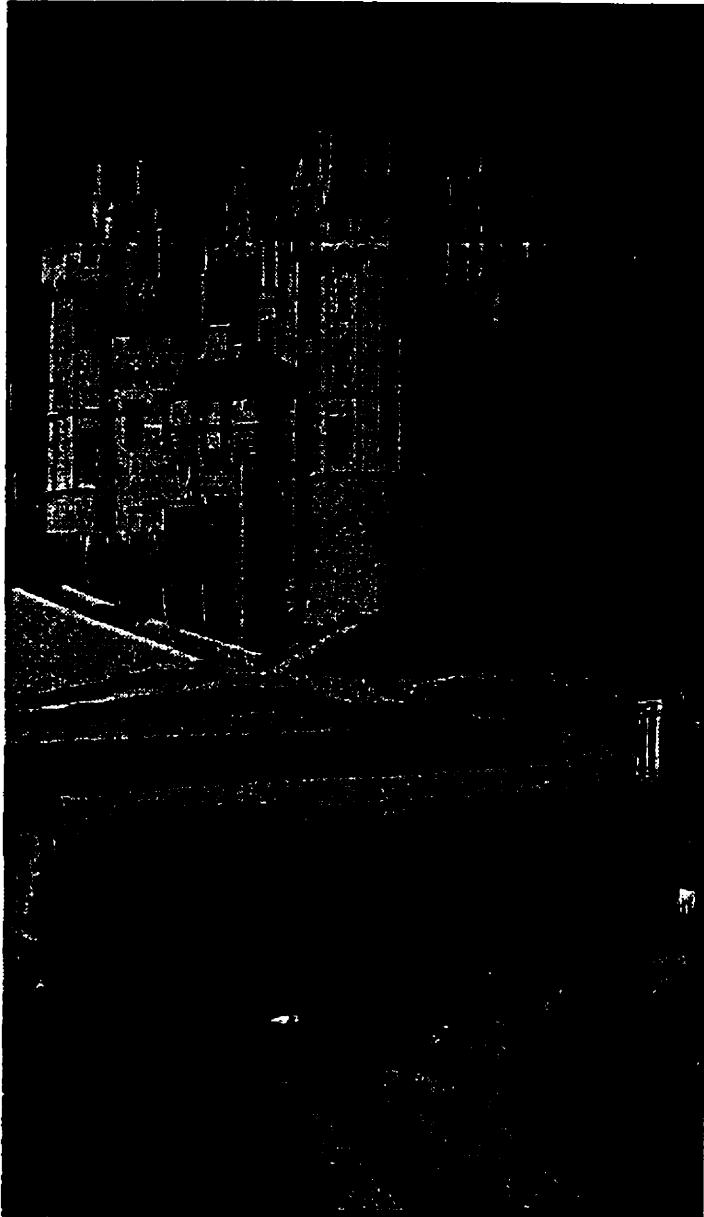


home

The Limbourg  
Brothers' the month  
of September from  
Les Très Riches  
Heures de Duke de  
Berry, circa 1400.

# Castle





1

## **The Castle / The City of Cain**

### **abstract:**

In Western culture, The Castle symbolizes the most potent display of domestic power. It underpins many of the priorities of our society and likewise gives insight into our traditional attitudes regarding domestication and inhabitation. This phenomenon is outlined in the context of the biblical story of Cain and Abel where Cain can be seen as representing the rooted, the worldly, the local and the territorial, while Abel represents the nomadic, ephemeral, transitory relationship between humanity and the physical environment.

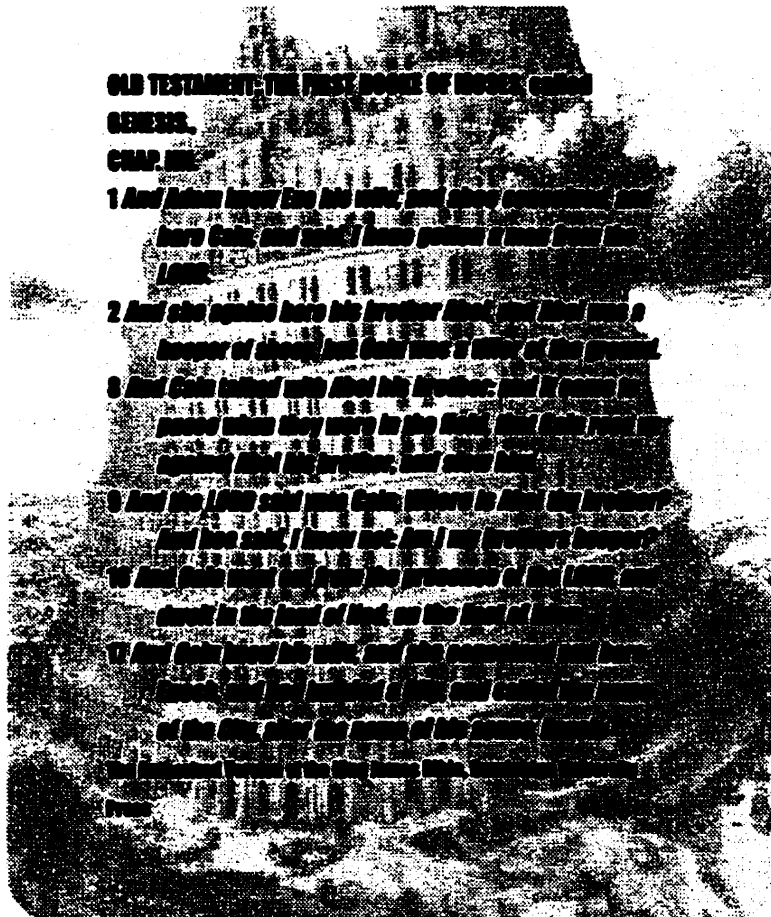
Certain values are arguably so deeply ingrained into the social fabric of western culture that they represent core values that are often taken as an unspoken and assumed foundation of our social makeup. It may be that these values subconsciously limit the scope of vision, and prevent seeds of other perhaps incompatible ontologies from taking root, or better yet, from being 'seen'.

Such may be the case for the Mobile Home and its peculiar relationship to Architectural theory and practice. This relationship is characterized by not so much by aggressive marginalization or subjugation (although that, too, is apparent) as by an inability to 'see' the value of such a building type. Not that architects haven't looked. There is a long list of credible architects, perhaps most notably Paul Rudolf and Walter Gropius that have championed the cause of the industrialized house, but it seems that the Mobile Home as a building type has never been given much credence. Often dismissed with no comment, even where comment should have been made [in the Dream of the Factory Built House, the Mobile Home was mentioned once, except for one paragraph right at the very end of the book] the Mobile Home seemed not even worth the time it took to criticize it.

There is overwhelming evidence within the last few years that the mindset that permits a mobile home to be 'seen' as a subject worthy of study is developing. This is evidenced by the dates of the works in the bibliography. Perhaps there has been a small hole in this area of study - one which is clearly lower than the tide-line, for now that there have been a few channels excavated, the flow of interest has clearly begun.

Like other prejudices, mechanisms controlling their operation may very well be invisible and may only come to the fore and become available for conscious discussion after an investigation into the nature of the marginalization involving that marginalized other: in this case the investigation into the mobile home as a building type, and its relationship with current theory of Architecture.

However, although this process informs this work, I would rather get away from the issues of marginalization and hegemonies as much as possible, and present mobile homes in a fresh light. I'd rather drop all previous attitudes, and start again from the beginning. And what better beginning for western culture than the first book of genesis.



The biblical story of Cain and Abel can provide especially potent insight into the themes of this thesis. As the first sons of Adam and Eve [conceived, of course, outside the garden of paradise], it could be argued that Cain and Abel symbolize members of the most fundamental categorization of the Judeo-Christian society: the "settled" and the "nomadic".

The names of the brothers are a polar pair of opposites. Abel comes from the Hebrew 'hebel', meaning 'breath' or 'vapour': anything that lives and moves and is transient, including his own life. The root of 'Cain' appears to be the verb 'kanah': to 'acquire', 'get', 'own property', and so 'rule' or 'subjugate'. [for more information, refer to Chatwin, Songlines, p 196]

Cain was a farmer. He was, through his tilling of the soil, tied to the land. It is fair to say that Farmers and settlers have always been at war with the external and invasive forces of nature, be they climactic, animal, vegetable or homo sapien. Of critical importance to the success of one whose well-being is invested in a stationary and vulnerable crop is the development of an effective method of defense against these forces. The first imperative is to establish a territory. The second imperative is to ensure that others recognize this territory, and the third is to develop the ways and means of defending the established territory.

Cain's founding of the "first city" can be seen to symbolize the evolution of agrarianism to that of the development of the city and civilization. Indeed, that a "tiller of the earth" should be the same to establish the first city, hints at the developmental continuum between the agrarian and the urban, with its associated territorial primacy. When the first clusters of civilization were built in the fertile crescent, the primary marketplaces were populated by the inhabitants of the adjacent rural areas that had come to the city to sell their wares. Eventually the Secondary industries of commerce and trade developed and with it came the development of the city proper with stores, merchants, and other services. Cities are economic entities that depend on physical proximity for their efficiency so as to facilitate the exchange of physical goods produced by the "tillers of the earth". It is clear that the primacy of proximity became heightened, and the



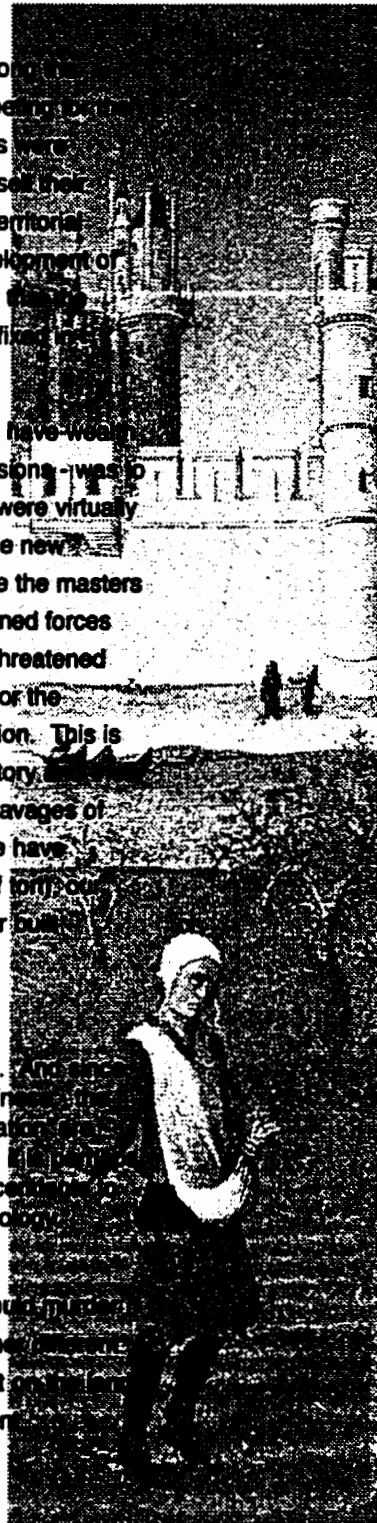
competition for real-estate escalated among the traders and merchants. Instead of competing for the most fertile soil to grow crops, merchants were competing for the locations best able to sell their goods and services. It is clear that the territorial prerogative only intensified with the development of the traditional city for the primary reason that the territories in question were permanently fixed to a geographic location.

In these "traditional" power structures, to have wealth - and wealth in terms of physical possessions - was to have power. Since the wealth and land were virtually synonymous, those that hold power in the new civilization must therefore by definition be the masters of territorial defense and acquisition. Armed forces were necessary to defend continuously threatened jurisdictions, as well as to attack others for the primary purpose of this territorial expansion. This is our Western architectural heritage. Territory and the protection of physical property from the ravages of enemies of a natural or of a social nature have governed the creation of our laws (law of tort); our social structure and our preference in our built environment.

### **The Architecture of Defense**

"Cain' also means 'metal-smith'. And since in several languages - even Chinese - the words for 'violence' and 'subjugation' are linked to the discovery of metal, it is fitting that the destiny of Cain and his descendants be to practice the 'black arts' of technology."  
[Chatwin, Songlines, p.196]

It is symbolically significant that Cain should murder Abel, who, as a shepherd, has an altogether different relationship to the land. He is dependent on the land for his well-being, but it is firstly a transient



relationship: the sheep must move from pasture to pasture to ensure sufficient food. The relationship to the land is the key issue here. If one is to establish a permanent hold on a piece of property, one must have technology as an aid in the "manipulation" of the land. The relationship to the land becomes not one of use alone, but one of manipulation and control; the environment in general must be engaged in a battle for ownership.

What is Architecture's place in a civilization founded on territorial ownership and the act of defense?

Firstly, any Architecture would have to act as an effective means to carry out the functional requirements of this territorial prerogative. It must therefore be defensive; it must be able to withstand the attacks that could be expected. Further, if this architecture were able accomplish this while simultaneously elevating the status of the "owner" thereby advancing their social

standing, and therefore power, then all the better. What acted as the focus; the lightning rod as it were, of this 'empirical' territoriality was the monument. In whatever form, it was the monument that was the symbolic empirical territorial marker.

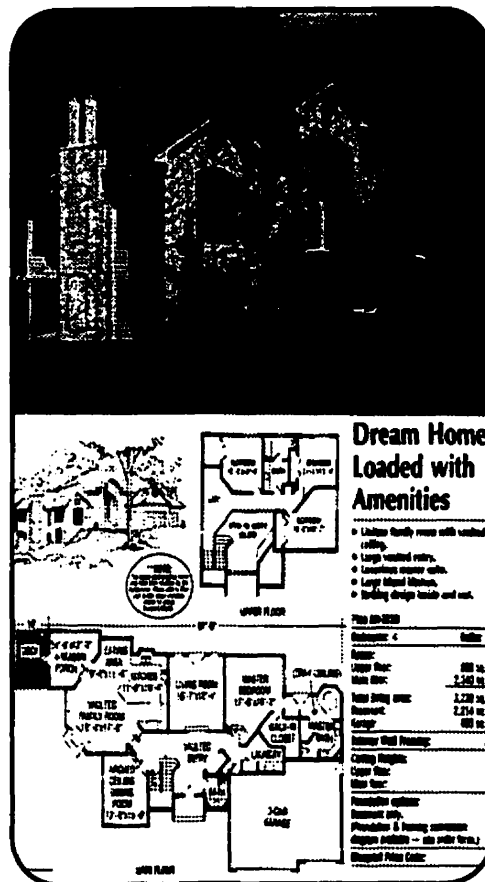


source: internet

The domestic pinnacle of this form of the territorial monumentality is perhaps the Castle or the Chateau.

The castle's rootedness is its defining characteristics. Solid, serious, defensive, indefatigable, unshakable, permanent, ostentatious; in a word, monumental. It is constructed of stone to reflect the desirability of the Vitruvian

firmness, commodity and delight. It is a clear statement of possession - a symbol of uncompromising ownership, and the focus of power. Eventually, it could be argued, the buildings themselves became an integral part of the source of power, as evidenced by the terms "court", "throne"; and if one were to take possession of the territorial building, it would be a very significant step towards securing whatever territory was that building's domain. it was the symbol of territorial



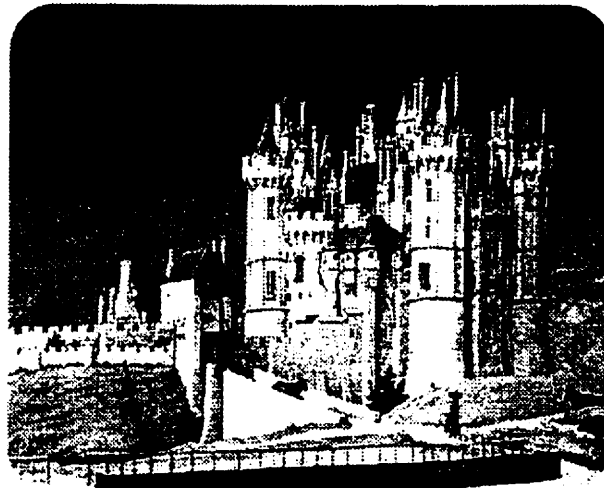
source: best home plans, sunset publishers

dominance, as well as the practical means of attaining and maintaining it.

**This immobility, and the narrowness of the confines containing the sovereign figure, quite literally form a centre that underlines the permanence of the dynasty, and orders and unifies the internal diversity of the social body. [Augé p.63]**

**Although the castle evolved from the medieval seat of power in the military sense, it evolved over the years to represent a far more symbolic ownership of the land through lavish displays of pure wealth. Gone were the ramparts, the loopholes and the drawbridge, but the walls, in a much castrated version stayed, not for the defensive value, but because of the symbolic. The walls aggressively claimed the landscape around the building, subduing the landscape to bondage to the Chateau.**

**As a result of their central position as seats of wealth, power and prestige, the Chateau / Castle evolved as the quintessential 'dream house'. This is the apex to which most domestic building aspires,**



**source: Duc de Berry's Très riches Heures**

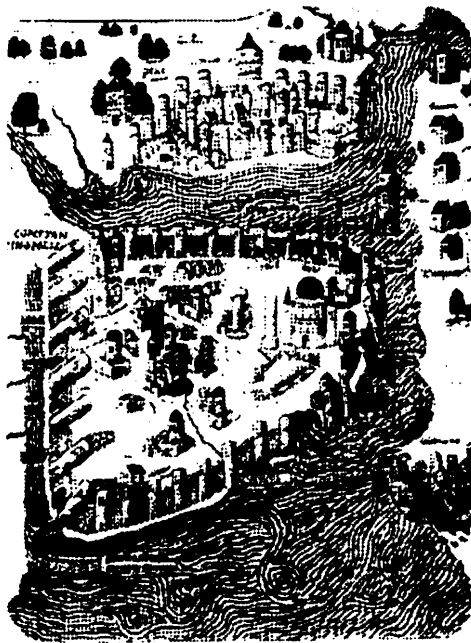
**whether consciously or not.**

**Although the most extreme example of this was seen in the castle, these same territorial priorities can be seen in almost every form of architecture, particularly in the private dwelling.**

**This is the legacy of western domestic architecture.**

The monument, as the Latin etymology of the word indicates, is an attempt at the tangible expression of permanence or, at the very least, duration. Gods need shrines, as sovereigns need thrones and palaces, to place them above temporal contingencies. They thus enable people to think in terms of continuity through the generations. This is well expressed, in

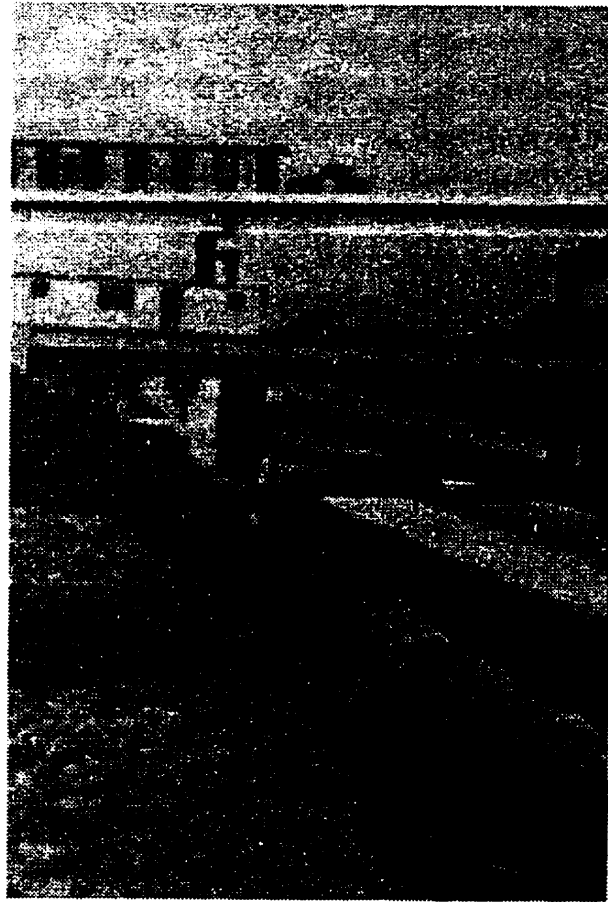
a way, by one of the interpretations of traditional African nosology: that an illness can be imputed to the action of a god angered by the way his shrine is neglected by its builder's successor. Without the monumental illusion before the eyes of the living, history would be a mere abstraction. The social space bristles with monuments - imposing stone buildings, discreet mud shrines - which may not be directly functional but give every individual the justified feeling that, for the most part, they pre-existed him and will survive him. [Augé p.60].



**this map of Constantinople circa 1480 clearly shows monumental and defensive priorities.**

source: Duc de Berry's Très riches Heures

**2**



**Home**

43

43

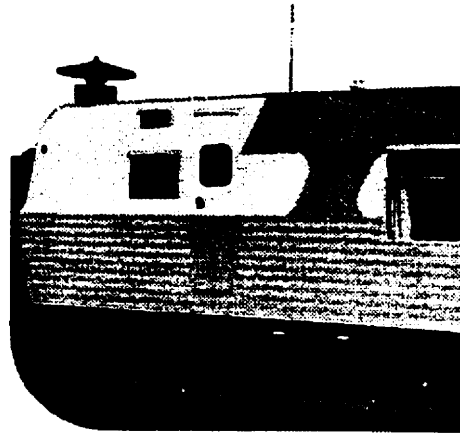


## What is the Mobile Home?

### A Definition of the Movable Building:

The architectural forms studied here are those that have a strictly ephemeral nature - that are movable in some form, and are designed specifically for deployment in different situations and/or locations. Though some possess characteristics from more than one category, temporary building systems can be simply divided into three specific types, listed below:

1. Portable buildings are those that are transported whole and intact. Some-time they include the method for transport within their own structure (wheels, hull) and can be towed or carried. However, the dividing line between building and vehicle then becomes blurred, a few can be described as self-powered. [The mobile home fits into this category...]



2. Relocatable buildings are those that are transported in parts but are assembled at the site almost instantly into usable built form. These are almost always carried but in a few limited cases may have part of their transportation system incorporated into their structure. The main advantages of this type is that it can provide space almost as quickly as the portable building without the restriction in size imposed by transportation.

3. Demountable buildings are those that are transported in a number of parts for assembly on site. They are much more flexible in size and layout and can usually be transported in a relatively compact space. They have some of the limitations that site operations bring to a conventional building, and depending on the size, complexity, and ingenuity of the system, are not as instantly available.

These building types can be further divided into deployment categories; module, flat pack, tensile, pneumatic and combined system.

The definition of the portable building is therefore not a straightforward task. It is in some way linked with the definition of architecture in comparison to



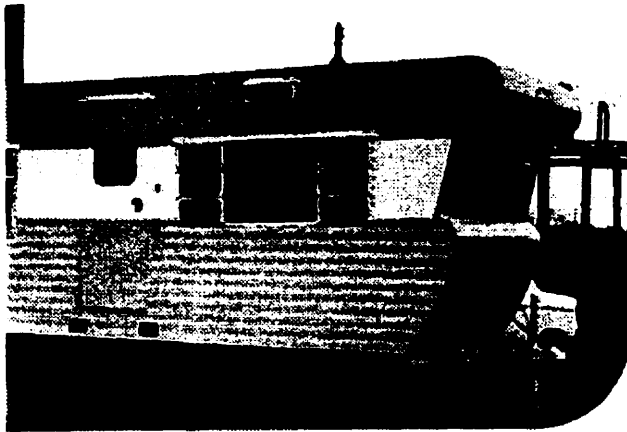
building. Like all inhabitable constructions these structures must perform the functions of environmental modification and lend themselves adequately to the purpose of the activities carried out within their enclosure. But if they are also to express in their appearance and disposition the physical manifestation of their creators' ambitions, then the building type must be called architecture. In some examples this is already the case, and in others it ought to be. A further ambition of those who wish to understand the nature of temporary architecture is therefore to make the distinction between portable building and portable architecture and to make the case for the relevance and importance of the latter

in shaping our current and future built environment."

[Kronenberg, Houses in Motion, pp. 7-8]

The mobile home as an architectural object is not very difficult to describe. A typical analysis might read as

follows:



The typical single-wide mobile home, provides the inhabitant with basic shelter. Each of the major areas of the typical house are represented in an open floor plan. The layout is minimal but functional, although it suffers from a disproportionately large percentage of floor area given to circulation. There is a lack of storage area due to there being no basement or attic, as well as the fact that the relatively small floor area implicates a reduction in storage area. The practicalities of factory manufacture and highway transportation restricts the plan to a linear configuration, which lead to further inefficiencies in volume to surface area ratios with the resultant increase in heating or cooling loads. The width of the mobile home is minimized also by the truncating of the eave to the minimum practical for effective protection from precipitation, which can also increase solar gain in the summer months.

**The interior of this mobile home is an introverted space. There is little consideration given to the procession from interior to exterior. The entrance into the mobile home is either directly into the living room, or into a utility (laundry) area; instantly taking the inhabitant from a condition of exteriority to interiority without mediation.**

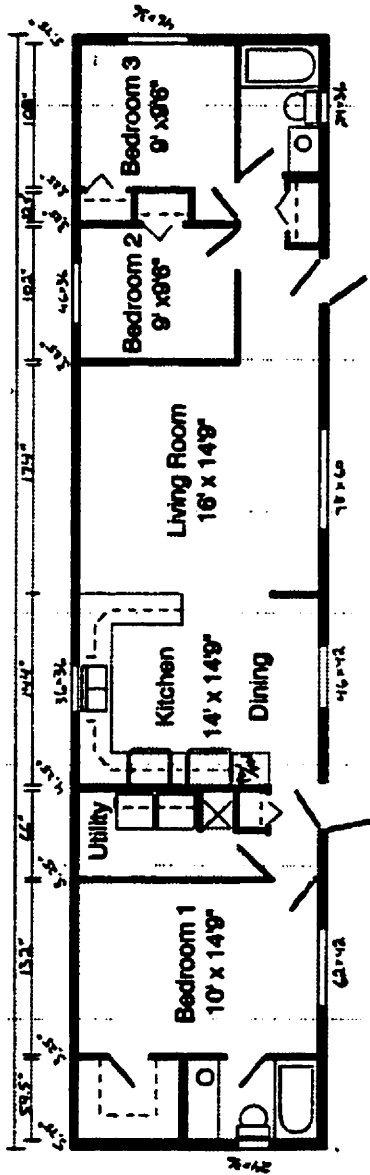
**Structurally, the mobile home relies on the walls to maintain rigidity, and as such require adhesive to be applied on a relatively panelized wall system, and the number and size of the wall openings have an impact on the overall structural rigidity of the mobile home.**

**Considerations given to placement on the site and implications of the orientation are not taken into consideration given that the mobile home is fabricated without any specific knowledge of the idiosyncrasies of location or environmental context.**

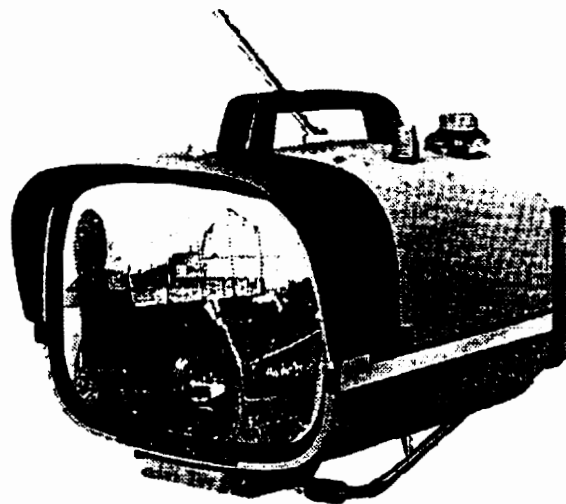
**Overall, the deficiencies of the mobile home in terms of energy efficiency, layout efficacy, customizability and flexibility conspire to make it a substandard housing option.**

**However, over 19 million people in the United States live in mobile homes (or manufactured homes): a vast majority of whom are satisfied with their living arrangements. Mobile homes account for between 20 to 30% of all new single-family housing completions in the U.S. in any one given year.**

**To understand it, we must understand where it is coming from, and where it is going. Let us track the history of the Mobile Home from its inception to modern day, and then take a look at the Mobile Home industry in the U.S. and compare it to traditional 'site built' homes.**

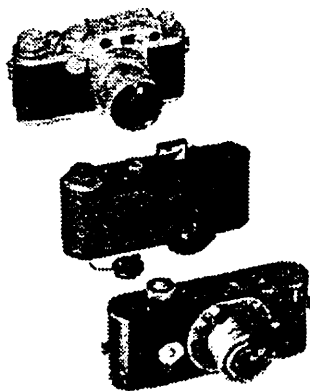


# episode 3



Tappan 400 range TV, 1958

***timeline***

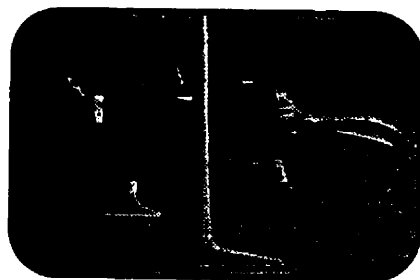


**Leica Cameras 1925**

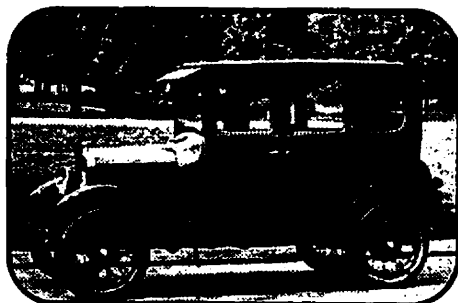
## **1922**

**Aeronautical engineer Glenn Curtiss with his trailer made in 1919.**

**source: Wallis p.33**



**Electrolux Vacuum Cleaner 1918**



**Model T Ford 1908**



***In the early 1920's, the "trailer" came under mass production to satisfy the wants and needs of the new automobile culture. These trailers were meant for periodic and recreational use. Their intended use was that of a household commodity - a luxury item not unlike that of a yacht. Only those who could afford a car could afford to buy a 'land yacht': a small and elite clientele.***

## 1930's

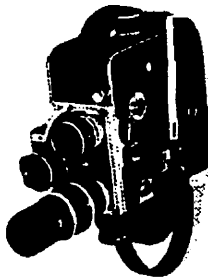
*the 30's witnessed the maturing of the mass-production process began in the 1920's. In 1936 most car manufacturers studied the trailer manufacturing industry to see if it was feasible to enter the field. Ford Motor Company and General Motors Corporation decided that 'sales potential was insufficient to justify diversion of capital, plant, equipment, and executive talent.'*



DC3 passenger plane, 1934



source: Krosenberg, figure 92



Kodak K-16 Motion Camera, 1938

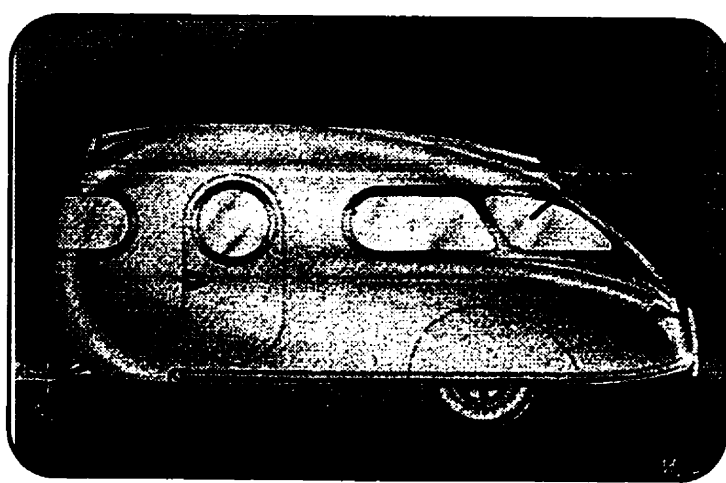


# Trave

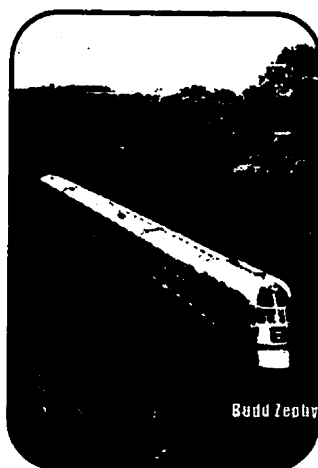
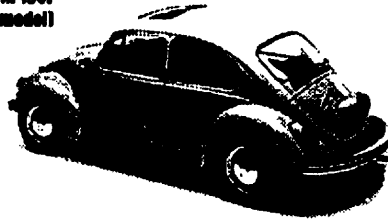
THE NATIONAL MAGAZINE FOR  
all Trailerites... owners, present and future  
dealers and manufacturers of pleasure cars



N 111  
SSLC  
ROGER W. HANSON, president, and  
to U. S. will soon be ready to publish  
America's first National Trailer Trade Show & Convention  
laws of F. C. T. and A. T. A. and Society of Trailer Manufacturers  
roller Development, B. Trailer Design and Construction, Trailer



Volkswagen Bug, designed in 1937  
(this is a 1960's model)



55

**1935**

**The 'Trailer of Tomorrow'.  
Designed by Carl K. Meyer**

source: Wolfe p. 1

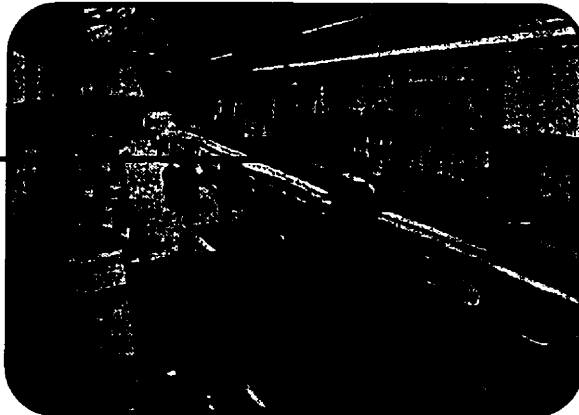
*"The trailer was either the) coming liberator of the common man or the most devastating, unsocial uglifying element since the scourge of billboards, hot dog stands, and the gasoline station that swept across the fair American landscape."*

American City magazine, **1936**

**1935**

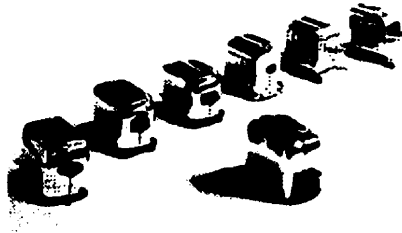
**International  
Fleetwood  
factory.**

source: Wolfe p. 115









Washington Leesters, 1938

## 1930

Ad hoc trailer park in Detroit.  
Trailers used for housing did not fit into existing legislation or infrastructure: they occupied the urban effaces. The response: create restrictive zoning ordinances.

source: Wallis p. 72

*As a recreational item, trailers could be "recharged" for periodic use and were meant to provide amenities outside the reach of civic infrastructure. They were never intended at their inception to be used as an alternative to housing.*

*This, however, changed during the Great Depression. Trailer cities of itinerant workers started to spring up in places where there was work. Temporary trailer shanty-towns appeared, much to the chagrin of city fathers and to the 'permanent' residences, who for their part couched their objections in terms of property value and city infrastructure. This was perhaps the start of an adversarial relationship between residents of 'traditional' dwellings and those of the 'trailer' community that continues today.*

## 1939

*The case of Coody vs. the City of Detroit: The City, defending its ordinance requiring neighborhood approval of trailer park establishment, claimed the living environment of trailers were not good for children: "children were obliged to be outside for a majority of the time. They had no privacy; a social problem was created where children had to live with adults in such close proximity and that under some circumstances they acquired a precocious knowledge of sex matters; a use of communal toilets and bathing facilities by members of the same sex of different ages creating undesirable stimulus, with potential damage to the morals of the young." Moore, p. 201*



**1940**

US government ordered 1,500 mobile homes to house construction personnel in defense production centres throughout the United States.

**1943**

The U.S. National Housing Agency wanted to eliminate the stopgap use of trailers for housing claiming that trailers were not houses. However, the War Production Board ruled trailers were indeed houses, and then refused to authorize the release of 'critical materials for further production' as long as the NHA declined to make further purchases or authorize private sales of trailers.

Under this pressure, the trailer evolved into a prefurnished

**1944**

1000 man hours to build a house... 112 to build a trailer

prefabricated 'house' that filled the temporary need for housing, and offered a postwar housing alternative.

**1946**

The term "Mobile Home" was first used to describe Trailers to be lived in.

***The second world war created a shortage in housing for those involved in the war construction effort. This was partially filled by the use of mass-produced trailers. These temporary and marginal uses of the trailers blurred the line between them and the house. It wasn't until the mid 1950's with the advent of the ten-wide that the "trailers" became "mobile homes".***

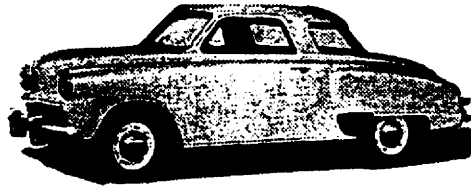


**1940's**

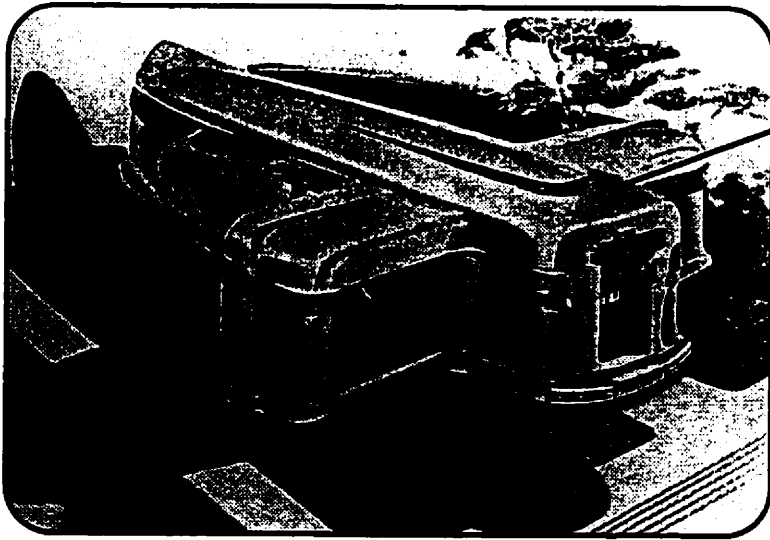
war worker's housing

source: Watts p. 84



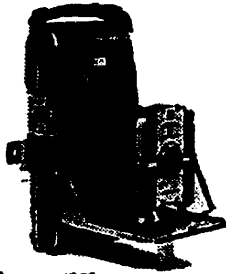


**Studebaker, 1947**



**1942**

source: Bernhard p.32

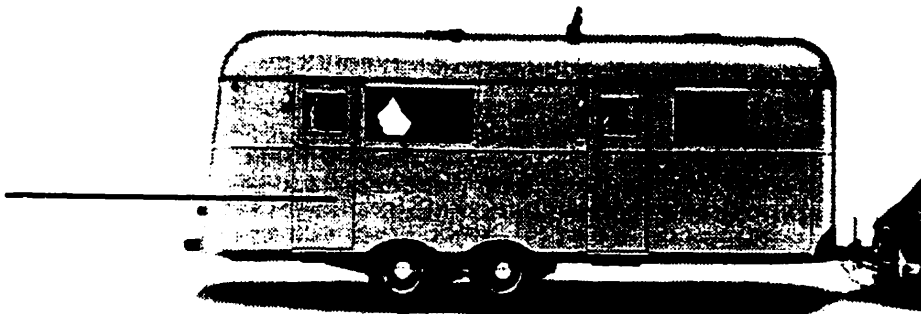


Polaroid Land Camera, 1948

**1946**

From a Palace Corporation  
ad run during the war.

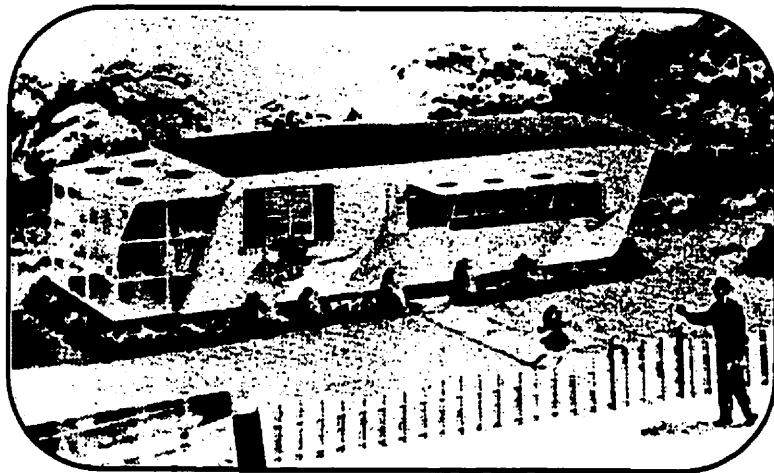
source: Krossenberg, fig. 85



## **1946**

trailers provide returning war vets temporary housing - until they can find something more 'permanent'.

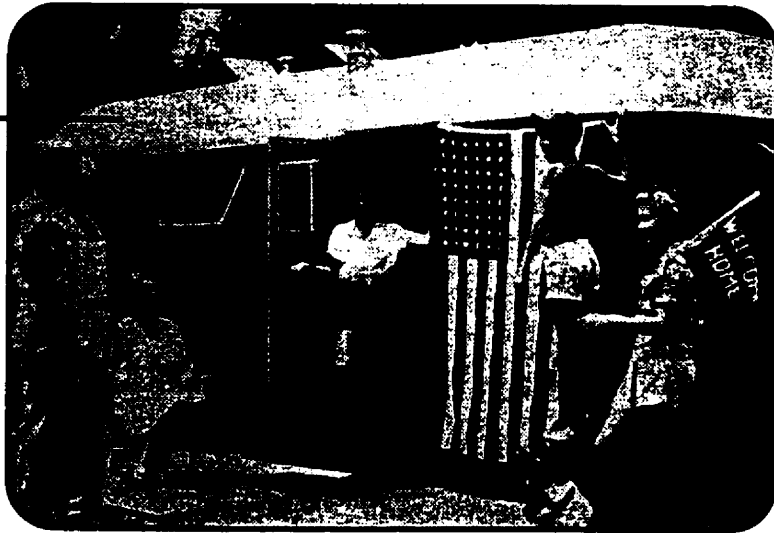
source: Wolfe p. 84



## **1947**

**Spartan Manor - made by Spartan Aircraft of Tulsa incorporated the structural technology of aircraft**

source: Wolfe p.108.



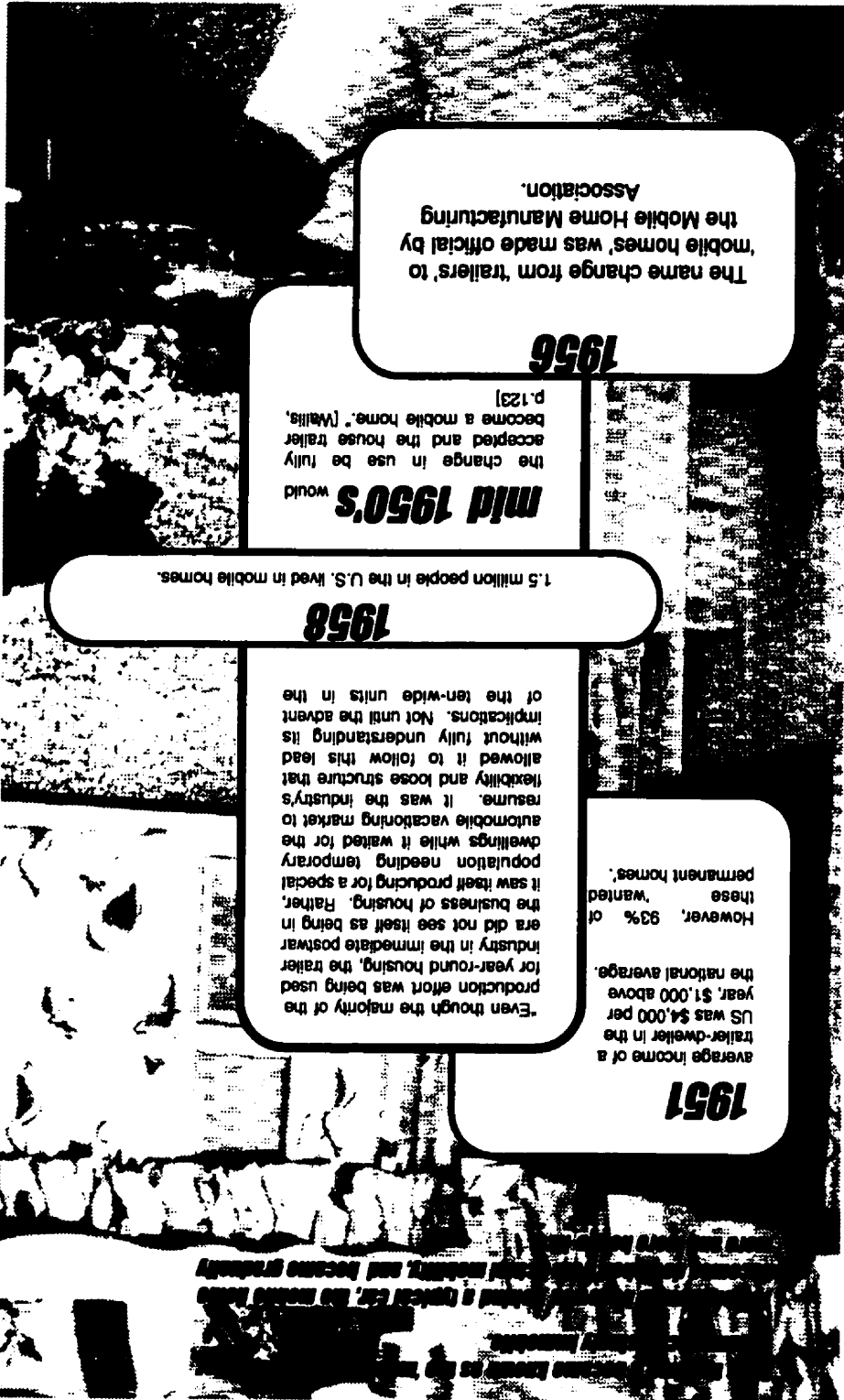
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**1947**

**Elcar's "Sun Coach" model**

source: Walls p. 115





The name change from 'trailers' to 'mobile homes' was made official by the Mobile Home Manufacturing Association.

### 1956

Mid 1950's would the change in use be fully accepted and the house trailer become a mobile home." [Wells, p.123]

1.5 million people in the U.S. lived in mobile homes.

### 1958

"Even though the majority of the production effort was being used for year-round housing, the trailer industry in the immediate postwar era did not see itself as being in the business of housing. Rather, it saw itself producing for a special population needing temporary dwellings while it waited for the automobile vacationing market to resume. It was the industry's flexibility and loose structure that allowed it to follow this lead without fully understanding its implications. Not until the advent of the ten-wide units in the

average income of a trailer-dweller in the US was \$4,000 per year, \$1,000 above the national average. However, 93% of these "wanted permanent homes".

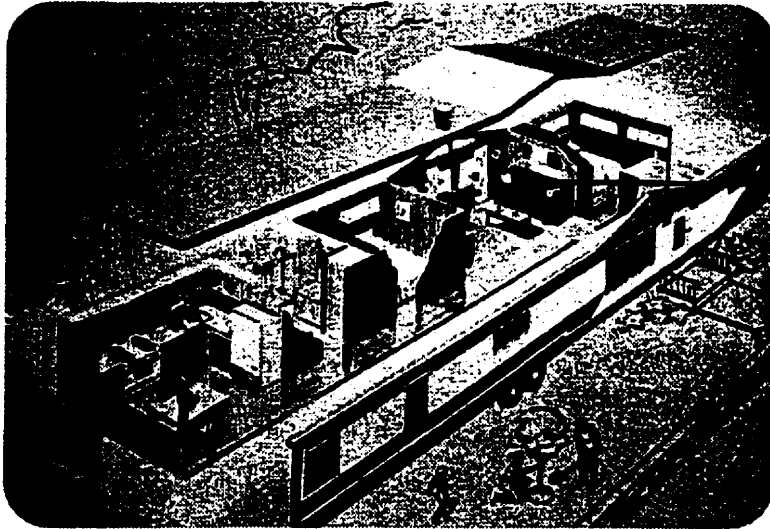
### 1951

...and a truck for the mobile home...  
...and became gradually...



**1950**

source: Wallis p. 137



**1952**

An 8-wide of the early 1950's

source: Bernhard: p.32.

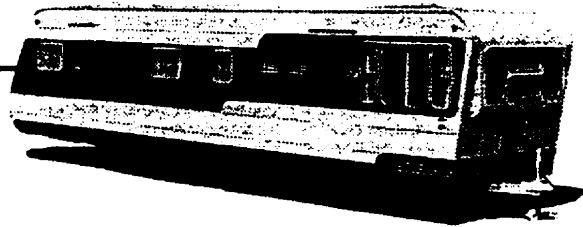


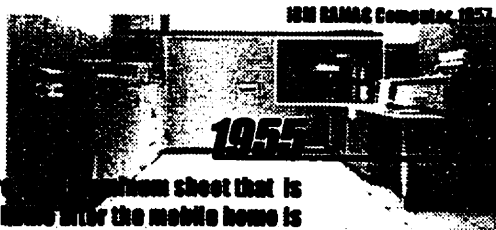


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**1950**

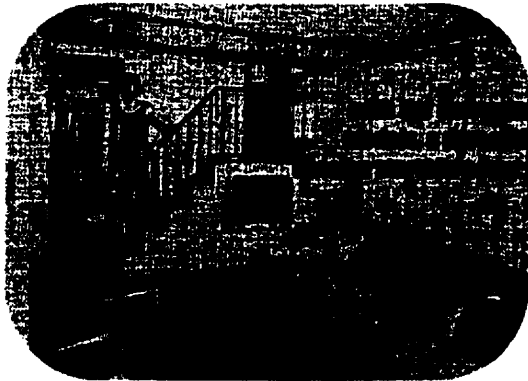
source: Wallis p. 144





the chimney shown here is a aluminum sheet that is attached to the mobile home after the mobile home is placed in position.

source: Walls p.140



**1959**

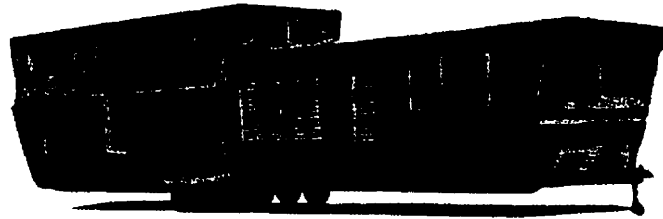
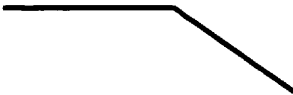
the television set of the 'tearful' mobile schizophrenic trailer or house?

source: Walls p.127

**1957**

Peerless towable.  
source: Wells p.136

*Ventura*



**1966**

the Mobile Home Manufacturer Association adopted a code "Minimum body and Frame Design and Construction Standards"

**1968**

average length of mobile homes was 60' compared to 35' in 1957.

**1961**

source: Wolff p.145

**1969**

40% of all single-family homes sold were mobile homes.

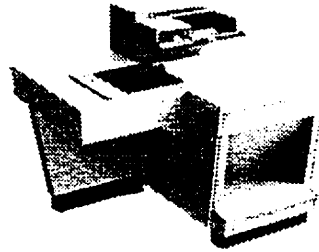
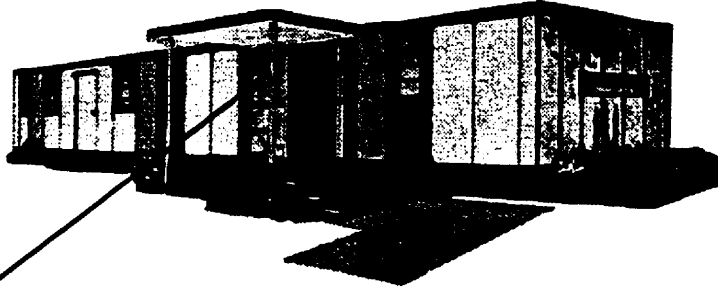
**1961**

a fast-wide-early 1960's  
source: Bernhardt p.33

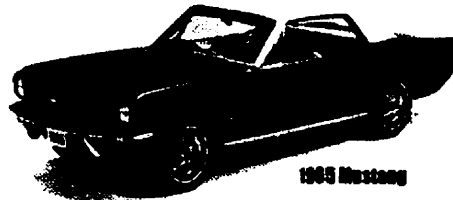
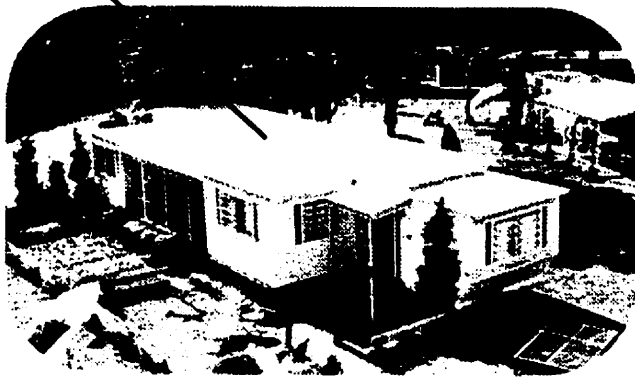


**Experimental system, manufactured housing by Aero-Jet General for the Department of National Defense based on technology from the space program in 1969. "Huge Mandrels were rotated as fiberglass filaments were wrapped around them into room-sized tubes. These tubes were then cut to length, windows were excised, and the rudiments of a house, albeit without the recognizable distinctions of walls and roof, were left." It was dismissed as not being "significant" architecturally**

(source: Davis, The Architecture of Affordable Housing, pp.26-28)



1960 Xerox office copier



1965 Mustang

**CCS 00 000 000**

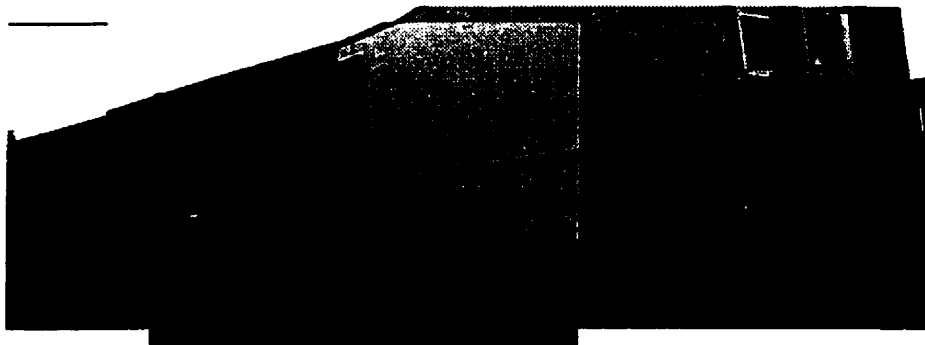
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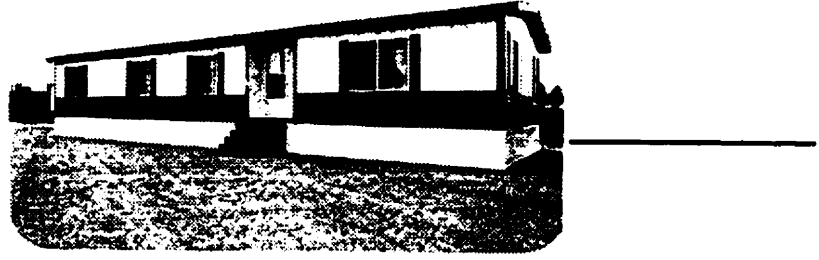
## **1970's, 1980's, 1990's**

**mobile homes in another**

---



***With the inception of the HUD code in the US and the adoption of CMHC standards in Canada, the Mobile Home from the 1970's onward becomes increasingly regulated. These are the mobile homes that are commonly seen in today's Mobile Home Parks.***





**1978**

a double-wide of the late 1970's  
source: Bernhardt p33

**1976**

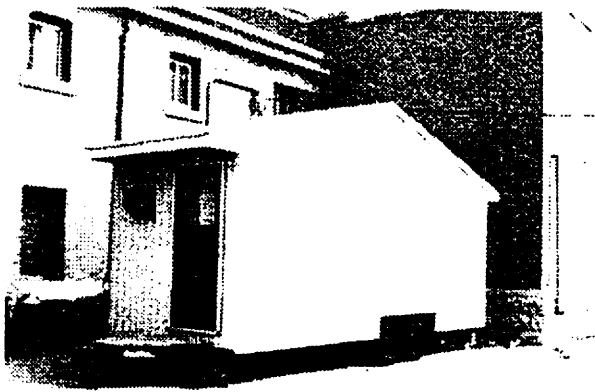
HUB code implemented in the US to offer quality control

**1972**

a twelve-wide of the early 1970's  
source: Bernhardt p33



**1980's**



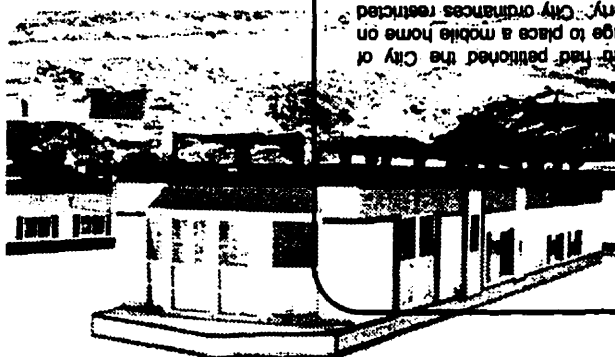


[Comau v. Brookside Village 633 SW2d 790 (1982)]

the inherent structural difference in such manufactured housing can make them vulnerable to windstorms and fire damage; and their mobile nature may lead to transience and detrimentally impact property values if scattered through the municipality. [The Court concluded that] mobile homes are different and thus may be classified separately from other residential structures for purposes of regulation.... We find such classification reasonable, as bearing a substantial relationship to the preservation of public health safety, morals or general welfare.

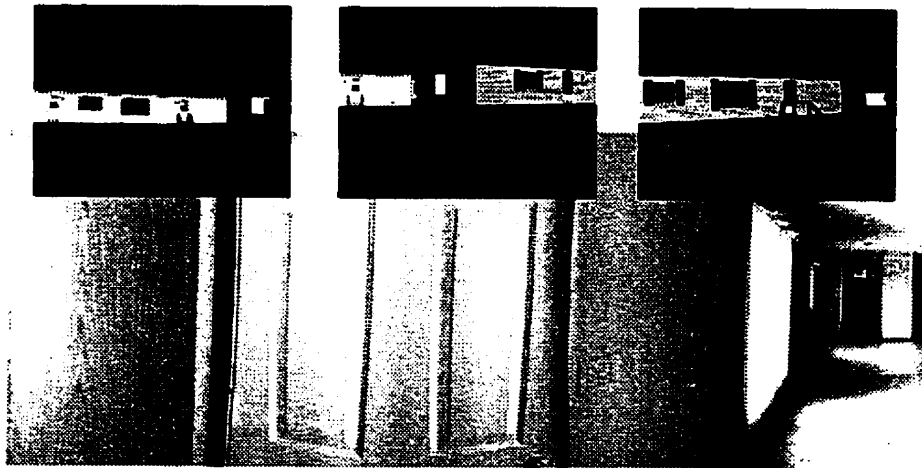
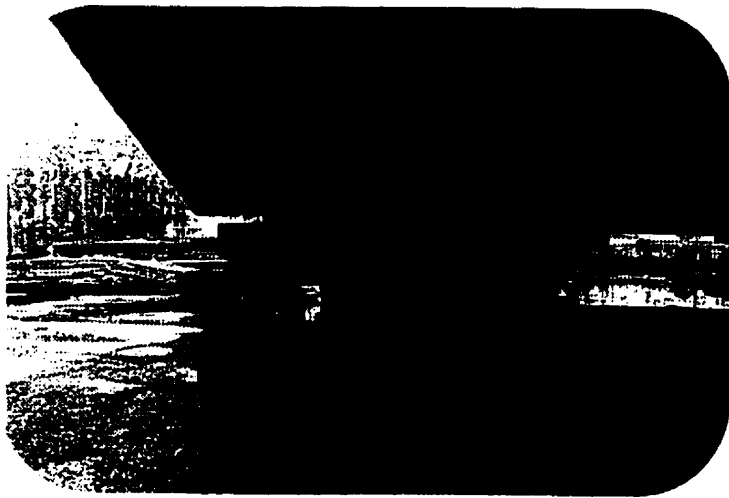
noted:  
The Court, finding for Brookside Village, infringement on his right to use his property. This restriction was an unconstitutional mobile homes to parks. Comau argued that his own property. City ordinances restricted Brookside village to place a mobile home on Henry Comau had petitioned the City of

Comau v. Supreme Court



1982

**1990's**



**Robinson township v. Knoll  
Michigan State Supreme Court**

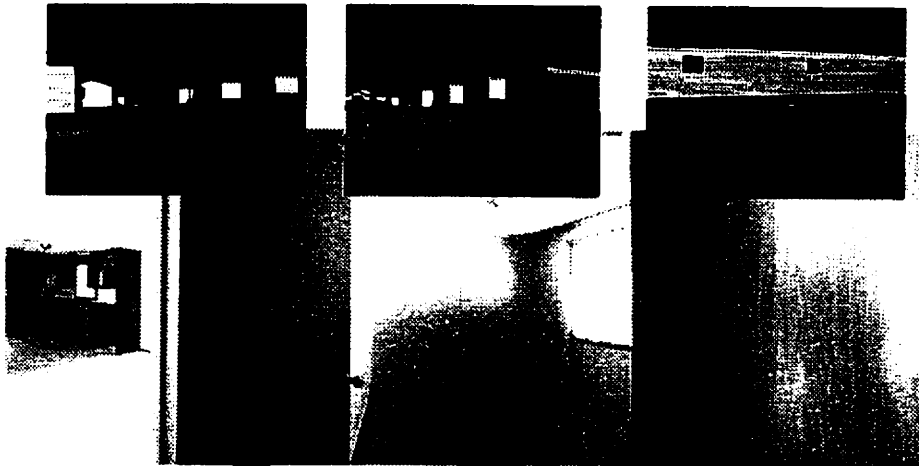
The finding of the Court:

The mobile home today can compare favorably with site-built housing in size, safety and attractiveness. To be sure, mobile homes inferior in many respects to site-built homes continue to be manufactured. But the assumptions that all mobile homes are inferior to all site-built homes are not tenable. To say that criteria cognizable under the police power can no longer be accepted.



To say [as the town ordinance does] that a dwelling was "constructed to be towed on its own chassis" or "designed without permanent foundation" speaks only to its origins and not to its present character.

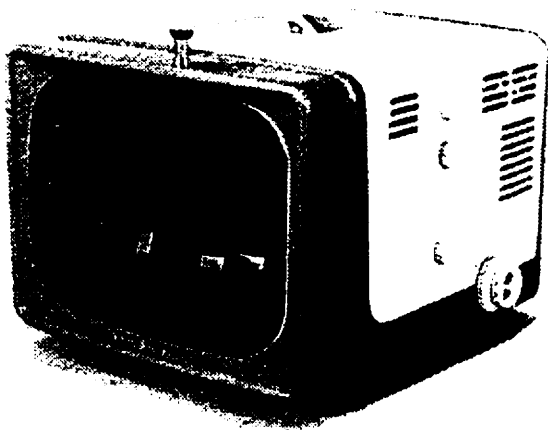
[p 142 Wallis]



**The 'manufactured house' of the 1990's is built to essentially the same specifications as a regular home, the only significant differences being in its construction process. Unlike its predecessors, road restrictions are not of primary concern. Because they are not meant to regularly moved, permits are issued for the transportation of the Mobile Home, just as one would for the transportation of any other large object on any public road system.**

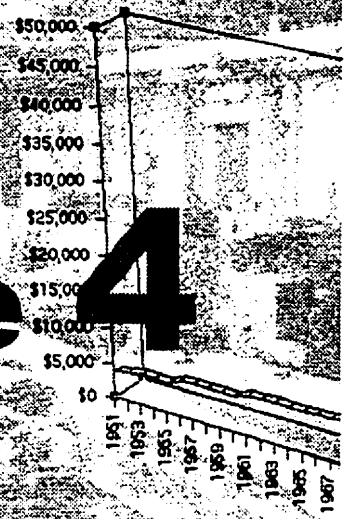
**Because of this change, 20-wides are not uncommon.**



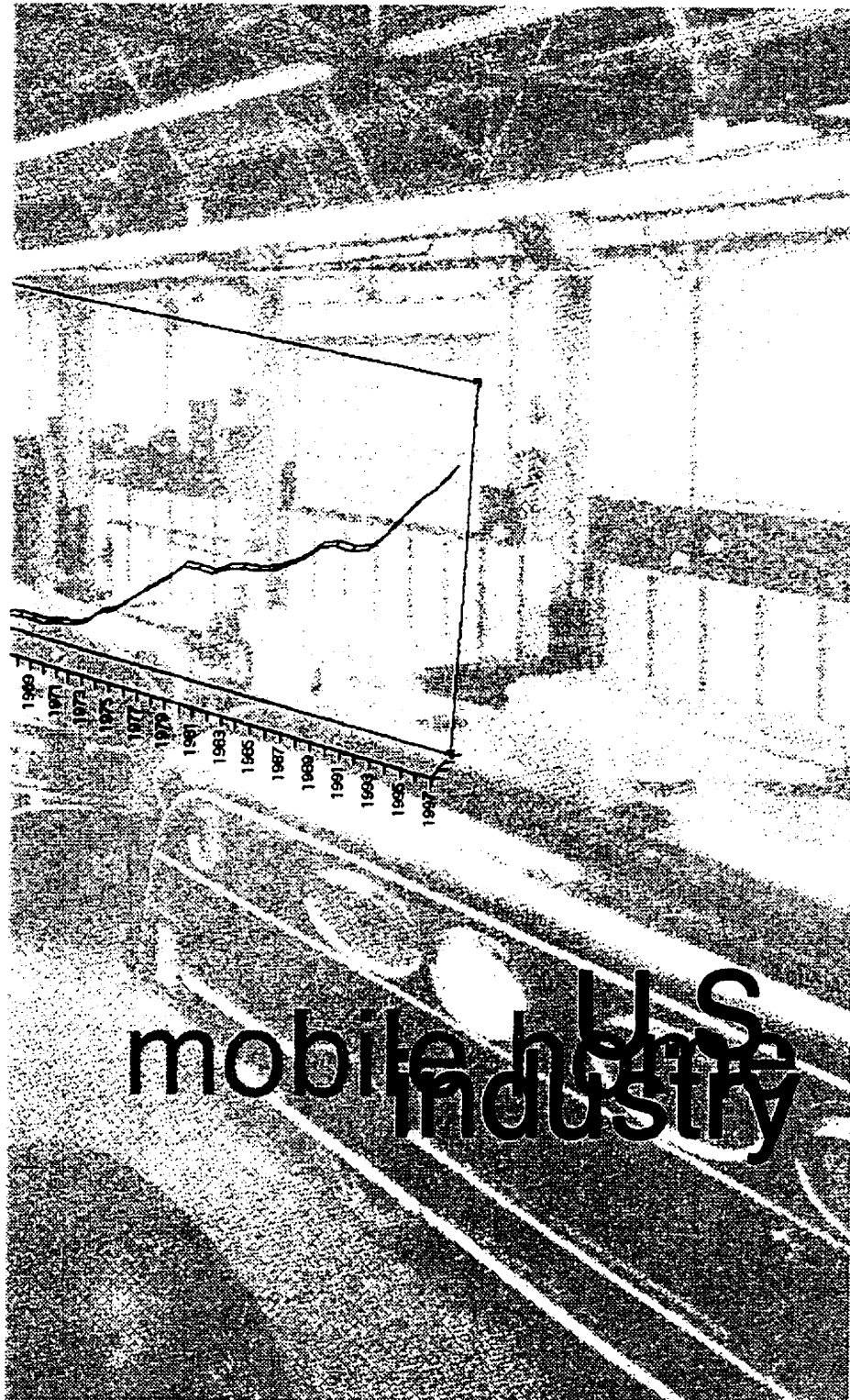




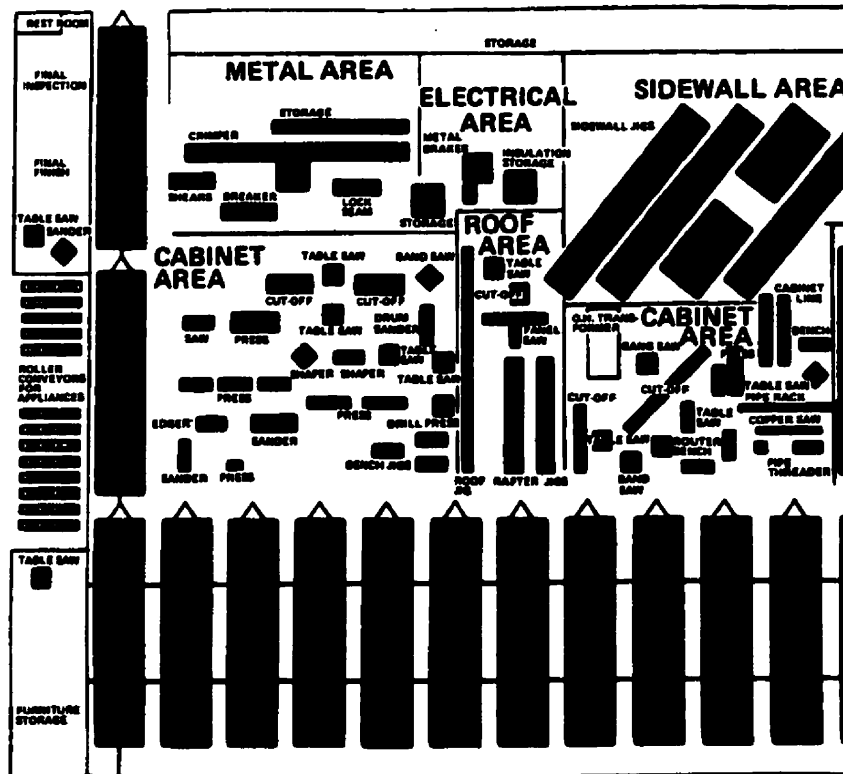
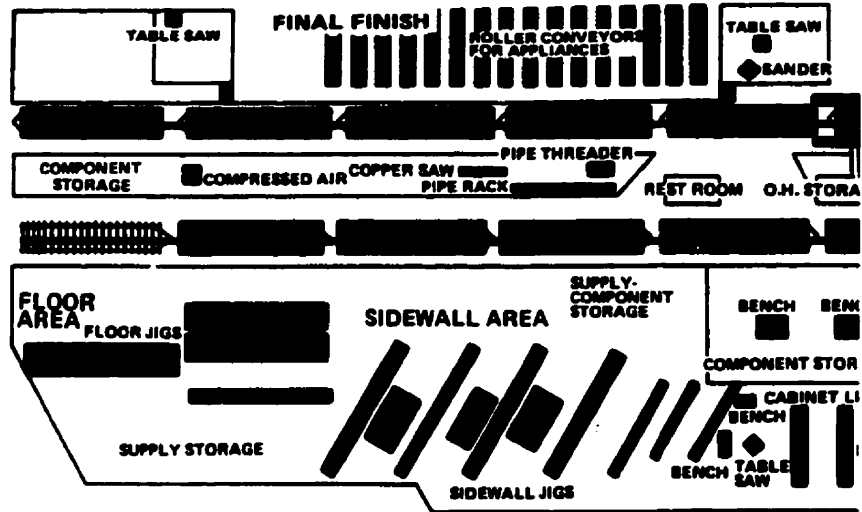
# episode 4



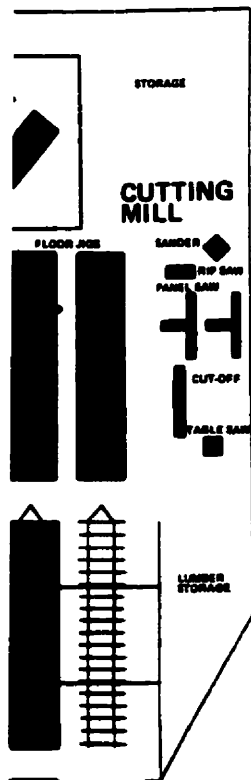
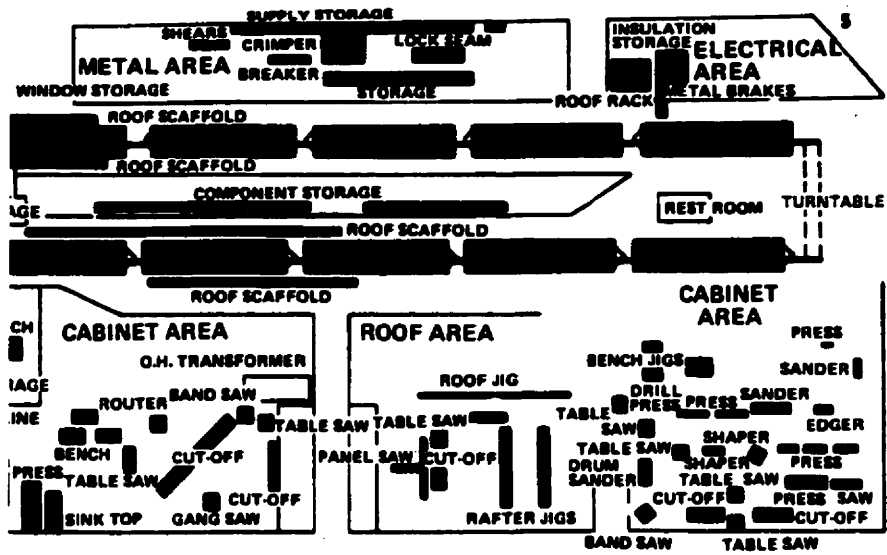


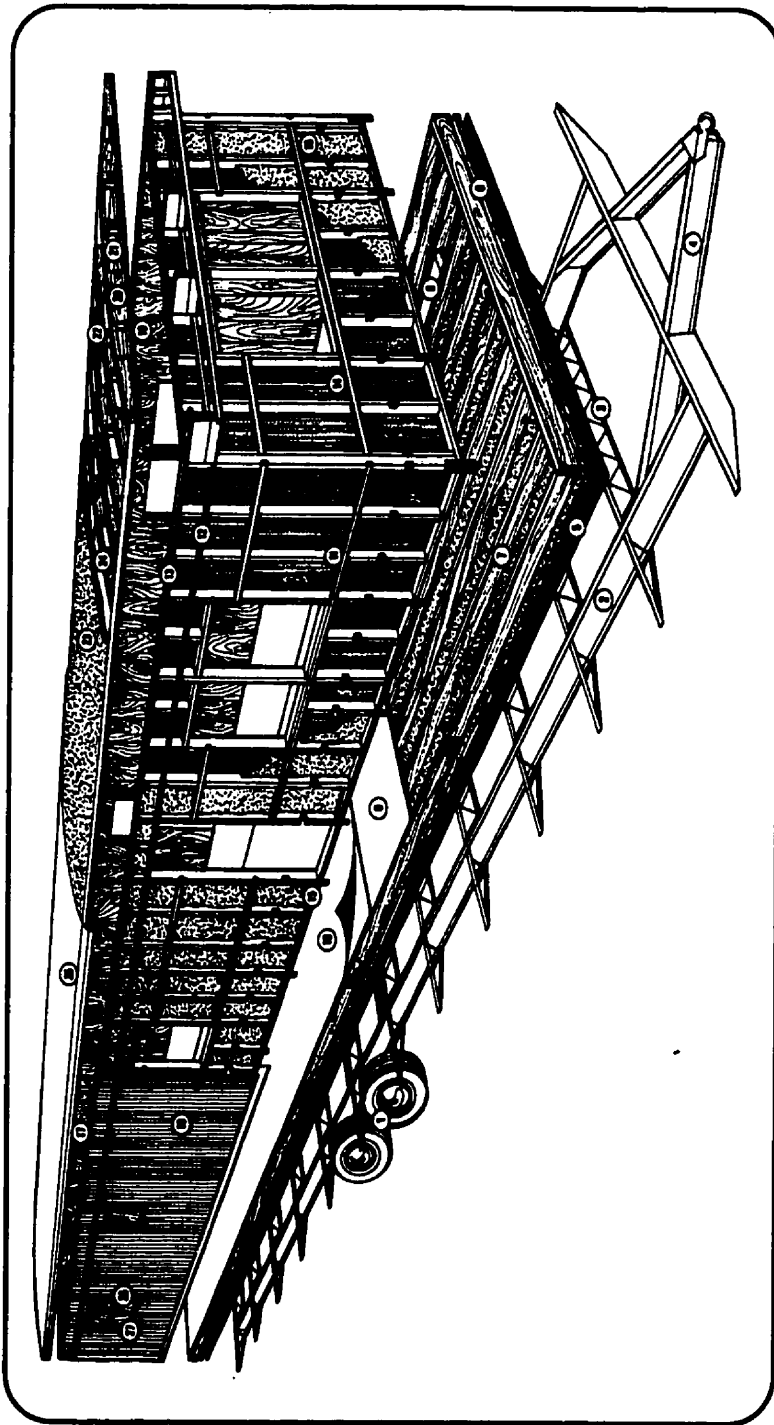


# U.S. mobile home industry



Bernhardt, fig. 6-10

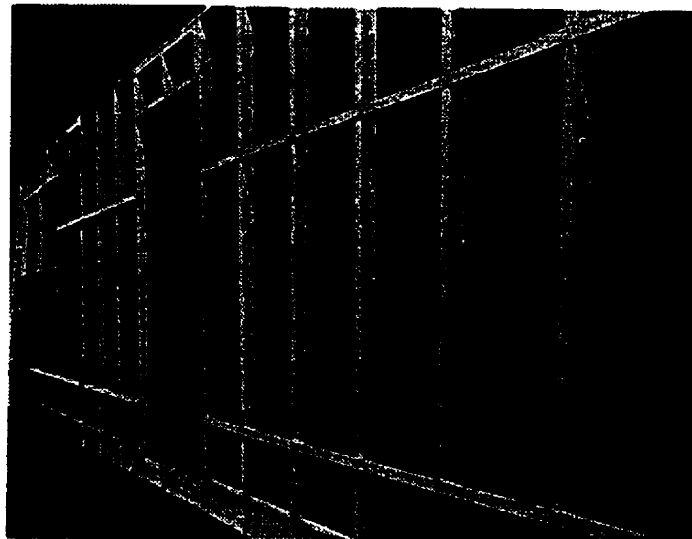
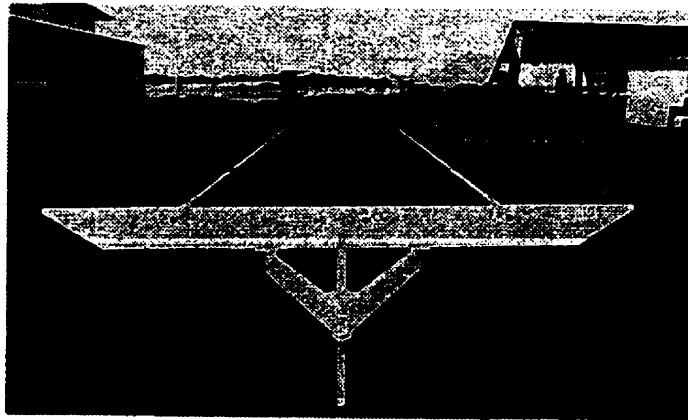




18. Stained insulation—heavy-density fiberglass insulation.
17. Ties to horizontal web in exterior door: insulation.
2. Rafters—T-beam—heavy-duty steel webbed on length of frame.
3. Rigid metal awnings and cover over members on length of frame.
4. Nibs—heavy T-beam with members—oftenly removable for closer appearance.
- The Floor System
5. Bottom board—lightly nailed on bottom of rafters.
6. Floor joists—all-weather insulation for complete cover; blanket fiberglass blanket under entire floor for complete underpinning.
7. Floor joists.
8. Moist duct—dimpled; bonded gland and removed to floor joists.
9. 8/8" ducting particle board gland and removed to floor joists.
10. Rail grade—substantially vinyl floor in non-eyered room.
- The Wall System
11. 2"x4" studs.
12. Ducted hot air ribs for insulated subwall construction.
13. 1"x4" top and bottom plate.
14. Insular paneling—substantially the same insular paneling gland and taped to subwall studs for unlined construction.
15. Rugged metal anchor bonding two subwalls to floor for additional strength.
16. Stained insulation—heavy-density fiberglass insulation.
17. Ties to horizontal web in exterior door: insulation.
18. Stained insulation—heavy-density fiberglass insulation.
19. Rigid exterior panel in protected aluminum web band on panel back.
20. The Roof/Ceiling System
18. Dimensional ceiling board.
20. Channelled trim-type ribs for extra roof strength.
21. Blanket fiberglass insulation between rafters.
22. Steel angle full length of roof over rafters support insulation and gasketed roof between rafters.
23. Thick fiberglass roll insulation over rafters.
24. Vinyl barrier on warm side of roof to prevent condensation buildup.
25. Gypsum board over one-pane roof.
26. Large aluminum-bronze windows with windows and doors.
27. Egress windows for emergency exit from every sleeping room.
28. Electrical, plumbing, heating, and construction Mechanical Service Systems
29. Electrical, plumbing, heating, and construction center to or across the Federal Lands Home Construction and Safety Standards.

## The Mobile Home Industry

The data in this section comes from the Manufactured Housing Association of America, which has gone to the trouble of compiling these statistics from US census data. Unfortunately the level of organization in Canada is not as high as that in the States, and so the numbers here do not represent Canadian Manufactured Housing statistics [which, so you know, is what Mobile Homes are called by those in the business...]

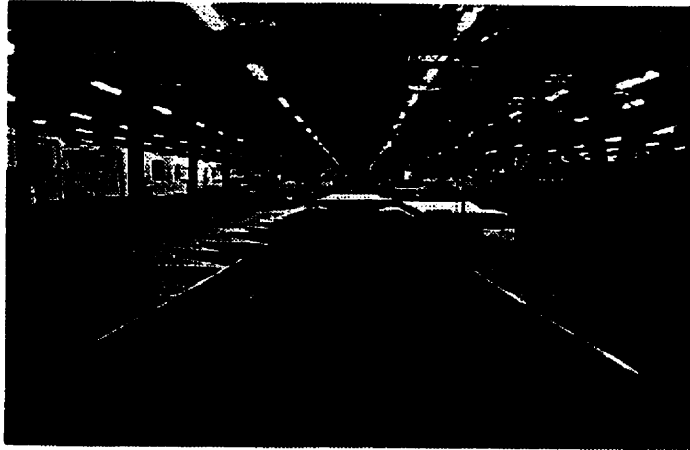


[source: Berhardt, figs 5.2, 5.3, 5.4]

TOP 25 PLANTS ACTIVED FROM 1940-1990 - BY TOTAL WIRE PRODUCTION (000,000)

Ranking	Company	Total Plants	Output (000,000)
1	Chrysler Enterprises	69,264	\$1,841,494,000
2	Fluorocel Enterprises	46,222	\$1,244,328,000
3	Delco-Remy	39,237	\$1,211,794,431
4	Chrysler Motors	29,429	\$882,288,000
5	Coventry Motors	24,287	\$642,288,000
6	Byette Corp.	17,288	\$682,894,000
7	Palm Harbor Motors	16,282	\$681,444,000
8	General Motors	12,278	\$411,472,191
9	Harold Motors	10,119	\$279,298,928
10	Ford Motor	8,994	\$288,288,000
11	Southern Chevrolet Motors	8,991	\$284,788,000
12	Peugeot Motors	7,994	\$288,288,000
13	Lucas Motors	6,236	\$184,328,000
14	Case International	4,743	\$180,241,000
15	Manufactured Housing	4,476	\$98,212,241
16	James of Ford	4,168	\$180,728,248
17	Plaster Heating Systems	3,211	\$70,118,248
18	Stinson Motors	2,646	\$66,788,000
19	Ford Motor	2,288	\$66,474,000
20	Stacy Park	2,100	\$88,028,000
21	John Deere Co. of Tractor	1,719	\$47,488,378
22	Peak Stone Motors	1,288	\$66,474,000
23	Van Building Systems	1,278	\$89,424,287
24	Manufactured Housing Enterprises	1,270	\$88,682,378
25	Stacy Motors	1,262	\$27,628,000
<b>Totals</b>		<b>234,488</b>	<b>\$9,234,884,377</b>

Source: Manufactured Home Manufacturer Magazine, June 1990



[source: Berhardt, figs 5.13, 5.14, 5.15]



## 1999 facts on the US manufactured housing industry

• Over 19 million people—about 8 percent of the U.S. population—live full-time in 8.9 million manufactured homes. \*\*

• In 1998, the industry shipped 372,843 homes from 330 manufacturing facilities. Shipments for the year were up 5.5 percent, floor shipments were up 7.8 percent. #

• Multisection shipments in 1998 outpaced single-section shipments, commanding 61.3 percent of total shipments. In 1997, multisection shipments accounted for 57.9 percent of the total. #

• 68 percent of manufactured home owners report satisfaction with the manufactured housing lifestyle. \*

• All manufactured homes are built to the federal HUD Code, with each home going through a rigorous inspection process before being certified and sold. 1998 marked the 22nd anniversary of the HUD Code.

• A majority of manufactured homes are never moved after they have been installed.

• Manufactured housing retail sales were estimated at \$14.5 billion in 1997. +x

• In 1998, 22.7 percent of all new single-family housing starts were manufactured homes. #

• According to the Foremost survey, 62 percent of manufactured homeowners live on private property, and 38 percent live in manufactured home rental communities. A growing trend is the development of subdivisions where six percent of residents live. \*

• The average sales price of a manufactured home was \$41,100 in 1998. Single-section homes average \$29,000, while multi-section homes average \$49,500. ##

• In 1997, the estimated economic impact from manufactured housing was \$33.6 billion. The economic impact reflects the economic activity generated by the production and sale of a home — this includes salaries, goods purchased and auxiliary services.

source: manufactured housing association of america

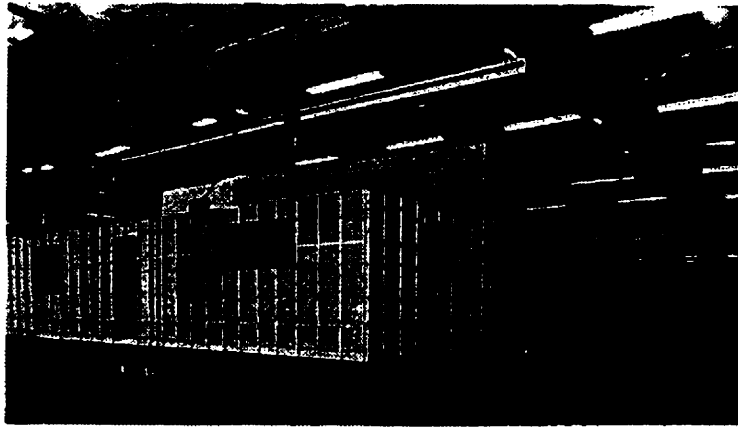
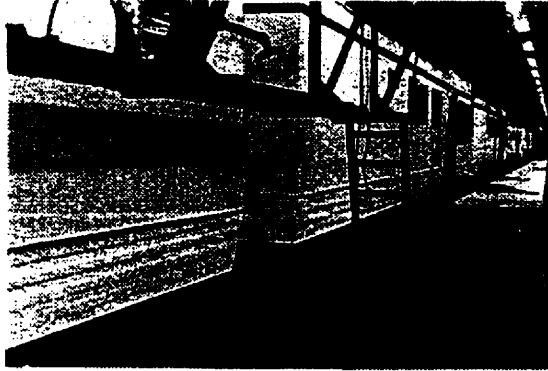
\* "The Market Facts," a national study conducted by the Foremost Insurance Group of Companies, 1998.

\*\* Dr. Carol Meeks, Manufactured Home Life study, 1998

## U.S. Department of Commerce 1997

# National Conference of States Building Codes and Standards (NCSBSCS)

+ Estimated by average purchase price multiplied by number of shipments



[source: Berhardt, figs 5.11, 5.12]

area use comparison in square feet	conventional house (percentage of total)	mobile home (percentage of total)
total interior area	1,323	622
area for circulation	247	145
area for access to storage	158	90
net habitable area	761	300
area consumed by partitions	46	9
area for storage	109	78
	1,323	622
	100.00%	100.00%

these numbers come from a comparative analysis of the 'typical' house from 1972 with the 'typical' mobile home of the same period. I wouldn't trust the absolute values, but the comparative use of area I think worthwhile noting.

area by area - conventional home

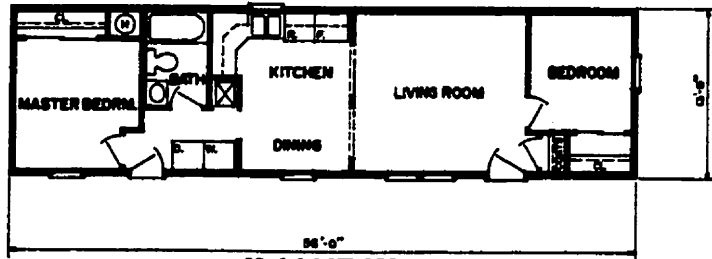


total area = 1,323 s.f.

area by area - mobile home

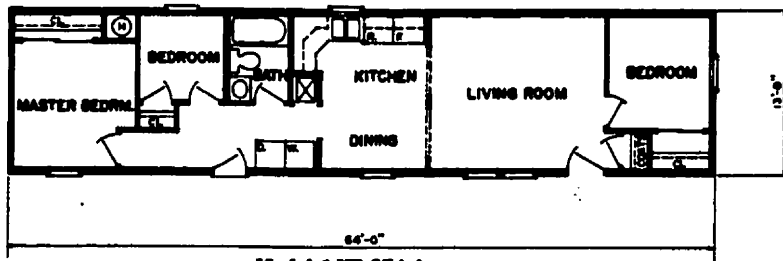


total area = 622 s.f.



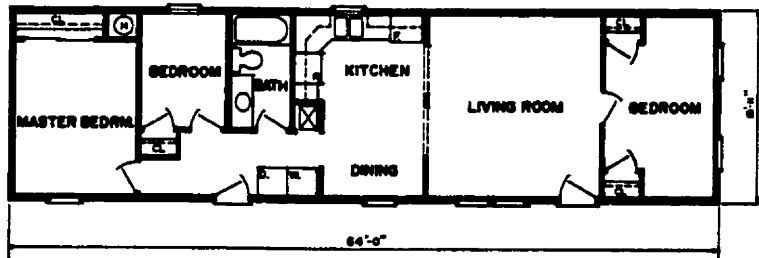
**Model # NP-882 A**  
**14' x 56'**  
**2 Bedroom**

MAIN FLOOR PLAN



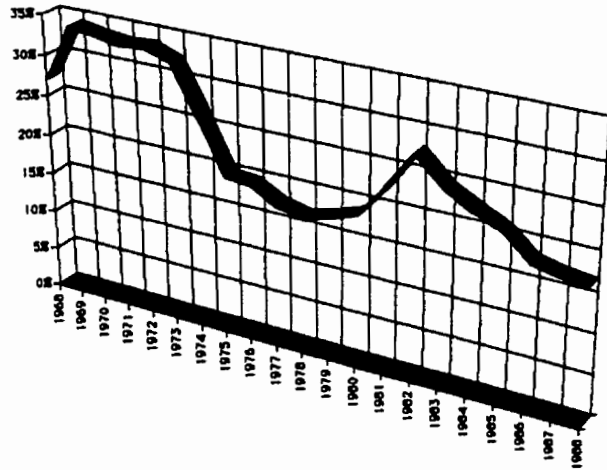
**Model # NP-884 A**  
**14' x 64'**  
**3 Bedroom**

MAIN FLOOR PLAN

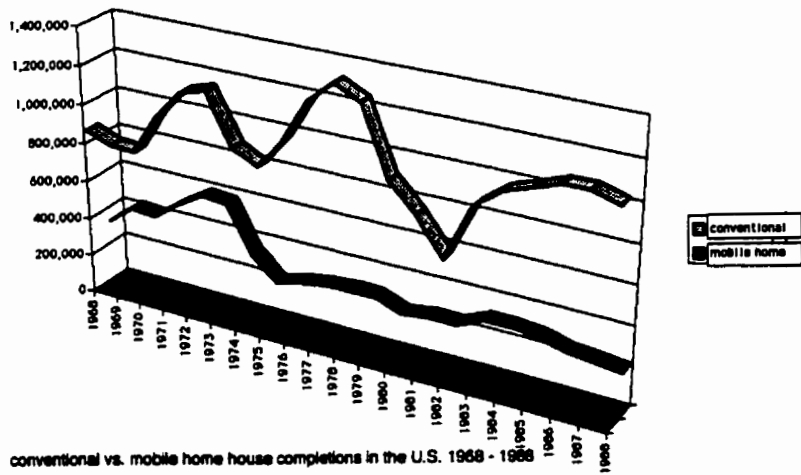


**Model # NP-885 B**  
**16' x 64'**  
**3 Bedroom**

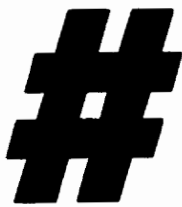
MAIN FLOOR PLAN

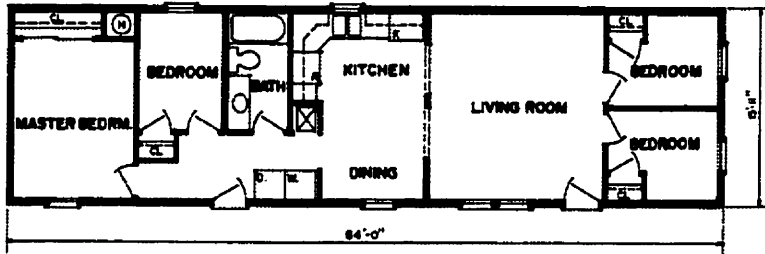


number of mobile homes as percent of total number of single family homes completed in the U.S. (1968 - 1998)

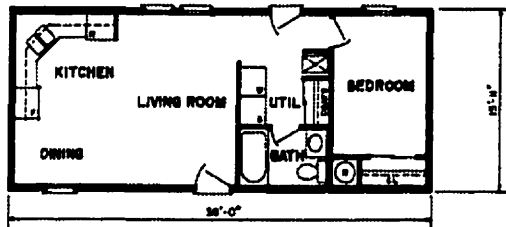


conventional vs. mobile home house completions in the U.S. 1968 - 1998



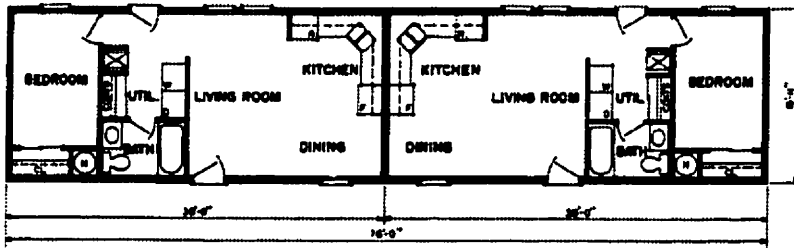


MAIN FLOOR PLAN **Model # NP-905 A**  
**16' x 64'**  
**4 Bedroom**

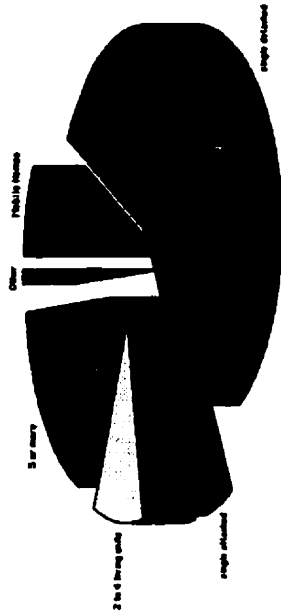


**Model # NP-907 A**  
**16' x 36'**  
**1 Bedroom**  
**Garden Suite**

MAIN FLOOR PLAN



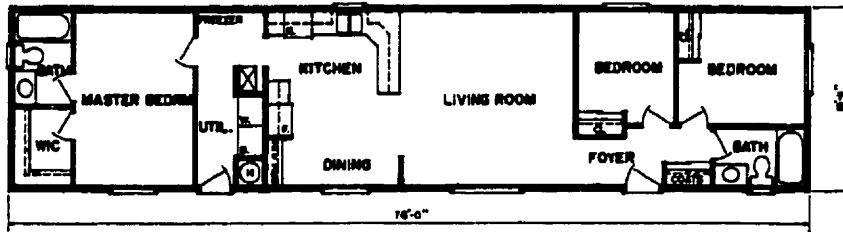
MAIN FLOOR PLAN **Model # NP-907 B 16' x 76' 2 Suite Duplex**



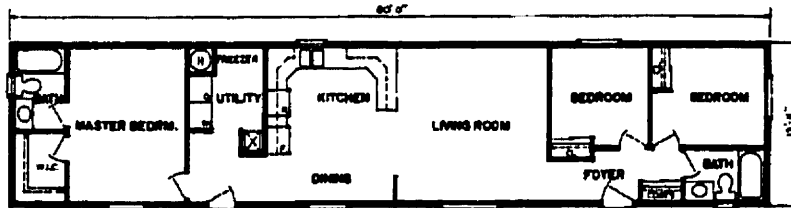
Number of housing starts by structure type from 1960 to 1990 in the US

Percentage	Mobile homes	Single detached	2 to 4 living units	5 or more	Other	Total
	7,379,653	60,202,499	2,870,243	10,104,610	1,121,156	102,082,673
	7.2%	59.1%	2.8%	10.0%	1.0%	

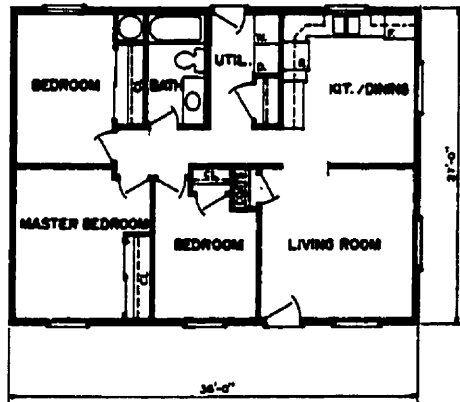
Source: U.S. Census Bureau The "other" category was intended to be living quarters such as houseboats, railroad cars, campers, vans, and caves.



MAIN FLOOR PLAN Model # NP-903 A 16' x 76' 3 Bedroom 2 Bath



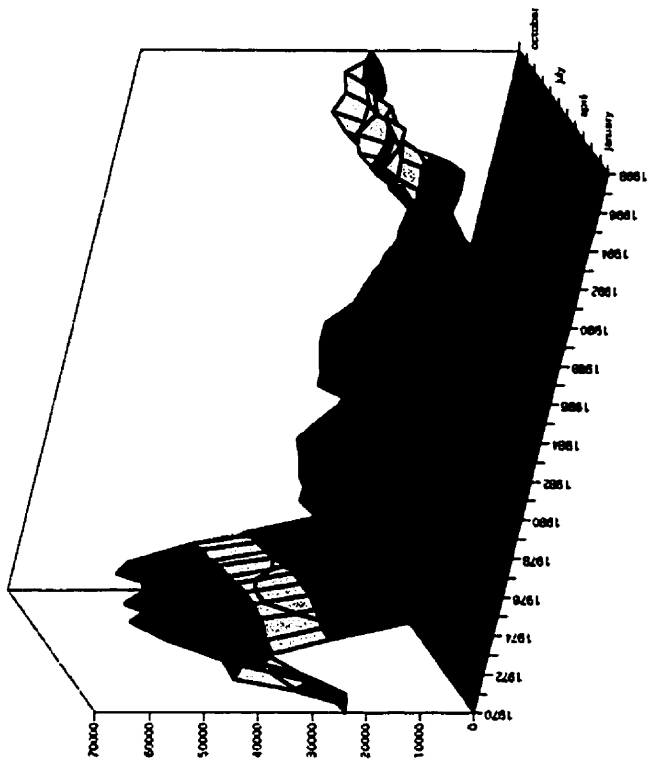
MAIN FLOOR PLAN Model # NP-901 A 16' x 80' 3 Bedroom 2 Bath



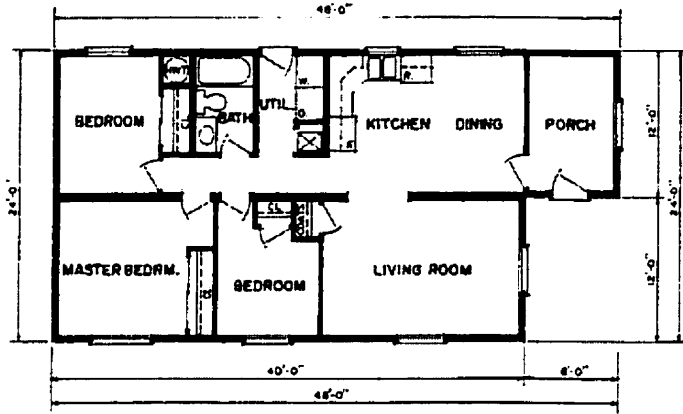
MAIN FLOOR PLAN Model # C-2001 Series



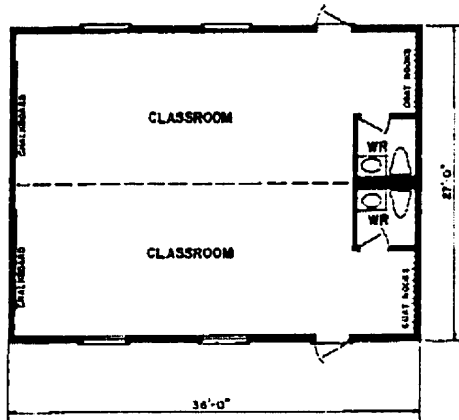




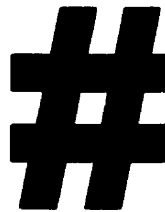
manufactured housing sales in the US by month and year



MAIN FLOOR PLAN Model # NP-1100 A

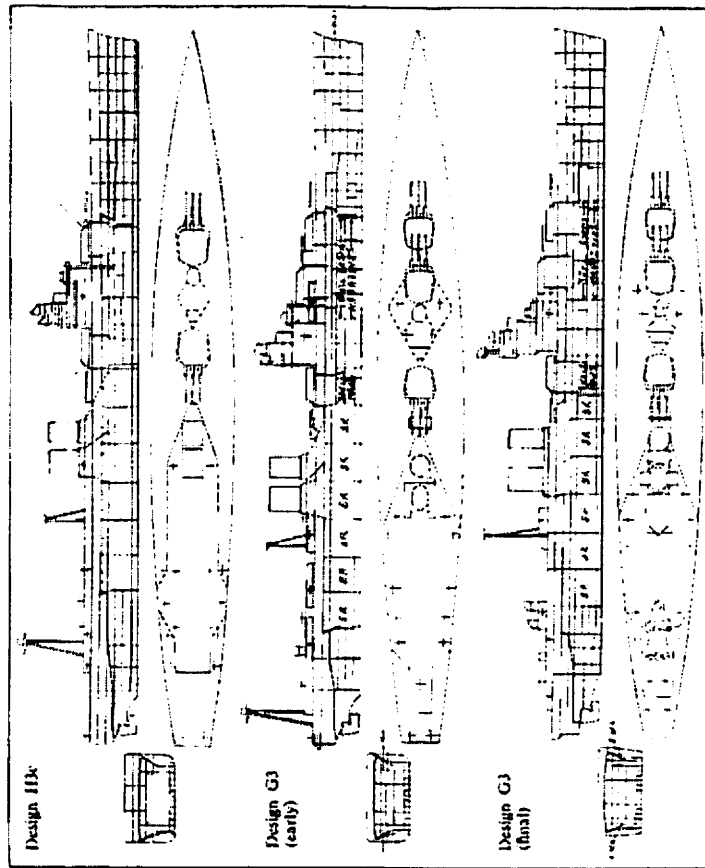


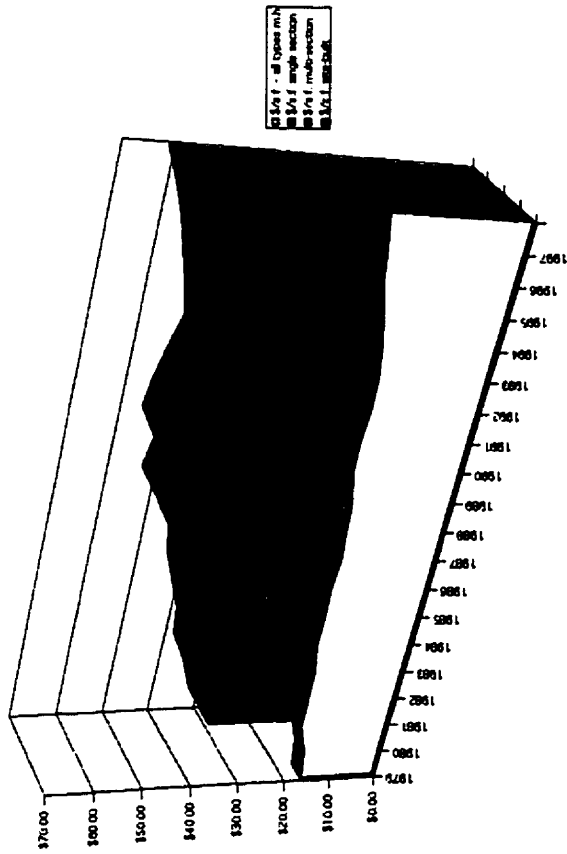
MAIN FLOOR PLAN Model # C-2000 Series



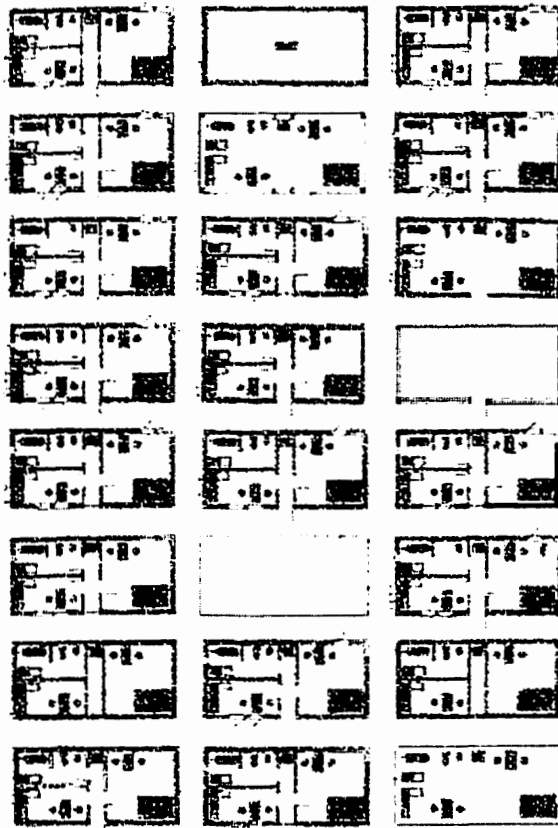


single family homes vs. manufactured housing shipments





comparative costs per square foot for site-built vs. manufactured housing



Yusoke Fujiki - winner of the House Of No Style competition, 1992

<b>weight</b>		
in pounds		
	conventional house	mobile home
weight (habitable)	226,680	14,000
area (their calculations)	1,288	622
pounds per square foot	175.99	22.51
including the carport	287,942	
total cost	180,000	6,300
cost per pound	0.79	0.45
<b>weight ratios (percentage of mh to house)</b>		
total weight	6.18%	
pounds per square foot	12.79%	
cost per pound	56.67%	

<b>volume</b>		
in cubic feet		
	conventional house	mobile home
habitable area (not incl. carport or attic)	10,584	4,350
including the carport	13,382	
including both carport and attic	18,102	
total cost	180,000	6,300
cost per cubic foot	9.94	1.45

<b>area and area ratios</b>				
	conventional house	(interior)	mobile home	(interior)
width	31	30	57	26
depth	30	29	12	11
area	1,900	1,425	687	288
total cost	180,000	122,000	6,300	288,000
area ratios	0.47		0.19	

note: they come up to 49

comparing the site-built home with the mobile home

[email sent July 13, 1999 to all members of the committee]]

To all,

Here's a partial abstract of the document I'm working on for delivery on Friday. In its complexity, it could actually stand as a thesis, so there is the minimum. The "argument" / content provided therein

would then be "enriched" by the fabled episodes of lore.

**Section I [couple of chapters] describe the MH** -> the trailer as a cross between the castle and the car... [I didn't write an abstract, but you know the basics of the story.]

**Section II: Modernism and the MH (including. post-Mod)**

To analyze the MH in relation to contemporary Architectural theory, criticism and history, one must first come to terms with the aspects of the dominant architectural paradigms that relate to the issues brought to the table by the MH. Upon reviewing the mandates of the Modernist perspective, it is revealed that the Mobile Home, on a processual and on a conceptual level displays many of the characteristics sought by the Modernist manifestoes of the 1920's. However, design solutions for the MH come from an approach to the problem from an entirely different direction. The design of the Mobile Home is not one of design by an formally trained Architect, but instead as a result of economic forces responded to by a large number of small Mobile Home manufacturing plants. In other words, the Mobile Home represents a unique example of the American Vernacular as a response to many of the same 'stock and trade' issues that drove the Modernist movement. The fact that that it has not been subject to traditional design processes means that the MH offers a glimpse into a building typology that has retained a particular and peculiar sort of purity. Le Corbusier chose the liner, the car and the airplane for his "pure" forms of engineering, unfettered by the application of the "lies of style". We can likewise regard the Mobile Home as a building type that exhibits the same purity of construction. The MH is one of the few successful examples of the factory built home.

In its prefabrication, the MH represents an powerful example of the autonomy or "objectivity" characteristic of Modern Architecture; a dislocation from a particular site, an



independence from its immediate environment, both physically and temporally.

But the dislocation of the MH goes one step further than even this. Although a very small percentage of Mobile Home's are actually moved once installed, as the name implies, it is the potential to move that adds a secondary dimension of dislocation and slippage. This secondary dimension will be examined with respect to the arguments presented by Post Modern theory, particularly the theory of the Nomad.

### **Section III: Supermodernism and the MH**

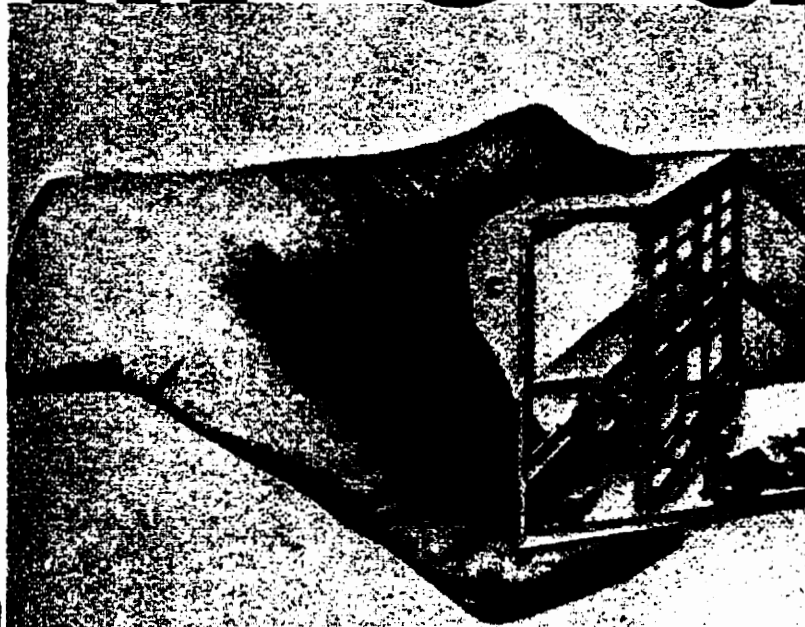
The study of the Nomad has produced, within the recent last few years, an anthropology of non-place. While this is a very active field in the disciplines of anthropology and ethnography, it has not been dealt with by Architectural theorists [because arch is a physical thing... supposedly]. That is, until Hans Ibelings took a stab at relating it in architectural terms in his 1998 book "Supermodernism". However, it is found that although Ibelings has applied the formal Modernist view in the interpretation, he has ignored some of the most important implications of the study of non-place; that formal considerations are very heavily downplayed in favour of the generic or topological approach.

### **Section IV: the "Topological Approach" and the MH**

The investigation started in Supermodernism is continued with respect to the works of Marc Augé, Paul Virilio, Deleuze and Guattari, Jean Baudrillard, Rem Koolhaas, Nigel Thrift, John B. Jackson, Iain Chambers and Michel de Certeau and others from the disciplines of architecture, anthropology and ethnography. It is shown that the "Topological" approach is the most appropriate when considering the MH, and this approach is described in detail, and the implications for Architecture, as a discipline based on formal considerations will be examined in as much detail as my poor brain can stand.

That should pretty much do it for the theoretical basis of the thesis. I would then like to manipulate and interpret this theory in the form that we had described previously; ie in the form of a "document", and ultimately as multi-media.

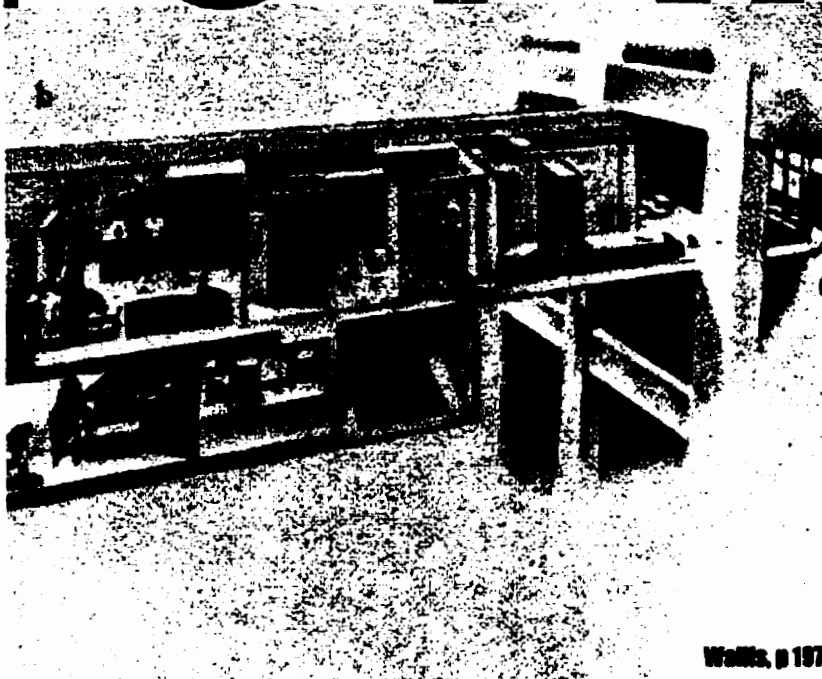
# M o d



# home

**Illustration of the "bottle a Block. In theory the building apartments, which would be concrete frame.**

# Le Corbusier's mobile



Walls, p 197

and wine bin" idea, from Le Corbusier's Marseille  
ing was to consist of prefabricated, factory-built  
be shipped to the site and slipped into a site-built

# 5

## ARGUMENT

tradition, nor of construction, nor of adaptation to utilitarian needs.

Contour and profile are a pure creation of the mind; they call for the plastic artist.

## MASS-PRODUCTION HOUSES

A great epoch has begun.

There exists a new spirit.

Industry, overwhelming us like a flood which rolls on towards its destined ends, has furnished us with new tools adapted to this new epoch, animated by the new spirit.

Economic law inevitably governs our acts and our thoughts.

The problem of the house is a problem of the epoch. The equilibrium of society to-day depends upon it. Architecture has for its first duty, in this period of renewal, that of bringing about a revision of values, a revision of the constituent elements of the house.

Mass-production is based on analysis and experiment.

Industry on the grand scale must occupy itself with building and establish the elements of the house on a mass-production basis.

We must create the mass-production spirit.

The spirit of constructing mass-production houses.

The spirit of living in mass-production houses.

The spirit of conceiving mass-production houses.

If we eliminate from our hearts and minds all dead concepts in regard to the house, and look at the question from a critical

#### ARGUMENT

From an objective point of view, we shall arrive at the "House-machine," the mass-production house, healthy (and, possibly, happy) and beautiful in the same way that the working tools and instruments which accompany our existence are beautiful. Beautiful also with all the animation that the artist's sensibility can add to severe and pure functioning elements.

#### ARCHITECTURE OR REVOLUTION

In every field of industry, new problems have presented themselves and new tools have been created capable of resolving them. If this new fact be set against the past, then you have revolution.

In building and construction, mass-production has already been begun; in face of new economic needs, mass-production units have been created both in mass and detail, and definite results have been achieved both in detail and in mass. If this fact be set against the past, then you have revolution both in the method employed and in the large scale on which it has been carried out.

The history of Architecture unfolds itself slowly across the centuries as a modification of structure and ornament, but in the last fifty years steel and concrete have brought new conquests, which are the index of a greater capacity for construction, and of an architecture in which the old codes have been overturned. If we challenge the past, we shall learn that "styles" no longer exist for us, that a style belonging to our own period has come about, and there has been a Revolution.

## **The Mobile Modern and Post-Modern Home**

### **abstract:**

The Mobile Home, on a processual and on a conceptual level displays many of the characteristics sought by the Modernist manifestoes of the 1920's. However, design solutions for the Mobile Home come from an entirely different origin. The Mobile Home is not designed by a formally trained Architect, but is instead a result of economic forces responded to by a large number of small Mobile Home manufacturing plants. In other words, the Mobile Home represents a unique example of the American Vernacular as a response to many of the same 'stock and trade' issues that drove the Modernist movement. The fact that that it has not been subject to traditional design processes means that the Mobile Home offers a glimpse into a building typology that has retained a particular and peculiar sort of purity. Le Corbusier chose the liner, the car and the airplane for his "pure" forms of engineering, unfettered by the application of the "lies of style". We can likewise regard the Mobile Home as a building type that exhibits the same purity of construction.

In its prefabrication, the Mobile Home represents an powerful example of the autonomy or "objectivity" characteristic of Modern Architecture; a dislocation from a particular site, an independence from its immediate environment, both physically and temporally.

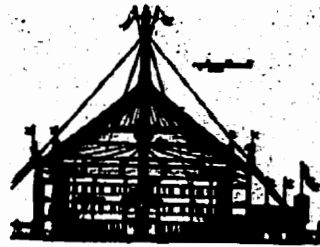
But the dislocation of the Mobile Home goes one step further than even this. Although a very small percentage of Mobile Home's are actually moved once installed, as the name implies, it is the potential to move that adds a secondary dimension of dislocation and slippage. This secondary dimension will be examined with respect to the arguments presented by Post Modern theory, particularly the theory of the Nomad.



crystal gardens by Joseph Paxton



CPR passenger car circa 1880



Henry VIII's banqueting tent

## **Modernism**

**"The world as we see it is passing." Paul of Tarsus**

**Mobility and the origins of modernity are one and the same thing. Geographer Nigel Thrift's investigations into mobility (from a British perspective) has shown that much of the dislocative changes to the way in which the modern 'man' was subject was as a result (perhaps not surprisingly) of mobility, and more specifically as a result of speed, light, and power: the three areas that Thrift maintains are all part of the 'mobility' family. It is interesting that the very same issues are at the heart of this thesis right from the start of the introduction of mobile forces to the pre-modern condition. I shall paraphrase for our use Thrift's findings of the Nineteenth Century's relationships to speed, light, and power.**

### **Nineteenth Century Europe and Speed**

- 19th century broke through the limits of walking and the horse.
  - The stage coach and the horse-drawn tram, the railway and the electric train, and the bicycle.
  - 1820 stagecoaches were in common use.
  - 1830 movement between major towns in Britain was 5x faster than in 1750.
- "It is no surprise that 'the annihilation of space by time' was a favourite meditation for the Victorian writer" [Thrift p. 199]
- By 1855 there were already 400,000 cyclists in Britain. The bicycle, which started as a piece of fun for young swells, foreshadowed the automobile in providing immediate, democratic access to speed (Kern 1983)" [Thrift p. 199]
  - Communication networks Mail, telegraph, newspapers, etc. started to displace face-to-face communication.



**Four effects of this 'great acceleration':**

**1. there was a general change of consciousness of time and space.**

**the 'dislocation' theme became a favorite with the Victorian writer.**

**2. people became more aware of time**

**3. people became aware of an enlarged simultaneous presence (telegraph), affecting the nature of subjectivity**

**-sense of the body as a "parcel of flesh shunted from place to place, just like other goods."**

**'Each individual paper, a replica of hundreds of thousands of others, served as a private opening to a world identical to that of one's companion on a street car, a companion likely to remain as distant, remote and strange as the day's news came to seem familiar, personal, real' [Trachtenberg, 1982, p 125]**

**4. people saw landscape as from a moving platform causing a change in the metaphors (particularity in the 'bourgeois' circles).**

**'The formula is as simple as can be: whatever was part of circulation was regarded as healthy, progressive, constructive; all that was detached from circulation, on the other hand, appeared diseased, medieval, subversive, threatening' [Schivelbusch, 1986, p. 195. See also The Condition of Postmodernity by David Harvey]**

## **Nineteenth Century Europe and Light**

- in 1879, the electric bulb was invented, and saw the end of the fire, and the beginning of electrical light.
- 1882 in New York and London saw the first electricity generating stations.

Five effects of the "ever-expanding lightscape".

1. It signaled the colonization of the night. Day and night blurred. In addition, there was a severing of the cycles of the heavens (streetlights used to be set by the moonlight)
2. Night-life started: both socially and industrially.
3. Night became an important part of 'dream spaces' (Benjamin 1973); department stores, hotels theatres cafes, etc. for marketing.
4. Surveillance. Differences in lighting created the seen and the not-seen.
5. A remetamorphosis of texts and bodies as a result of the new perceptions.
  - perceptions of landscape
  - manufactured light "produced new image technologies and associate institutional forms" in particular the camera. "It produced a new regime which permitted new types of image, new forms of fantasy and desire, new forms of 'experience which (did not need) to be equated with presence' (Game, 1991, p147)" [Thrift p. 203]

**The power of artificial light to create its own reality only reveals itself in darkness. In the dark, light is life' (Schivelbusch 1988, p 221)**

**"Nineteenth century image technologies were surrounded by institutions of surveillance which invoked arrangements of bodies in space, regulations of activity, and the deployment of individual bodies, which codified and normalized the observer within rigidly defined systems of visual consumption. There were disciplinary techniques for the management of attention, for imposing homogeneity, anti-nomadic procedures that fixed and isolated the observer."**

[Crary, 1990, p.18 as cited in Thrift p. 204]

### **Nineteenth Century Europe and Power**

**Electricity was quickly integrated into houses. It was clean and odourless. It seemed to be an absent presence, a sourceless source.**

**Power's important effects:**

- 1. power boosted new conceptions of time and space: absent presence, and a communication that was not physical at all.**
- 2. remetaphorization of the body: the body electric (frankenstein). "It lives in the skies and seems to connect the spiritual and the material" [Czitrom, cited in Carey 1989, p 206, cited in Thrift also p. 206]**
- 3. resulted in a more integrated society. Most people are now 'on the grid'.**

I should point out at this point that Thrift's use of the reference of power - i.e. electricity - relates to mobility indirectly. It facilitates it.

I shall now introduce the Modernist avant-garde and extract their relationship to mobility, as well as the Mobile Home.

### **The origins of Modernism: Futurism**

Futurism is one of the initial poetic attitudes that helped to create High Modernism in Architecture. Its founding father, so to speak, Tommaso Filippo Marinetti was following a tradition that "stretch[ed] back through French Symbolism to Baudelaire, the 'poet of modern life'" [Curtis p71].

Anarchist in inspiration, the Futurist outlook had no particular political affiliation, but was in favour of revolutionary change, speed, dynamism of all sorts, and an aggressive adulation of the machine. Typically, the Foundation Manifesto suggested the destruction of museums and academies; the vitality of contemporary life was opposed to the tiredness of inherited art forms:

We declare that the splendour of the world has been enriched by a new beauty - the beauty of speed. A racing car with its bonnet draped with exhaust pipes, like fire-breathing serpents - a roaring racing car, rattling along like a machine gun, is more beautiful than the winged Victory of Samothrace. Marinetti (Le Figaro of 20 Feb, 1909)

"Dynamism was the shared central conception [of Futurism], and the early painters in the movement, among the Boccioni and Severini, attempted to translate the Futurist ethos not only by choosing subjects such as trains leaving stations, building sites on the edge of industrial cities, and strikes, but by treating these themes in a vital play of complementary colours divisionist lighting effects and unstable diagonal compositions." [Curtis, p.71]

To analyze the Mobile Home in relation to contemporary Architectural theory, criticism and history, one must first come to terms with the

aspects of the dominant architectural paradigms that relate to the issues brought to the table by the Mobile Home. The dominant paradigm, whether directly or indirectly by reaction, is the Modernist perspective, particularly as put forth in the manifestoes of the 1920's. The Modernist perspective grew as a result of the social impact of industrialization and modernization in Europe. Inspired by Futurism, and catalyzed by the horror of WWI, Modernism quickly spread across Europe in the 1920. From a western historic point of view, its proponents included Peter Behrens, Auguste Perret, Walter Gropius, Adolf Loos, Antonio Saint' Elia, Gerrit Thomas Rietveld, Ludwig Mies van der Rohe, and Le Corbusier, to name a few. I will focus on the work of Le Corbusier, specifically his seminal 1926 work *Vers Une Architecture*.

### **Towards a New Architecture**

In *Vers Une Architecture* Le Corbusier clearly outlines his concept of a truly Modern Architecture. In it, he holds up examples of engineering as being the "pure" object to which the Modern movement should aspire. Specifically, in the section entitled "Eyes That Do Not See" Le Corbusier uses three modes of transportation: the ocean liner, the airplane and the automobile. His main thrust is not that these "machines" be used as stylistic benchmarks, but rather as a sort of ideal that should be held as an inspiration to the Architects of a New Age. It was in their process; in their approach to arriving at a design solution, that Le Corbusier found the greatest potential for inspiration.

The airplane is the product of close selection.  
The lesson of the airplane lies in the logic which governed the statement of the problem and its realization.  
The problem of the house has not yet been stated.  
Nevertheless there do exist standards for the dwelling house.  
Machinery contains in itself the factor of economy, which makes for selection.  
The house is a machine for living in.

Le Corbusier doesn't let it rest there. He further declares that not only

should we approach the design of the house as would an engineer, unfettered by architectural precedent or historical burden, but that our methods of construction should likewise adapt to the industrialization processes that were sweeping all other realms of modern society [Fordism and Taylorism].

### **Towards a Mobile Home**

Separated by an ocean, a few decades, and a decent number of paradigms, we find the North American Mobile Home industry. As previously described, early mobile homes or trailers of the 1920's and 1930's were not really homes at all; they were trailers that were meant for recreational and seasonal use. These trailer plants were off-shoots of the automotive industry, and already fully automated. It wasn't until after WWII that these trailer manufacturers started to produce models that were meant for year-round living, due in part to increased housing demands from returning war vets. However, these "Trailer Homes" retained their strong links to the trailer industry, and its association with continuous or frequent mobility. We shall return to the mobility aspect of the Trailer Home shortly; for now we shall focus on its prefabricated nature.

Coming, as it did, from precedent of the automobile industry, the Mobile Home/House Trailer has always been inextricably linked to prefabrication and mass production. It evolved as a direct response to the influences of the marketplace and consumer demand. Models that did not fit the requirements of the consumer were discontinued. As Le Corbusier said, "...if a man does not move forward he becomes bankrupt". Mobile Home design possessed no grand narrative, no overriding design manifesto, no champion or pioneer of or leader of design. As an industry, it was defined by its mobile precedents and was driven by consumer demand, largely or entirely by demand, preferences, and expectations. This in turn meant that mobile home designs had a fair degree of momentum; what had been in the past successful was taken as the model for the next generation of designs.

Because of this lack of individual authorship, the evolution of this building type could be regarded as an American Vernacular of housing, and from the perspective of design, could be considered to contain the same sort of purity that Le Corbusier sought with his machines.

The industry's approach to design was predicated on the automobile, and adapted for habitation. This is the obverse to Le Corbusier's notion of having the automobile's influence mutate a pre-conceived notion of a house. Because the approach of the Mobile Home originates from a different set of principles, namely that of the production of the automobile, the resultant removal from Architecture (with a capital 'A') meant that they were able to literally respond to Le Corbusier's cry for style-free problem-stating and problem-solving standardization of the housing industry.

#### **A Question of Style**

Why then were they not heralded as the magnificent triumphal solution that Modernism was waiting for? After all, they satisfied the criteria Le Corbusier had laid before them, and not only that, they actually had accomplished this feat without the "interference" of a pre-existing architectural style! And yet they were utterly ignored by the profession, even though they represented a successful solution to a problem that many seminal architects, including Le Corbusier but most notably Gropius [note: see Dream of the Factory Built House by Gilbert Herbert] tried directly and unsuccessfully to solve.

This apparent paradox is roundly answered by another apparent paradox: The Trailer Home could not have been conceived of as the best solution to the Modern Problem of the Industrialization of the House, (and its calls for a rejection of stylistic preoccupation) precisely because the Trailers had no architectural style. They were not magnificent enough in their volumes. In any light. Perhaps as far as Architecture was concerned, the Trailer had answered the problem by coming in the back door: they could not communicate in the language that Architects had developed building castles. They presented too literal an answer to the problem. They represented an "engineered"

solution to the problem, and as such were seen 'at the same level' as the Corbusian Liner, Airplane, and Automobile. They lacked the artistry the Architectural profession required to accept their form, since, despite all its rhetoric of a shedding of architectural style, the Modern Avant Garde were actually searching for the shedding of a particular set of competing styles: most notably the Beaux-Arts and the Revivalists styles.

### **The International Style and the Myth of Functionalism**

A short note on style:

"A style may be considered a complex of formal relationships in which certain moods and meanings are most at home; it provides a set of conventions, which, in the compelling and profound work of art, come together in such a way that the conventionality is forgotten." [Curtis p.182]

A casual reading of the rhetoric Le Corbusier presents in "Vers Une Architecture" may lead one to believe that Modernism is in fact Functionalist in nature, that there be no stylistic filtration, only as a pure response to the Universal Factors that reflected the needs of Modern Man. This is not, however, the case. Modernism uses the concepts of industrialization, simplicity and objectivity as artistic inspiration for the generation of architecture, and Le Corbusier clearly states this in the text of Vers Une Architecture:.

Architecture goes beyond material needs...  
Contour and profile are the touchstone of the architect. Here he reveals himself as artist or mere engineer....Contour and profile are a pure creation of the mind; they call for the plastic artist.

So although Le Corbusier earlier called for a rejection of style, it is clear that his formal priorities were strong. He marveled at the process of the design of the machine, although he reserved judgement on whether the solutions themselves are effective. His attitude toward the



'mere' engineer belies his opinion that they lack the supposed ability to design artistically, which is necessary for the plastic artist to produce the form (contour and profile) that would become great architecture. Ultimately, these formal concerns are stylistic concerns. As a manifestation of the Style of Modernism, let us examine the International Style

In 1932, Johnson and Hitchcock published "The International Style: Architecture Since 1922" to accompany the MOMA's exhibition of a new architectural style dubbed the International Style. The book defined, in stylistic terms, the creation of a "new" age of architecture whose stylistic traits were represented by the characteristics described in the book.

There is first of all a new conception of architecture as volume, rather than as mass. Secondly, regularity rather than axial symmetry serves as the chief means of ordering design. These two principles with a third proscribing arbitrary applied decoration mark the productions of the International Style.

There were other contemporary publications heralding the Internationalism of the Modern movement in Architecture, including Walter Gropius' 1925 publication: "Internationale Architektur (Munich)" in which functionalism was held to be the commonality leading to the International Style, and "Gli elementi dell'architettura funzionale" (1932) by Alberto Sartori.

The International Style was perhaps unified by the desire for a 'Revolution' put forth by Vers Une Architecture. As Johnson and Hitchcock had shown, it had a unified set of characteristics which were subsumed by functional requirements; an architecture broken down to its constituent parts and reassembled with no unnecessary historical burden or allusions. Would it therefore make sense that the buildings have common traits, since after all, they are unsullied in their response to environmental conditions, giving building solutions that reflect the modern program and the modern construction materials? After all, a car in England is similar in many ways to a car in Czechoslovakia.

The International Style, though, was not as purely related to functionalism as it at first seemed. In an essay entitled "The International Style and the Myth of Functionalism", historian William Curtis wrote:

Despite the fact that these forms had the clearest basis in functional decisions concerning the process of manufacture, and despite the fact that they could be related to the naked facts of concrete and steel construction, the pragmatic was transcended, idealized, given a poetic, expressive presence.  
[Curtis, p.177]

A clear tension exists between Functionalism and Formalism, and to label a style is to work contrary to the efforts of the functional preference for generation of architectural form free from the constraints of style for speaking of the new architecture as a 'style' at all suggests that a set of visual formulae could be picked up and then applied. As Buckminster Fuller representing the Functionalists objected:

The International Style 'simplification' then was but superficial. It peeled off yesterday's exterior embellishment and put on instead formalized novelties of quasi-simplicity, permitted by the same hidden structural elements of modern alloys that had permitted the discarded Beaux-Arts garmentation.... The new International Stylist hung 'stark motif walls' of vast super-meticulous brick assemblage, which had no tensile cohesiveness within its own bonds, but was, in fact, locked within hidden steel frames supported by steel without visible means of support. In many such illusory ways did the 'International Style' gain dramatic sensory impingement on society as does a trick man gain the attention of children...

They remind one that, for all the rhetoric used in the twenties concerning the honest expression of function, structure, and technology, the game had to go on once removed, as it were, in the field of symbolic forms, if the pragmatic was to be translated into art. One can go further, and say that it was in the tension between such apprehended facts, as, say, an industrial window, or a standardized reinforced-concrete support, and the symbolic associations they evoked, that part of the expressive power of the new architecture lay.  
[Curtis p. 177]

But the objection against taking 'functionalist' slogans at face value is even more fundamental. For even those few architects of the 1920's who saw themselves as pursuing a purely functional architecture were still stuck with the fact that functions do not, on their own, generate forms. Even the most tightly defined set of requirements may be answered in a variety of ways, and a priori images concerning the eventual appearance of the building will enter the design process at some point. Thus functions could only be translated into the forms and spaces of architecture through the screen of a style, and in this case it was a style of symbolic forms which referred, among other things, to the notion of functionality.

The goal of symbolic objectivity was to align architecture with the pervasive factuality of modern existence, with that 'inequity' (to call up Bernard Berenson's tag) which characterizes the modern imagination. The aims of simplification and purification at the core of the movement, providing it with a morality of Calvinist austerity, actually stemmed from a diffuse convention on the part of many progressive designers and theorists during the nineteenth century to the effect that architecture should be 'honest', 'truthful', and 'real', especially with respect to the revelation of functional programme and of materials and structure. During the twenties this moralistic heritage acquired an antiseptic cleanliness, and irreducible bareness, which symbolically, if not quite literally, accords with the morality of objectivity.  
[William Jordy as quoted in Curtis, p.180]

"Don't you miss some kind of permanence," he asked the father of one family?

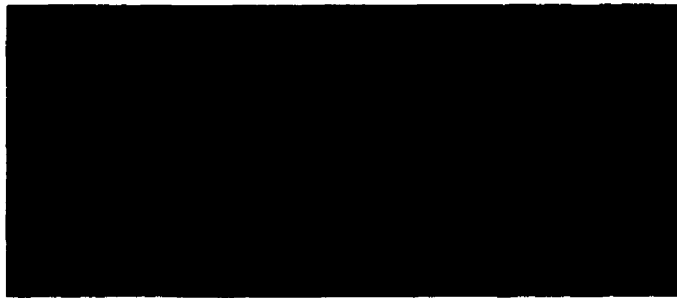
Who's got permanence? Factory closes down, you move on. Good times and things opening up, you move on where its better. You got roots and sit and starve. You take the pioneers in the history books. They were movers. Take up land, sell it, move on."

further along on their trip Steinbeck thinks aloud to his dog Charley:

"In the pattern - thinking about roots | and most other people have left two things out of consideration. Could it be that Americans are a restless people, a mobile people never satisfied with where they are as a matter of selection? The pioneers, the immigrants who peopled the continent, were the restless ones in Europe. The steady rooted ones stayed home and are still there... Perhaps we have overrated roots as a psychic need. Maybe the greater urge, the deeper and more ancient is the need, the will, the hunger to be somewhere else."

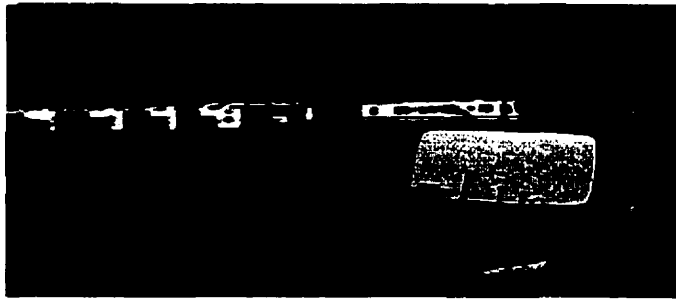
John Steinbeck, *Travels With Charley* (NY:Viking Press, 1962), 91-94

america



Say you are passing through the renovated downtown late at night: you then find that the dominant feature of the scene is not the cluster of magnificent forms and spaces; it is the long and empty view of evenly spaced, periodically changing red and green traffic lights along Main Street. The tall glass buildings, so imposing by day, are half-hidden in darkness and stand to one side to allow the street to thrust ahead, unimpeded. It cuts through the less opulent parts of town, the block after block of silent, nondescript houses like the houses in every other American city. It goes through the tree-grown suburbs and parallels the complex of warehouses and parking lots and industrial plants until at last it turns into an interstate highway, heading into the dark and featureless countryside...

america



...The highway never seems to end. There is an occasional brightly lit truck stop and the lights of a bypassed town. Rows of trucks are parked at rest areas, and with the house of solitary travel there comes a mood of introspection. A favorite episode in novels and movies and television shows laid in the American heartland is that lonesome ride through the night landscape: an occasion for remembering other times. You think back over your past, think about your work, think about your destination and about those you have left...

(cont...)

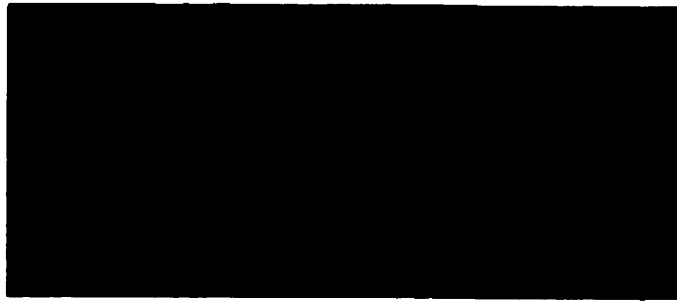
america



...The dashboard display shows how fast you are driving, tells you the hour and how many more miles you still have to go. The sameness of the American landscape overwhelms and liberates you from any sense of place. Familiarity makes you feel everywhere at home. A sense of time passing makes you gradually increase your speed.

[words: John B. Jackson Sense of Place a Sense of Time, p.155]  
[images: author]

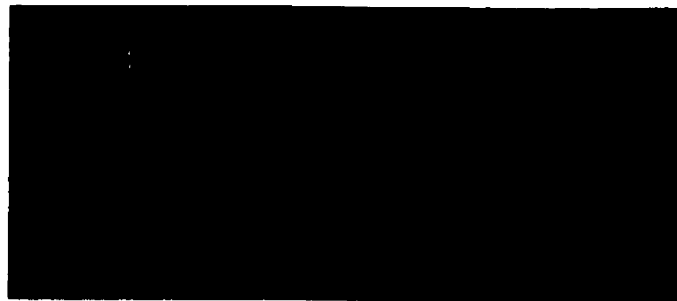
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**Speed creates pure objects. It is itself a pure object, since it cancels out the ground and territorial reference-points...**

**america**





**Speed is the triumph of effect over cause, the triumph of instantaneity over time as depth, the triumph of the surface and pure objectality over the profundity of desire...**

**america**



**...Driving like this produces a kind of invisibility, transparency, or transversality in things, simply by emptying them out. it is a sort of slow-motion suicide, death by an extenuation of forms - the delectable form of their disappearance...**

**america**



**Speed is simply the rite that initiates us into emptiness: a nostalgic desire for forms to revert to immobility, concealed beneath the very intensification of their mobility. Akin to the nostalgia for living forms that haunts geometry.**

**[words: Jean Baudrillard, America (1993) pp.6-7]  
[images: from a GM truck commercial (1999)]**

**america**

The home's "mobility" exists to fulfill another part of the Dream: that part of our Emersonian legacy is an awareness of our inheritance - as Americans - of space rather than time. To this way of thinking, one has a perfect right to maintain that a "normal" house belongs, again in Emersonian terms, to tradition, with all its associations of the past's claims upon the living, and as such a house represents allegiance with the past, ancestors, and placedness. The mobile home (home, not house) avoids all that. Emerson argued that the liberation of American energies could only be accomplished by severing our ties to tradition, which at any rate wasn't ours to begin with - that is to say, by abolishing our ties to the dead, that which chains us to historical time. In this, he was reformulating the terms of a famous debate between Thomas Paine and Edmund Burke concerning the meaning and value of the American Revolution's first international gift: the French Revolution. Paine, straight from his own fame as a revolutionary fellow-traveler, and argued for the right of people to reject the claims of the past on the present, which, from his perspective, amounted to the blind obedience, even love, of the living toward the dead, a kind of historical necrophilia. Burke, who saw the strength of tradition from his own vantage as a comfortable Englishman, contended that such a breaking of the chain was tantamount to chaos and bespoke an arrogance to the benighted living to which all of history stood in glaring contradiction. Emerson's solution, as useful as it was novel, was to switch dimensions: time was to be exchanged for space, which manifests itself in the present tense, preparing the way both for the American emphasis on the immediate and on mobility as a "right." He also accomplished, almost as a byproduct, the bizarre task of turning time into a commodity. Thus, with the Sage of Concord's inferred blessing, one might even venture to say that the mobile home is a more authentic American house than a fixed abode. The mobile home contains the potential for establishing itself in space, that is to say, geography, in much the same way that a house establishes itself in one place over time.

[Rigsbee, pp.78-79]

america

### **Meanwhile... back on the Range**

The Mobile Home's removal from the formal design world and its lack of a disciplined style during its development means that the Mobile Home can offer a glimpse into a building type that has retained a degree of removal from the influence of the design professionals. Le Corbusier chose 'pure' forms of engineering, unfettered by the application of the 'lies of style'. We can likewise regard the Mobile Home as a building type that exhibits the same purity of construction. Indeed, from a functionalist point of view, it could be fairly argued that the mobile home is more modern than the Modernists themselves. In its prefabrication, the Mobile Home represents a powerful example of the autonomy or "objectivity" characteristic of Modern Architecture; a dislocation from a particular site, an independence from its immediate environment, both physically and temporally. However, it also represents a vernacular approach to the challenge of the factory built house.

The traditional anthropological approach to architecture has been to examine the houses of the aristocracy, not the 'common' house. However, to judge one form on the basis of the other is inappropriate. "Far from being a small and primitive version of the house of the nobleman or merchant, it has been a distinct form with its own rural way of life." [Jackson, p.64]

The difference is often less a matter of size and cost than of how space, interior as well as exterior, is organized and used. The average white-collar home is likely to contain a great variety of what anthropologists call monofunctional spaces: spaces of one kind or another set aside for a special use or a special person. This was always characteristic of the aristocratic household, even in the remote past, but its prevalence in the houses of the middle class is relatively new. Many scholars have discussed the development of the elaborate floor plan in domestic architecture, Philippe Ariès and Yi Fu Tuan among them. The nineteenth century seems to have been the time when the obsession with monofunctional spaces or rooms reached its climax. The contemporary middle-class dwelling manages to survive with fewer spaces but, in the guise of a free flow of space, new ones keep emerging: media entertainment centers, hobby

rooms, exercise rooms, and super-bathrooms. The modern hi-tech kitchen is becoming a cluster of monofunctional spaces.

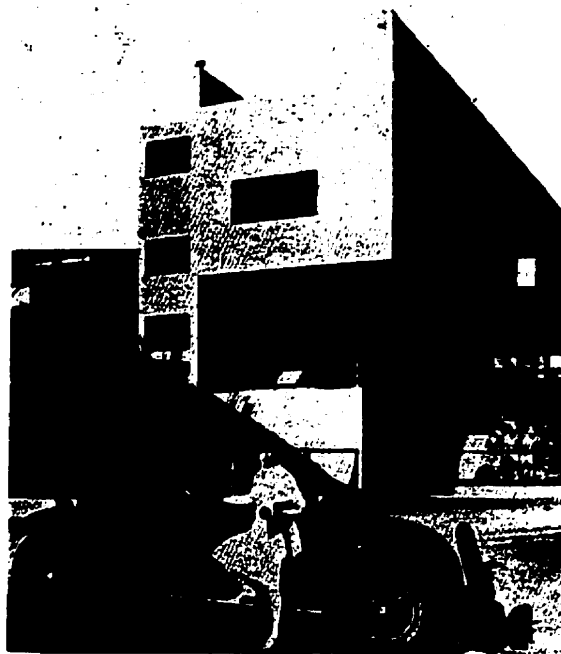
There are several things about this segmentation of domestic space that I find interesting. In the first place, it is merely a small-scale architectural version of a widespread modern tendency to organize all spaces in the landscape in terms of some special function...

But equally significant is the fact that the working-class house has been largely immune to the appeal of the monofunctional space. The house may well contain many rooms, but most of them serve several uses, uses which can change from hour to hour or from day to day. The garage serves as a storage room, then becomes a workshop. The kitchen is where we watch television and cook and eat; the dining room - if there is one is for homework. The out-of-work brother-in-law sleeps on the living-room couch, and the men in the family tune up the second-hand car on the patch of lawn. These are strictly temporary expedients. All, or almost all, spaces in the house can be shared and used in a variety of ways. This reflects what I would call a vernacular concept of a space: a space has no inherent identity, it is simply defined by the way it is used. The middle-class or establishment concept is almost the direct opposite: each space is unique and can in fact affect the activity taking place within it. So, in the design of domestic spaces and their relationship, the skill of the architect and planner is always called for. [Jackson, pp.70-71]

The architect, designer and planner come from the master masons that constructed massive medieval monuments. They approached the 'problem' by employing a 'hard' mentality of segregation and monofunctionalism which is an impossible model to follow for the mobile home.

### **Secondary Slippage**

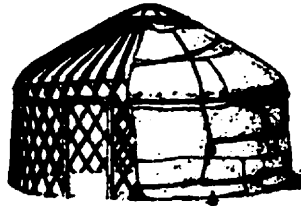
The mobile home represents not only an initial removal from "place" in that it is designed and built for generic locations, but a secondary removal in that it can be moved once installed. A Modern Masterpiece, such as the Villa Citrohan, follows the classical priorities of firmness, commodity and delight. Despite the fact that it has responded to modes of transportation in symbolic aspiration, it may hint at dynamism but in fact finds itself firmly entrenched in the physics of statics. The Mobile Home, however, responded to the problem of habitation from the perspective of mobility where the physics of dynamics dominate. Lightness, flexibility, tensile strength and aerodynamics (wind resistance) all play a significant role in determining the final form. This added dimension of slippage from the site colours the perception of the post-occupancy of the construction of a Mobile Home. It runs contrary to many of the notions of place and habitation, where territorial ownership and defense is the modus operandi of societies that have a agrarian history, including those of the west. In short, it calls back one of the basic anthropological divisions; between the nomad and the settled. Divisions which have been recently called upon more and more as the difference between the Modern and the Post-Modern. This secondary slippage will be examined with respect to the arguments presented by Post Modern theory, with particular emphasis on the subject of the Nomad.



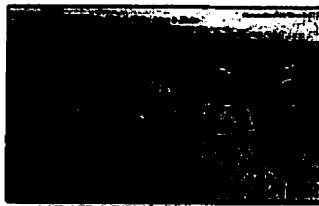
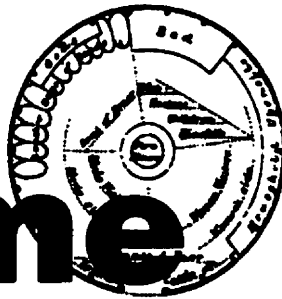
Mercedes Ad and Weissenhofsiedlu (source: Colomina, 1998)



# Postm



# home



# o d e b i l e

I am sorry they won't let you have your sloop again, for I scorn to do any one a mischief, when it is not to my advantage; damn the sloop, we must sink her, and she might be of use to you. Though you are a sneaking puppy, and so are all those who will submit to be governed by laws which rich men have made for their own security; for the cowardly whelps have not the courage otherwise to defend what they get by knavery; but damn ye altogether: damn them for a pack of crafty rascals, and you, who serve them, for a parcel of hen-hearted numbskulls. They vilify us, the scoundrels do, when there is only this difference, they rob the poor under the cover of law, forsooth, and we plunder the rich under the protection of our own courage. Had you not better make then one of us, than sneak after these villains for employment?

Pirate Captain Bellamy to a captured merchant vessel captain, 1770(?)

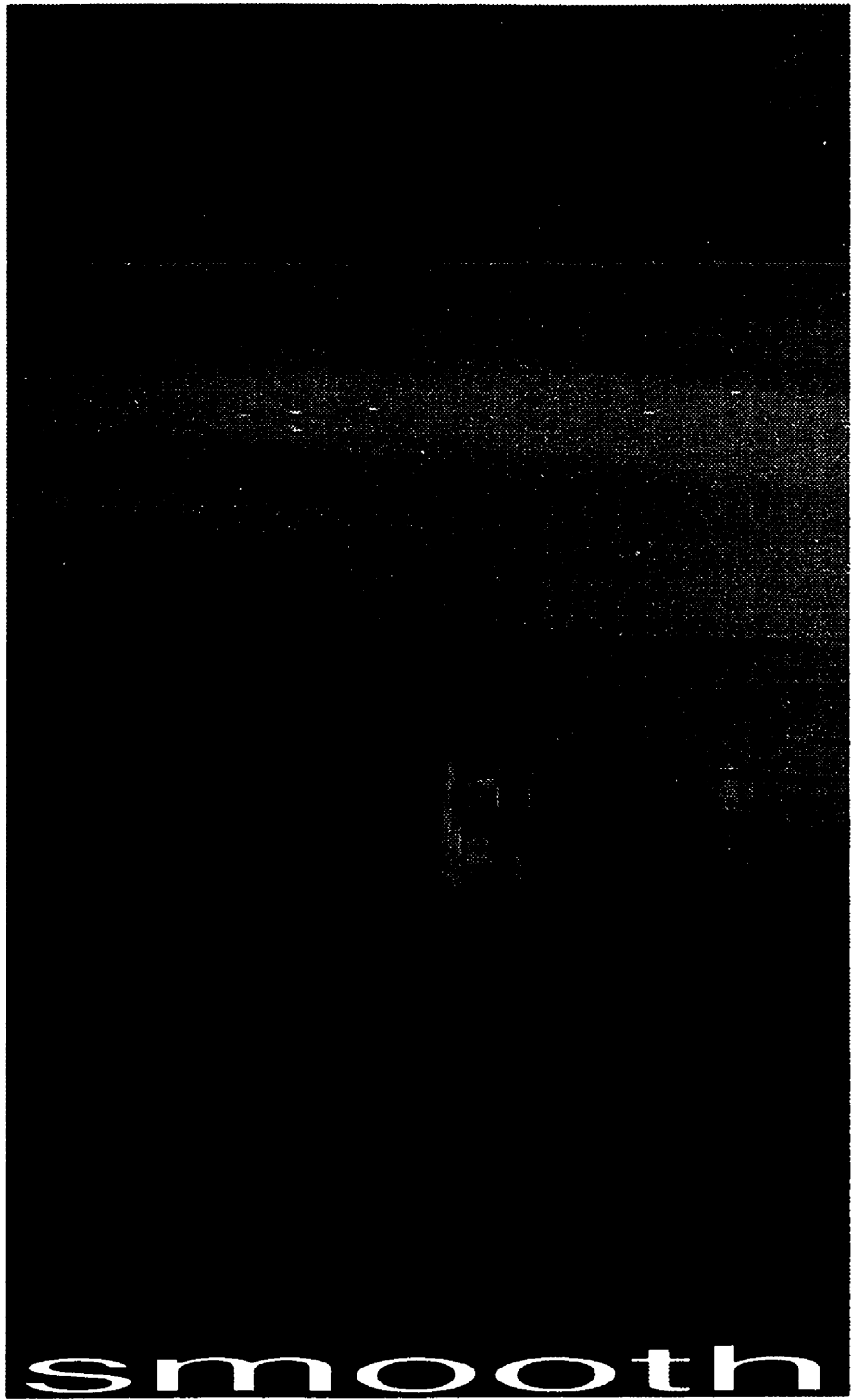
[Dafoe, Daniel. A General History of the Robberies and murders of the Most Notorious Pirates. after Hakim Bey]

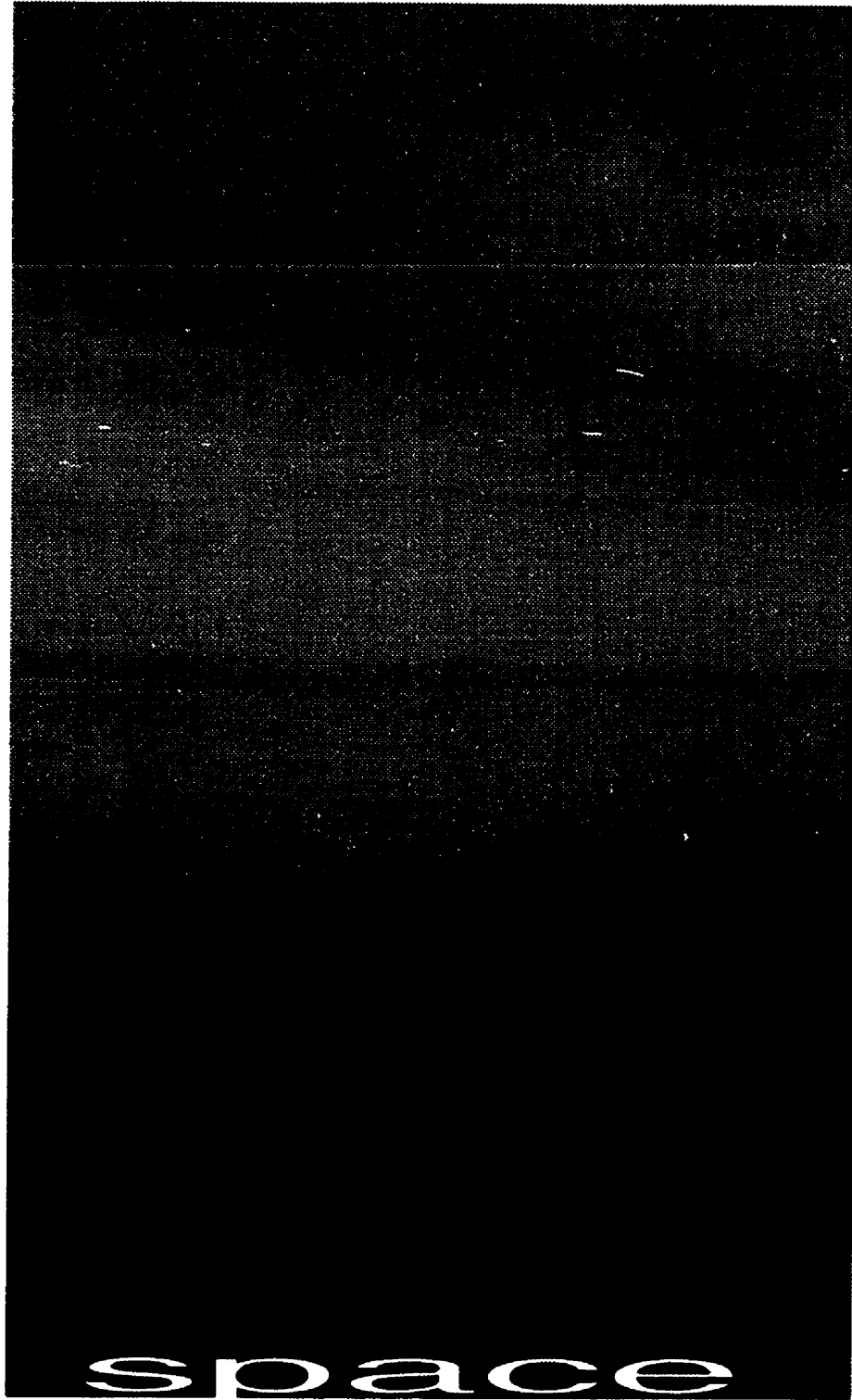
# 6

**"...the silence of these infinite spaces terrifies me..." Pascal**

**smooth**

**space**



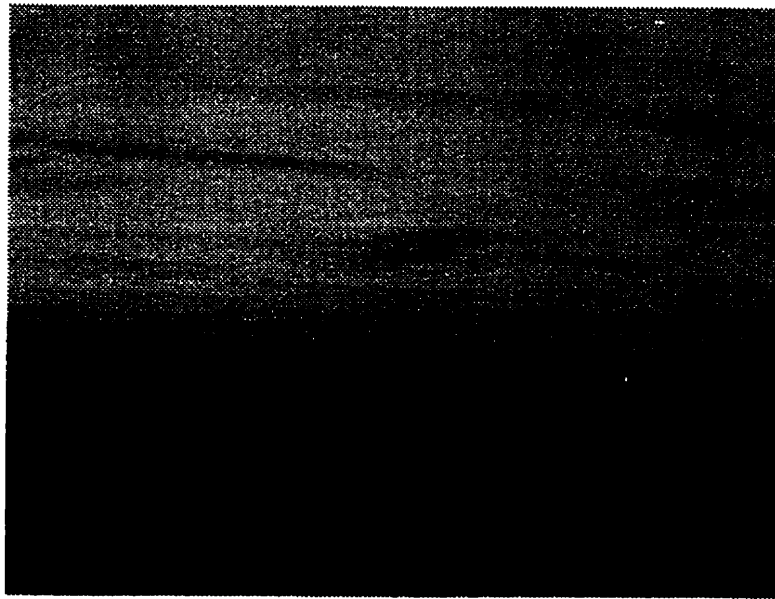


**Smooth space** is a field without conduits or channels. A field, a heterogeneous smooth space, is wedded to a very particular type of multiplicity: non-metric, acentered, rhizomatic multiplicities which occupy space without "counting" it and can "only be explored by legwork." They do not meet the visual condition of being observable from a point in space external to them; examples are the system of sounds, or even of colours, in opposition to Euclidean space. [Deleuze and Guattari, *Nomadology*, pp. 34-35]

The classical image of thought and the striating mental space it effects, aspires to universality. It in effect operates with two 'universals,' the Whole and the final ground of being or all-encompassing horizon, and the Subject as the principle that converts being into being-for-us. Imperium and republic. Between the two, all of the varieties of the real and the true find their place in a striated mental space, from the double point of view of Being and the Subject, under the direction of a 'universal method'.

It is now easy for us to characterize the nomad thought that rejects this image, and proceeds otherwise. It does not ally itself with a universal thinking subject, but on the contrary with a singular race; and it does not ground itself in an all-encompassing totality, but is on the contrary deployed in a horizonless milieu that is a smooth space, steppe, desert, or sea. [Deleuze and Guattari, *Nomadology*, p. 48]

**smooth**



space



**Proposition 5: Nomad existence necessarily effectuates the conditions of the war machine in space.**

**1**

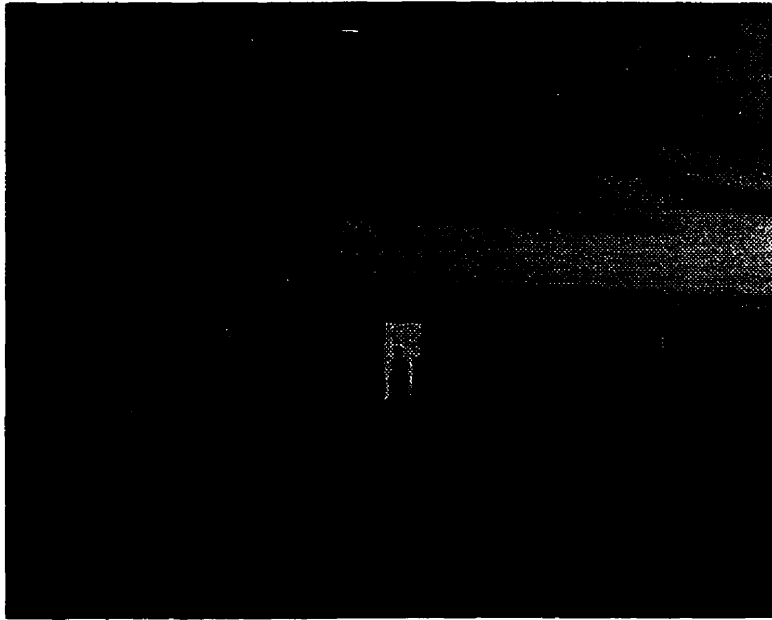
The nomad has a territory... To begin with, although the points determine paths, they are strictly subordinated to the paths they determine, the reverse of what happens with the sedentary. The water point is a relay and exists only as a relay. A path is always between two points, but the in-between has taken on all the consistency, and enjoys both an autonomy and a direction of its own... (ibid, p.50)

...The nomad only goes from point to point as a consequence and as a factual necessity: in principle, points for him are relays along a trajectory. (ibid, p.50)

**2**

...[E]ven though the nomadic trajectory may follow trails or customary routes, it does not fulfill the function of the sedentary road, which is to parcel out a closed space to people, assigning each person a share a regulating the communication between shares. The

**smooth**



space

nomadic trajectory does the opposite, it distributes people (or animals) in an open space, one that is indefinite and noncommunicating. [Ibid, p.51]

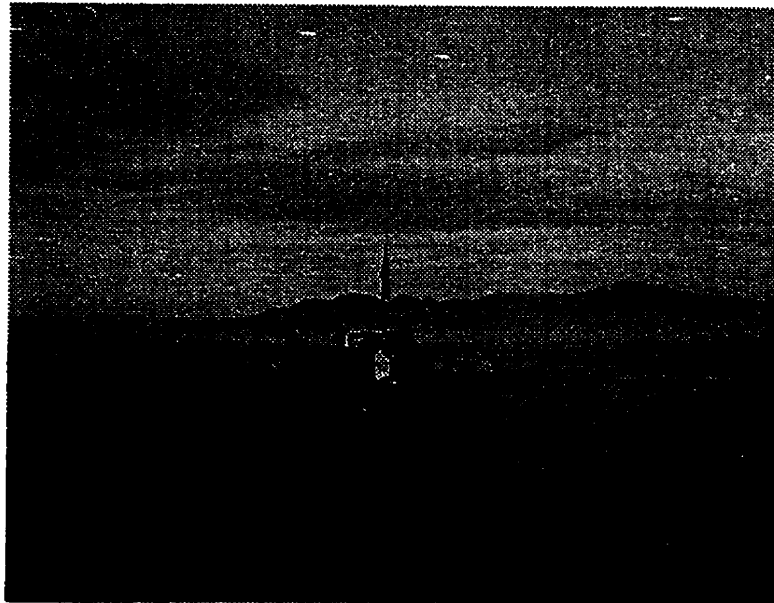
### 3

There is.... a significant difference between the spaces: sedentary space is striated, by walls, enclosures and roads between enclosures, while nomad space is smooth, marked only by 'traits' that are effaced and displaced with the trajectory. Even the lamella of the desert slide over each other, producing a inimitable sound. The nomad distributes himself in a smooth space, he occupies, inhabits, holds that space; that is his territorial principle. It is therefore false to define the nomad by movement. Toynbee is profoundly right to suggest that the nomad is on the contrary he who does not move. Whereas the migrant leaves behind a milieu that has become amorphous or hostile, the nomad is one who does not depart, does not want to depart, who clings to the smooth space left by the receding forest, where the steppe or the desert advance, and who invents nomadism as a response to this challenge. [Arnold Toynbee A Study of History New York: Oxford University Press, 1947 p.168]  
[Deleuze and Guattari, Nomadology, p.51]

Less than 5% of all mobile homes move after being placed in position.

It is ... necessary to make a distinction

**smooth**



space

between speed and movement: a movement may be very fast, but that does not give it speed; a speed may be very slow, or even immobile, yet it is still speed. Movement is extensive, speed is intensive. Movement designates the relative character of a body considered as 'one', and which goes from point to point; speed, on the contrary, constitutes the absolute character of a body whose irreducible parts (atoms) occupy or fill a smooth space in the manner of a vortex, with the possibility of springing up at any point... In short, we will say by convention that only the nomad has absolute movement, in other words speed; vortical or swirling movement is an essential feature of his war machine.

It is in this sense that the nomad has no points, paths or land, even though he does by all appearances. If the nomad can be called the Deterritorialized par excellence, it is precisely because there is no reterritorialization afterwards as with the migrant, or upon something else as with the sedentary (the sedentary's relation with the earth is mediatized by something else, a property regime, a State apparatus...) With the nomad, on the contrary, it is deterritorialization that constitutes the relation to the earth, to such a degree that the nomad reterritorializes on deterritorialization itself. It is the earth that deterritorializes itself, in a way that provides the nomad with a territory. The land ceases to become land, tending to become simply ground (sol) or support. The earth does not become deterritorialized in its global and relative movement, but at specific

**smooth**



space

locations, at the spot where the forest recedes, or where the steppe and the desert advance....[ibid, p.52]

The nomad, nomad space, is localized and not delimited. What is both limited and limiting is striated space, the relative global: it is limited in its parts, which are assigned constant directions, are oriented in relation to one another, divisible by boundaries, and can be fit together; what is limiting (limes or wall, and no longer boundary), is this composite in relation to the smooth spaces it 'contains,' the growth of which it sows or prevents, and which it restricts or places outside. Even when the nomad sustains its effects, he does not belong to this relative global, where one passes from one point to another, from one region to another. Rather, he is in a local absolute, an absolute that is manifested locally, and engendered in a series of local operations of varying orientations: desert, steppe, ice, sea. [ibid, p.54]

text: Deleuze and Guattari: nomadology

photos: Richard Misrach: 'the event' - a series of photos taken on the event of the space shuttle landing at the Salt Flats in Utah.

**smooth**



space



## **Post Modernism and the Nomad**

**Everyone is travelling in the field of 'theory' today. Metaphors of movement parade across the pages of cultural theorists, social theorists, geographers, artists, literary critics. Mobility is the order of the day. Nomads, migrants, travellers and explorers inhabit a world where nothing is certain or fixed. Tradition and rootedness have the smell of death. Diaspora is everything. Monumentalism, the edifice, the rooted and bound are firmly placed in the museum of modernity.**

**[Cresswell, p 360]**

### **The Nomad**

**An interesting thing happens when one examines architecture as detached from the site. It becomes a pure Modern Object. An even more interesting thing happens when the element of time is added and the dislocation turns to mobility. The architectural 'object' becomes untethered, unfounded, and continually displaced; nomadic. The excitement over the use of the Nomad as a metaphor of the Post-Modern subject has been growing over the last few years, and has at the time of the writing of this work become feverish.**

**The concept of the Nomad is defined by the relationship to the 'ground'. Although often seen as continually transient, it is far from that. It has temporary relationships with a number of different 'grounds' and the routes in-between these grounds. This shifting in emphasis from the fixed, singular, and stationary to the moving, multiple, and dynamic give rise to the anthropology of 'non-place' and also forms the critical difference between the Modern and the Postmodern point of view.**

**"The familiar dualisms of man/women; white/black; true/false are all tethered to the geography of here and there. The movements of the nomad, on the ground and in the head, cannot help but transgress such simplicities." [Cresswell, p. 367]**

## **The Modern Nomad**

**For there is no doubt that in our headlong rush to educate everybody, we are lowering our standards, and more and more abandoning the study of those subjects by which the essentials of our culture - or that part of it which is transmissible by education - are transmitted; destroying our ancient edifices to make ready the ground upon which the barbarian nomads of the future will encamp in mechanised caravans.**

[T.S. Eliot Notes Towards the Definition of Culture, (London, Faber and Faber, 1948) p108]

**In an essay entitled "Imagining the Nomad: Mobility and the Postmodern Primitive", Geographer Tim Cresswell investigates the use of the Nomad as the central figure in both Modern and PostModern thought. In it, he illustrates some often shocking points of view that he argues are Modernist in disposition. What they all have in common is the vilification of the Nomad.**

**The little intercourse that they have with each other, and the absence of almost any kind of property, render them quite strangers to the great objects of law, and consequently unconscious of the benefits of a regular Government.**

[Deputy Inspector General of Hospitals Andrew Smith, 'Observations relative to the origins and history of the Bushmen', Philosophical Magazine, New Series 9 1831, p. 122]

**They are deeply versed in deceit, and treacherous in the extreme, being always prepared to effect by guile and perfidy what they are otherwise unable to accomplish. [ibid p.124]**

**The disposition to laziness so decidedly characteristic of the Hottentots, is equally developed in the Bushmen; and were it not for the absolute necessity of daily exertion to procure the scanty means of subsistence, they would doubtless pass their time in indolent practices similar to those pursued where resources are more certain and productive" [ibid p.127]**

**[The Wandering Poor of London can be identified] ...by his repugnance to regular and continuous labour - by his want of providence in laying up stores for the future ... - by his passion for stupefying herbs and roots, and, when possible, for intoxicating fermented liquours ...- by his love of libidinous dances ...- by the looseness of his notion of property - by the absence of chastity among his women, and his disregard for female honour - and lastly, by his vague sense of religion.**

**[Henry Mayhew, quoted in Stallybrass, P. and White A. , The poetics and Politics of Transgression, (Ithaca NY, Cornell University Press, 1986), page 128]**

**In the continual warfare with the force, they resemble many savage nations, for the cunning and treachery they use ... Their love of revenge too, is extreme - their hatred being in no way mitigated by time ...**

**[Henry Mayhew, Mayhew's London (selections from London Labour and London Poor), (London, Spring Books, 1851) p. 42]**

**Certainly, an individual may develop the warmest devotion to a place in which he was not born, and to a community with which he has no ancestral ties. But I think we should agree that there would be something artificial, something a little too conscious, about a community of people with strong local feeling, all of whom had come from somewhere else... On the whole, it would appear to be for the best that the great majority of human beings should go on living in the place in which they were born. Family, class and local loyalty all support each other; and if one of these decays, the others will suffer also.**

**[T.S. Eliot in Notes Towards the Definition of Culture, (London, Faber and Faber, 1948) p.52]**

**This place is finished, as it was. What matters from now on is not the fields, not the mountains, but the road. There will be no village, as a place of its own. There will just be a name you pass through.**

**[Raymond Williams, Border Country, (London, Chatto and Windus, 1960), p. 242]**

**So the wagon loaded with its barbarians in wonderland, moves irresistibly forward: not forward to anywhere, but simply forward for forwardness's sake.**

[Richard Hoggart on Mass Entertainment *The Uses of Literacy*, (London, Penguin, 1957), p. 193]

**The hedonistic but passive barbarian who rides in a fifty-horse-power bus for threepence, to see a five-million-dollar film for one-and-eightpence, is not simply a social oddity; he is a portent.**

[ibid p. 250]

The significance of this 'Modern attitude' is summed up by Cresswell:

**To the modernist imagination, the figure of the nomad is one of threat. These writers mobilize the nomad as a symbol of transience that disrupts the bounded value system that they have invested with moral worth... Just as the postmodern theorists enjoy the disruption of boundaries that the nomad necessitates, the modernists feel nausea at such a threat. The postmodern embrace of the apparently anti-rational also finds its mirror image in the modern repugnance for the mobile threat to right thinking. To British proto-anthropologists and to Henry Mayhew, the wandering tribes were always the unspeakable threat to the certainties of 'civilization' - people who did not understand rational systems of law and labour. These nomads are reborn in Eliot's mechanized nomads of mass education and Hoggart's 'barbarian' of American (and thus rootless) culture. The lineage is a complicated one, but it can be traced. It is a history linked to the modern quest for certainty and authenticity in a world which increasingly 'melted into air'.**

[Cresswell, p. 376]

### **The Postmodern Nomad**

**With the switch from the Modern to the Postmodern point of view, the Nomad changes disposition from an 'unspeakable threat' into a hero. It is beyond the scope of this thesis to define what makes something Modern or Postmodern [for a great analysis of that, see *Space and Social Theory: Interpreting Modernity and Postmodernity*. Georges**

Benko and Ulf Strohmayr (eds), 1997], but it is clear that many of the traits of nomadicism mirror the image of Postmodernism. Perhaps it is because of the subversive ability nomads have of clearing arbitrary boundaries, traversing and transgressing 'territorial' divisions that have been staked out by the (Deleuzean) 'State'. Perhaps, too it is in the nomad's unique position as a 'meta-dweller' that gives it a unique perspective on territorial priorities. To get an idea of what constitutes the Postmodern Nomad, the work of three authors will be examined: Iain Chambers, Gilles Deleuze and Felix Guattari, and Michel de Certeau.

### **Michel de Certeau**

In his book "The Practice of Everyday life" Michel de Certeau utilizes the postmodern nomad in his 'pedestrian'; the counterpoint to the hegemony of the powerful. De Certeau argues that the strategies of the powerful are the delimitation and distribution of space, depending on the "certainties of mapping" [Cresswell p 362]. The tactics of the pedestrian offer a continual and quiet resistance to the territorialization of the powerful.

Michel de Certeau's use of the pedestrian as Hero(ine) is similar to Deleuze and Guattari's mobilization of the nomad as the primary weapon against the fixity of modern structures.

### **Deleuze and Guattari**

Deleuze and Guattari have perhaps defined the role of the 'postmodern' nomad most consistently [even their other metaphors of schizophrenia and rhizomes have strongly nomadic characteristics]. In *Nomadology: The War Machine* Deleuze and Guattari set the Nomad as a War Machine: a machine that is never a comfortable bedfellow with the 'State' which attempts to 'control the flow' through the

**establishment of barriers to free mobility; in direct opposition to the anti-territorial priorities of the nomad.**

**The postmodern nomad attempts to free itself of all roots, bonds, and identities, and thereby resist the state and all normalizing powers. [Steven Best and Douglas Kellner, Postmodern Theory: Critical Interrogations (New York Guilford Press, 1991) p. 103]**

**Deleuze and Guattari also give a metaphorical spatial dimension peculiar to their 'nomad'. Unlike migrant workers who move from node to node, a nomad's territory is the road between those two nodes. This creates a linear characteristic to their spatial constructs. However, these 'lines' or 'ways through' are not necessarily fixed in space either, as, like rhizomes, they change when the environment changes. The 'lines' cut through metaphorical space of the desert which is 'smooth' and as Cresswell states "curiously isotropic" [Cresswell, p. 367], and therefore universally neutral and de-territorialized.**

**Although this characterizes the metaphorical home, Deleuze and Guattari also situate their nomads in urban space where the nomad's horizontal 'smooth space' is in constant oppositional tension with the vertical 'striated space' of the 'State'.**

**The Nomad is at home in smooth space. It would serve us well to further discuss this concept, for it relates to the 'home land' of the nomad.**

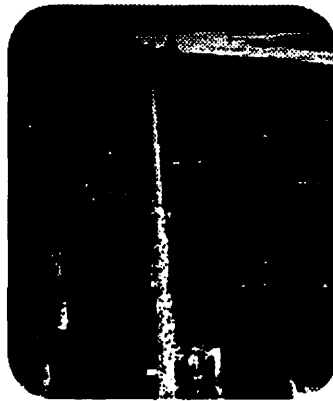
### **Iain Chambers**

**Iain Chambers' use of the nomad also finds an urban home; in that of the metropolis. In an approach that is reminiscent of Deleuze and Guattari's 'smooth spaces', Chambers calls for a replacement of the 'mechanisms of totality' with 'a horizontal vista of mobile meanings, shifting connections, temporary encounters, a world of inter-textural richness and detail...' [Iain Chambers, Popular Culture: The Metropolitan Experience, (London, Methuen, 1986) p. 213]**

**Inside this mobile collage a democracy of aesthetic and cultural**

populism becomes possible. The previous authority of culture, once respectfully designated with a capital C, no longer has an exclusive hold on meaning. [ibid p.194]

There are obviously strong similarities between the three authors in terms of metaphor, attitude, and approach. There is a commonly recognized incongruity between the territorial priorities of the empowered group represented by Deleuze and Guattari's 'State', which is based on hierarchy and control, and the mobile, ephemeral, and 'horizontal' nomads whose freedom to transgress the boundaries established by the 'State' makes it an enemy thereof. What is also shared between these three authors is that there is a recognition of an area 'between' the 'nodes' of 'proper place' in which the nomad is 'at home'. These areas, or perhaps more accurately, lines, represent an area of study of recent anthropological and ethnographical interest: the concept of non-place.



White men, he began, made the common mistake of assuming that, because the Aborigines were wanderers, they could have no system of land tenure. This was nonsense. Aborigines, it was true, could not imagine territory as a block of land hemmed in by frontiers; but rather as an interlocking network of 'lines' or 'ways through'.

[Chauvin, *Origines*, p. 56]

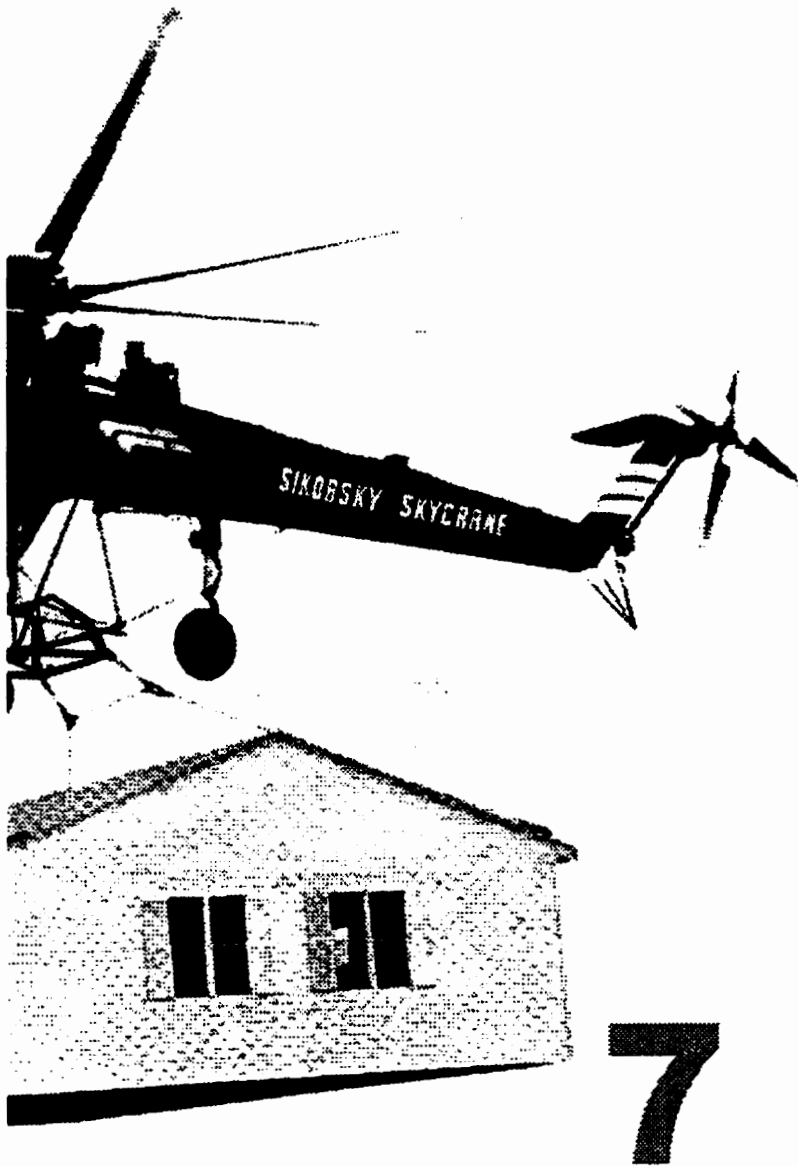


# Lightening Architecture

**home**



# mobile



## **Lightening Architecture**

### **[The Topological Approach and the Mobile Home]**

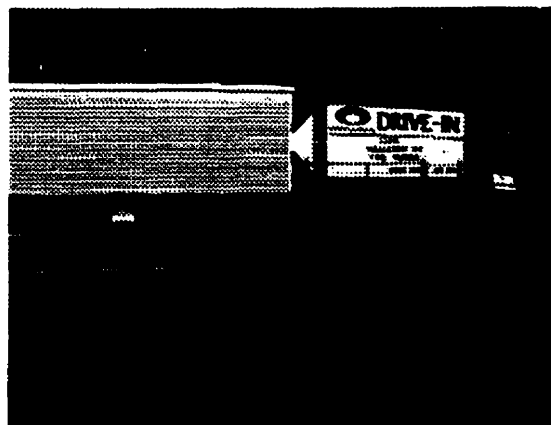
"Architecture is the masterly, correct and magnificent play of volumes brought together in light." Le Corbusier, 1923

#### **The *Mobility* of Home:**

- Prefabrication (Modernism...)
- Mobility itself (Postmodern Nomadism...)
- Conceptual Mobility - Thinness - (Supermodernism...)

We now come to the final and perhaps most complex aspect of the Mobile Home: its conceptual mobility. The Mobile Home becomes this in two ways. Firstly, as its name implies, there is a certain impermanence with the Mobile Home despite the fact that it is rarely moved once situated. It could be successfully argued that the true 'mobility' of the Mobile Home is not in its actual mobility: its one-time trip down the highway to the site where it is 'installed'; but rather in its potential to be moved once so 'placed'. This potential is, in real terms, not an issue for it could be as permanent as any other form of housing. It is, however, critical for the purposes of this thesis because it more than any other aspect of the Mobile Home offers potential to its 'static' brethren. This alone would be enough reason to continue, but the Mobile Home has another conceptual offering. If one considers the Mobile Home, one is considering not a particular building, but a building type. Like all 'types' it is morphological; abstract; generic.

This is not, of course, particular to the Mobile Home. Many other building types exist. However, the point is that if one considers a building type, it is usually heavily nested in the study of specific precedents, and examples, not in generic or non-specific terms. The Mobile Home, because of its added potential for movement clearly makes the discussion of specific precedents and examples less important than the discussion of it as a generic type. This offers one lightening: that from specifics. However, mobile homes, possess a lightness in both the temporal as well as physical sense that must be tracked.



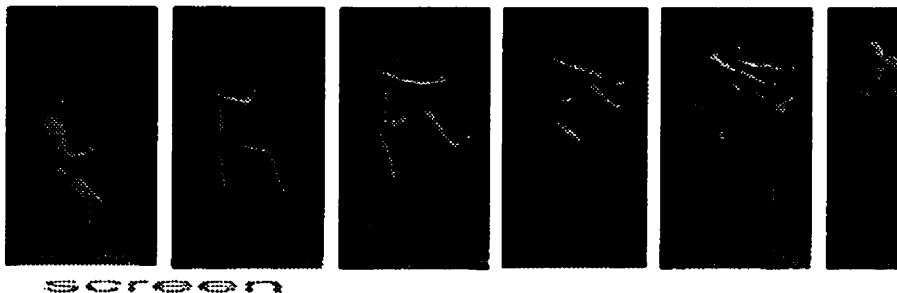
# Screen

"It goes without saying... that the modification of the city is done on the basis of criteria that are those of visual memory. The cinema teaches us to cultivate this memory and the notion of displacement has become a new principle of composition. Remembering a place which one has been through means having a succession of three dimensional emotions that are clearly related to cinematographic culture."

Jean Nouvel "the Film Director/Architect," Lotus 84, Milano: elemond, 1995, p.13

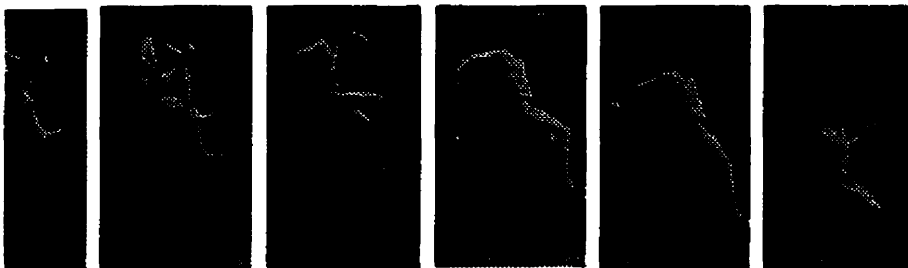
Nouvel uses the moving picture to parallel the experience of architecture. This is the point of view of the movable subject. It would not be difficult to show the predominance of this method of viewing architecture: ie as a static element around which rotates, or else something which is stable, whereas the point of view of the 'user' of the space is mobile. This is the point of view that Le Corbusier uses -> much of his work revolves around the procession of the architecture, the movement through architectural space. Seen this way, Architecture will always be the datum with respect to which and about which all things dynamic relate: the seasons, time, as well as the movement of the observing Subject. It will always be monumental, and it will always be territorial.

What the mobile home forces one to contemplate, is perhaps not so



much the point of view of the nomad subject, but that of his or her home. The mobile home inverts the relationship of the mobile observer revolving around a static building (an ambulatory model to be sure) to the mobile building revolving around a static observer. In film theory, there are three models of movement with involve the 'object' and the 'framing' of that object. 1. the movement of the frame in relation to a static object, 2. movement of the object within a static frame, and 3, the illusion of movement through editing. If, when viewing the mobile home and its relationship to the environment, we consider the mobile home as an object and the viewer as the point of view of the 'frame', then the 'traditional' view of the user/architecture relationship is clearly represented by the first model where the building as a static element is experienced through an ambulatory model of experience. The second type of movement, characterizing the conceptual relationship of the mobile home to the assumed static observer opens up a number of interesting relationships. Firstly, the mobile home must become an 'object' in the autonomous sense first advanced by the modernists. It is a thing that is devoid of relationship to specific externalities. It is a thing that can be represented in model form, and held up in model form - manipulated in space as an object. Or as a tool. It takes on, in fact, more a tool's relationship to 'place' than that of a 'home': a tool like a spear, a car: a machine for living in.

The interior, though, upon entering, gives another impression. It is, as a matter of design, non- ceremonial in its entrance. The line between the outside and the inside is greatly attenuated: one passes from a condition of being entirely within to being entirely without in one small



171

**step. It is as if entering a space-craft or yacht. There is no 'extroverted' space - there is only 'introverted' space with views out; like a cockpit.**

**There are no interior spaces that are expansive enough to constitute a space within themselves. They are entirely defined by the views that they contain. Like a cockpit or a cinema, the mobile home's interior space is defined by views out. The 'views' out are through windows, wall hangings and most commonly through television screens. The 'view out' envelopes the mobile home and makes it part of the subject of the inhabitant. It becomes an extension to the senses of perception and therefore takes on the qualities of a human - cyborg relationship. It then becomes part of the nomadic voyage, a participant in the movement through space of the instead of place itself...**

**"The screen as the frame of frames, gives a common standards of measurement to things which do not have - long shots of country side and close - ups of the face, an astronomical system and a single drop of water - parts which do not have the same denominator of distance, relief or light. In all these senses the frame ensures a deterritorialisation of the image."**

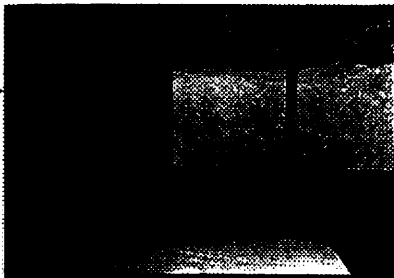
**[Gilles Deleuze, Cinema 1: The Movement Image, Minneapolis: The University of Minnesota Press, 1986, p.14]**



CN observation rail car 1880's



source: Burch Brown p 27

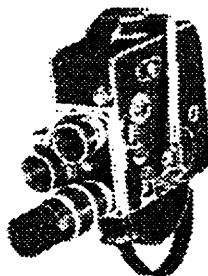


### **Thinness and the Mobile Home**

Although it is becoming less and less a literal reality, the mobile home certainly exhibits a certain characteristic 'thinness'. On a literal level its walls are usually thinner than that of a regular house. [Note that this is less so now as 'manufactured housing' takes over from 'mobile homes'.] Partially to minimize mass for ease of mobility, but ultimately as a result of the continual pressure to keep costs of production to a minimum, the mass of the mobile home has been eliminated resulting in a sort of enveloping ephemerality similar in many ways to a screen, be it shoji, or cinematic. As poet David Rigsbee notes of the Mobile Home:

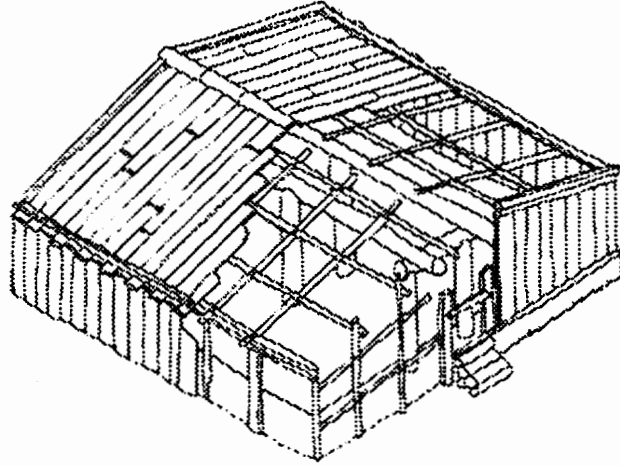
... [C]ompared to a house, the screen separating inside from outside is greatly attenuated. One seems always on the verge of being outside, and although inclement weather may not make this the best of all possible situations, the cumulative effect is of an increased familiarity with the outside. Trailer life, with the tissue-thinness of its exclusion, necessarily brings one not only into close, but also knowing, proximity to the elements, their rhythms, and pressures, from which one is ultimately (though literally by only a matter of inches) protected. [Rigsbee, 1996]

The reference to screen is appropriate for the walls of the Mobile Home have in their thin neutrality the uncanny ability to take on elemental influence from the surrounding environments and people, reflecting and displaying as much or as little as is shone on them.



This reduction in massiveness can be seen in the nomadic people of, for example, the Bedouin and Native North Americans with their tensile dwelling structures, where the emphasis is on portability and ease of building and unbuilding. From the Gypsy caravan to the Inuit igloo, there is little doubt that strong bonds exist between the ephemeral structure and the nomadic people of this earth. As discussed in the previous section, from a European point of view, dematerialization of the building structure was not accepted by the 'state' of Architecture. Interestingly, it was permitted in the 'marginal' applications: temporary exhibitions in fairs, museums, department stores, and in the form of advertising. [note Beatriz Colomina's "The Exhibitionist House" in *At the End of the Century: One Hundred Years of Architecture*. Los Angeles: Museum of Contemporary Art, distributed by H. N. Abrams, Inc. 1998]

Dematerialization was made architecturally accessible (in Europe) through the fruits of the industrial revolution: steel and glass. As Thrift points out, the industrial revolution ushered in the three 'primary colours' of mobility: Speed, Light, and Power. This triumvirate was adopted by the engineering profession, and resulted, for example, in the (Corbusian) Airplane, Car, and Liner. It was Paxton, a gardener and greenhouse builder, who arguably first took aesthetic advantage of this dematerialization for architectural use. The Crystal Palace is an interesting precedent for it was also constructed using prefabricated parts, and even more interesting was that it was constructed as a temporary structure. Temporaryness is, after all, merely a temporal thinness. Although its impact was great for architects and the architectural avant-garde, the Crystal Palace was seen publically as an interesting spectacle. Perhaps the concept of "thinness" and its relatives of temporaryness, lightness, ephemerality, and dematerialization have had difficulties in being adopted as a consistent architectural language because, I would argue, of its lack of 'firmness' and its inverse relationship to form. Even the work of Meis van der Rohe, who perhaps embraced these qualities more than any other modern architect, was seen as interesting but ultimately marginalized as "empty, blank and lifeless". Although Meis van der Rohe's work is undergoing a mini-renaissance, it seems at this point to be housed firmly within the confines of the architectural avant-garde. Perhaps at



**Nootka of Vancouver Island actually had two different seasonal residences with identical frames. The exterior sheathing planks were removed, transported, and then reassembled on the 'permanent' frame of the other house. [source: Bernhardt p.24]**



**mid-west plains tipi village  
from the perspective of a speeding train?**

the root of this continued marginality lies the castle/car dichotomy and the resultant prejudice against the nomadic, and the resultant and ultimate preference for a 'permanent' home for place and identity.

There are, though, precedents for other points of view that allow perfectly well for the establishment of a receptacle for identity and 'place-making', but outside the confined of the 'four walls' of a 'permanent' house. One is the Australian Aboriginies who, as a result of living in a climate that demands mobility for survival, have developed a transient, yet very intimate relationship with their natural surroundings. [For a very enjoyable fictional read on this, refer to Chatwin, *Songlines*, 1982] Another example is that of the Japanese.

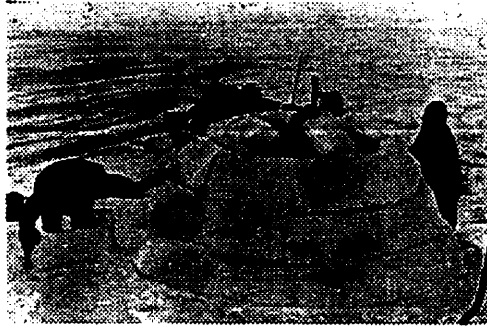
### **Shimenawa**

Before responding to the problem of form, I'll give a quick overview of the Japanese notion of portability / ephemerality, and temporaryness. In a book entitled "Japanese Design" by Matthias Dietz and Michael Mönninger, the authors make several key observations:

Today's Japan ought best to be described as a "soft" structure in which the "software" - the traffic and the crowds, the information channels and sign systems - predominate over the "hardware" of architecture and design. [Krstic, p. 9-10]

This essential 'softness' characteristic of the Japanese is captured in the "Furoshiki" - a "piece of cloth that is multi-functional which allows the user to manipulate it in multiple ways" [Krstic, p.11]. The multiplicity of uses of items is a characteristic of Japanese 'multi-functional' [soft] design, and is diametrically opposed to the European 'single-use' ['hard'] design.

One is a mechanical implement that serves a particular purpose but no more than that one purpose, while the other makes greater demands of its user but is capable of an infinite extension of its possible functions according to the powers of the human imagination. [Kenji Ekuan, "Design als Überlebensprinzip", Design report14, Frankfurt 1990, p. 59, as quoted on p.11.



Also note the similarity between this and the J.B. Jackson's notion of the 'soft spaces of the American Vernacular.].

Softness has the same lack of 'fixity' that one finds characteristic of mobility and speed in general. The Mobile Home has taken on this soft personality: it has a mutability, a flexibility that cannot be monumental.

This notion of Japanese 'softness' is taken further by Vladimir Krstic.

In a recent article entitled "Constructing the Ephemeral: Notions of Binding and Portability in Japanese Architecture", Krstic investigates traditional Japanese Shinto shrine construction, and its relationship to the transient deities that inhabit it. He then ties that concept into the more general notion of Japanese design and mobility.

By definition, a shrine is something that is made for perhaps the ultimate 'nomads': deities. In the case of a shinto shrine, this is doubly the case since shinto deities [Kami - divine ancestral spirits] come and go in cycles, and are seen as temporary visitors to the shrine. The shrine, therefore, in Krstic's opinion, starts to exhibit some aspects of the transiency of the gods.

**"According to the cosmogonic view of Shinto Religion, the gods... reside in the invisible and inaccessible depths of the sea or the mountains and they manifest themselves only for a brief period of time when they, on a cyclical time basis, come to visit particular locations in the world of the living. The tying of the sacred rope Shimenawa not only inscribes the territory and signifies its occupation (by a divine spirit) but, more importantly, it denotes the impermanence of the event that takes place within the inscribed territory - in Shinto terminology Yori-shiro, or a temporary divine visiting place. The temporariness here appears as a double 'theme' of the construction technique. On the one hand, the purpose of the construction is to signify and allow for the temporariness (of the event of divine appearance) to be materialized through the symbolic function of its structure. On the other hand, the construction itself, having its origin in the signification of the temporariness, is conceived as a physical analogue of that which it signifies and is executed as a temporary thing, whether in regard to the technique (being demountable), materiality (rope, grass and other perishable natural materials), or destructibility (propensity for burning in straw). Ultimately, it could be argued that the purpose of the act of binding a sacred rope is to construct temporariness." (Krstic, p.11)**

**Krstic's arguments at this point revolve around the notion of the sign or the signifier. Although it is outside the scope of the thesis to thoroughly examine the nature of architectural semiotics, the significance is that the 'sign' is 'read' as an indicator of 'something else': it implies, and is subordinate to, the signified. This is a method that has been consistently applied to the theory of architecture and has, as we shall soon see, recently come under scrutiny. However, Krstic does not stop at the semiotic interpretation of the binding of the shimenawa. He also demonstrates that through the argumentation of the 'dislocation' that the Japanese have with their notions of place, Krstic shows that the construction technique of the binding is not a particular sign alone, but also is the application of a universalized method of construction.**

**The constructed temporariness incorporates two permanent elements that partake in its making (it actually unfolds as a function of their mutual relation): the place and the construction technique.**

The place constitutes a constant in terms of its idea, or the ideology of seeing that informs its discrimination, a characteristic natural condition sought out and received as a potential ..., which invites perpetual acts of construction. The place, its permanence, is consequently recognized more in terms of latent capacities rather than as an actuality. It is solely through the mediation of the 'construction', the tying of the rope, that the place is truly actualized, though, as discussed above, only on a temporary basis. [Krstic, p.11]

The 'latent capacities' of a construction opens the virtual door to a number of interesting ramifications. If the potential exceeds the actuality of a 'form' or 'formal' construction, we are therefore entering a realm in which the 'virtual' forces are greater than that of the actual. In a very Deleuzian way, Krstic continues:

Parallel to this idea of the permanence of place, the construction technique - the tying of the rope - emerges as a second constant. [It is conceived as such solely in terms of the precision and the exactness of the binding method, which in the fixity of its principle transcends all circumstantial conditions, including topological idiosyncrasies, and imposes itself in a form of applied universality through its construction technique.] So the impermanence here appears in the difference of the constancy of the method of 'reading' of a place and the constancy of the application of the 'science' of a universalized construction method. [Krstic, p.12]

Juxtapose the text from Deleuze and Guattari:

Between things does not designate a localisable relation going from one to the other and reciprocally, but a perpendicular direction, a transversal movement carrying away the one and the other, a stream without beginning or end, gnawing away at its two banks and picking up speed in the middle.

[Deleuze and Guattari On the Line, Semiotext(e), New York, 1983 p.58]

It appears that what we are witnessing here is the effects of what I'll refer to as 'secondary' slippage between the built object and its location. This secondary slippage occurs not as a result of actual movement, but as result of a conceptual mobility. It has the peculiar characteristic of dematerializing, on a conceptual and perceptual level,



the 'solidity' of architecture. It has the ability to accentuate the 'middle' of, or the 'difference' between formal states.

[T]he idea of portability emerges as an arguable constituting element of the archetypal condition of Japanese architecture. This idea, however, does not inscribe a literal condition of architecture as being necessarily physically portable (although that always remains an open and inherent possibility); rather, it denotes a conceptual notion that informs the process of the phenomenal constitution of an architectural object. The material reality of architecture in Japanese tradition is, hence, conceived only in relative terms, as a counter-instance, but not more relevant, to that which is absent of matter; its body circumscribes a place of intersection and exchange between the real and the unreal and is literally made out of it - the tenuous construction of transience (Shimenawa). [Krstic, p.13]

It is interesting to note at this point that this 'dislocation' does not necessarily infer attenuation or neglect of the 'location'. On the contrary, the 'location' may in fact be the recipient of the greatest share of value and attachment.

Yet paradoxically, it is the location (place) that endures rather than architecture. The Japanese are very reluctant to give up a piece of land but they have very little concern for the eventual removal of an architectural structure that might be sitting on it. [Krstic, p.13]

Through the actual divorcing of architecture and place, what "remain[s] constant is the idea of place, pregnant with its indiscernible spiritual depths, against which architecture is measured as a transient sign (or the sign of transience)" [Krstic p.12]

The Japanese ontology is ultimately a mindset: not a style, nor a characteristic form. It has its manifestations in the form, as in Krstic's example of the Shimenawa, but the manifestations are but indicators of a point of view that is diametrically opposed from the one that seems to be endemic to the European sensibility: that of the nomad.

This nomadic sensibility embraces the removal from a territorial positioning, and accepts the fruits of speed (prefabrication, the

predominance of media, increased lightness, to name a few). It follows then that these characteristics would imbibe the object of architecture itself with a softness that we witness with mobile homes. This process can already be witnessed in Japan, somewhat less so in North America, and much less so in Europe.

However, even without any amount of paradigm-shifting, Krstic's assertion that portability in Japanese architecture exists in an "atemporal (temporary) fashion, by being signs of that which is physically invisible" is valuable for it shows clearly how architecture can, by locating itself explicitly as an 'atemporal' phenomenon, through references or signs of the temporary, heighten its immaterial sense, and therefore it's conceptual speed or mobility.

However, as Krstic himself points out at the end of the work:

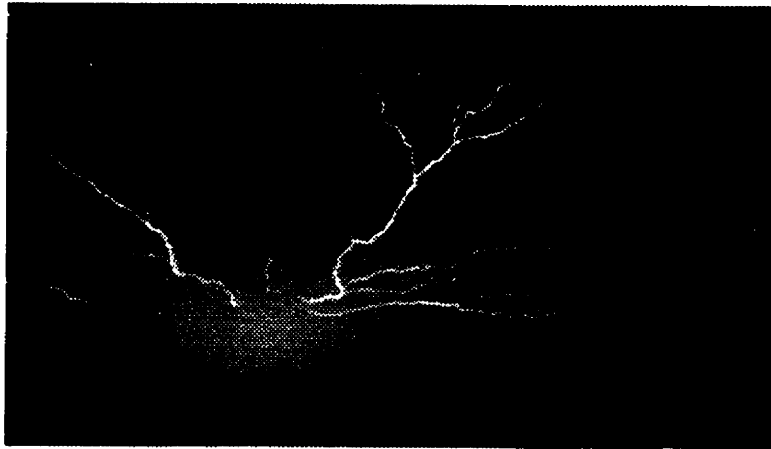
The corollary of this situation is the loss of place of architecture, or the problematisation of the idea of fixed site. What is postulated here is not the idea of the doom of sitelessness, but rather the notion of architecture sited in the city (its condition) as a whole where individual physical place becomes a thing of a lesser consequence for the construction of architecture. [Krstic, p.16]

This is the natural conclusion for those who hang onto Cain's ontology, and there is nothing 'wrong' with it. Being based on form and the semiotic interpretation of form, the Temporary, and the Mobile can only be seen through signs or symbols of mobility: in Krstic's postulation, the Shimenawa; in the case of the Mobile Home, the wheels on which it sits. It does, however, hinge on the 'reading' of the 'signs' and is therefore subject to the vagrancies of interpretation built into the post-modern ontology. If there exists a sign-signified relationship, even on an abstract level, the result is a formal preconception and its corresponding 'filters of style'. At best what we are left with is the International Style II: the Return of Universalism. What I will soon be arguing is that what it really is is a resultant of a paradigm of nomadism; what Massumi calls a 'dopplering': an asignifying sign that does not necessarily yield a 'reading', for its generating principle is at its base, resistant to any form of physical manifestation.] For all its

helpfulness, this approach puts a formal argument of architecture first. The only way in which the 'transient' can be reached this way is through a symbolic denotation via the process of binding. However, to be useful to architecture in a general sense that doesn't have the advantage of being symbolically linked to the transient, as in the architecture of a Shinto shrine or that of a Mobile Home, we are still left with the notion of mobility and its problematic interpretation in the architectural realm of the built object. How can we learn from these 'transient' building types? Is there a way to invigorate a static object of architecture without the use of 'racing stripes' or other formal illusion to speed or mobility? In order to answer these questions, we need to drop the signifying objects for a while, and investigate the nature of mobility itself by charting a course through a number of mobility-related causes and effects in search for the significance of mobility for a static Architecture.



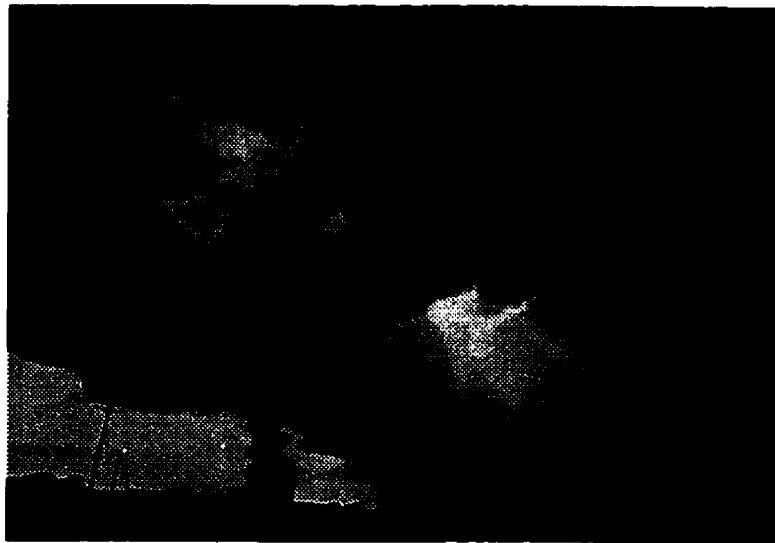
artist Andrea Zittel's A=Z compartment in Urban context



lightning

Almost a year later to the day, a late November storm front cut its way through the South with Sherman-like efficiency. A spectacular system of zinc clouds marched across the sky in stern phalanxes, trailing multiple tornadoes and capable of devastating whole towns, particularly towns that because of their indigenous poverty weren't bolted securely enough to their earth. My cousin's widow had gone out under the menacing green sky looking for her daughters, who were returning from school. Almost as soon as she had moved a hundred yards from the trailer, a funnel cloud descended from the sky and touched down here and there, as if knowingly, like an elephant's trunk extended over a fence. By the time it reached her trailer, it had vacuumed up enough substance to be transformed into a kind of club. With indifferent efficiency, it smashed the trailer from its cinder block foundation. The bands securing the trailer to stakes popped loose, aluminum panes flew like barrel staves, and the trailer was knocked, spinning, half a mile away. Her spine snapped, my cousin's widow had awakened in the cradling branches of a pine tree, the dawn autumn stars twinkling through the needles. In this chaos and in the aftermath, she did not find out until the next day that her daughters were safe.

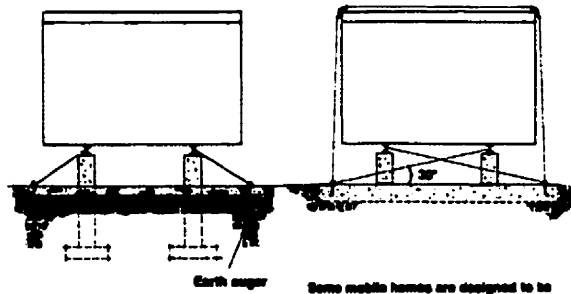
[Figsbee pp17-18]



lightning

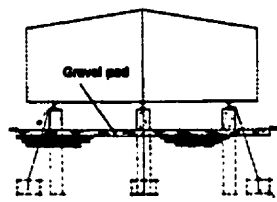
**Tornadoes and Mobile Homes have a special relationship. Mobile Homes suffer notoriously at the hands of strong winds. The perception of their inability to be withstand airborne abuse has spawned many tactics to attach the light buildings to the ground. These tactics call for the Mobile Home to be anchored, moored, lashed, and battered down with Lilliputian fervor.**

**However, the pairing of Mobile Homes and tornadoes runs deeper than this. The unmistakable and undeniable presentness of a violent storm is metaphorically welded to the concept of the mobile home. A tornado, like a lightning strike, exists in the zone between the grounded earth and the charged sky. It is a violent and extremely powerful yet temporary and ephemeral bridge between the two alchemic states: that of the earth-bound concrete being and the viscous airborne mobility of the sky. It only exists between.**

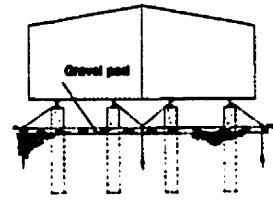


Single wide unit on piers with earth augers.

Some mobile homes are designed to be anchored with over-the-roof tie-downs and are provided with hardware at points designed to take wind loads. These tie-downs are not required on mobile homes conforming to the CSA Z240 series of standards and should not be installed without consulting the manufacturer of the unit.



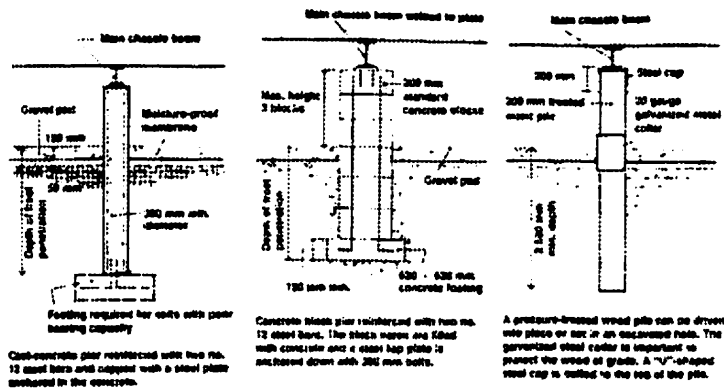
Double wide unit on piers with deadman anchors.

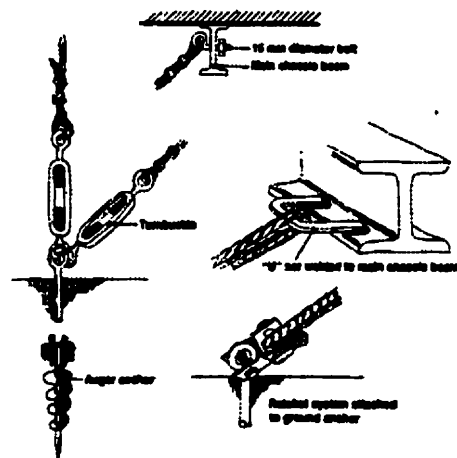
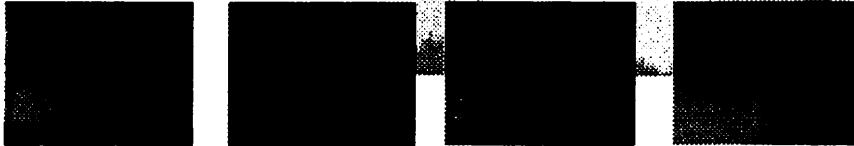
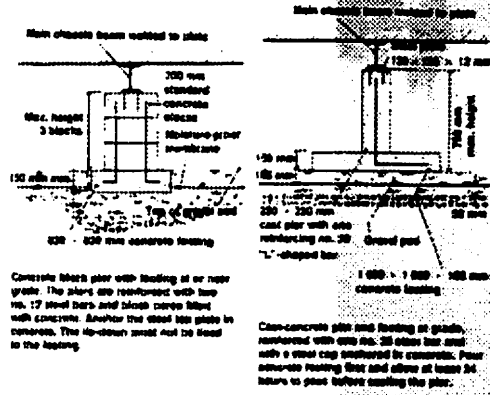


Double wide unit on piers with earth augers.

# lightning







The number of anchor points required depends on the wind velocity in a particular location. The table below provides a general guide for a single side stable frame.

Wind velocity mph	Number of frame ties per side
0 - 112	4
112 - 128	5
128 - 144	7
144 - 160	8
160 - 170	10

Sheltered area      Frame welded to plate

The ties in the form of anchor rods or cables may be attached to the ground by means of anchor heads cast in concrete blocks, by means of earth anchors cast directly in the ground, or by cross-connection to below-grade foundation plans.



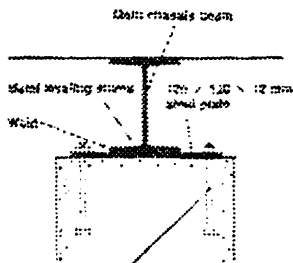
**Damping Solutions**

As parts of the system must be connected together, the damping mechanism must be designed to resist a maximum force of 75 kN. Another note: the damping device has a maximum capacity of 12 mm.

The bearings are directly adjacent to the blocking points. The maximum displacement in the bearing device frame is 10 mm. A bearing point should be within 1 mm of the end stop.

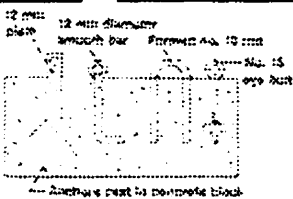
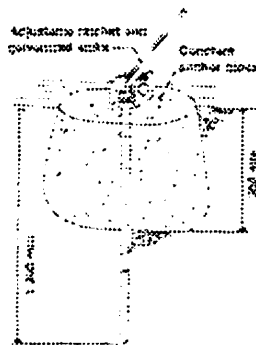
The bearing and connection must be of the same and type and shall be checked by drawings.

In areas with high over-voltage areas or water-borne clay, the use-type cable must be suitable to resist the tension stress on the device frame. The tension on the cables should be checked with the full use capacity periodically throughout the entire lifetime of the device. The cables can be used only as a tension device in the system.



12 mm diameter steel rod in concrete

In situations where enough resistance to overturning and displacement may be provided by welding the mobile-home frame to the steel bearing plates on top of base or foundations, only device weight plus, cast-in-place or reinforced concrete block foundations are suited for this application.



Types of anchor bolts

**Design solutions**

There are a variety of foundation types which can be suitable as permanent structures for mobile homes. Selection of a type appropriate for individual applications will depend on the area in which the unit will be located, the type of soil, the water table, the depth of frost penetration, the availability of materials and cost. It is highly recommended that the advice of a professional engineer or architect be sought.

Generally, footings-at-grade are not suitable for most areas of Canada.

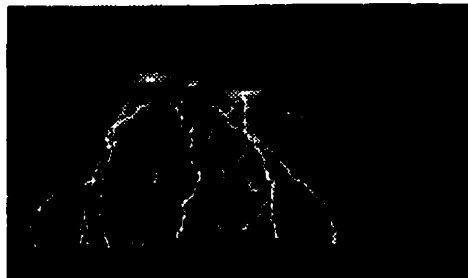
SOIL TYPE	FOUNDATION TYPE
1. All types of soil except swamp, muskeg, permafrost and saturated clay	<ul style="list-style-type: none"> <li>cast reinforced concrete pier</li> <li>reinforced concrete block</li> <li>full basement</li> <li>reinforced concrete slab-on-grade</li> </ul>
2. Well-drained soils susceptible to frost	<ul style="list-style-type: none"> <li>pressure-treated wooden pier</li> <li>reinforced concrete slab-on-grade</li> <li>full basement</li> </ul>
3. Well-drained soils not susceptible to frost	<ul style="list-style-type: none"> <li>reinforced concrete block with footing at grade</li> <li>cast reinforced concrete pier with footing at grade</li> <li>reinforced concrete slab-on-grade</li> <li>full basement</li> </ul>
4. Swamp, muskeg, permafrost, saturated clay	<ul style="list-style-type: none"> <li>consult a professional engineer or architect experienced in the design of foundations for these conditions.</li> </ul>

The requirements of *Reinforcing Standards* should be used as the basis of foundation design.

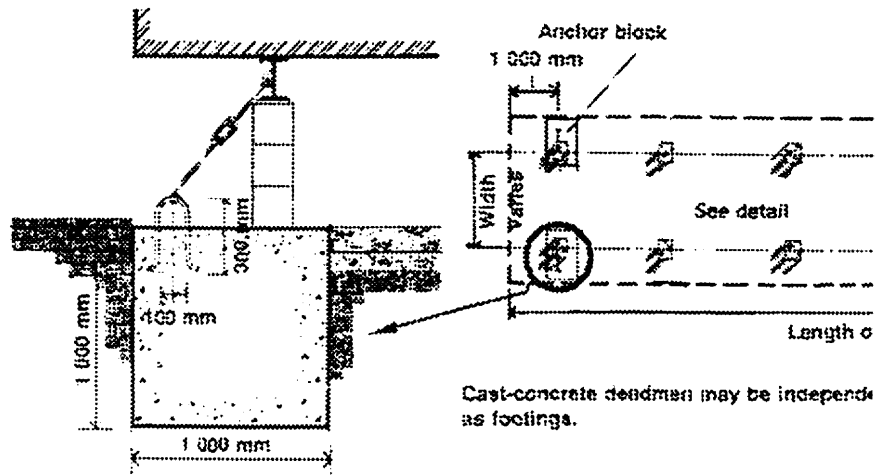
The "Footings and Foundations", *Reinforcing Standards 1980*, NRCC 17254, Ottawa, The Associate Commission on the National Building Code, National Research Council of Canada, 1980. See, in particular, Section 15.



Generally the number of piers required depends on the overall length of the mobile home and the manufacturer's recommendations.



lightning



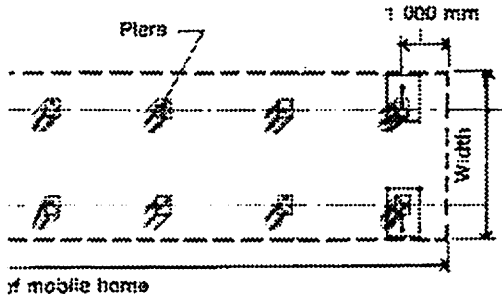
Combined footing and anchor block.



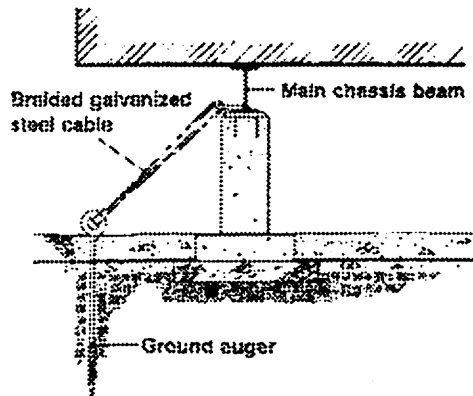
Life in a trailer is certainly not bound to be unpleasant. In the first place, compared to a house, the screen

separating inside from outside is greatly attenuated. One seems always on the verge of being outside, and although inclement weather may not make this the best of all possible situations, the cumulative effect is of an increased familiarity with the outside. Trailer life, with the tissue-thinness of its exclusion, necessarily brings one

not only into close, but also knowing, proximity to the elements, their rhythms, and pressures, from which one is ultimately (though literally by only a matter of inches) protected. The reverse is also worth bearing in mind: the forces of nature crowd in, but - except in the case of catastrophic weather - unable to establish a beachhead, are at last and decisively frustrated. Allegorist could draw a moral from this: danger and trying situations always present themselves to us (after all, we are natural productions ourselves, subject to the same laws of light and leaf, rain and inevitable ruin), but moment by moment we best the external forces, all the while recognizing their

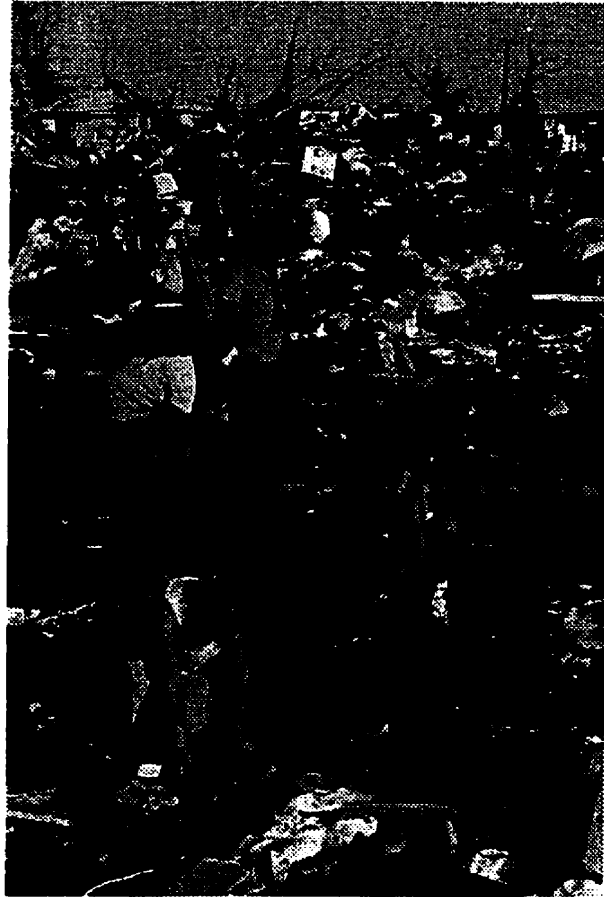


ent of the piers or integrated with them to serve



war on our bodies, even as we reject these claims in a thousand battles. This kind of recognition, which the ancients must have experienced, can scarcely be said to be the experience of modern-day house-dwellers. But the thin panes that hold nature at bay excel in doing precisely that: holding.

[Rigbee, p. 91]



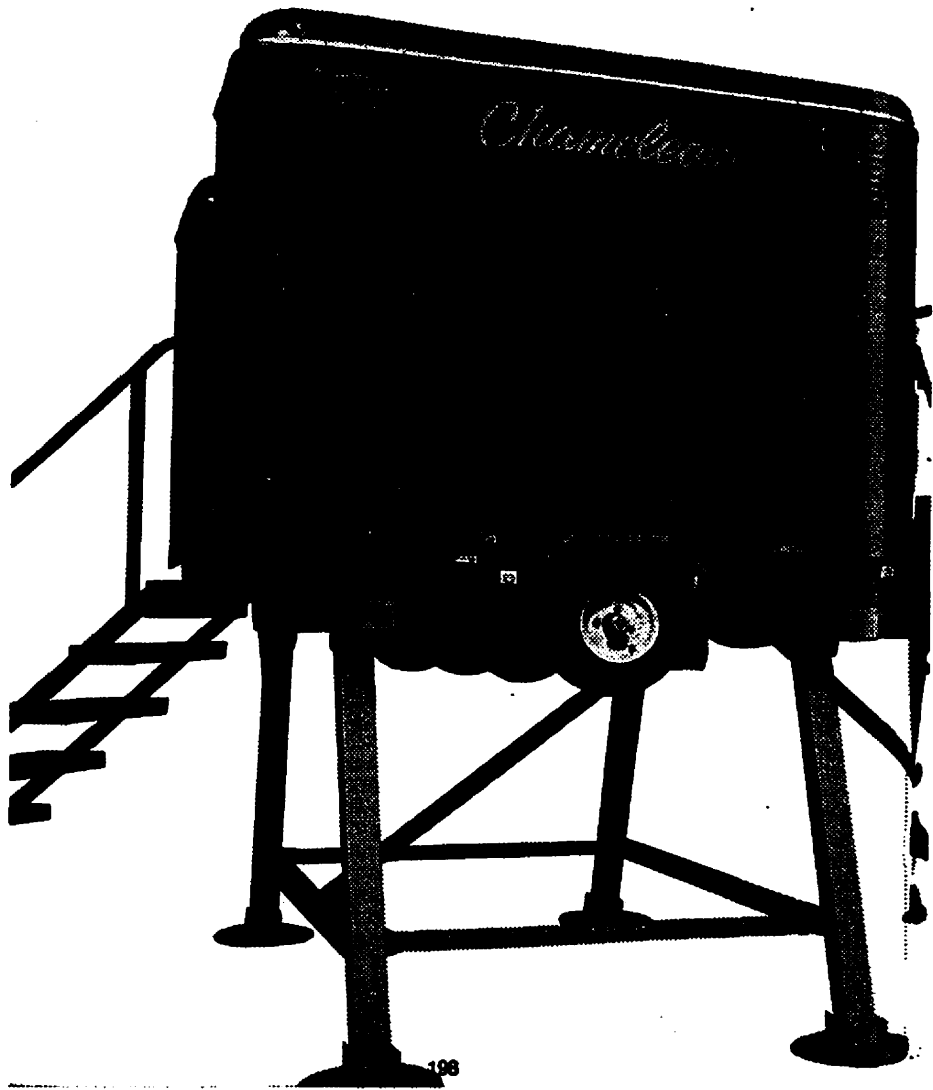
**"If you are in the path of a tornado, get out of your car or mobile home..."**

a U.S. Weather Bureau advisory

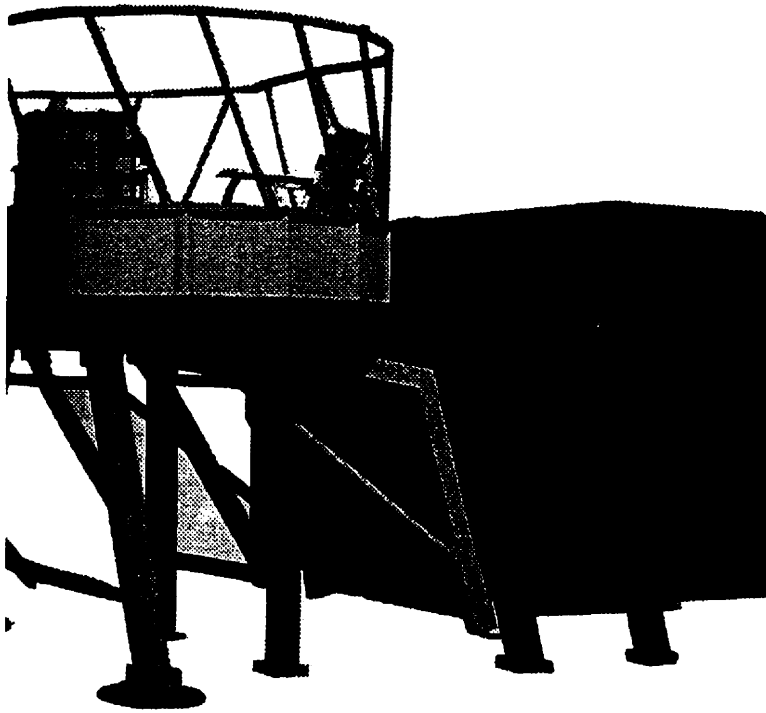
lightning



9



# cause effect



artist: Kim Adams

## **Cause = Mobility**

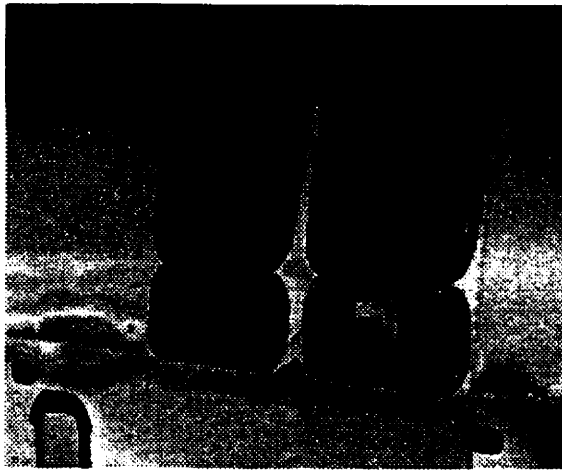
**"My thoughts on modernity... have been crystallized by consideration of a commonplace even banal, image; an urban landscape at night through which runs a river of headlight."**

**Nigel Thrift**

It is an arguable point, but modernity - the condition in which we in western civilization live today - could be most completely characterized by mobility in general. It is certainly the case that the Futurists drew their inspiration from the speed of 'modern' life, and that their manifestoes inspired the Modernist avant-garde. Baudelaire, the 'poet of modernity' was certainly no stranger to the nomadic, mobility-based point of view. Further, why did Le Corbusier choose modes of transportation for his 'eyes that do not see' upon which he based much of his very influential argumentation? Why was Meis van der Rohe obsessed with transparency and the notion of the continuous plane? Why did Beatriz Colomina, when asked to sum up the last 100 years of architecture chose to use the examples of exhibition architecture, with comparatively heavy emphasis on prefabrication techniques, as well as 'futuristic' modes of living which were almost always based on the notion of transportation, speed, or the 'dislocation' of modernity? And what about Archigram anyway? I'm aware that it would be just as easy to come up with examples of the 'sedentary' version of modernist architecture, but it is hard to deny the lure of mobility when one is discussing the concept of 'modernism'.

Geographer Nigel Thrift, as discussed earlier, certainly adheres to this point of view. In his paper "Inhuman Geographies: Landscapes of Speed, Light and Power", Thrift identifies the three key characteristics of the modern condition as being, as the title suggests - speed, light, and power. Further, he argues that these three parameters have, since the 1960's been in the process of merging into what he calls 'mobility' [Thrift p.213].

Thrift cites the causes of mobility as being the "democratization of the automobile and the aircraft and best illustrated by tourism: [In] 1989,



airstream 1

201

201

there were 400 million international arrivals a year; in 1960: 60 million."  
[Thrift, p.213 - my emphasis].

Travel is now thought to occupy 40% of available 'free time'.  
If people do not travel, they lose status: travel is the maker of  
status. It is a crucial element of modern life to feel that travel  
and holidays are necessary. [Urry 1990, p. 5]

Another component to Thrift's 'mobility' is communication. The quantity  
and quality of communications technology has also grown  
exponentially. Satellite, cell phones, fax, fibre optics, mobile telephone,  
the internet. Even though much of the technology existed in the 19th  
century, it is its ubiquity and instantaneity that positions it as a  
significant social impact.

Light has also undergone a major transformation, according to Thrift,  
through the computer and its allied products: the fibre optics cable, the  
laser and the increased use of non-visible spectral light, CAD,  
holograms, simulators, computer animation, robotic image recognition,  
ray tracing, texture mapping, motion control, virtual reality helmets and  
gloves, magnetic resonance imaging, multispectral sensors and  
medical imaging. Light is also the driving force behind the most  
powerful invention of modernity: the television and video.

All these changes are quintessentially modernist, and all of them  
essentially mobile.

So what effects have they caused?

# Effect 1

## Overexposure, Blurring and Excess Supermodernity

Thrift continues for us. He cites the three consequences of these new technologies as follows:

1. They relocate vision to a plane severed from a human observer;

"Increasingly visuality will be situated on a cybernetic and electromagnetic terrain where abstract visual and linguistic elements coincide and are consumed, circulated and exchanged globally." [Crary, 1990, p.2 as cited on Thrift p. 214]

[Hockey players looking up at the jumbotron to watch the action even though they are right there in front of it].

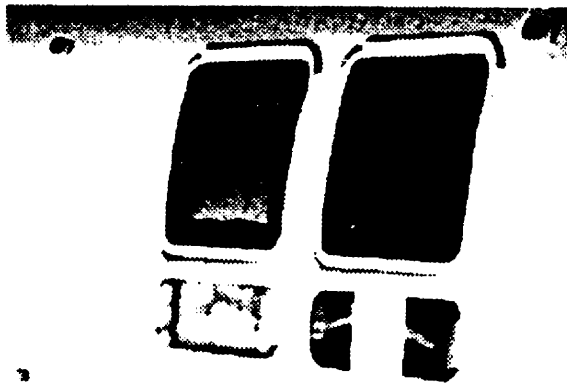
2. The increased use of radar, radio and microwave technology results in 'invisible' and ubiquitous power with through the means of surveillance resulting in the blurring of the notions of privacy and publicity.

Related to no.1, but with a different impact.

3. The subject/object relationship of user/technology has been blurred.

This effect also blurs the notion of surface.

Essentially, it could be argued that the effect of mobility's primary colours of speed light and power is a blurring of boundaries. These are physical as well as social boundaries. Perhaps noted previously as a characteristic of the post-modern condition, this boundary blurring seems to be everywhere. One of my favorite examples is that the



airstream 2

204

204

phone in my 90 year old house was originally located in its own nook in the wall in the Entrance Hall; since that is where guests are receive, of course. I now have a 900MHz portable phone that I can never find when it rings.

Thrift is nowhere near alone in noting this phenomenon of boundary blurring.

Heidegger:

**What is this uniformity in which everything is neither near or far - is, as it were, without distance. Everything gets lumped together into uniform distancelessness. How? Is not the merging of everything into the distanceless more unearthly than everything bursting apart? [From the essay 'The Thing']**

Nietzsche:

**Sensibility immensely more irritable; ... the abundance of disparate impressions greater than ever; cosmopolitanism in foods, literatures, newspapers, forms, tastes, even landscapes. The tempo of this influx prestissimo, the impressions erase each other; one instinctively resists taking in anything, taking anything deeply, to digest anything; a weakening of the powers to digest results from this. A kind of adaptation to the flood of impressions takes place: men unlearn spontaneous actions, they merely react to stimuli from the outside.**

[Nietzsche, 1967, p.47 as cited in Thrift p. 219]

Haraway:

**The cyborg is oppositional, utopian, and completely without innocence. No longer structured by the polarity of public and private, the cyborg defines a technological polis based partly on a revolution of social relations in the oikos, the household.**

[as quoted in Riley, p.8]



**Schivefsbuch:**

**provides an account of an aesthetics of disappearance, of the landscape as a blur, a streak viewed from a moving platform, 'no longer experienced intensively, discretely, but evanescently, impressionistically - panoramically, in fact'**  
[Schivefsbuch 1986 p.189]

**Deleuze and Guattari:**

**The nomadic subject traverses points of pure intensity in migratory fashion. Nomadic thought is a distribution of singular points of possible actualization/individuation/conductivity; "Nomad thought" does not immure itself in the edifice of an ordered interiority; it moves freely in an element of exteriority. It does not suppose an identity; it notes difference. It does not respect the artificial division between the three domains of representation, subject, concept and being; it replaces restrictive analogy with a conductivity that knows no bounds.**  
[Massumi, 1988 p.xii]

**Virilio:**

**This sudden reversion of boundaries and oppositions introduces into everyday, common space an element which until now was reserved for the world of microscopes. There is no plenum; space is not filled with matter. Instead, an unbounded expanse appears in the false perspective of the machines' luminous emissions. From here on, constructed space occurs within an electronic topology where the framing of perspective and the gridwork weft of numerical images renovate the division of urban property. The ancient private/public occultation and the distinction between housing and traffic are replaced by an overexposure in which the difference between 'near' and 'far' simply ceases to exist, just as the difference between 'micro' and 'macro' vanished in the scanning of the electron microscope. [Virilio, Lost Dimension p. 13]**



airstream 3

Virilio's writing on the subject of 'overexposure' runs deep, but its essential points are that 'speed' has caused a blurring of boundaries and an excess of images, times, and events.

Marc Augé in his book *Non-Places: Introduction to an Anthropology of Supermodernity* presents a study of the effects of what we have called the characteristics of 'mobility' above. He calls it the 'supermodern' condition and claims its essential quality of excess: specifically the excesses of time (event), space, and individuality.

This need to give a meaning to the present, if not the past, is the price we pay for the overabundance of events corresponding to a situation we could call 'supermodern' to express its essential quality: excess. [Augé p. 30]

The consensus seems to be that integral to the conception of mobility is an element of subjective dislocation brought about by a general milieu of excess and the blurring of traditional boundaries; the private and the public; the near and the far; the 'other' and the 'us'; and the 'then' and the 'now'. Two authors in particular have been instrumental in interpreting the effect of this blurring and excess: Paul Virilio and Marc Augé with their respective theories of 'overexposure' and 'non-places'.



dust mites

# Effect 2

displacement of fixity  
non-place

What is the spatial result of supermodern excess and blurring, or the and overexposure described above? The answer, according to Virilio, is 'displacement of fixity', which ultimately results in what Marc Augé calls non-places.

To see the landscape pass by a train or automobile window or to look at a film or a computer screen the way you look out of a window, unless even the train or the cockpit become in their turn projection rooms... train, car, jet, telephone, television... our voyages, of which we are no longer even conscious... 'the need for peregrination has led to the establishment in displacement itself of the very fixity of life'.

[L'Homme standard, Gaston Rageot, Librairie Plon 1928. As quoted in Virilio, Lost Dimension p. 61]

If architectonics once measured itself according to geology, according to the tectonics of natural reliefs, with pyramids, towers and other neo-gothic tricks, today it measures itself according to state-of-the-art technologies, whose vertiginous prowess exiles all of us from the terrestrial horizon. [Virilio, Lost Dimension, p.27]

This displacement of fixity is essentially the quality of 'non-places' (non-lieu) described by Marc Augé. One of the immediate effects that overexposure has is to cast into question any constructs that are reliant on the fixity of place: territoriality, 'home', and 'place'; or as Augé says: 'traditional anthropological place'.

Space, place, non-place, hypermodernity, globalization,... much effort has gone into explaining, often in a very technical way, the contemporary transformation of place; a modernity pushed to the extreme, towards a hypermodernity or surmodernité. A journey beyond the modern, beyond place.

[Ulrich Strohmayer, Introduction, Space and Social Theory: Interpreting Modernity and Postmodernity, p.23]

It is generally recognized, as Strohmayer points out above, that 'place' has a very slippery grasp on contemporary society. The problematic areas for 'place' theory are those areas that resist any attempt to form

attachments. We know them commonly as motorways, turnpikes, giant car-parks, airports, automatic dispensers, shopping centres, supermarkets, multiple and brandname stores, hotel and restaurant chains. [see *Nowherevilles* (Galletti, 1992)] They are everywhere, and paradoxically nowhere as well. They are very closely related to movement and mobility. In fact, Augé goes so far as to say that non-space is quantifiable, "with the aid of a few conversions between area, volume and distance - by totalling all the air, rail and motorway routes, the mobile cabins called 'means of transport' (aircraft, trains and road vehicles), the airports and railway stations, hotel chains, leisure parks, large retail outlets, and finally the complex skein of cable and wireless networks that mobilize extraterrestrial space for the purposes of a communication". In other words, by totaling all space inhabited by mobility and its progeny of speed, light and power.

### **Non Place**

The best way to demonstrate the concept of non-place as a relationship to the overexposure and excess of Supermodernism, is to use selective quotes from Augé's text. I will first give an overview of the nature of non-place, and then define it in relation to what it is not: i.e. traditional 'anthropological place'.

...the intelligence of space is less subverted by current upheavals (for soils and territories still exist, not just in the reality of facts on the ground, but even more in that of individual and collective awareness and imagination) than complicated by the spatial overabundance of the present. This as we have seen, is expressed in changes of scale, in the proliferation of imaged and imaginary references, and in the spectacular acceleration of means of transport. Its concrete outcome involves considerable physical modifications: urban concentrations, movements of population and the multiplication of what we call 'non-places', in opposition to the sociological notion of place, associated by Mauss (1966) and a whole ethnological tradition with the idea of a culture localized in time and space. The installations needed for the accelerated circulation of passengers and goods (high-speed roads and railways, interchanges, airports) are just as much non-places as the means of transport themselves, or the great commercial centres, or the extended transit camps where the planet's refugees are parked. [Augé, p.34]

**The resultant character of non-place can be compared to that of 'traditional anthropological place': for 'non-place', as its name infers, is actually defined by what 'place' is not. Traditional anthropological place, according to Augé is deeply connected to identity and the preservation of the established social order. As we saw in the analysis of Postmodernism and the Nomad, these views are usually opposed to the interests of the mobile nomad, and they are further based on a control of space, and the routes through that space.**

**It is hardly surprising that the terms of this discourse [the discourse of the identity of the established social order] should tend to be spatial, once it has become clear that it is the spatial arrangements that expresses the group's identity ..., and that the group has to defend against external and internal threats to ensure that the language of identity retains a meaning. [Augé p 45]**

**So it would therefore be entirely consistent to find that 'traditional place' would have, at its core, a territorial type of monumentality.**

**Louis Marin, for his part, borrows Futetiere's Aristotelian definition of place; 'Primary and immobile surface of a body which surrounds another body or, to speak more clearly, the space in which a body is placed.' [from Louis Marin, 'Le lieu du pouvoir à Versailles', La Production des lieux exemplaires, Les Dossiers des séminaires TTS, 1991, p. 89]**

**Hestia symbolizes the circular hearth placed in the centre of the house, the closed space of the group withdrawn into itself...; while Hermes, god of the threshold and the door, but also of crossroads and town gates, represents movement and relations with others. Identity and relations lie at the heart of all the spatial arrangements classically studied by anthropology. [Augé p.58]**

**Traditional anthropological place can therefore be described by the monument, and the routes connecting the monuments, which breaks down into: itinerary, intersection, centre, and monument. This is the same character of place that we first witnessed in the section on castles. Indeed, Michel Foucault considered the medieval conception of space to be restricted to " the space of emplacement," to " a**



**“Just as the vessel is a place which can be carried around, so place is a vessel which cannot be moved round”**

Aristotle (Physics 212 a 14- 16)



**hierarchic ensemble of places "without any significant sense of infinite SPACE" [Casey, Edward S. "Smooth Spaces and Rough-Edged Places: The Hidden History of Place", p.4]**

**This conception of place as a fixed, or at least relatively fixed has continued, and seems consistently through ancient to modern times.**

**Aristotle:**

**Place is "the first unchangeable limit of that which surrounds"**  
(Physics 212 a 20 - 21)

**"Just as the vessel is a place which can be carried around, so place is a vessel which cannot be moved round" (Physics 212 a 14- 16)**

**Newton:**

**All places are said to be defined from the positions and distances of things from any body considered as immovable.**

**Immovable places are those that, from infinity to infinity, do all retain the same given position one to another.**

**Leibniz**

**Place is that, which is the same in different moments to different existent things, when their relations of co-existence with certain other existents, which are supposed to continue fixed from one of those moments to the other, agree entirely together.**

**[as quoted in Casey, Edward S. "Smooth Spaces and Rough-Edged Places: The Hidden History of Place", p.8]**

**Heidegger**

**Space has been split up into places. [Being and Time, p 138]**

**Yi-Fu Tuan**

**Place is security, space is freedom: we are attached to one and long for the other.**

**[Yi-Fu Tuan, Space and Place: the Perspectives of Experience, 1977].**

**Immovable place, however, has always been an uneasy bedfellow to the Modernist subject. The problems come on both a 'practical' as well as conceptual level. The modern subject is, as argued before, tied closely to mobility and dislocation, and "one way of understanding**



modernity... is by its very neglect of [the] distinction [between space and place]" [Casey, Edward S. "Smooth Spaces and Rough-Edged Places: The Hidden History of Place", p.2]:

With Kant, then, we reach an extremity that was already nascent in Descartes: the modern subject is a placeless subject. This subject, living only in the flattened-out sites it itself projects or constructs, cannot count on any abiding place in the world... The simple location of things ends in the positioning of human beings in a succession of sheer sites -- thereby inculcating docile bodies to occupy these sites. These bodies and sites are indifferent to one another and to the placeless selves they are supposed to subserve. [Casey, Edward S. "Smooth Spaces and Rough-Edged Places: The Hidden History of Place", p.6]

If the 'modern subject' cannot relate to place, where is this subject's home? Certainly not a castle...

It is also clear that Augé, as an anthropologist and therefore one concerned with spatial implications of human habitation, should find a problem when plying his trade to the very thing that eludes place by definition: mobility.

This parallel between place as an assembly of elements coexisting in a certain order and the space as animation of these places by the motion of moving body is backed by several references that define its terms. [Augé p.80]

In an attempt to rectify this incongruity, Augé formulated the following definition of what he termed 'non-place'.

If a place can be defined as relational, historical and concerned with identity, then a space which cannot be defined as relational, or historical, or concerned with identity will be a non-place. The hypothesis advanced here is that supermodernity produces non-places, meaning spaces which are not themselves anthropological places and which, unlike Baudelairean modernity, do not integrate the earlier place... [Augé pp 77-78]

It is the nature of non-place and place that neither are ever in pure form. Together, they form a sort of continuum where one never

supercedes the other.

**...place and non-place are rather like opposed polarities: the first is never completely erased, the second never totally completed; they are like palimpsests on which the scrambled game of identity and relations is ceaselessly rewritten. But non-places are the real measure of our time; one that could be quantified - with the aid of a few conversions between area, volume and distance - by totalling all the air, rail and motorway routes, the mobile cabins called 'means of transport' (aircraft, trains and road vehicles), the airports and railway stations, hotel chains, leisure parks, large retail outlets, and finally the complex skein of cable and wireless networks that mobilize extraterrestrial space for the purposes of a communication... [Augé p. 79]**

Similarities can be seen between this notion of 'non-place' and the definition of 'space' above. It is, as Augé maintains, what occurs between places. It is dynamic:

**Place as defined here is not quite the place Certeau opposes to space...: it is place in the established and symbolized sense, anthropological place. Naturally, this sense has to be put to work, the place has to come to life and journeys have to be made, and there is nothing to forbid the use of the word space to describe this movement. But that is not what we are saying here: we include in the notion of anthropological place the possibility of the journeys made in it, the discourses uttered in it, and the language characterizing it. And the notion of space, in the way it is used at present (to talk about the conquest of outer space, in terms which, for the time being, are more functional than lyrical, or to designate unnamed or hard-to-name places as well as possible, or with the minimum of inaccuracy, in the recent but already stereotyped language of travel, hotel and leisure institution: 'leisure spaces', 'sports spaces' , rather like 'rendezvous point') seems to apply usefully, through the very fact of its lack of characterization, to the non-symbolized surfaces of the planet. [Augé, p.82]**

**Non-place is therefore a 'space' which cannot be defined as relational, or historical, or concerned with identity. Further, it inhabits the points between place, spaces that are meant to be moved through; spaces that have a dynamic element to them. For the analysis of the Mobile Home, this is a perfect description, I would argue, of the 'non-place'**

inhabited in the space of 'secondary slippage': the conceptual mobility that the Mobile Home occupies. Although Marc Augé's non-places are generic actual real-life locations that one passes through en route to 'somewhere' else, it is exactly this conceptual place - or better - non-place that the Mobile Home inhabits even though it may not be moving at all. The Mobile Home is repulsed by the magnetic pull of Place.

For all its conspicuous bulk, the trailer is quite small and cramped, and, long and narrow as it is, fails to provide a half-way satisfactory arrangement of rooms for a family. Though it is often efficient as a store or an office or a schoolroom, its inflexibility means that it can never be a self-sufficient, autonomous dwelling. On the contrary, almost from its first day of occupancy it spills its contents - and its occupants - into its surroundings: parked cars, refrigerators, packing cases, children and dogs and laundry invade the landscape. As time goes on the trailer becomes more and more dependent on the spaces provided by village taxpayers: cars take up room, children need spaces for play. Yet, ironically enough, the trailer rejects assimilation: its potential mobility, its frequent changes in occupancy and ownership, its ambiguous legal status all work against its acceptance. Finally, it quickly becomes shabby in appearance. It is of light construction, easily destroyed by fire or toppled by a high wind. Literally as well as figuratively, the trailer has no real attachment to place. [Jackson, p61]

Its place is non-place.

This allows us to move to the next point in the process of cause and effect: what happens to the subject, or the inhabitant of 'non-place'?

Clearly, the word 'non-place' designates two complementary but distinct realities: spaces formed in relation to certain ends (transport, transit, commerce, leisure), and the relations that individuals have with these spaces. Although the two sets of relations overlap to a large extent, and in any case officially (individuals travel, make purchases, relax), they are still not confused with one another; for non-places mediate a whole mass of relations, with the self and with others, which are only indirectly connected with their purpose. As anthropological places create the organically social, so non-places create solitary contractuality. [Augé p. 94]

In the situation of supermodernity, part of this exterior is made of non-places, and parts of the non-places are made of images. Frequentation of non-places today provides an experience - without real historical precedent - of solitary individuality combined with non-human mediation (all it takes is a notice or a screen) between the individual and the public authority. (Augé, p.118)

These [characteristic features of supermodernity] subject the individual consciousness to entirely new experiences and ordeals of solitude, directly linked with the appearance and proliferation of non-places. (Augé, p.30)

What is the effect of mobility, that is to say non-place, on the observer, the spectator, the traveller, essentially the (super)modern subject? It is critical to touch upon this for the reason that if there is a change in perception or the quality of the supermodern subject, there will necessarily be a change in the nature architecture is 'seen'. Again, we shall follow the strands of Marc Augé's thinking on the subject, and incorporate Paul Virilio's and Deleuze and Guattari's notions on the mobile subject as well.

**Subject = Spectator / Traveller**

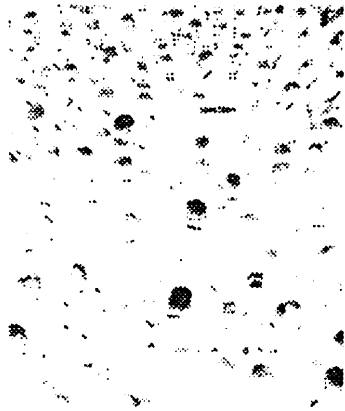
Travel ... constructs a fictional relationship between gaze and landscape. And while we use the word 'space' to describe the frequentation of places which specifically defines the journey, we should still remember that there are spaces in which the individual feels himself to be a spectator without paying much attention to the spectacle. As if the position of spectator were the essence of the spectacle, as if basically the spectator in the position of a spectator were his own spectacle... The traveller's space may thus be the archetype of non-place. (Augé, p.86)

The modern-day 'flâneur', the tourist, is in a position of almost-not quite being there. The 'landscape' keeps its distance, but its natural or

architectural details give rise to a text; a text that does not necessarily require its actuality to give the passing travellers the benefit of being there. This removal from participation removes one from place, and participation in it...

The [super]modern subject is a dislocated, or perhaps more exactly, a dyslocated subject, someone who does not know the difference between place and space, or even the difference between either of these and the sites to which he or she is confined in the pseudo-voluntarism that thinks that such a subject can go any place. But this global nomadism is a delusion, since to be able to go anywhere is to be located nowhere.

[Casey, Edward S. "Smooth Spaces and Rough-Edged Places: The Hidden History of Place", p.8]



The subject in a non-place is, through his removal from the 'places' of identity and history, thereby relegated to the role not of participant but to that of a spectator. The constant presence of the present requires of the supermodern subject to become a kind of continual witness the overabundance of present events, thus adding to the spectacular nature of the events or spectacle..

Everything proceeds as if space had been trapped by time, as if there were no history other than the last forty-eight hours of news, as if each individual history were drawing its motives, its words and images, from the inexhaustible stock of unending history in the present. [Augé, p.105]

Everything becomes a spectacle, an event to be viewed, preferably, from the comfortable distance of the removal and isolation that further characterizes the supermodern subject. [By the way, as I write this, an associate informs me that Princess Anne was just outside the building visiting the Pan-Am games' 'Athelete's village'. I didn't even know she was there. If only I had the TV on...]

## **Subject = (Solitary) Individual**

In real-world application, non-places can be considered essentially utilitarian. They exist to provide a need, be it for movement, groceries, or temporary accommodation. Almost always, there is an agreement formed between the user of the non-place and the powers that control it. It is an agreement made on an individual basis. When you enter a mall, you are entering private commercial property, and through the process of agreeing to enter you agree to conduct yourself according to 'their' rules, or be evicted. [Note the ubiquitous controlling authority in non-place]. Likewise, if you use a highway or are waiting for a plane in an airport terminal, you have entered into this arrangement through the various contractual arrangements ranging from vehicle licensing to the purchase of a ticket. The use of the internet is likewise controlled by the service provider.

The passenger through non-places retrieves his identity only at Customs, at the tollbooth, at the check-out counter. Meanwhile, he obeys the same code as others, receives the same messages, responds to the same entreaties. The space of non-place creates neither singular identity nor relations; only solitude, and similitude. (Augé, p.103)

It is interesting to note that the original French meaning of Augé's 'non-lieu' has a legal connotation of 'no case to answer' or 'no grounds for prosecution': a recognition that the accused is innocent. (Augé, p.102)

The solitude and similitude of the individual in non-place is maintained by the use of media to interface with the individual. The media in non-place has a characteristic of being the tool of 'authority' be it in the form of 'instructions for use' or in the attempt to extract money (special in isle 6). However, far from being oppressive, it is often specifically sought out by the quasi-nomadic subject of supermodernity. It is the link with the world around.

[T]he real [note use of the word 'real'] non-places of supermodernity - the ones we inhabit when we are driving down the motorway, wandering through the supermarket or sitting in an airport lounge waiting for the next flight to London or Marseille - have the peculiarity that they are defined partly

by the words and texts they offer us: their 'instructions for use', which may be prescriptive ('Take right-hand lane') , prohibitive ('No smoking') or informative ('You are now entering the Beaujolais region')... This establishes the traffic conditions of spaces in which individuals are supposed to interact only with texts, whose proponents are not individuals but 'moral entities' or institutions (airports, airlines, Ministry of Transport, commercial companies, traffic police, municipal councils) [Augé, p.97]



I cannot help but notice the similarities between Augé's 'public authority' figure and Deleuze and Guattari's 'State' construct: the antithetical construct to the Nomad. Through the anthropology of the 'real' conditions of supermodernism that Augé specifies: the infrastructure of connectivity that is ultimately controlled by some 'State' or other; it is reasonable to assume that the closest to the Deleuzian Nomad that Augé can come is to the analysis of the heavily 'State'-controlled connecting tissue between the 'traditional anthropological places'. However, as I have previously shown, this is not the same place as occupied by the Deleuzian Nomad. It would not seem reasonable to be able to 'see' the Nomad from an ethnological perspective, which is, it seems, heavily caught up the structure of the Deleuzian 'state'. Despite this, Augé contends "Empire, considered as a 'totalitarian' universe, is never a non-place."

I can only think that this claim results from the observation that non-place as a way through or between places exists in a relational correspondence with established places and that are never, for the simple reason that they are a means to an end, never the 'totalitarian end' in and of itself. But this does not mean that 'Empire' cannot extend its influence over the 'means' that constitute non-place, and from Augé's account of them, it certainly does that. So it must therefore be made clear that mobility as manifest in 'real' non-place certainly does not constitute the same mobility of the (perhaps 'fictional') nomad; it still falls heavily within the territorial jurisdiction of the state.

Nevertheless, I wonder if, despite this, the 'real' non-place is the home of the 'civilized nomad': a character that, although they realize that they exist in and conforms to a society that has hierarchies of control still heavily based on territorial ownership, can still reach a certain degree of unanimity and nomadicism. This hybrid and essentially schizophrenic character is perhaps, I would suggest, the inhabitant of the Mobile Home.

Augé's analysis of non-place that results in the 'civilized nomad' is arguably itself a result of the 'treatment' that it receives at the hand of the 'public authority'. I must question, though, if this analysis of the supermodern subject does not take full advantage of the changes in perception, and ultimately in ontology, that could be adopted by the civilized nomad. Augé notes that "Experience of the remote has taught us to de-centre our way of looking, and we should make use of the lesson. The world of supermodernity does not exactly match the one in which we believe we live, for we live in a world that we have not yet learned to look at. We have to relearn to think about space." [Augé p.36]. However, it is interesting to note that although Deleuze and Guattari as well as Paul Virilio were writing on this subject in the same country before and during the same time that Augé was formulating his theories on mobility and non-place, neither of those parties are alluded to in Augé's text. I would suggest that this is because their primary drive is to question, through philosophy, the soundness of the territorial and static mode of thinking and being, which in Augé's 'reality' is



merely an abstraction. However, the critical corollary to Augé's approach is that the concept of mobility will always exist within the shell of an ontology that is predicated on monumentality. To break that shell, we must drop the 'real' considerations for a while and continue the investigation into the perceptual and paradigmic changes that could result if the nomadic point of view is adopted, and the most complete formulation of this point of view has been developed by Deleuze and Guattari.



# Effect 4

## the Perception & Ontology of the Normal

The nomadic point of view has provided a counterpoint to the 'state' of architecture. In the field of theory in the social, and now increasingly in the physical arts and sciences, this point of view is being recognized and explored in great detail ["Thus, I think it is possible to see the past being rewritten,... both in the terms of mobility and as a history of mobility. Indeed so great is this rewriting that mobility is now coming to be seen as the normal state of things, and settlement as the problematic 'other' category that needs to be explored." Thrift, p.229]. As a result, architecture is left with the problem of communication in that the foundation of the language of architecture - form - is being eroded by the liquid forces of mobility. When seen as an image of mobility, architecture is seemingly left without its unifying identity; literally without solid ground for communication.

One response is to return to 'the good old days' of formal and understandable language. Another is to revel in the confusion and loss of clear and literal meaning in "readings". Another is the formalist approach. Yet another response is to acquiesce to a kind of neutrality that attempts to avoid any and all allusive devices, a retreat into a formal taciturn. Whichever method is followed, the dematerialization of monumental form caused by mobility must result in a re-investigation into the methods by which one understands architecture, and the basis on which it is 'seen' and then 'understood' because mobility changes both the nature of the architectural object, and the subject 'viewing' that object. It becomes an issue of perception, and ultimately the way one thinks -- an ontology.

### **The Frame**

If aviation - appearing the same year as cinematography - entailed a revision of point of view and a radical mutation of our perception of the world, infographic technologies will likewise force a readjustment of reality and its representations. [Virilio, Lost Dimension, p.27]

The nature of this perception of the world or 'readjustment of reality' is further elucidated by recent work in the scientific fields. Virilio explains the impacts of many of the leading scientific discovery regarding the dematerializations of the physical environment, including non-Euclidean geometry and the theory of relativity. Virilio cites the work of Mandelbrot, who postulates, through chaos theory, dimensions that are shown be 'partial' and relative; which firmly places the physical dimension as a continuum; a relationship between the figure and the object:

"...From this [rupture of displacement] emerges the notorious oscillation of the dimensional value, a cinematic jumping that would not exist if we took account of the "speed vector" of both the defilading and the observation that go into enchaining into one long sequence-plan the different scales of vision and the diverse degrees of resolution of the image, thereby attaining an unparalleled transparence." [Virilio, *Lost Dimension*, p. 55]

The 'transparence' to which Virilio is referring is not necessarily the transparence in a physical sense, but the essential disappearance, or better yet dematerialization of the previously 'solid' object. So when Virilio says "in fact, transparency has long transplanted appearances." [Virilio, *Lost Dimension*, p.22], he is talking about the ways in which things are viewed: perception.

"An identical unveiling is at work here: great distances no longer hide the appearances of distant lands, the opacity of materials no longer hides the intimate details of matter. This "transparence" - not to be confused with any physical dimension, as a non-separability that is both quantic, or infinitely small, and optic, actually opto electronic, or infinitely large - should lead us back, after Euclid, whose postulate allows for speed, to Galileo, whose small telescope, whose astronomer's lens, prefigured the highest speeds of motion." [Virilio, *Lost Dimension*, p.61]

Many of Virilio's contentions rely on an empiricism that using the starting point of non-euclidean geometry and Einstein's theory of relativity results in the lack of any scientific absolutes, implying that form is an illusion. Although this is scientifically and logically the case,

it is perceptually less persuasive. An apple is solid even though it is 99% 'empty space' on the atomic level. So many of Virilio's arguments seem to have no direct real-world application. This contention is valid, but what it is not considering is the shift in perception that is necessary to perceive the environment. What is important is the way in which the apple is viewed. Taken on a Virilian level, the apple's form blurs and takes on a transparency as what is solid melts into air. The lack of formal preconceptions, and the re-alignment with a way of seeing the world that denies formal precepts, allows one to let go of the static form as the primary building block of environmental cognition, and to replace that with zero-dimensional energy, light and speed.

### **The Primacy of Light**

"From matter to light, scientific knowledge progressively avoids any reference to solids or solid reference points, as they submit increasingly to the impact of advanced technologies and, thus, give up on their required material proofs." [Virilio, *Lost Dimension*, p. 48]

Starting with the general theory of relativity in which light, or more accurately the speed of light is the only universal constant, light has become the basis for measurement: truly the fundamental building block. As evidence of this, Virilio cites the change in the universal measurement standards of the meter which have changed from the physical measurement of a platinum bar to the optical [find the wavelength measurement]

The center of the universe is no longer the geocentric earth or the anthropocentric human. It is lumino-centrism of a helio-centrism, or, better yet, of a lumino-centrism, one that special relativity helped install, whose uncontrolled ambitions derive from the purposes of general relativity.

With the shift in perception towards light, ultimately a zero-dimensional

point of illumination, perspective loses its primacy, and light, which is everywhere and nowhere, fibre optic and televisual, tunneling and disappearing: the transparent image that is at its core nomadic.

Thus the new representations of the form-image of the sensible world, the "point of light" replaced the vanishing point of the perspectivists. The luminous point became the vanishing point of the speed of light, the non-place of its acceleration, a photon, electron acceleration that contributes to the present formation of the dimensions of infinite space, just as the point without dimension of ancient Greek geometry served to establish the dimensions of the finite world, including the development of arithmetic and mathematic numeration, as well as the geometric and geographic formulation of the image-form of the "planetary globe". [Virilio, *Lost Dimension*, p.43]

So Virilio poses the ultimate question to the 'civilized nomad':

Are we prepared to accept a reversal of all philosophic meaning, hereafter considering accident as absolute and necessary, and substance - all substance - as relative and contingent, hereafter considering catastrophe not as substantial deformation but rather as an unexpected accidental formation à la René Thom, and, further, to consider movement and acceleration not as displacement but rather as emplacement, an emplacement without any precise place, without geometric or geographic localization, as with the particles of quantum mechanics? We must at least resolve ourselves to losing the sense of our senses, common sense and certainties, in the material of representation. We must be ready to lose our morphological illusions about physical dimensions; except for the point, the punctum, that figurative abstraction more resistant than the atom and, as always, absolutely necessary for different conceptions of the world. [Virilio, *Lost Dimension*, p.48]

In addition, he adds that the video (pixel) is non-dimensional "This analogical or numerical figure comes from the very absence of a field, of a depth of field, so that depth is now only that which occurs in the temporal video-performances of the pixel" [Virilio, *Lost Dimension*, p 51]

**The crux:**

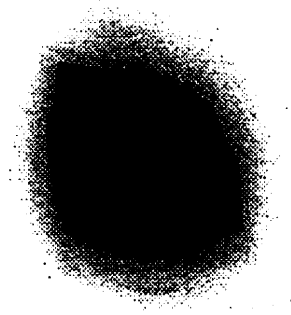
**Since the visible is now only the effect of the surface interface of the promptness of the luminous emission, and since, furthermore, at the ocular level, that which moves increasingly quickly becomes decreasingly perceptible, we have to admit that that which is given to us as perceived is done so by means of phenomena of acceleration and deceleration, in each case linked to the intensity of luminescence. If speed is light, then all light becomes semblance, the shifting appearances of momentary and false transparencies, and the dimensions of space become mere fugitive apparitions. All become figures and objects seen in the instant of a glance, but the glance is both the perceived place and the perceiving eye. The glance is both site and sight. [Virilio, Lost Dimension, p.62]**

**This is reminiscent of Massumi's discussion of the **brightness confound**: a term coined by 'frustrated' researchers into the nature of perception.**

**The 'brightness confound' can become a conscious percept, through a concerted effort of unlearning habits of seeing, or through a simple accident of attention. When it does, the confound is contagious. It strikes depth: three dimensionality, argues the 'ecological' school [for more, read James J. Gibson, The Ecological approach to Visual Perception, Houghton Mifflin (Boston), 1979] Of perceptual theory, is an effect of complex differentials of surface lighting played out in ever-shifting proximities of shadow and colour, reflectance and luminosity, illumination and translucence.. it is not, as traditional theories of perception would have it, the product of mysterious calculations of relative size and distance. [Massumi, p.20]**

**What we are witnessing with Virilio and others is the maintenance that there is a fundamental shift in the way that objects are viewed when viewed through the eyes of Deleuze and Guattari's Nomad, or from Virilian image of speed. This shift, which is characterized by the replacement of matter with that of light as the primary building substance, has a characteristic of dissolving the physical dimensions: lessening their significance, as well as their potency.**

Depth is a surface effect susceptible to the brightness confound. When it goes, so does separable form. Not only do the relative size and distance of objects flutter, their boundaries blur. They cease to be separate figures, becoming not entirely localisable zones in a fuzzy continuum. In other words, they cease to be objects, becoming what they always were, in the beginning and in parallel: fluctuations; visual runs; experiential transition zones. The distinctions of habit fold back into the always accompanying level of the more-than-three-dimensional light concurrence from which they emerged. The fixed boundaries and 'constants' of our habitual perceptions are emergences from an experiential confound to which they can return, and must return, for they are not structural constants at all, but continually regenerated effects, predicated on the variation they follow and emerge from, as its perceptual arrest. They rest entirely on variation.  
[Massumi, p.20]



# Effect 5

## Virtualization Lightning

It is precisely the magnitude of speed, a hitherto unequalled magnitude, a 'depth of time', that eludes the habitual limitations that result from the material resistance, just as with the more-or-less distant localizations of observed objects. The severance of dimensions... is thus not strictly a facet of the observed object, having to do with degrees of resolution of figures and of images. It is also the effect of different filming sequences, and of the more-or-less high rapidity of execution of their montage: cinematic cinematographic, or videographic montage, of which the constant progress of the means of communication of dimension has finally made us aware, optic or opto-electronic means that are no different than those of televisual or telematic telecommunications; or, again, those means of physical transport of people, since it always comes back to that primitive magnitude of the rapid vehicle, such as the TGV or Concord... [Virilio, Lost Dimension p. 55]

We are left now with the final effect/cause before we can enter into the analysis of the impacts for an architecture of form of a 'formless' mobility. However, the central paradox of 'what it is if not form' must be probed until some mechanism can be used as a 'bridge' to the 'real' that avoids the bracketing and control of the Deleuzean 'State'.

It is important to note at this time that the deformation of architecture does not imply a necessary abandonment of the fact that the creation of architecture is, in the final analysis, a physical act; one based on the use of materials that are used to protect from the elements. However, what this deformation does call for is a necessary admittance of a shift of emphasis in perception of the absoluteness of the building. This is a shift which may have formal consequences but they must be seen as exactly that: consequences. Far from stifling the profession or allowing 'anything goes' approaches, this mutation of point of view would open a large number of possibilities which could present the same firmness, commodity and delight, but on different dimensions.



**Terrence Riley:**

**This is not to say that form is irrelevant or that all geometries are alike. Rather, as architecture goes forward into an era of great cultural and technological change, it is critical to note that dissimilar forms are not necessarily ideologically oppositional and formal distinctions are neither the only distinctions in architecture nor are they the most important ones. [Riley, 1999, p.4]**

**Virilio's examination of the nature of mobility and its relationship to the built environment provides the necessary seeds of a language of mobility that is necessary for the lightening of architecture.**

**Perhaps the most critical concept that Virilio has to deal with is the nature of form and its relation to mobility. Using picnolepsy [a mild form of epilepsy which affects most people in their childhood] as a vehicle much as I am using the Mobile Home, Virilio sets up a situation where forms have a "departure from duration". This in turn results in a discontinuity of the perceived world, and a marked importance in the unseen world; discontinuities are continuous and perception is likened to epileptic time travel.**

**One of the first impacts of this discontinuity is that "the pursuit of form is only a technical pursuit of time" [Virilio, 1991a p.14]**

**The pursuit of forms is only a pursuit of time, but if there are no stable forms, there are no forms at all. We might think that the domain of forms is similar to that of writing: If you see a deaf-mute expressing himself you notice that his mimicry, his actions are already drawings and you immediately think of the passage to writing as it is still taught in Japan, for example, with gestures performed by the professor for students to capture calligraphically. Likewise, if you're talking about cinematic anamorphosis, you might think of its pure representation which would be the shadow projected by the staff of the sundial. The passing of time is indicated, according to the season of the year, not only by the position but also by the invisible movement of the form of the shadow of the staff or of the triangle on the surface of the dial.**

**Furthermore, the hands of the clock will always produce a modification of the position, as invisible for the average eye**

as planetary movements; however, as in cinema, the anamorphosis properly speaking disappears in the motor of the clock, until this ensemble is in turn erased by the electronic display of hours and dates on the black screen where the luminous emission substitutes entirely for the original effect of the the shadow. [Virilio, Aesthetics of Disappearance, p.17]

In this, Virilio is arguing that the permanence of forms is illusionary; fleeting over time, and that the only way to arrest form is to arrest time, which is an impossibility. In other words, from this point of view, all form is animated and in constant dynamic fluctuation. Although this The implication of time (and therefore speed) taking the place of the primacy form is that there is a dimensional shift that he describes as follows:

The relation to dimensions changes drastically. What happens has nothing to do with metaphors of the 'images of time' style; it is something like what Rilke's phrase meant in the most literal sense: 'What happens is so far ahead of what we think, of our intentions, that we can never catch up with it and never really know its true appearance.'

Virilio's argumentation of the annihilation of the fixity of form as a result of the forces of speed is a necessary step towards the reconsideration of architecture based on the principles of mobility. However, Virilio is somewhat frustrating in that it does not allow for a useful integration of his new ways of perceiving the world: as a dematerialized successions of disappearance. To make that final step, it is necessary to introduce a cousin to the Virilian speed vector; the virtual space.

#### **Virtual Space:**

"actual traces of the virtual are always effects of movement"  
[Massumi, p.21]

An operational definition of 'the virtual':

Deleuze and Guattari, following Bergson, suggest that the virtual is the mode of reality implicated in the emergence of new potentials. In other words, its reality is the reality of

**change: the event. This immediately raises a number of problems for any domain of practice interested in seriously entertaining the concept. If the virtual is change as such, then in any actually given circumstance it can only figure as a mode of abstraction, for what is concretely given is what is - which is not what it will be when it changes. The potential of a situation exceeds its actuality. Circumstances self-abstract to the precise extent to which they evolve. This means that the virtual is not contained in any actual evolve. This means that the virtual is not contained in any actual form assumed by things or states of things. It runs in the transitions from one form to another. [Massumi, p.16]**

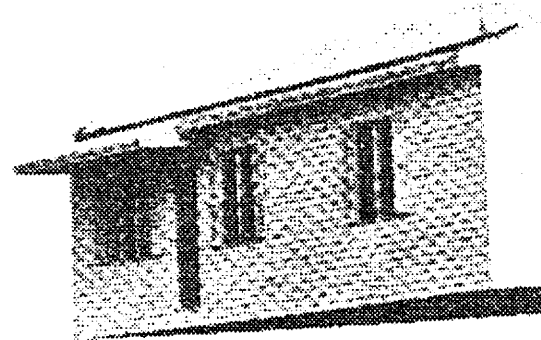
**To be 'virtual' implies a Virilian geometry featuring time and therefore speed and event as the basis of perception. Further, as Massumi points out, "the virtual occurs when the connotative potential is more powerful than the actual" - again implying a potential that outpaces the physical form. The Virtual, therefore, is defined as being non-concrete, abstract, yet not signifying: formless. More accurately, though, is that it occurs between forms. Massumi continues:**

**The abstractness of the virtual has been a challenge to certain discourses, particularly in the interdisciplinary realm of cultural theory, which make a moral or political value of the concrete. This is not the case with architecture, even though its intimacy with the concrete is quite literal. Architecture has always involved, as an integral part of its creative process, the production of abstract spaces from which concrete forms can be drawn. The challenge that the virtual poses for architecture lies more in its 'unform' nature than its abstractness. How can the run of the unform be integrated into a process whose end is still-standing form? [Massumi, p.16]**

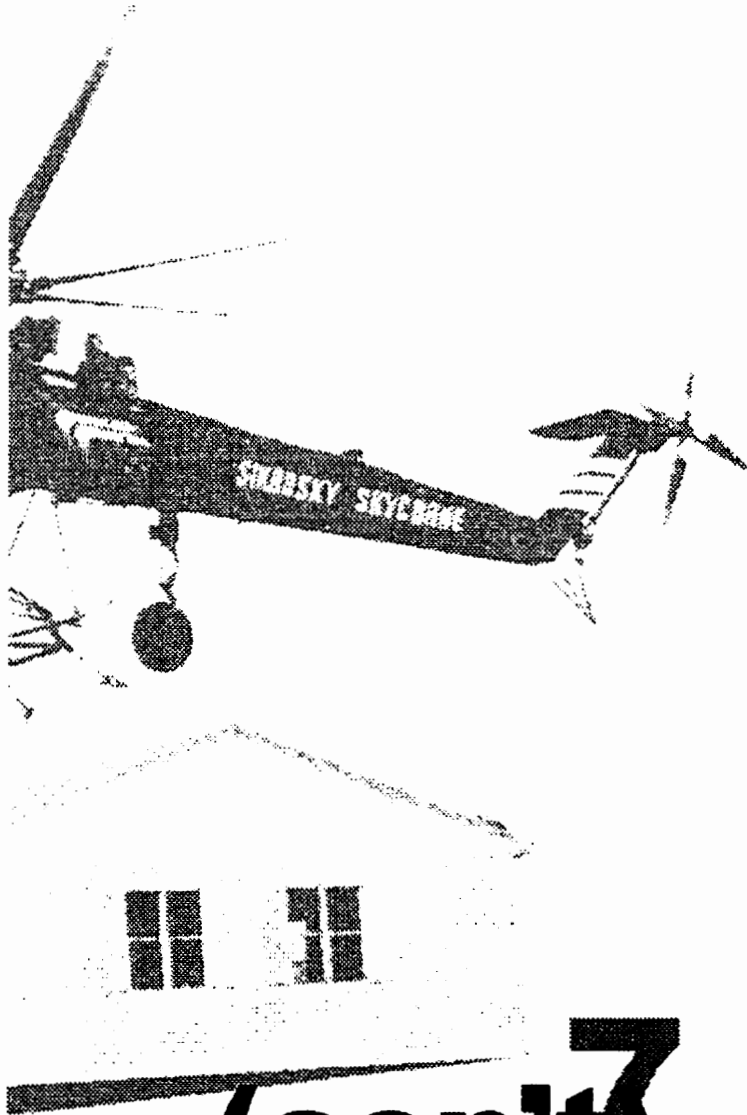
**So although the virtual has a strong abstract component, This is not the difficulty posed to architecture. It is rather its peculiar nature as an unform,"or as a Virilian 'zero-dimensional' object that poses the problem for the traditional architectural approach. The concept of topology can be used to form a conceptual framework that would allow for the conception of the incorporation and appreciation of these unform objects.**

# Lightening Architecture

**home**



# mobile



**(con't)**

## **Towards the Topology of Dematerialization:**

**{Lightening Architecture {continued}}**

### **to-pol-o-gy n**

a branch of mathematics that investigates the properties of a geometric configuration that are unaltered if the configuration is subjected to any one-to-one transformation continuous in both directions. [Webster's Third New International® Dictionary]

Topology deals with continuity of transformation. It engulfs forms in their own variation. The variation is bounded by static forms that stand as its beginning and its end, and it can be stopped at any point to yield other still-standing forms. But it is what happens in-between that is the special province of topology. The variation of seamlessly interlinking forms takes precedence over their separation. Forms figure less as self-enclosures than as open co-dependencies of a shared deformational field. The continuity of that field of variation is inseparable from the forms populating it. Yet it exceeds any one of them, running across them all. When the focus shifts to continuity of variation, still-standing form appears as residue of a process of change, from which it stands out (in its stoppage). A still-standing form is then a sign: of the passing of a process. The sign does not in the first instance signify anything. But it does imply something; or better, it implicates. It envelopes in its stillness a deformational field of which it stands as the trace: at once a monument of its passing and a signpost of its potential to be repeated. The variation, as enveloped past and future in ceasing form, is the virtuality of that form's appearance (and of others with which it is deformationally interlinked). [Massumi, p.16]

From a topological perspective, a donut is equivalent to a teacup. The form of a donut could be 'morphed' without changing the original parameters of that of a torus. It could bulge on one side, and that bulge could form a 'container' for tea, but it is just a manipulation of the 'bulge'. Since physical manifestations do not impact a topological analysis, this is a useful tool to use when discussing the reduction of the physicality of form. Virilio refers to this 'imperceptible order' of topology and speaks to its implications in the following:

**Constructed space, then, is more than simply the concrete and material substance of constructed structures, the permanence of elements and the architectonics of urbanistic details. It also exists as the sudden proliferation and the incessant multiplication of special effects which, along with the consciousness of time and of distances, affect the perception of the environment.**

**This technological deregulation of various milieus is also topological to the exact extent that - instead of constructing a perceptible and visible chaos, such as the processes of degradation or destruction implied in accident, aging and war - it inversely and paradoxically builds an imperceptible order, which is invisible but just as practical as masonry or the public highways system.**

**In all likelihood, the essence of what we insist on calling urbanism is composed / decomposed by these transfer, transit and transmission systems, these transport and transmigration networks whose immaterial configuration reiterates the cadastral organization and the building of monuments.**

**[Virilio, Lost Dimension, p.21]**

**It is in the 'recursion' of the physical form that there exists a potential to exhume a topological architecture. The topological ontology makes the design process the central focus of the design, not the form, as Massumi writes:**

**"Far from directing it, form emerges from the process, derivative of a movement that exceeds it. The formal origin is swept into transition. Followed by the architect." [Massumi, p.16]**

**Form, then becomes the 'still-standing residue' that is a sampling of the topological field of deformation. It is a manifestation that is without the element of time; a 'morphological irruption': a snapshot. The architect's role becomes much less heroic - becoming instead "a prospector of formative continuity, a tracker in an elusive field of generative deformation" [Massumi, p.16] whose job it is to be "in a sense catalytic, no longer orchestrating" [Massumi, p. 16]. The architect becomes less a recipient of divine inspiration, and more a captain of a ship that moves regardless. "The whole point of the topological turn is to catalyze newness and emergence rather than**

articulating universalized fixation." [Massumi, p.17]

It must be pointed out that this is the opposite to the Corbusian method of design:

**Possessed of a method whose elements are like words of a language, the creator chooses among these words those that he will group together to create a symphony...One comes logically to the necessity... of a logical choice of themes, and the necessity of their association not by deformation, but by formation.**

[Le Corbusier from "purism" (1920), *Modern Artists on Art*, RL Gerbert(ed), prentice-hall (engelwood cliffs, NJ) 1964, p 62 pp 65-67.]

This 'Modern' method draws from pre-existing vocabulary of elementary forms. The result is both individualistic, but yet (as discussed in *Modernism and the Mobile Home*) accedes to universality via symbolic objectivity. The critical difference between the Modern method and the topological method is that the form is admittedly particular, whereas it is the 'field of generative deformation' that is more universal. This relates to the Mobile Home in that the Mobile Home is a building type (topology) that has many particular variations (snapshots), but it is not the individual models that hold the interest of this thesis. It is the "deformational field" that has created these individual models that we are referring to when we discuss the Mobile Home.

At any rate, in order to chart the course of topological deformation, one must use abstract methods, but with an added elements of chance, accident, and indeterminacy. The computer, of course, is the preferred tool of the virtual, and it adds, through the process of digitization, a certain indeterminacy. In the case of the use of software, this indeterminacy is given by the built-in constraints of the software, and the ability of the designer to manipulate it. The point being, however, that the virtual forces are not neutral screens onto which is projected in a preconceived notion of form, but that the virtual forces take on a deformational life of their own.

**As a consequence, the space of abstraction itself becomes active, no longer merely prefiguring. The abstract space of**



design is now populated by virtual forces of deformation, with which the architect must join forces, to which he or she must yield in order to yield newness. The design process takes on a certain autonomy, a life of its own. [Massumi, p.13]

This process generates a plethora of forms. From this, the architect can select any number of forms that can be further tweaked, the outcome never sure, never predetermined. This reminiscent of the Virilio's remark that "Ours is a crisis of cutting and joining, a crisis of editing; we have passed beyond the crisis of montage" [Lost Dimension p.62]. The impact for authorship of design having become much less to do with the Modernist 'freedom' and 'necessity' implying a omniscient point of view; captains of the ship of change, but rather that of the engineer in the boiler room smashing at the engines that drive the ship; dealing with the dirty realities of all the menial factors that enter the process including taste, cost, time.

The success of the exercise is not measured by any god-like ability to create something from nothing. It is the more modest ability to extract a difference from a variation (a standing difference from a running variation). It all depends on what happens in the middle. Cultural production becomes the art of the prevailing middle. [Massumi, p.18]

The process must be complicated and as Massumi says, is a 'complex of complexes' each one reacting with the others in exponential fashion. The result for form is that "the translation into and out of virtual force lays everything out on a single, complex, deformational surface from which form emerges as a certain kind of stoppage." The extraction process is more a product of the 'art of the leap' of intuition than arbitrariness. [note: reminiscent to Bergson's notion of intelligence vs. Intuition]

Now that we've outlined what the topological method is, and touched on how form is derived from it, we are still left with the same questions of its application:

"if the idea is to yield to virtuality and bring it out, where is the virtuality in the final product? Precisely what trace of it is left in the concrete form it deposits as its residue? What of emergence is left in the emerged? If the end form is a sign

**that does not signify, then what does it do and how does it do it? What is the relation of the asignifying sign to its event?**

**[Massumi, p.18]**

**If architecture continues to be seen as static form then the virtuality will never be seen. The element of time must be added to the static; the Virilian re-configuration of the senses must be attempted to see the speed: the dynamics in the statics. The importance of the building as a function of perception as well as inhabitation must be pursued to attempt to reach the virtual nature of the mobile. However, it is critical that the formal aspects of the building be considered as secondary in importance to the 'deformational field' that can be seen as the producer of form in the first place.**

**There have been two ways of 'reading' the afterlife of a building, both of which result in the 'formal brackets' being 'clamped' back onto the architecture in question. The first, involves the use of signifying semiotic terms to 'decode' the building and bring out its 'language' through formal 'referral' (usually known as the 'postmodern' method in Architecture). The result is that architecture is imprisoned in a language of formal vocabulary, unable to move beyond that level of understanding. The second method, as explained by Massumi, is referred to as existential phenomenology, and is characteristic of the modernist approach in general.**

**The experiential substrate, it turns out, is not so much unprepackaged as it is packaged by a structural pre-fit between the body and the world. This has the merits of avoiding imprisonment in signification, and of reconnecting with material processuality. But it consigns everything to function, hypostasised as the ontological ground of lived experience. 'Intentionality' is another word for function, glorified as the ground of all experience. This transcendentalisation of function encloses process in organic form; another difference between 'high' modernism and existential phenomenology, although not so great as it is made out to be. For both, experience is formally prefigured. [Massumi, p.18]**

**This is the same problem that we encountered in our investigation into Krstic's article on Japanese architecture and its impact on the analysis**

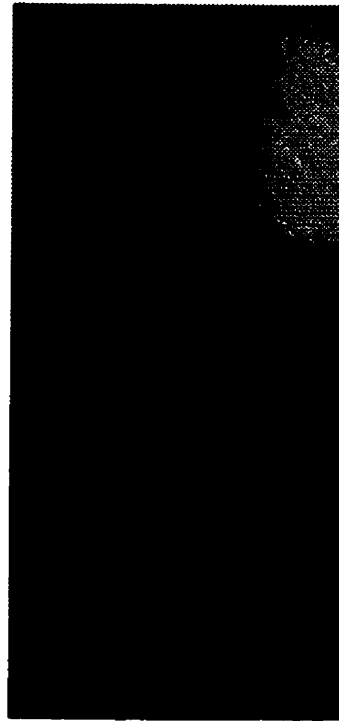
of the Mobile Home as an object. Again, what we are after is a removal from the formal in order to get at the concept of continual dislocation, whether it be in the image of Thrift's mobility, Massumi's virtuality, Deleuze and Guattari's transversality/nomadology or Virilio's speed. As soon as judgement is passed on singular phenomena of an architectural neumena, then it limits the analysis to the exclusion of the animate nature of architecture. The way to conceptually capture this continual dislocation is through an investigation of the dynamic elements of Speed and Light.



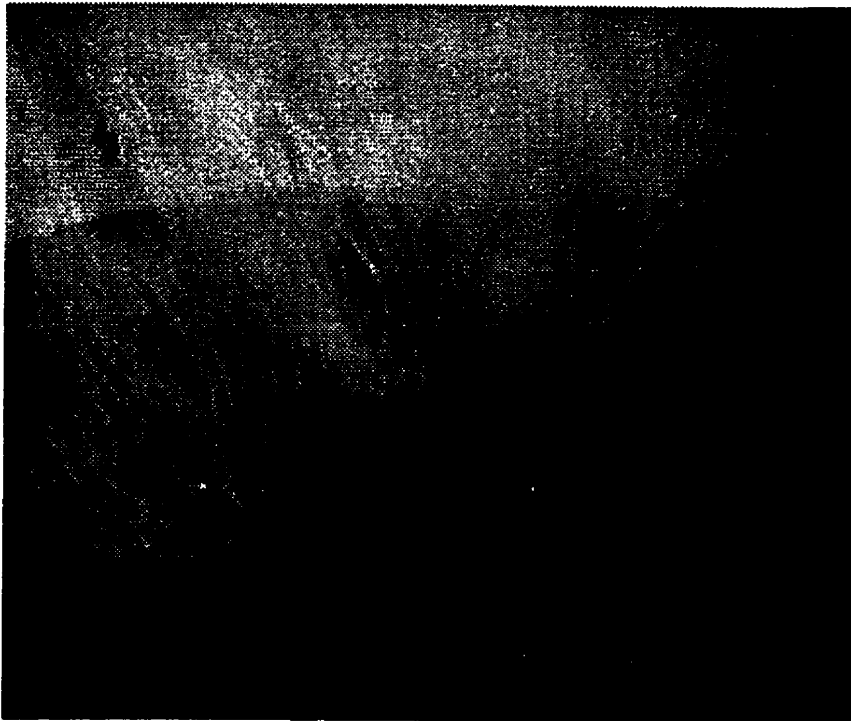
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# Fogs & Doppertings

**home**



# mobile



from the motion picture Duel

# 10

## **Architectural Effects:Fogs and Dopplerings**

### **The 'Afterlife': 'Fogs and Dopplerings'**

"In addition to residue in static form, the formative process leaves traces still bearing the sign of its transitional nature. These are not virtualities, but populations of actual effects that more fully implicate changeability and the potential for further emergence [than self-enclosed forms or ordered agglomerations of forms realizing a rigid combinatory logic to produce citations, associations, or most ubiquitously, stock functional cues - formal compositions following laws of perspective and resemblance designed to awaken habitual patterns of recognition and response. ...They are fogs and dopplerings; patches of vagueness or blurrings presenting to the senses an insensible plasticity of form; flushes of freshness, arun in concretised convention and habit; recalls of emergence reminiscences of newness." [Massumi p.20]

The nature of mobility for architecture is, in actual terms, fairly difficult thing to put one's finger on given the nature of the origin of the profession. And when one does put one's finger on it, as perhaps Krstic did with the Shimenawa, it is critical to realize that it isn't mobility itself, but it's droppings; or as Massumi says, its asygnifying signifier. It comes from the 'topological' field, but it does not signify nor represent it. It has come down a 'one-way street' into formal existence. The manifestations become less 'solid objects' as architectural effects. Massumi describes these manifestations as 'Fogs and Dopplerings'. Fog annihilates separable form: it is an effect of lighting. Dopplerings are effects of movement. Each one of the effects relate to light or to movement, and sometimes both.

### **Effects of the Primacy of Light**

"Deprived of objective boundaries, the architectonic element begins to drift and float in an electronic ether, devoid of spatial dimensions, but inscribed in the singular temporality of an instantaneous diffusion." [Virilio, Lost Dimension, p.13]

**The implications of an architectural paradigm based on form in the physical dimensions is not necessarily obvious. The grand spatial controlling mechanism of modernism starts to break down in a Virilian model of non-place based on speed and the primacy of light. There are four direct physical implications:**

- 1. Light becomes the bricks and mortar of architectonics. What becomes important is not the form or effect but the play of light in and off and around it.**
  
- 2. Both the blurring of the boundary and architecture's role as an interface changes the nature of the 'surface', as it breaks down in its physicality and at the same time becomes a method through which information is transmitted in an osmotic fashion. This also has the added implication of architecture as an active participant in the role of media.**
  
- 3. An increased Transparency and Translucency of materiality. As a variation on the dissolving of the 'surface', transparency and translucency have developed an even greater significance since the Modern movement in architecture.**
  
- 4. The influence of the topological ontology on architecture creates a ubiquitous, and therefore generic condition. It therefore has the appearance of being everywhere and nowhere. As a result, there is a non-specificity to the application of an architectural technique; a certain characteristic neutrality.**

**Because of the fact that these techniques are effects, impressions, interpretations, and are not meant to be 'ideas' that are, (pardon the term) cast in stone, I will refrain as much as possible from commenting directly on the effects, instead allowing authors that have written a lot on the subjects argue it, and juxtapose them with images that are suggestive of the form of effects.**

## **1. Light**

**"Architecture ... is a distribution of light before it is a concretion of forms." [from Deleuze, Foucault, 1986, p. 57] Its basic medium is light. It uses concrete and stone, metal and glass, to sculpt light in ways that either direct the fixations of attention steadfastly away from their confounded conditions of emergence, or on the contrary enable it sporadically to fold-back into them. The separation between the 'primary' sensations (depth and form) and the 'secondary' sensations (in particular colour and lighting) is untenable. Since perception is a matter of complexes of complexities played out in surface relations, the more useful distinctions, are, again, topological (cuts and continua; boundaries and transition; fold-outs and fold-backs) and processual (affluter or stabilized; arun or still-standing; refreshed or habitual; functional or eventful). One of the direct implications for architectural practice is that colour need not be dismissed as essentially decorative. As a dimension of the brightness confound, it is as primary an architectural element as the cube - if not more so. [Massumi, p.20]**

## **2. Surface: Interface (Media)**

### **Media**

**Benjamin:**

**architecture, like cinema, "presents material to a simultaneous collective reception."**

**René Clair:**

**"The art that is closest to cinema is architecture."**

**Marc Augé:**

**The link between individuals and their surroundings in the space of non-place is established through the mediation of words, or even texts. We know, for a start, that there are words that make image - or rather, images: the imagination of a person who has been to Tahiti or Marrakesh takes flight the moment these names are read or heard.... Here the word does not create a gap between everyday functionality and lost**



**myth: it creates the image, produces the myth and at the same stroke makes it work (TV viewers watch the programme every week. Albanians camp in Italy dreaming of America, tourism expands). [Augé p. 97]**

**Virilio:**

**We can now better understand the precise materiality of architecture which fascinated Walter Benjamin. It was connected less to the walls, floors, and opacity of surfaces than to the primacy of the access protocol of doors and bridges, but it also referred equally to the ports and other means of transport, that prolonged the nature of the threshold, the practical function of the entryway. This protocol of physical access gave all its meaning to the space of a dwelling and of a City; both were linked to the primacy of the sedentary over the nomadic ways of our origins. And all of this is being swept away by advanced technologies, especially those of domestic teledistribution. [Virilio, Lost Dimension, p.99]**

**Where once one necessarily entered the city by means of a physical gateway, now one passes through an audio-visual protocol in which the methods of audience and surveillance have transformed even the forms of public greeting and daily reception. [Virilio, Lost Dimension, p.14]**

**Architecture is more than an array of techniques designed to shelter us from the storm. It is an instrument of measure, a sum total of knowledge that, contending with the natural environment, becomes capable of organizing society's time and space. This geodesic capacity to define a unity of time and place for all actions now enters into direct conflict with the structural capacities of the means of mass communication [Virilio, Lost Dimension p. 22]**

## **Interface**

**The blind alley disappears into the superimposed vision of a closed-circuit television that never turns off, that always gives and receives, directly or indirectly, all surfaces and all the pieces of a tele-topological puzzle, one in which televised permanence replaces the permanent cinema of the 1920's through the 1940's, where the public would go to get reality**

**just for an instant. [Virilio, Lost Dimension p. 71]**

**We are no longer primarily concerned with the displacement - or with our being displaced-in the space of a passage. We are now involved with the dephasing in time of the instant of a disjunction-conjunction. This is a concurrence of technical circumstances in which appearances are all against us, all precisely against us in the opto-electronic interface. The separation of different sites in the original geopolitics of the rural, the communal, the urban and the national, has become the interruption of the non-site of contemporary chronopolitics. [Virilio, Lost Dimension p. 74]**

**With the territorial language of place repressed, what language takes hold? Due to the emergence of the postmodern nomad, the new institutions of power cannot solely control through physical territorial demarcation. The new territories are being forged in non-place. The control of non-place is not in the routes, but at the nodes of access. Access to data-banks, access to financial resources, access to the internet. Control of access to electronic network is the power game, and one of architecture's role is as machine interface. Cyborg Architecture.**

**...We encounter in the interface a form-image in which time more than space makes the "surface", since the only depth is that of the primitive dimension of speed, the emptiness of the quick, that of the vector of instantaneous transmission of data that affects, with the consciousness of the users, the figures, the movements and the represented extension. [Virilio, Lost Dimension p. 53]**

**The imbalance between the direct information of our senses and the mediated information of the advanced technologies is so great that we have ended up transferring our value judgments and our measure of things from the object to its figure, from the form to its image, from reading episodes of our history to noting their statistical tendencies. As part of this grand transferral, we now face the major technological danger of a generalized delirium of interpretation. [Virilio, Lost Dimension p. 52]**

## **Surface (Hypersurface)**

**Scientific" definition of 'surface': Each surface is an interface between two environments that is ruled by a constant activity in the form of an exchange between the two substances placed in contact with one another. [Virilio, Lost Dimension p. 17]**

**Boundaries are less finite walls, and more permeable membranes.**

**The rigor of inquiry into both the graphical and material manifestations creates the possibility for an interplay between the graphics and surfaces, creating a plane of immanence - a hypersurface. [Massumi, p. 25]**

**The cathode window and the matrix screen are able to displace doors and physical means of communication, because cinematic representation has already displaced the reality of the effective presence, the real presence of people and things. Further, the accident of instantaneous transfer machinery displaces the substance of space-time, in favor of a kind of energy reduction and a hyper-cinematic reductionism that affects urbanism and architecture, but above all else re-orders geometry and the dimensions of physical space. [Virilio p. 99]**

**For Benjamin, the architectonic no longer operates among the registers of resistance, material and appearances; it occurs now instead within the order of transparency and the ubiquity of the instantaneous, both mythical qualities that predict those of the great political and social liberation..."**

## **Transparency / Translucency**

**At present, transparence replaces appearance because the aesthetics of accelerated disappearance has displaced that of the progressive emergence of forms and figures in their material support, their surface of inscription, from the surfaces of engraving, drawing, painting, sculpture, and the photogravure of intaglio negatives to the monoliths and constructions of architecture. [Virilio, Lost Dimension p. 36]**

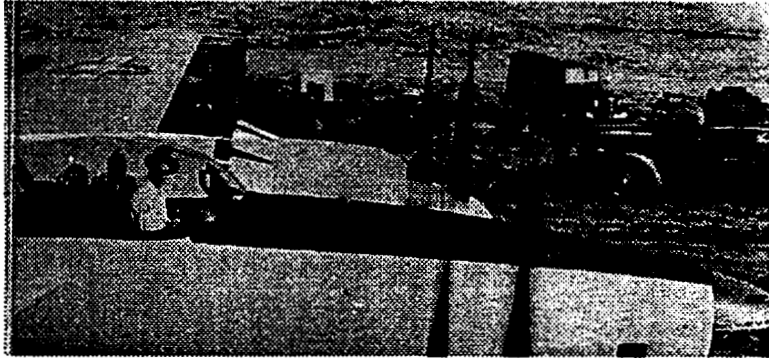
When transparency becomes manifest, it becomes a manifesto that re-organizes appearance and the measure of the sensible world and thus, almost immediately, its figure and its image-form. [Virilio, Lost Dimension p. 32]

These performances and electronic video-performances are matched only by the architectural nullity of all buildings. This is the nullity we see in the arrangement of Silicon Valley, the electronic suburb of an agglomeration without agglomeration. We have arrived, in the era of telematic non-separability, at the zero degree of architecture. [Virilio, Lost Dimension p. 100]

### **Ubiquity**

The first part of Hughes' life could pass for a programming of behavior by dream and desire: he wanted to become the richest, the greatest aviator, the most important producer in the world, and he succeeded everywhere ostentatiously; overexposing his person, avid for publicity, for years he inundates the Western press with his image, with tales of his records or conquests of women.

For Hughes, to be is not to inhabit; polytropos, like Homer's Ulysses, not occupying only one place, he desires not to be identifiable, but especially to identify with nothing. "He is no one because he wants to be no one and to be no one you have to be everywhere and nowhere." This taste for ubiquitous absence he'll quench, first through his use of various technical media, in surpassing what was then the most prestigious speed record: the 14th of July, 1938, his Lockheed-Cyclone having flown around the world "in a great circular arc," lands at Floyd Bennet Field where he had taken off on July 10th. Then he guides his plane into the hangar to the exact point he left from. It isn't long before Hughes recognizes that his desire for movement is only desire of inertia, desire to see arrive what is left behind.



Hughes, shortly before the crash shown below.



Then Howard Hughes disappears.

Soon his only link to the world will be the telephone. Like Chateaubriand, he locks into a narrow space his life-long hopes. The rooms he wants to be in now are narrow and all alike, even if they are worlds apart. Not only does he thereby eliminate the impression of going from one place to another (as in the empty loop of the world record), but above all each place was such as he could have expected it to be. The windows were all shaded and the sunlight could no more penetrate these dark rooms than the unanticipated image of a different landscape.

Suppressing all uncertainty, Hughes could believe himself everywhere and nowhere, yesterday and tomorrow, since all points of reference to astronomical space or time were eliminated.

At the foot of the bed where he was lying was, however, an artificial window, a movie screen. At the head there was a projector and alongside it, within reach, the controls that allowed him to project his films, always the same, eating indefinitely from the same plate.

Master of an incomparable fortune, of a considerable technical and industrial achievement, the only purpose of his wealth, finally, was to purchase total reclusion in a dark room where he lived nude, covered with bedsores, emaciated and destitute on a pallet.

The Master of Time.

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## Conclusion

Perhaps this is the hardest lesson that the Mobile Home has for us to learn. It is not about the movement of 'fixed forms', nor is it about the 'absolute movement of process self-feeling', but the generating difference between these two that generates the 'world'. I have called it 'slippage'. To see it, one must accept the point of view of the Nomad. In doing so, one reverses the relation between movement and space, form and light, and "when the relation between space and movement inverts, so does the relation between ourselves and our experience." [Massumi] Just as potential exceeds the actual in the case of the virtual, 'experience' onto-topologically exceeds 'being'. "Experience is our virtual reality". Experience is the "cloud" from which the actual world, or actual architecture as the case may be, can be extracted at any point in the physical manifestation of the 'signifying sign-form'.

## ***Architecture is the masterly, correct and magni***

The signifying or processual sign-form of the onto-topological turn catalyses experiential potential rather than meaning. It is a sign of material dynamics of variation, pointing in two directions at once.

1. recalls design process (chance)

2. points forward to the life of the building in terms of dwelling and looking (alien process)

Architecture is a gift of product for process, the sign-form fundamentally means nothing. It is meant to stand at the threshold between processes. The middle prevails.

The aim of onto-topological architecture has no end. The aim of processual architecture does not stop at any end. The product is re-process. Processural recursion.

"The correspondence pertains to the conditions of emergence rather than the actuality of the emergent. In other words, it is virtual. The identity stretched analogically across the gaps of differentiation is 'machinic': what is repeated is autonomisation, same process, different at every take."

That is the concept of the isopolitical approach to Architecture, and it is this approach that the analysis of the Mobile Home has lead me towards.

As a final thought on the Mobile Home I present one final set of quotes:

"The grand narratives of theoretical causality were ... displaced by the petty narratives of practical opportunity, and, finally, by the micro-narratives of autonomy. At issue here is no longer the 'crisis of modernity,' the progressive deterioration of commonly held ideals, the proto-foundation of the meaning of History, to the benefit of more-or-less

## ***Efficient play of volumes brought together in light.***

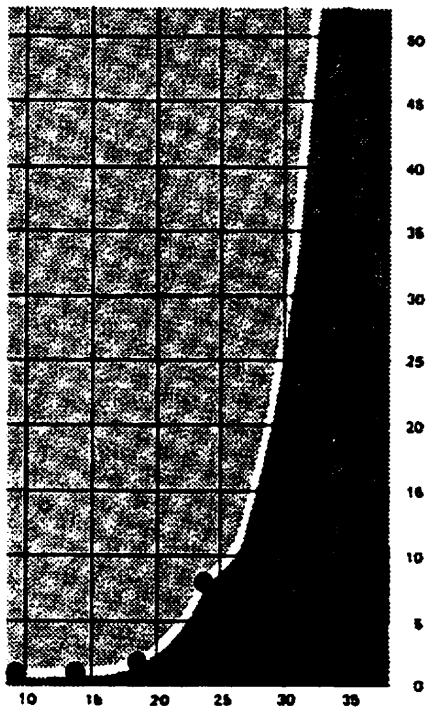
Le Corbusier, 1999

"restrained narratives connected to the autonomous development of individuals." (1999, p. 27)

"Thus, the crisis in the conceptualization of 'narrative' appears as the other side of the crisis of the conceptualization of 'dimension' as geometrical narrative, the discourse of measurement of a reality visibly offered to all." (1999, p. 28)

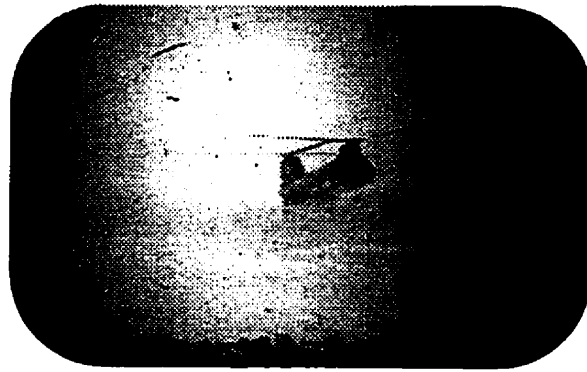
Perhaps the proliferation of the 'styles' of Modernism, Post-Modernism, Deconstruction, and now Supermodernism are merely the reiteration of this crisis in the conceptualization of narrative". Perhaps if there was less attention given to the form-image and more attention given to the generating principles behind them, then the 'style-wars' will end. Perhaps the Mobile Home is pure Modernity.





**A CHART OF RISING RESISTANCE**

A graph of the wave-making resistance of the tanker below indicates that it can cruise economically up to a speed of 23.6 knots—after which the price of making waves soars.



Helicopter over flood area in Manitoba (1986)

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