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POETIC INTERVENTIONS IN THE OPEN CITY:
HOMO VIATOR AND LANDSCAPE IN HOUSTON AND RANDSTAD
HOLLAND

by

ERIK OTTO DRIESSEN

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

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ABSTRACT

Poetic Interventions in the Open City:
Homo Viator and Landscape in Houston and Randstad Holland

by

Erik Otto Driessen

The Haarlemmermeer Polder resembles the Sleeping Beauty awaiting the Prince's kiss: it is a void filled with opportunity in the dispersed metropolitan landscape of Randstad Holland. Like Houston, it is densely urban, yet its urbanity is for the most part placeless. This dual personality is an exciting constant in a model of transformation into an 'empty' metropolitan area in which urbanity is exploited to its extreme: the density of the void. Two aspects will be significant to its future. The first is Homo Viator who has constructed a new domain linked together by motion. Second, there is the landscape of the open city. Exciting opportunities abound in stretching the contrast between the human and natural orders to an uncomfortable extreme by Dutch measures. The resulting landscape through colonization will be a new chapter in the Dutch tradition of treating the landscape as a work of art, continuously reinterpreted and rewritten.
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12. Ibid., p. 64.


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PREFACE

The origins of this investigation probably trace back to my first visit to Rudolf Steiner's Goetheanum near Basel, Switzerland. Steiner's organic principle (i.e. the manifestation of life) was the dominant source of inspiration during my investigation into German expressionism, resulting in my undergraduate thesis titled Towards a Relevant Architecture: Movement as a Generator for Architectural Form.

More recently, my interests have shifted from the 'skin' to the 'guts', from appearance to behavior, and ultimately, from building to the urban landscape. Moving beyond mere built form, I have come to include the human subject in my interest in the organic. The concept of time entering space has become a dominant and liberating theme in my architectural thinking.

Another theme which gave rise to this investigation is my interest in the relation between collectivity and individualism. It is undoubtedly related to my Westbound travels: first to California, later Connecticut, and finally to Texas. While at first taken by the American concept of 'freedom' during my years in California, the Dutch idea of a shared experience within a communal but individually tolerant framework has never escaped my mind during my years in the United States. The combination of rootedness and drift - of place and non-place - is one that has shaped my life and recurs frequently throughout this investigation; it has taught me to observe more sharply.

Lastly, there is an attempt in my work to return to the Netherlands an attitude common during its Golden Age in the seventeenth century - of vision, determination, and grandeur. Holland was made big by the mercantilists of the
VOC (the Dutch East Indies Trading Company), whose ships conquered the world. The 'VOC attitude' has unfortunately been replaced by a culture of narrow-mindedness and complacency; however, despite its small size, the Netherlands has remained a global distribution center. Crucial aspects of a renewed VOC attitude would be the further building upon Holland's leading position in the control of flows as well as a renewed sense of challenge in the contemporary landscape in the same way that Holland was literally lifted out of the sea. The connection of the past with the future has become important for me; it holds the potential of exciting developments which could enrich the current (landscape) architectural debate in the Netherlands.
I. INTRODUCTION

"I would even argue, paradoxically, that mobility increases the sense of place: and that this rapid movement of people is something a town must have if it isn't to wither away."

Ian Naim, The American Landscape

Having traveled the world and called a variety of places 'home', I have become, in the words of J.B. Jackson, other-directed. I enjoy staying somewhere equally as much as the prospect of moving on. Thus, the meaning of 'place' to me can no longer be explained merely in terms of traditional (European) enclosed urban spaces and monuments. The concept of 'place' to me has come to include not only my places of arrival, but also more ephemeral places of transit, such as airports, airplanes, train stations, highway restaurants, and so forth. Thus, my concept of place has a static as well as a dynamic aspect associated with it.

In our world where boundaries are disappearing every day, the balance of 'place' and 'non-place' is in fact becoming an important issue, both in a physical as well as a psychological sense. While according to some, the concept of 'non-place' has no place within the city, I believe that it is in fact an important aspect in looking at our contemporary urban landscape. By removing us from the comfort of our everyday surroundings, a sense of non-place can bring us back to ourselves. By their juxtaposition, 'place' and 'non-place' allow for a more accurate way of observation.

The friction between these two realms can be traced clearly in the history of our cities. Two basic orders have been at the heart of their development: the
order of place, characterized by a stability of form, and secondly, the order of speed, characterized by the fading of form. From the Renaissance onward, temptations of speed - manifested through trade, contact, and communication - have gained the upper hand over the medieval stabilitas loci.

"The city is in origin a paradoxical form," writes Wim Nijenhuis: "The city ground plans take their shape and meaning from the distinctive opposition between city and land or center and periphery. [...] Primarily, the city is formed and informed by heterogeneous speeds - by the difference between inertia and traffic. The form of the city is thus, finally, an unstable effect."

The city can be traced historically as a place of exchange between place and transmigration. The authority and control over this exchange has constituted the history of urban morphology. Each stage of this history has brought forth different goals and incorporated different values. The history of place (the city wall, gate, and so forth) has centered around the maintenance of the city frontier and the power of distinction based on foundational values. This is the culture of the maintenance of form: the city's identity derives essentially from its border.

The history of traffic and speed, on the other hand, is one of instability and of the elusive. While the form of the city distinguishes itself from its environs by means of the wall, it also displays an affinity for the excluded, since without it, the city would not exist. Medieval castles and cities, for example, were of necessity surrounded by vectorized forms of transmigrational energy. The city is in this case a mirror of the vector and of its surroundings.

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1 Nijenhuis, Wim, City Frontiers and Their Disappearance, p. 45.
The transformation of the principles of place and speed and its effect on urban form was particularly evident in the nineteenth century, when the precursor to our contemporary city emerged. It was in this period that the model of the city as a representation of a collective civitas was abandoned. Instead, the effects of the Industrial Revolution - however terrifying - laid the economic foundation for our twentieth-century urban life. A middle class emerged which could eventually afford to escape the horrors of the city. The development of railroad networks, first implemented in London and Manchester, proved to be of decisive significance for the development of the new suburbs, and eventually a new city.

Moreover, a different perception of nature had evolved, triggered by a wealth of discoveries from the world of the classic civilizations - most notably the excavation of Pompeii. Romantic illusions of nature entered the heart of the city to provide the 'urban victims' with a sense of escape in their own desires. Urban parks such as Hyde Park and Central Park became accessible to a broad public, providing a minutely composed hybrid nature. While the entertainment and diversion aspects certainly contributed to the success of these parks, their principal virtue was the provision of an Arcadia within the borders of the industrial city; a polarity which emancipated the city dweller and provided a framework which returned him back to himself. This polarity between our reverence for on the one hand 'unspoiled' nature and on the other hand technological process is described magnificently by Leo Marx in The Machine in the Garden and remains important in our contemporary urban landscape.

In the twentieth century city, new ideologies for living, dwelling, and recreation were developed and the 'city monster' of the nineteenth century was
destroyed. The modernists knew how people should live: they defined a new
city which returned the city dweller back to nature within his own living
environment. The very reasons for the existence of the city park were
eliminated: the entire city became a park.

The city park was degraded to a symbolic representation of what it once
was. It no longer represented the once-magical boundary between city and
nature. Instead, it became a part of a new planning mechanism which
advocated the further separation of city functions that had already been set in
motion by the garden suburbs. Living, working, and recreation were to be
distributed evenly throughout the city, with traffic as an intermediary and almost
neutral fourth function.

However, when automobile ownership exploded in the decades
following the Second World War, traffic developed into an unpredictable force
in urban planning. While the historic infrastructure had always been intertwined
with the city - both in terms of scale and social functions - modern infrastructure
manifested itself as a large-scale entity which assumed a life of its own and
obscured traditional understandings of ‘city’ and ‘country’. A new expansionist
form of urbanism emerged in which the traffic function became in fact the
dominant force. Modern city planning did not anticipate nor survive this
development.

The modernist city accelerated into the contemporary urban landscape of
the open city. The open city is the late twentieth-century version of the
metropolis which has destroyed all designed illusions of the nineteenth century
but still carries a modernist legacy. It is “a vital and majestic rainforest which
accommodates the immense potential of mass culture,² a city without boundaries, where space is dictated not by static elements but by movement, time, and the media. The open city embodies a new order based on disconnection and superimposition that is interpreted freely by its dwellers.

Life in the open city is the ultimate form of escape. It is a series of illusions, possibilities, and experiences. With our Japanese gadgets, we can do anything and go anywhere. In the open city, we can colonize the earth from our own home. We are able to conquer not only nature, but architectonic expressions as well: we change the space into motion. We are living like city nomads.

Houston serves as a good example of the open city. It is characterized in a spatial sense by the absence of the traditional core-periphery model; instead, a poly-nuclear structure of several important nodes, built around a web of freeways and surrounded by ‘urban plankton,’³ has emerged. Its openness (i.e. the abundance of unbuilt space) is at once the site of neglect as well as incredible potential.

The open city is no longer an exclusively American phenomenon. In fact, its second generation has spread to Europe and Asia as well: the open urban system. Whereas in first-generation open cities like Houston and Atlanta, a historic core exploded into several urban nodes, the reverse has occurred in the open urban system: an implosion of several historically independent cores into one larger system.

The open city metaphor is a useful point of departure in analyzing Randstad Holland, the largest urban conurbation of the Netherlands. Shaped in

the form of a horseshoe, it includes Amsterdam, Rotterdam, The Hague, and Utrecht, and surrounds an 'empty' agricultural and recreational center called the Green Heart. The concept of this 'Rim City' is increasingly threatened, however, due to the emergence of 'urban confetti' which - interspersed between the large urban centers - has started to lead a life of its own.

Figure 1. Randstad Holland/Green Heart

In its current form, the Randstad can be viewed as the model city of late twentieth-century culture. It is the dispersed metropolis, a multi-colored and well-connected conglomerate of enclaves which offers clear insight as to how mass culture has cultivated a historic delta landscape. Fragments of the past mix here with contemporary programs in seemingly random fashion: "a 20-minute drive takes the Randstad dweller past "sculptural oil refineries, colorful bulb fields, intimate garden cities, medieval rings of canals, eight-lane highways, hypermarkets, high-rises, lakes for recreation, old Dutch windmills, university campuses, beaches, glass roofs of greenhouses, reflecting business

3 Term borrowed from Rem Koolhaas.
parks, motels, furniture megastores, golf courses, airports, sea ports, markets, squares, and mosques.”

It is my thesis that the Randstad, being an example of the second-generation form of open city, deserves a treatment that is truly metropolitan, i.e. in line with: 1) a changing sense of cosmopolitanism, which involves the realm of Homo Viator who is constantly on the move and has created a new sense of domain which extends far beyond the ordinary row house, back yard, and parking spot; 2) the history of the Dutch landscape as a work of art - continuously reinterpreted and rewritten.

Seen in this light, Houston and the Randstad share a set of interesting characteristics. At the most basic level, both are flat and watery. More conceptually, both are composed of multiple centers without a real heart, and share a tradition of large-scale infrastructural works. While the Dutch planning machine gave rise to some important ambitions of the Dutch post-war reconstruction - the grand public works including the Afsluitdijk and the East Scheldt Storm Barrier, the seaports, Schiphol Airport, the suburbs, and the many green areas - Houston’s grands projets were executed primarily by and for the private sector.

Houston and the Randstad share a lack of concern for the whole: in the case of Houston, there is no zoning plan, while the Randstad has been ‘over-zoned’ to the point where much of its previous cohesion (manifested in its archeological sublayers) has disappeared. Astonishingly, there is not one but about twenty planning organs in charge of the urban dynamics of this area at the present time. This problem of government fragmentation is becoming

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particularly acute in addressing the increasingly problematic relationship between the two cornerstones of the Randstad that are at odds with each other: the urban confetti and the Green Heart.

At the core of this challenge is the fundamental lack of experience of Dutch planning agencies with the scale of the metropolis. Even today, their efforts concentrate primarily on the autonomous development of historically independent cores, failing to take into account the dynamics of the open urban system. On the planning map, this has translated into the outdated vision of 'red versus green': city versus nature.

This investigation sets out to indicate that urban planning must become more critical in thinking about the phenomenon of the city, and particularly in the case of Randstad Holland, the political ramifications associated with adjusting our view of the city. What is needed is a vision concerning the creation of new urban milieus which address issues such as mobility, work, culture, and the way we like to live.

![Image: Randstad Holland: patchwork metropolis](image)

Figure 2. Randstad Holland: patchwork metropolis

My investigation attempts to suggest that architecture is not the starting point; perhaps it is its opposite - the void. Having learned from cities like
Houston, I resist the notion that urbanity can only be achieved by means of ‘building’. The open city is a prime example that the void cannot automatically be interpreted as 'anti-city'; a void can in fact be quite urban in a non-classical way.

This observation points to what is perhaps the most interesting characteristic of the open city: its quality of the density of the void. In Houston as well as the Randstad, one can readily experience this dual personality of being at once in the middle of nowhere as well as being at the heart of a metropolis. Particularly in the case of the Randstad - which is situated in the world’s most densely populated country - this is a surrealistically interesting phenomenon.

The ‘density of the void’ concept finds a great expression in the form of the Haarlemmermeer Polder, located Southwest of Amsterdam. An area of reclaimed land at five meters below sea level, the polder is located at the Western edge of the Green Heart and is currently occupied primarily by strips of agricultural land and Amsterdam's Schiphol Airport. As such, the Haarlemmermeer Polder is the perfect guinea pig for testing the emergence of an open urban system 'Dutch style'. On the one hand, one feels intimately connected with the Dutch land through the proximity of dikes, windmills, farms, and greenhouses; on the other hand, one is allowed the opportunity to remove oneself from this manicured landscape by virtue of the airport, a major freeway, and the haptic polder void. The balance between these two realms - between ‘place’ and ‘non-place’ - creates a poetic for the Randstad as an open metropolis.
The Haarlemmermeer Polder is a metaphor for the entire Randstad in the sense that it is a ‘domain of flows’. Given the phased departure of agriculture as its prime land occupant, challenging opportunities abound here for a poetic development of the ‘journey’ concept. The dweller of the open city is no longer the ‘urban victim’ of the nineteenth-century city; to the contrary, he is very clever and extremely mobile. In his travels, he constantly replaces one environment for another and links fragments in the void by means of mobility and movement. In the age of the open city, there is no need to make a new environment that is suited to humans, since humans have adapted to their environment. Like true nomads, they can colonize even ‘the middle of nowhere’.

Secondly, the Haarlemmermeer as an area of reclaimed land points to the complete artificiality of the Dutch landscape as a whole. In fact, the polder soil constitutes a giant palimpsest as it has changed color repeatedly - from water to land and reversely. This interaction between man and water is an important starting point in any consideration of the urban landscape of the Randstad. The strip landscape of the Haarlemmermeer Polder, which is
currently formed by ditches delineating agricultural plots, has the potential to become a metaphor for the Randstad as an open urban system where speed and time have replaced the traditional understanding of space. The grid could become a pulsed ‘rhythm’ that links a variety of cultures together. This would render a clearer archaeological dimension to the land as the landscape becomes a transparent bearing element for relics of the past as well as future scenarios.

In this context, urban planning at the general level should maintain a high degree of neutrality with respect to architecture: the organization of the landscape facilitates freedom. The role of architecture becomes more heuristic: it no longer shapes the city per se, but encourages to explore it. Architecture begins to connect in the sense that it allows one to hover between different sensations: one may be a bicyclist, but may feel like an airplane passenger.

Finally, this investigation seeks to propose a new, more fleeting sense of collectivity - one based on strategic location within an array of networks - that the open city can cultivate. After all, it is in the open city and the open urban system that a new urban future is in the making; their relative infancy should be regarded as a potential rather than a constraint. Both in a literal and phenomenal sense, the open city leaves room for a reconciliation with our contemporary landscape.
II. URBAN MORPHOLOGY: DISAPPEARING CITY BORDERS

Although the contemporary city finds its roots primarily in the nineteenth-century industrial city, it is useful to go back somewhat further in the history of urban morphology to establish a sense for what factors have contributed to the demise of the traditional city into its current form: the open city.

Before the advent of the industrial city, urban form and location were determined to a large degree by symbolic representations of the cosmos, religious rituals, and conceptions in which the relation between governing powers and the citizen were expressed in a material manner. Thus, the city not only assumed a physical presence with a mere practical significance, but it was also the crystallization of an all-encompassing world order. This tradition formed the governing principle for Roman urban planning and determined any theory of the city until the late Middle Ages.

The symbolic representation of the city as a sacred place where religion, justice, and order predominated, experienced a climax in the Tuscan city states. The image of the city was determined by a city wall, city gates, a town hall and churches, while the concrete street plan was of secondary importance. The city wall exerted a dual significance with respect to the city it surrounded. Principally, it formed the material representation of the urban community, the *civitas*; however, the military significance of the city walls was also important.

The first city states came into existence precisely because they were located behind well-equipped fortress walls that were erected as “emblems of

\footnote{See Rykwert, Joseph, *The Idea of a Town* for a good description.}
territorial conquest based on the initial differentiation of culture according to speed. According to Wim Nijenhuis, the form of the city was already in these early stages, an “unstable effect’. Already in the first city states, the city was formed and informed by heterogeneous speeds - by the difference between inertia and traffic. The city existed as a result of the traffic which flowed through it (the movement of trade, the flux of wanderers, pilgrims, soldiers, and so forth), and hence assumed the role of a “qualifying difference within the traffic.”

Heterogeneity of speed also produced a distinction in the psychology of the different social classes. According to Nijenhuis, “the class bound to the inertia of residence [was] undetermined and weak, to which the whole technology of the oppressed bears witness. The military class, on the other hand, [was] powerful. Its mobility and speed, its refinement of economy, and its organization of the field of perception [allowed] this class to keep its power and will out of sight. [...] The *dromomane*, the warrior with his chariot and later every power based on speed, [was] ‘strong’ because of his powers of evasion and elusiveness. Meanwhile, the resident [was] ‘weak’ because of his restriction to place.”

In addition, the location of a city was important in the formulation of the city frontier. Invariably, the important cities were founded at strategic points in traffic flows, at mountain passes, at the opening of valleys, alongside rivers or estuaries, and so forth. “Location, city wall, and gate [were] the result not of *mythic* but of *military* thinking, which aims to control the flux of people, money, and goods. Throughout history, the power of any city has been measured in

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6 Nijenhuis, Wim, *City Frontiers and Their Disappearance*, p. 45.
7 Ibid., p. 45.
8 Ibid., p. 46.
terms of its authority over traffic. The city is an interrupter, a singular point on an endless trajectory; [...] a bank that abstracts welfare and stability from an economy of passage and delay, to which the innumerable toll booths, barriers, frontier gates, city gates, and enclosed harbors that were built before the nineteenth century testify.”

Besides the city wall and its gates, only churches and town halls were customarily depicted on medieval city plans. Every city followed as much as possible the examples of the holy cities of Rome and Jerusalem in the construction and location of their churches. The city plan in effect derived its meaning from the various churches and the saints which were revered in them.

A reversal in urban thinking occurred in the late sixteenth century as a result of the pope’s custom to celebrate mass in the various churches of Rome according to a fixed calendar. After this custom had been neglected for a long period of time, it was reintroduced by Pope Sixtus V in a modernized form. He reduced the number of churches which would be honored with a frequent papal visit to seven and ordered these churches to be connected by a network of straight, broad avenues. The urban programme hence established introduced a new vision regarding urban space: the opportunities created by perspective were employed to frame the symbolic meaning of a church in a visual manner.

The idea of the city, which had hitherto been based primarily on spiritual and social grounds, gradually eroded during the course of the seventeenth and eighteenth centuries, to the point where the city only maintained its significance as the capital of a nation state. This phenomenon was accompanied by the frequent display of absolute power, employing the range of visual aids which

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9 Ibid., p. 46.
had been developed in baroque Rome. The idea of the city, stripped of its original contents, was thus reduced to a theatrical form of monumentality around the center of political power, while the urban community, the civitas, had disappeared from the urban stage.

Towards the end of the nineteenth century, little remained of the grand cultural tradition which had embodied the European cities in the past. The effects of the industrial revolution, as has often been described, were initially disastrous for the average urban dweller. The famous book by Friedrich Engels on the horrific circumstances in the British industrial cities around 1840 provides a terrifying view of the hopeless and inhumane misery that existed in these towns. Coketown was a city without any urban or social cohesion: a chaos of slums, factories, noise, and pollution.

Nevertheless, it was in this inferno that the economic foundations were laid for a new form of urban life. A middle class emerged which could afford to develop a culture of living in the course of the nineteenth century which had a significant effect on the development in the twentieth century.

Moreover, the city frontier disappeared rapidly during the nineteenth century due to decisive developments in defensive security as well as in the accumulation of wealth. The increasing firepower of canons, the introduction of mobile war machines, the perfection of military and civil logistics, and innumerable other inventions made defensive security and safety impossible to guarantee through the assistance of the fortress machine. "Henceforth," writes Wim Nijenhuis, "attack [became] the best defense. Attack [was] no longer about the solidity of the wall and the regulating power of the gate - no longer about the

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reliable frontier - but about the ability to collect, streamline, and direct confused forces, to vectorize them.¹¹ The city border thus changed its form accordingly from a fixed state into a permanently conductive and shifting entity.

Urban wealth was originally founded on an economy of delay, whereby the urban and military elite skimmed their wealth off the traffic. Tolls, taxes, entrance fees, and other charges used to be the profit-generating instruments of the endless transfer and storage activities of the staple market (such as the medieval market). With the rise of political economy, the economy of delay was terminated. Political economy was not only an ideology of the liberalization of productive forces, but also an ideology of communication. Political economy attempted to liberate the flux of goods, people, and money in order to achieve maximum mutual exposure¹².

Although Paris is often considered as the climax of nineteenth-century urban planning, concurrent developments in London were in fact more interesting in the light of the development of a new city type. While Hausmann’s transformation of Paris was spectacular and universally admired, it did not reveal a new ordering of urban functions in the true sense of the word. Already before 1850, while Paris was still an overcrowded and decrepit medieval city, the process of decentralization and functional separation commenced in London, eventually leading to the contemporary city. Unrestricted by the fortifications in which the continental cities found themselves caught, residential districts were built in the British capital which increasingly assumed the character of suburbs¹³. The center started to assume a monofunctional

¹¹ Nijenhuis, Wim, City Frontiers and Their Disappearance, p. 49.
¹² Ibid., p. 49.
character as well by means of the construction of a number of new office buildings.

The introduction of railroad transport between the new suburbs and the heart of London marked the definitive separation between living and working. Bedford Park, for instance, emerged at the end of the 1870’s along the extended District Line at what was then the urban border of London. It developed rapidly into a prototype of the later Garden Suburbs, with relatively small and affordable houses in a ‘green’ environment. The word *suburbia* emerged here in the 1890’s, and around 1900, at a production level of 150,000 new houses a year, the growth of suburbs around the British cities could be considered rampant.\(^{14}\)

The street plan and architecture of Bedford Park (by Norman Shaw) would influence the appearance of the suburb for almost half a century, but of crucial importance for the further development of the city was the principal separation between the functions of the inner city and the function of ‘living’, which was manifested so explicitly here. The art of living, the charms of family life, and the more informal manners of the middle class - no dressing for dinner - were elevated into a true cult at Bedford Park. At the same time, people came to view the inner city increasingly as a filthy and unhealthy heritage from the past. Incidentally, not without reason, since death rates in the suburbs were significantly lower than in the center.

The disappearance of the city frontier implied the absolute power of what Nijenhuis has called “the rule of dromocracy”\(^{15}\): the order that controls the road and mobility, producing and controlling vectors. The quality of this kind of

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society became mobilization. Traffic, in this view, became the new bearer of peace. With the loss of the economy of delay and the advent of a system that eliminated distance and accelerated circulation, the territorial frontier vanished as a principle for the accumulation of wealth and security. As several writers have observed, the emergence of the railroad system in the nineteenth century exemplified a new era in which distance became secondary to time: "the 'regime' of decision, anticipation, and action, information power and speed is a regime of time."

The suburb, the most visible product of the 'dromocratic rule', has been criticized from the start as a monotonous and boring entity in the modern city. However, such criticism has contrasted significantly with the success and continued popularity of this way of living throughout the twentieth century. Even before the Second World War, suburban developments in London and several large American cities already demonstrated that the traditional view of the European city had to be considered a folklorist fact.

THE PASTORAL VERSUS THE MODERN TECHNOLOGICAL IDEAL

The United States constitute a good backdrop for a closer investigation of the suburban phenomenon, not necessarily in its built form but principally in its ideology. While authors like Fishman, Jackson, and Garreau have commented extensively on the rise of suburbia, it is my intention here to identify some of the deeper cultural roots which allowed for the profuse development of this way of

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15 Nijenhuis, Wim, *City Frontiers and Their Disappearance*, p. 50.
16 Ibid., p. 49.
life. Nowhere else in the world have the forces that shaped this new 'culture of living' come to the surface more distinctly than in America.

Roughly three stages can be identified in the American building of the suburban lifestyle. The first phase, which started well before the Second World War and flourished in the 1950's, was characterized by the relocation of homes beyond the boundaries of what was considered the traditional city. The second phase consisted of moving the traditional market places away from the city and relocating them close to new homes, packaged in a different form commonly referred to as the mall. The malling of America occurred most extensively during the 1960's and 1970's. The third step, then, was to relocate the very means of creating wealth - after all the essence of urbanism - out to the new living and shopping areas. This has resulted in a fourth phase which Joel Garreau has referred to as "Edge City": seemingly endless new urban areas with the single-family detached dwelling as the landmark structure, "the suburban home with grass all around that made America the best-housed civilization the world has ever known."^17

Without downplaying the socio-economic factors that contributed to the rise of the suburban lifestyle in the United States, the concept of the "home with grass all around" seems interesting. It constitutes the very essence of some of the most fundamental American values, and secondly, it is indicative of the way we have come to construct our built landscape of the open city^18.

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^17 Garreau, Joel, *Edge City*, p. 4.
^18 I realize that "we" is an unfortunate description here, since I am not an American. It generally indicates, however, the fact that America is at the forefront of many of these developments, but that at the same time, the American experience is becoming universal due to the rapid globalization of the American culture and economy.
The American system of values described above is characterized by the basic divide between a reverence for ‘unspoiled’ nature and the enduring devotion to ‘progress’. On the one hand we regard ourselves as self-reliant individualists who maintain a sensible relationship with nature by means of our family home with a plot of land around it. On the other hand, we place an enormous value on technological process, of which the two or three cars parked next to (or in) our homes are just one example.

Pastoralism concerns the simple nobility of rural life, often represented in a delirious manner. Far from being a realistic portrayal of actual country life, pastoralism as an artistic and ideological motif seeks to transcend the ordinary by describing a far better world. At times a symbol for the establishment and the newly rich, pastoralism has served to mask the social realities of the industrial revolution and to legitimize the resulting individual accumulation of capital.

The vocabulary of pastoralism was chosen primarily for its backward references and its Greco-Roman-like piety. As a result of travels to the classic
world of Greece, Italy, Egypt, and Mesopotamia, a new perception of nature had emerged. The monuments overgrown by nature, the decayed Renaissance gardens, and the mysterious pyramids in the desert generated a new mystic sensation of a yet-to-be discovered and inscrutable nature. This pre-romantic astonishment formed the inspiration for a new world view. Rome became the inescapable source for the eighteenth- and early-nineteenth century artisan. Painters, writers, and philosophers traveled to the ruins that provided insight into the rise and demise of this great ancient civilization. The climax of their crusade was even further southward in Naples, however. There, the city of Pompeii had recently been excavated and could be admired in combination with the Vesuvius - the cause of this drama.

Equally relevant has been the application of the pastoral ideal into everyday American life. As Leo Marx observes in *The Machine in the Garden*, his classic work on technology and the pastoral ideal in America, “the pastoral ideal has been used to define the meaning of America ever since the age of discovery, and it has not yet lost its hold upon the native imagination.”¹⁹ Marx distinguishes two kinds of pastoralism, the first being “popular and sentimental”; the second “imaginative and complex” in nature. The popular and sentimental version juxtaposes the ideal of rural life against the “moral vice and depravity of the city”. One's proximity to nature (i.e., a retreat into the ‘primitive self’) implies happiness and good health as a logical result of insulation and shelter from the ‘big city life’. One only has to consider the Western frontier myth to conclude that many popular versions of early rural life reflected this sentiment. The most important feature about pastoralism is clearly one's existence amidst ‘natural’

¹⁹ Marx, Leo, *The Machine in the Garden*, p. 3.
circumstances as a valid alternative to urbanism: "the primitivist hero locates value as far as possible, in space or in time, or both, from organized society. [...] To arrive at this haven, it is necessary to move away from Rome in the direction of nature. But the centrifugal motion stops far short of unimproved, raw nature."\(^{20}\)

In contrast to generating an alternative or oppositional sentiment, imaginative and complex pastoralism implies a more or less dialectical relationship between the opposing forces of city and country. Here, there is an attempt to resolve any conflict between the different realms of nature and art. Marx cites Nathaniel Hawthorne's *Sleepy Hollow* as an example to illuminate this concept of idyllic fantasies interrupted by interventions of reality. Somewhere in the New England rural landscape, Hawthorne finds himself carefully observing and reflecting upon the beauty and serenity of his bucolic surroundings, when suddenly his reverie is disturbed by the whistle of a railway train in the distance. "This [intervention] has the rather immediate effect of causing a shift in immediate attention from nature and self to the broader complex of nature, self, and the civilization of which both are now a part."\(^{21}\) The train in Hawthorne's example exemplifies the *qualification* of the idyllic fantasy, thereby rooting it in everyday reality. This theme, as demonstrated by Rowe and others, was commonly employed by American landscape painters such as Cole, Durand, and Church. Characteristic for their approach is an ideal pastoral design which is exposed to its opposite and thereby transformed into a semi-primitivism, located in a "middle ground" between the purely natural and civilization as a result of the presence of technology."\(^{22}\)

\(^{20}\) Ibid., p. 22.
\(^{21}\) Rowe, Peter, *Making a Middle Landscape*, p. 220.
To writers like Thoreau and Emerson and the painter Cole, wilderness was the seat of all transcendent values through the guiding power of settlement which was just then busy conquering that wilderness. Terms such as 'wilderness' and 'frontier' have been intimately linked with the concept of pastoralism in the American experience: the conquest of wilderness in fact was the very root of pastoral developments in America. It appears to have resulted in a uniquely American kind of pastoralism, whereby the term 'nature' is used quite loosely, representing everything that is non-artificial.

The preoccupation of Americans with their natural surroundings must be seen in the light of the vastly unspoiled state of most of the continent in the early years. Having come from Europe, the American land represented to many a new opportunity to withdraw from the world and retreat into a fresh, green landscape. The grand American tradition in landscape painting testified to this celebration of the landscape as a repository of the sublime. Increasingly, however, American wilderness was civilized in the name of civilization, transforming the Edenic wilderness into a pastoral Garden of Eden, "a rural paradise that humanized the impact of development."23

This is illustrated by successive pictorial depictions of Thomas Cole, which move from the wilderness becoming pastoral to, finally, industrialization. Thomas Cole's *Wilderness and Pastoral Garden: Expulsion from the Garden of Eden* (1827-28) serves as an excellent starting point to illustrate the point. Here, the division between wilderness and Eden could not become more evident. Two humans are depicted standing at the threshold of the two realms, which is an allegory about the human task of remaking the wilderness into an image of a

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pastoral setting. Cole's didactic point is one of inevitable transformation; the moral message of the picture seems to be 'out of the wilderness into civilization'.

Figure 5. Thomas Cole, Expulsion from the Garden of Eden (1827-28)
Figure 6. George Inness, The Lackawanna Valley (1854)

George Inness's The Lackawanna Valley (1854), seems to best capture Nathaniel Hawthorne's passage on the passing train through an otherwise bucolic landscape. A young boy is depicted overlooking a valley through which a steam train approaches out of a railroad terminal and turning shed. In this case, the process of 'civilization', symbolized by the railroad, has progressed from the Garden of Eden into an industrial artifact. The Lackawanna Valley symbolizes most effectively the essential division between 'unspoiled' nature and the devotion to progress.

PASTORALISM AND THE LANDSCAPE: NECROLOGY OF THE PARK

The birth of industrial society reflected a hitherto unmatched step in Western civilization, initiating a chain reaction of events. Previously insignificant cities developed into the first metropoles at record pace, attracting millions of
poor people from the countryside. Socio-economic, technological and spatial concepts which were to guide these staggering developments were altogether lacking. The nineteenth-century city was overpopulated. Alienated from their agricultural origins, the new city dwellers were forced into a rushed and disorienting life. It was this nineteenth century 'monster city' which preceded our twentieth-century metropolis: no prospect for well-being, no natured urban culture, only revolts and lethal epidemics. It is no accident that the park was to be invented in this century; "the construction of the first city parks was inevitable, an act of despair," writes Adriaan Geuze.24

The location of a heightened natural illusion within the city perimeter provided the 'city victims' with their desperately needed escape. Places like Hyde Park, Buttes Chaumont, het Vondelpark, and Central Park were made accessible to a broad public and provided a meticulously composed hybrid-nature filled with illusions. These parks were the anti-city; "their value," writes Geuze, "[was] not to be found so much in the aspect of entertainment and diversion, but all the more in the psychological aspect."25 The integration of an Arcadia into the city gave rise to a polarity which provided a frame of thought for the city dweller and returned him with a sense of orientation. The park emancipated the urban dweller and allowed him to understand his position within it.

As observed above, the liberating eighteenth-century exposure to the great civilizations of the past found its reflection in literature and (landscape) painting. The spatial medium for this new perception of nature became horticulture (landscape gardening), which was brought to its highest expression

in Great Britain. "The English horticultural tradition of the eighteenth century was based on a stylized Arcadia. Here, the overgrown classical grave monuments, wells, grotto's, and waterfalls were reproduced, creating a mystical space filled with contrasts, illusions, and symbolism. The English landscape tradition [was] in a pure sense a meeting place of exotic natural sensations, a materialized travel guide. It was the estates through which the English elite daydreamed, the decors designed by Capability Brown, that served as examples for the nineteenth-century urban park. Stourhead, Stowe, and Blenheim had become mature examples by the time the park had yet to be invented."28

Figure 7. Filtercot & Hoare, Stourhead, Wiltshire

The application of the English Garden style as a park concept was a tremendous success. The English reproductions of Arcadia soon found their way into many Western European and North American cities; success was guaranteed as the concept gained rapid popularity everywhere. All nineteenth century parks were constructed around the concept of a romantic illusion of nature. Landscape architects like Zocher, Olmsted, and Alphand succeeded in

providing park visitors with the same environments which the eighteenth-
century explorers had discovered on their journeys, and subjected them to the
same kind of astonishment which the explorers had experienced upon their
discoveries. They constructed intricacy by employing artificial grade differences
on an undulating ground plane, creating perspectives which never ceased to
change. The visitors' view was further framed by undulating bodies of water,
bridges, and the planting of trees. In the sequence of this ever-changing decor,
classical buildings would loom picturesquely.

The first urban parks quickly became great attractions for the urban
population and developed into veritable urban centers. In line with their
significance, the urban parks assumed prominent locations within the city center
and took on the function of essential links within the urban typology. The best
neighborhoods were often to be found adjacent to parks, as was the case, for
instance, at New York's Central Park.

The nineteenth century witnessed the climax of the urban park. Parks
constructed in this period continue to be important, exciting, and highly valued
places in our cities. They continue to claim their own 'culture', even within the
contemporary city, which can rival with any given contemporary program. Their
beauty is universal.

Curiously, the park was accepted without any form of polemics. It
assumed a significant role within the city as if it had always existed. The park
had arrived without a complex ideology; no urban doctrine challenged or
refuted its invention. "The urban park, as it turns out, was not so much the
solution for the nineteenth-century city expansion, but rather the self-evident

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product of an unconscious awaiting," claims Geuze27. City cemeteries and zoo's were designed according to the same principles. The romantic pedestrian park remained the expression of nature within the city.

The park became one of the fundamental aspects of city planning: every new expansion of the city was graced with at least one park. Curiously, this has remained unchanged more or less to this day.

The twentieth century has been marked by rapid changes in urban planning. There was the invention of the garden city, but more importantly, the breaching of the city block. Architectonically speaking, the living unit has been overhauled. New floor plans, new transparent materials, new hygiene standards, and the addition of light, air, and space have rendered the city inhabitable. Despite these developments, the convinced belief in romantic city parks has remained unchanged. Germany did see the advent of the 'Volkspark', a more sober version of the landscape park with more of an emphasis on open recreational facilities for sports, games, and sunlight, but the romantic principles set forth above have remained in most parks.

The post-war preoccupation with 'green' has manifested itself in even more parks and a bundling of green spaces. In reluctance to the expansion of the city, a new 'green' type of city planning has evolved, which has adopted the park ideology at the mega-scale of the metropolis. The bizarre climax of this 'mega-park ideology' has revealed itself outside of the city in 'Green corridors' and other extra-urban manifestations of the park.

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When the urban dweller of the 1960's ceased to look for diversion in the urban park and began venturing out of the city as a result of his increased (auto)mobility, a new and costly recreational policy was instituted. Following the car-driving urban escapees, large-scale parks in the areas surrounding the city were constructed; their design was romantically inspired. These parks are without exception underutilized, ugly, and often quite large. The park seems to have drowned in its own success. This also appears to be the case in the endless array of newly constructed parks in the suburbs. Parks and green spaces have become uninteresting yet uncontested parts of our living culture; their existence often only provides the surrounding inhabitants with the illusion that their living environment has been 'enhanced'.

The strange phenomenon surrounding the park ideology is the fact that parks are at the same time desired and unused. Dogs, courting couples, and drug addicts have become their principal user-occupants. In most cases, the park today only serves a symbolic function. At the same time, the market has taken this rather superficial status symbol as a point of departure for project development. Corporate campuses and even industrial areas have now
assumed a park-like character. The park has come close to becoming an ubiquitous cliché of itself.

TOWARDS THE OPEN CITY: MODERN PASTORALISM

The modern city refuted arguments for the park and rendered it nearly redundant. By the middle of the twentieth century, urban planning possessed enough ideology and solutions for healthy urban expansion. The Moderns defined a new city which returned the urban dweller into nature. Their 'radiant' modern city was geared towards human needs: freedom of movement and sunlight. Writes Geuze: "The architecture of concrete, steel, and glass allowed for a plasticity which in turn lent itself for a self-conscious expression towards nature. It played with textures of vegetation and could capture sunlight. The principle of the free floor let man hover between the treetops and let the house cover every piece of earth crust. As a result of transparency and framing, the once magical boundary with nature, the boundary between city and landscape, was eliminated. The boundary ceased to exist; it was no longer relevant. [...] In the modern city, nature became a reality instead of an illusion. It appeared as an amenity for fresh air and turbulence, as a stage for physical expression and sport, as a seasonally changing stage set for the urban infrastructure. The city had adapted to the city dweller." 28

This was not all. The modern city evolved into the bustling metropolis of the second half of the twentieth century, a complex web which accommodates the immense potential of mass culture. It has become a city without boundaries,

28 Ibid., p. 15.
where space is dictated by motion, time, and the media; commercial illusions create dreams of a hybrid nature in a twenty-four-hour culture. The late twentieth century city is an exploded metropolis which has swept away all designed illusions of the nineteenth century. More than ever, this city is adapted to the city dweller. It is exciting, seductive and is interpreted and manipulated freely by its emancipated citizens.

The new city is an airy metropolis with a dazzling mix of settlements, urban centers, suburbs, industrial areas, sea- and airports, forests, lakes, beaches, natural reserves, and so forth. The city has been reshaped into a modern cultural landscape in which all sorts of enclaves have settled seemingly independent from others, creating a suprematist composition at the scale of a metropolis. Contemporary programs exist alongside archaeological fragments; the relationship with nature has changed profoundly. The city has colonized the landscape; the remaining agricultural landscape is taking on an urbanized form at an accelerating rate.

All natural illusions created in previous centuries have been captured in the imagination of the contemporary city dweller: mass culture has discovered the slopes of Aspen, subtropical beaches, Hellenistic temples, Buddha statues, and Aborigine settlements, and taken possession of them. What's more, the urban dweller loves the new sensations of artificial nature and technology. The mass culture he is a part of basks in great welfare. Thanks to the Japanese zest for work, technology and mobility are accessible to virtually anyone: cars, computers, TV's, camcorders, mobile phones, and so forth.

The contemporary city dweller chooses his freedom within the framework of mass culture and annexes his own surroundings. Mass culture and the media
generate a collective voyage of discovery which is not unlike the voyage to Pompeii made earlier by a small elite. This time, however, the entire urban population participates.

Figure 9. Windshield to the Open City

The urban dweller spends a great deal of his time traveling. He lives like a nomad, covering large areas. He constantly changes surroundings as a commuter or as a tourist. Speed and time have replaced the traditional understanding of space. Movement links the elements of the vast expanse into ever-changing configurations, allowing the urban landscape to bombard the urban dweller with images, signs, and commercials - an addicting sequence of events. The everyday sensations to be had on the freeway are superior to the winding scenic paths of nineteenth-century parks. However, the roles are reversed here: it is no longer the picturesque landscape which undulates, this time it is man himself who hovers through the landscape in streamlined fashion. Welcome to the city without borders - the open city.
III. THE OPEN CITY: HOUSTON

The reversed condition of man 'flowing' through the landscape which concluded the previous chapter has been nowhere more evident than in the history of the United States. It has produced what I would like to refer to as 'the American condition': from the outset, the United States has had a history of freedom, opportunity, and unrestricted travel in a vast geographical territory. There seems to be a national tradition here of picking up one's belongings and moving whenever life at home becomes intolerable. 'Freedom' used in this context implies an 'open' world, distinguished by movement, opportunity, and choice. Unlike the early European settlers who crossed the Atlantic, Europeans today no longer travel to the United States in search of freedom. Rather, they come to find inspiration; there is much to learn from the American condition.

Although cultural geographers like James Kunstler claim that the 'American condition' originated with the advent of the automobile, its roots go further back to the very heart of American settlement - agriculture. In the early days, American civic virtue centered around the farmer, who was considered "the most noble and independent man in society."29 In the words of John Adams, "The only possible way [...] of preserving public virtue [was] to make the acquisition of land easy to every member of society: to make the division of land into small quantities, so that the multitudes may be possessed of landed estates."30 Consequently, the United States Congress decided in 1785 that all the territory west of the Appalachians should be organized by an immense grid

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29 Jackson, John B., Discovering the Vernacular Landscape, p. 31.
consisting of lines running north-south and east-west, defining six-square miles. Each of these large square was subdivided into thirty-six smaller squares.

The 1785 grid system represented Leo Marx’ principle of ‘The Machine in the Garden’ at the largest conceivable scale: that of the entire nation. The urban grid was projected on natural and agricultural land, yielding an immense checkerboard pattern. Here, then, were the origins of urbanization for virtually every settlement in the Western United States, engraved in an agricultural grid system. However, the interests of the small independent farmer were quickly replaced by those of land speculators, who welcomed the grid with open arms. To them, the grid represented measurability and finally, a complete control over the land. The 1785 grid transformed the American civic spirit in an important and enduring way, giving way to a mindset of economy and expediency.

HOUSTON: THE ULTIMATE AMERICAN CONDITION

It was in this context that the city of Houston emerged around 1830: as a land speculation. Houston did not evolve as a result of a natural accumulation of people or the existence of a natural resource; it was announced in a Texas newspaper. The announcers were two New York land speculators, Augustus C. and John K. Allen. They were the founders of what came to be the ultimate open city; their scheme already included some of its salient characteristics, such

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30 Ibid., p. 31.
31 Christian Norberg-Schulz has observed that the 1785 grid system, which essentially brought the city out into virgin nature, reversed the traditional relationship between what is natural and what is man-made. Hitherto, the straight contours of man-made towns were to be found within the encompassing topological ground of nature, whereas in the planned part of the United States, the natural elements were enclosed by the straight lines of the artificial grid. (see Norberg-Schulz, Christian, New World Architecture, p. 29)
32 Telegraph and Texas Register (Columbia, Texas), August 30, 1836.
as an emphasis on infrastructural provisions. These were sauced over with what has perhaps been the most important aspect in the development of Houston: a never-ending sense of optimism, mixing a certain naiveté with a shrewd business approach.

For all the difficulties surrounding the positive identification of the 'open city', the rise of Houston and other young metropoles throughout the United States demonstrates that, to cite Robert Venturi freely, we have left the Italian piazza behind us. The traditional concepts of space and place have been replaced by a fleeting alter ego whose psychology we are just beginning to understand. The following analysis takes the acceptance of growing pains associated with this new kind of city as well as the analysis of its potentials as a starting point. What are its characteristics?

**CITY WITHOUT BOUNDARIES.** The starting point for Houston was the abundance of available land: there were no natural inhibitions to limitless physical growth, except the bayous (rivers), which immediately caught the Allen brothers' attention. These, along with the endless grid, were to become the vehicle for Houston’s growth, from the 6,642 acres which were purchased by the Allen brothers in 1836 to 590 square miles of territory and development control over almost 2,000 (!) square miles of extra-territorial jurisdiction in 1990. Seven of the ten largest cities in the United States could fit side-by-side within Houston's boundaries. These cities have a combined population of 3.86 million people compared to Houston's 1.63 million in 1990, reflecting Houston's relatively low population density of 2,800 people per square mile33. The stage

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33 Planning and Development Department, City of Houston, 1994 *Houston Almanac*, p. I-1, I-2.
for Houston's limitless expansion was set between 1949 and 1956, when the city's land area jumped from 76 to 350 square miles.

**Figure 10. Houston annexations, 1836-1993**

**COMMITMENT TO TRANSPORTATION TECHNOLOGIES.** A key element in the Allen brothers' development scheme was the promotion of a townsite in conjunction with water transportation, to act as a gateway to the existing settlement at San Felipe. Located at the crossing of several bayous (rivers), the Buffalo Bayou offered potentials for trade to and from Houston due to a variety of natural conditions. The city was conceived as a break in transportation - a point where goods required transfer from one mode of transport to another, in this case, from steamboat to ox-wagon. The first advertisement mentioned few geographical landmarks but an abundance of information about Houston's relative position: 8 to 10 hours by steamboat to Galveston, and reliable connections further to New Orleans, New York, and abroad. Furthermore, the abundance of wood and stone quarries was
highlighted, and finally, the Allen brothers dreamt of further improving Houston's location in the form of an extended railroad network that would connect with the water transportation system.

Houston's connections to the hinterland began by picking up existing Indian trails and straightening them into wagon routes. The pattern resulting from these early trails is one which remains with us today as a primary feature of Houston's transportation configuration: a radial form. Early improvements in transportation facilities were undertaken by private businessmen - a fact that would prove ever-important in the development of the city - and a radial network of lines with all parts of the state as well as several out-of-state destinations was established.

Within a few decades Houston emerged as a regional marketing city dominated by a healthy commerce in agricultural goods. Lumber, grain, and particularly cotton commodities generated the Allen brothers' dream: an important infrastructure of railroads, warehouses, cotton gins, and banks servicing the southeast Texas agricultural economy. The official seal of Houston has at its center a plow and a locomotive, truly accurate symbols for an urban economy originally based on agricultural marketing and on railroads.

By the 1880's Houston had become a leading railroad city in the Southwest. Houston became the regional headquarters for Southern Pacific Railroad, and a full-fledged cotton brokerage business had emerged. Additionally, the railroads stimulated the development of the timber and lumber industries due to the burgeoning demand for railroad ties and building materials. Gulf Coast railroad executives actively promoted new agricultural

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34 Papademetriou, Peter, *Transportation and Urban Development in Houston 1830-1980*, p. 5.
production; they publicized new crops such as rice for planting on the fertile lands around Houston, for rice meant more produce to transport. Also, the railroad executives, together with the cotton entrepreneurs, created a demand for improved business services, including enterprises such as banks and law firms. One last byproduct of the booming railroad activity was the development of a street-railway system in the downtown area, using horse-drawn streetcars.

However, Houston’s role as a transportation hub could only be developed in conjunction with the realization of deep-water access to the Gulf of Mexico. Deep-water access was vital in the light of Houston’s competition with Galveston to become a major Gulf Coast port. Government-subsidized work on the city’s ship channel improved Houston’s status as a Gulf Coast port. Tonnage shipped out of the port increased significantly in the 1870’s and 1880’s.

Before the dominance of oil and gas, the Houston-Gulf Coast economy was dominated by trade agriculture, and certain types of primary commodity production, such as the extraction of sulfur, salt, lime, and other minerals, as well as timber. The discovery of oil ninety miles east of Houston in 1901 and subsequent discoveries closer to the city between 1905-1919 set the stage for Houston to become a major oil and gas exploration center, as well as a node of related value-added manufacturing industries. By 1919, three-quarters of Gulf Coast oil was coming from fields in the Houston area.

The rate in which Houston ascended the Gulf Coast throne of transportation was not only impressive, it also provides valuable insight into the first stages of the development of what was increasingly becoming an open city.

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35 Feagin, Joe, Free Enterprise City, pp. 49-50.
In 1890, with a population of 27,000, the city of Houston ranked only eighteenth in the South - well behind Dallas and San Antonio, and even smaller than Galveston. However, its already well-developed railroad, port, and banking infrastructures provided the key for further growth. Houston was the sheltered harbor closest to the ranches and cotton fields of the Midwest and Central South; therefore, no less than seventeen railroads used the city as a rail hub by 1912, branching out in a radial pattern. Contrary to many Sunbelt cities which were bypassed until postwar decades, Houston had emerged by the 1900's as a principal agricultural marketing center into the world market. And the developed infrastructure of port facilities, railroads, and banks actually created the infrastructural foundation for Houston's subsequent dominance as an oil center.

As Peter Papademetriou has pointed out, Houston's transformation into a city was also marked by the advent of a transportation system for passenger traffic. While the beginnings of a city streetcar network had appeared in the 1870's with single cars pulled by mules, these were gradually replaced by electrically powered streetcar lines. "This early form of mass transit," writes Papademetriou, "was viewed as a symbol of the progressive improvement of the urban scene [...]." Although the streetcar system contributed to the growth of the city and enjoyed a great deal of popularity, its provision involved significant capitalization for maintenance and new construction. Thus, the Houston Electric Street Railway Company, in the absence of competition, became dependent on ridership for its revenues.

36 Ibid., pp. 53.
37 Ibid., pp. 53.
38 Papademetriou, Peter, Transportation and Urban Development in Houston 1830-1980, p. 20.
Unlike in cities such as London and Paris, where public transport systems were constructed underground, Houston’s public rail system remained above grade, due to muddy soil conditions and relatively small demand. This proved fatal when automobile ownership in the city began to rise sharply around 1910\textsuperscript{39}: from eighty cars in 1905 to 1,031 in 1911, 34,869 in 1922, and 97, 902 in 1930\textsuperscript{40}. Within several years, the traffic chaos had assumed such enormous proportions that the streetcar operators could no longer maintain timely schedules. As a result, even more people reverted to the automobile, which naturally lead to the demise of the private streetcar lines.

\begin{figure}[h]
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\caption{Houston: 1920's congestion on Main Street}
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Faced with a similar situation, a European city government might have decided to construct, at the expense of enormous amounts of money, a network of subterranean connections after all. In Houston, this was not at all deemed necessary. To the contrary, an entirely different solution was preferred. In 1923, an observer in Los Angeles had predicted that “the day is not far distant when

\textsuperscript{39} Henry Ford’s first model-T Ford left production lines in 1908.

\textsuperscript{40} McComb, David, \textit{Houston, The Bayou City}, p. 102.
vehicular congestion will be so great down town that enterprising merchants will be establishing great department stores in outlying business centers where shoppers can be conveniently served.\textsuperscript{41} This is precisely what occurred in Houston, which would rapidly develop into a city with various centers. Already in 1929, the Hare and Hare 1929 Report noted that the section of South Main below the Central Business District actually showed a greater traffic count than downtown itself. The central business district remained the commercial and financial center, but secondary convenience centers began to emerge along primary arterials as a response to decentralized population location.

While both the Federal as well as Houston’s City Government let public transportation die a silent death, the automobile was subsidized from the very beginning. Already in 1925, the Federal Government spent more than $1 billion on road construction. After the 1929 recession, the construction of new roads assumed another meaning as a means to create jobs. At the local level, several parkways were built in the 1930’s to alleviate Houston’s poor thoroughfare connections; Houston’s 1939 Traffic Way Plan advocated a strategy \text{"[...] to bring wide right of ways into the metropolitan area as far as practical, then diffuse the traffic over several optional routes into the city,\textsuperscript{42} a system of limited access highways involving comprehensive state, county and city financing.

Furthermore, the Plan mentioned the continuing problem of the existing network as one that “owing to the topography of the city, the layout of the street system and the routing of buses, most of the persons who desire to travel from

\textsuperscript{42} Haile and McClendon (Consulting Engineers), \textit{Traffic Way Plan for Houston Metropolitan Area and Harris County}, 1939, p. 21.
one part of the city to another must cross the downtown business area." This problem was addressed in the milestone 1942 *Major Street Plan for Houston and Vicinity*. This document was the first evidence of the city's full-fledged commitment to automobile technology. One of the major components was the so-called "Defense Loop," a belt drive circling the city and providing a by-pass between all highways entering the city, essentially located where Interstate 610 is now. The answer to traffic congestion, though disguised in military terms, was seen in the form of freeways and parkways, and improved access to them through adequate thoroughfares.

The character of ridership changed significantly after the Second World War, when Houston's public transportation was deserted quickly by wartime riders. The automobile lured like never before, and secondly, the city's rapid rate of land annexations - particularly in 1949, when Houston's size more than doubled - was too much to keep up with for the Houston Transit Company.

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43 Ibid., p. 21.
During the mid-1950's, continued economic growth as well as suburbanization made evident the need for the construction of an entirely new mega-network: the freeway system. In 1953, a formal resolution was signed by Harris County, approving the construction of seven new freeways. All built between 1950 and 1967, these new freeways decisively transformed the psyche of Houston's domain as well as many of the drivers which would enter it, even just temporarily on their daily commute. What was it about the new freeway system that changed Houston’s collective *gestalt*?

First, the ‘free’ (i.e., gratis) aspect of ‘freeway’ was underestimated from the very beginning. Within one year of its opening, the Gulf Freeway already handled more traffic than it was planned for. As it turned out, commuters constituted only a majority of the daily traffic counts: most belonged to that traffic group which J.B. Jackson has spent his career describing: the leisure user. "Freeways where imbued," according to Douglas Harvey, "with the glamour and romance of the modern." 44 Here was a new way of life which, after the initial but affordable investment of an automobile, opened itself to the public in a "sit back and enjoy the flight" manner.

‘Free'-ways also exerted a profound liberating effect on their users at the urban scale: freeways allowed for the nearly complete severing of ties between the suburbs and what used to be the center, downtown. Places such as Bellaire and Sharpstown developed seemingly independent from Houston’s core.

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Lastly, ‘free’ in ‘freeway’ represented a physical clearance, a limitless horizon. Urban life was no longer bound to place, and particularly at the intersections of new freeways developments occurred which were previously unthinkable outside the city. The places affected most by the new freeways were neither city nor suburb, but the places inbetween. Their emergence was completely independent from efforts to curb congestion; they were planned from the start never to become congested. What emerged was what Douglas Harvey aptly named “the fifty-first state, the Interstate”\textsuperscript{45}. Texas’ contribution to the shaping of the Interstate was the frontage road, a system of parallel access roads to the freeway which proved that freeways were not just a curative force, but a creative one. In a fashion typical of Texas, freeways were seen from the start as a means for sales and tax revenues: merchandising and driving became one, to the joy of realtors.

\textsuperscript{45} Ibid., p. 61.
Houston’s subsequent fascination with transport technologies was in the form of air transport. Although its location is too far off the heavily traveled Northeast-West air corridor which has rendered significant importance to cities like Denver, Minneapolis, and Dallas-Forth Worth, Houston does have a fair share of North-South air traffic, particularly to and from Mexico. Purely ideologically speaking, Houston needed more than one airport, and so it got two, conceived within just one decade of each other (a third one has been planned in the Katy prairie to serve the new ex-urbs to the West of town).

Intercontinental, though not a major airport, is telling of Houston’s megalomanian approach to (air) travel. It is not just national borders that are breached here, you step into a different continent when approaching this place. The experience commences on Beltway 8, where Houston’s grandest series of voids - the airways cut out from the surrounding forest - mentally prepare the anxious traveler for the experience of lift-off. At the terminal, computer voices tell

![Figure 14. Beltway 8 near Intercontinental Airport](image-url)
you where to go and what to do, rendering the average traveler the sense that he/she is about to be shot off on one of NASA’s space missions. Hence the nickname ‘Intergalactic Airport’ for this otherwise benign place.

As Lars Lerup points out in his article “Stim & Dross: Rethinking the Metropolis,” Houston’s transportation networks are part of an ecology in which “(...) all the things that constitute this specific territory are more or less organically related (...). Which suggests that it is the powerful web of organic relations that makes Houston a palpable, cohesive reality.”

According to Lerup, the concept of the journey in Houston assumes a unique dimension due to the experience of hovering between two strata which are sandwiched atop each other: the Zoohemic Field (Houston’s abundance of trees) below, and the Aerial Field (the thick Houston air) above.

“The two strata touch (...) when the freeway hews its way through the green carpet to merge with the airspace. In these gashes the two worlds are sutured together, or more precisely, the motorway adjoins the airspace by delaminating from the plane. Submerged in the lowest strata of a major freeway intersection, literally driving (at warp-speed) on the underside of the ground ecology of the city, the rider is brought to a realization. In fact, all brushes with the outer margins of the various ecologies of the city, whether her at the base of the hierarchy or at its very top, hovering in an air vehicle while rapidly transversing both ecologies, tends to throw the whole into focus. Such realizations, frog’s-eye or soaring-eagle perspectives, are shapeful and at least partially extraspacial.”

The haptic atmosphere around Houston’s Intercontinental Airport as well as Lerup’s description of Houston as an ecology rather than a city point to the fact that one never really arrives in Houston: one is always in transit. Moreover, the grammar of shape is changed in Houston as well by means of the ways in which one moves through it:

"As city form, the Houstonian interiority is very different from, say, the Parisian. (...) the low-slung green canopy establishes a pervasive almost-domestic intimacy that in the European city can only be had inside the residential block - in the warmth of a house. Thus Houston is at any one location both a giant room and an ocean of endless surfaces. This inner field-and-room, produced through a trajectorial subjectivity, is held in place by two planes: the ground and the canopy of trees. Both planes undulating, the fieldroom is not a space in the European (Euclidean) sense but a constantly warping and pulsating fluidity, (...) This is a navigational space, forever emerging, never exactly the same, liquid rather than solid (...)"48.

![Image](image.jpg)

Figure 15. Houston's 'megashapes'

It is precisely these concepts such as 'never arriving' and being part of a 'constantly warping navigational space' that have had a decisive impact on Houston's urban psyche.

**MANY CENTERS, NO HEART.** Already in the early 1960's it had become clear that Houston would become a great, sprawling metropolis that would cover hundreds of square miles, rendering obsolete traditional core-periphery models. The 1970's Sunbelt oil boom only accelerated emerging development patterns, transforming the city from a centralized urban area into a

47 Ibid., p. 89.
48 Ibid., p. 91.
multi-centered city with a variety of high-density urban office/retail centers. At the heart of these developments was (and still is) a free capitalist spirit which has dominated over the public realm. Houston is not the result of any one theory of urban form; it is devoid of a zoning plan, and has instead been governed by politics of laissez-faire, unrestricted growth, and equally important, the domination of property ownership.

Houston’s collection of activity nodes has yielded a new urban ‘time-space’, where the interval (the void) takes on significance as a rhythmic urban ‘beat’. In an optimal scenario, this beat assumes the role of a connecting device by means of landscape and movement. Unfortunately, this is rarely the case: the beat is still hollow.

Houston has a long history of non-urban highrises and other corporate settings, such as the corporate campus. The first of these was the Prudential Building of 1952, built at the edge of what is now the Texas Medical Center49. Because of downtown’s high land prices and traffic congestion, many companies began searching for cheaper and more easily accessible land elsewhere. The rapid expansion of peripheral and ex-urban office space was unhampered by zoning regulations or the lack of public transport to these remote locations - the car sufficed as only means of transportation. Houston’s freeway boom of the 1960's facilitated the five-fold expansion of office space in Houston during the 1970's, third in the nation behind New York and Washington DC50.

The new clusters which cover the Houston landscape are exemplary of the urban developments which have taken place in the last few decades. Conceived as the cooperative products of developers and architects as representatives of “culturally insecure” new money, these clusters are the crystallized manifestations of Houston’s psyche. They are the result of intense speculation, indicate a tremendous commitment to transportation technologies (particularly elevator, car, helicopter, and airplane); they reveal a rugged sense of individualism which harks back to the frontier days, and lastly, they rely for the most part on symbols and sign language, applied to otherwise uninteresting exteriors.

The nodes facilitate the viability of a decentralized form by sustaining the needs and activities of localized subsections of the city, as they also represent a total-city scale by virtue of their particular specialization. Ultimately, well-known clusters such as Galleria/Post Oak, Medical Center, Greenway Plaza, and the North Belt are regional in scale because of their sheer size and the size of the greater Houston metropolitan area (3 million people).

The emergence of the Galleria/Post Oak area serves as a good example of these developments. Its evolution into a high-density prestigious office area began in 1959 with shopping centers which siphoned off the adjoining affluent River Oaks and Tanglewood communities. Construction of Loop 610 and Highway 59 paralleled the construction of more and bigger retail areas, resulting in the Galleria I shopping center in 1970 (the Loop opened in 1969). As construction of the loop progressed, the emphasis on building retail spaces shifted to speculative offices. Retail and office activity seamlessly integrated
with high-rise condominium units and hotel rooms in the Galleria/Post Oak area, surpassing downtown and the Intercontinental Airport/North Belt area.

Figure 16. Post Oak Boulevard seen from the Galleria

Galleria/Post Oak has become the third-largest concentration of office space in Texas, and is in fact more truly an urban core than Houston's downtown. A high-rise office strip parallel to the West Loop emerged in the 1970’s, while Post Oak Boulevard became the next focus of development as space along the freeway 'ran out'. Both strips are dominated by buildings making reference only to the freeway and frontage roads, spaced well apart from each other, and designed by signature architects. Mixed-use developments, like the Riverway, organize different uses (office and hotel) into separate freestanding buildings sharing a central green space on a gentle hillside as "towers in the park," while The Lake at Post Oak replaces the concept of a shared park with a man-made lake. Everything is master-planned as office park with lush landscaping between separate buildings linked by streets, unconnected to adjoining malls, residential areas, or other uses.

The developments at Galleria/Post Oak provide valuable insight into the shaping of such new clusters and the inevitable figure-ground distortions that
have accompanied the emergence of the open city. We need not adapt to the open city or places like Galleria/Post Oak - they have adapted to us - but we do need to understand how they function in order to maximize their potentials. This is particularly relevant with respect to the concept of the void, which is omnipresent here. What can the ‘Post Oak-void’ teach us?

The way in which the void appears in Houston has transformed our spatio-temporal awareness of the urban environment, even more so than the sign or billboard, as others have claimed. In fact, the sign and the billboard belong to the void. Houston’s space and place are determined by the rhythmic sequence of building-VOID-building-VOID-building-VOID, and so forth. It is clear that speed and time have replaced the traditional understanding of space here, and the voids allow for the fragments to be linked. Houston’s urban landscape inundates the experience of the passer-through with signs, images, and billboard commercials orchestrated by the void. In contrast to its most common appearance at Post Oak, the void not only requires to be designed more carefully (i.e. as a positive rather than a negative aspect), but it also bears in it the seeds for Houston’s ‘second phase’ development. The void has the potential to become a connector by means of the way it is traversed (the dynamic view for cars, bikers, and pedestrians alike) and by means of a coherent landscape.

The Post Oak experience is a fine manifestation of Leo Marx’s descriptive phrase “The Machine in the Garden”. The ‘machines’ (buildings) bask in a highly abstract, well-engineered aesthetic, whereas the ‘gardens’ are

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left essentially 'blank' in the appearance of grass fields and lakes. Considering
the great concentration of workers in the Post Oak area, the 'garden' not only
leaves potentials for visual connection to be explored, these connections could
also serve the recreational needs of workers and passers-by far better than is
currently the case.

Houston harbors tremendous potential for a further development of the
modern pastoral ideal within its perimeters for the simple fact that it has so much
void space combined with the presence of a basic yet rich set of archaeological
substructures such as the agricultural grid and the omnipresence of trees. Seen
in this light, Houston's abundance of void space should be turned into an asset
rather than be seen as a negation. 'Property' can no longer equal mere
'building', but should come to include 'landscape' as well.

The interesting phenomenon concerning 'landscape' in the case of
Houston is that it is in fact the last armature that unites the city. However, it no
longer possesses the power of the classically urban, but derives its meaning
more and more from its existence as an area where people can reside
temporarily.

Figure 17. Houston: void at the heart of the metropolis
Whereas the composition of the classical city - constituted by boulevards, alleys, streets, and lanes - presupposes a linear organization and distribution, these elements have been replaced in the open city by clusters, concentrations, eddies, and by the contraction of quality at several points. Landscape has the ability to react much better to these phenomena than architecture or urbanism: it effortlessly links the irreconcilable.

INTERIORIZATION AND FRICTIONLESS PUBLIC SPACE. As Houston’s freeways have come to determine its urban morphology at an ever-increasing rate, an inversion of the public and the individual realms has occurred. The zone of the freeway has become the shared order, whereas the zone off the freeway has become the individual order. In a sense, the freeways are the best public space that Houston possesses: the “healing ride” as well as many of the city’s best views are to be obtained on these endless stretches of concrete. Public space in the traditional sense is scarce - if not non-existing - here due to an innate sense of individualism and protection of the private good - either from the weather or from the collective. However, while analyzing the demise of traditional public space in Houston, one must bear in mind the changing needs and interests of the open-city dweller: he/she has lost interest in the traditional “Italian piazza” and is demanding a new form of public space. In the open city, opportunities abound. This is particularly true here in Houston, where many people live only temporarily (i.e. to make a fortune and move elsewhere).

32 Lerup, Lars, “Stim & Dross: Rethinking the Metropolis,” p. 94.
33 I am borrowing Robert Venturi’s language from Learning from Las Vegas, p. 6. “Piazza” refers here to enclosed public space. As is the case for Las Vegas, Houston has no ideological baggage for including such space within its boundaries.
Many excuses exist in defense of the sensational lack of conventional urban space in Houston: the weather, the lack of zoning, the successive growth surges Houston has had to endure, the scarcity of natural landmarks, the low-density spread, the prohibitive cost of public space in today's economy, the anti-tax attitude, and the stranglehold of the business community on the local government. However, none of these reasons explain why there is so little space which can mediate between the private home and the corporate world.

The roots of Houston's aversion against a 'culture of congestion' are to be traced back to its very building blocks: the freeway, the office tower, the suburban home. Without exception, they are subject to a pervasive sense of interiorization. All of Houston's comfort is found in the air-conditioned indoors: in a car, in the Astrodome, in the downtown tunnel system, in the Galleria, in Transco Tower, and most importantly, in the suburban home. There is scarcely any tradition of 'uncomfortable interiors' in Houston, save in the barrios and the black wards - precisely the places where a lively public realm does exist\textsuperscript{54}.

The suburban detached single-family dwelling is perhaps the landmark of this interiorization. Peter Rowe and others have documented its formal and spatial developments\textsuperscript{55}; what concerns me are four aspects about the relation of this type of dwelling with its environment. First, consider the prototypical floorplan of any of these dwellings: one room for every function. The single-family dwelling is the triumph of functional segregation. The blend of modern informal living with formal nostalgia has rendered this functional categorization obsolete; one need only look at the dust accumulation in any dining room. Second, the suburban home is a virtual extension of that other aspect of our

\textsuperscript{54} The stories in Sig Byrd's Houston are not only beautiful but very telling in this respect.
daily interiorized life in Houston: the freeway. They are seamlessly connected by means of 30 percent of the average floorplan: the garage. No need to go outside, since the sidewalk - if there is one - stops at the streetcorner. The floorplan guarantees a smooth transition from public into semi-public, and finally - for insiders - the private sphere. Third, despite the existence of about six different types in its kind, the suburban house relies on symbolic representation and identity; the facile use of figural devices independent of their authentic formal roots is thus quite common. Fourth, a large percentage of the suburban lot is reserved for a private back yard and thus meticulously fenced off.

As it turns out, all of suburbia ended up looking the same, leaving the average open city dweller with very little room for self-expression except in terms of shopping habits at the mall and to drive an expensive import car. These facts notwithstanding, Houston offers opportunities for constructing public space.

Absolutely essential is the construction of a new kind of "challenging space" in Houston's voids: open spaces which offer a variety of recreational possibilities as well as interpretations for the city dweller. The bayou banks along Allen Parkway, for instance, are far more than containers of water in the creative mind of the open city dweller. They represent a picnic site, cliffs for climbing, a wharf for fishing and canoeing, and, if the water was ever cleaned up, a site for snorkeling and scuba diving. Memorial Park, instead of a hunk of donated land, contains the seeds of at once a golf course, running track, hunting reserve, swamp, and tropical rainforest. In this sense, there is much to

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53 Rowe, Peter, "Houses in Gardens," in: Making a Middle Landscape, pp. 67-107.
learn from the way children occupy vacant lots as bicycle race tracks, soccer fields, and impromptu playing grounds.

The new public spaces thus created will have to draw from the streets, like the Piazza del Campo in Siena, yet this time their visitors are drivers instead of pedestrians. In the open city, the axis without definitive ends becomes the primary fact. "An axis is perhaps the first human manifestation; it is the means of every human act," Le Corbusier said. In the past, however, the axis or path led to a goal where the purpose of the movement was explained as part of a closed system of meanings. In the open city, movement gains a meaning in itself, and the axis (street, dike, freeway, runway) becomes a manifestation of opportunity and change: of the American condition.

Thus, new public spaces have to account for making the transition from one means of transportation to another in a more subtle way than providing a bland parking lot. At the simplest landscaping level, this would involve the widespread use of trees to poetically inform our designs ranging from parking lots to tract houses. At a more complex level, a blurred interface between interior and exterior could create fantastic potentials, stirring the imagination of every visitor.

LEARNING FROM HOUSTON: AN OPPORTUNITY SCENARIO

What do all the freeways, shopping malls, office building clusters, suburban homes, and vacated lots of the open city teach us? For one, they are conveying the clear message that the 'Italian piazza' is indeed behind us in the

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open city. Second, they point back to us, the humans who created them and never cease to move in, through, and by them. The artificially created landscape of the open city pushes us in front of the urban mirror of distortions and shows us how much (or little) we have grown since the last time. We then realize that we still have a(n urban) life ahead of us in which we can wage war with dullness, nostalgia, and empty aesthetics. In its infant form, Houston is the physical manifestation of the fact that seemingly hopeless developments and an exciting future are in fact not far removed from each other in the open city. Similar to a maturing child, Houston requires confidence.

The history of Houston’s urban morphology has shown us the results of what I will refer to as ‘discrete patterns of thought’: the one-to-one causal relationship between function and object. Contemporary urban life is saturated with the theme of functional separation: one high-rise tower for living, another one for working, and a third for shopping. The domination of property needs mediation by the landscape of the open city for the urban fabric to once again assume multiple dimensions.

Houston as an open city is the site of tremendous opportunity. While its public spaces are presently unprepared for the needs of the contemporary urban dweller, Houston’s history of an artificial creation of the landscape holds promise in providing more ‘challenging’ spaces, which are demanding to be surrealistic and subversive, not to shock but to provoke the urban dweller. The idea of the journey, whether it be physical or fictitious, appears to have the potential to come to terms with the concept of the void (this will be elaborated in chapter four). The physically often terrifying reality as well as the poetic, dream-like appeal of the void can hence be explored.
IV. THE OPEN URBAN SYSTEM: RANDSTAD HOLLAND

It is difficult, certainly from a European perspective, to face the true character of contemporary open cities like Houston in an open-minded fashion. Particularly to the Netherlands, with its strong tradition of urban planning and coherence, open cities like Houston appear at first sight to be veritable terrors from a different planet. Although the Netherlands and the United States remain quite different in many respects, it is in fact useful to study American society and its cities as a possible future perspective for countries such as the Netherlands. At the time of the famous expansion plans for Amsterdam (1935), for instance, designers were convinced that the American use of the automobile would never be equaled in the Netherlands. This turned out to be a serious mistake. Presently, the Netherlands is entering a phase in which the 'American condition' seems to be creeping into its urban ideology: recent polls confirmed that an overwhelming majority of the Dutch population prefers to live in a single-family detached dwelling with a gabled roof and two cars. There are already 5.5 million cars in the Netherlands for 15 million people; projections for 2000 estimate 8 million cars. Similar to Houston, (auto)mobility implies that not only the decentralization of living, but also of that of other functions will have to be reckoned with in the Netherlands's near future. Instead of keeping the ideal of the compact city alive at all cost, it would be useful to begin to address the question of what is required to let the open city function in a Dutch context.

Such is particularly relevant in the case of the Randstad, a ring of cities in the Western part of the Netherlands located around an empty 'Green Heart'.
The urban ring includes the Netherlands' four largest cities, Amsterdam, Rotterdam, the Hague, Utrecht, as well as several smaller but older cities such as Haarlem, Leiden, and Delft. The Randstad has the shape of a horseshoe (pointing with its open end to the southeast) and is roughly equal in area to that of metropolitan Houston: the diameter of its ring is roughly 60 miles versus Houston's 50 miles. Approximately six million people live within its boundaries (40 percent of the Dutch population), while the urban area of the Randstad represents only 6 percent of the entire country.\(^{57}\)

\(^{57}\) Hall, Peter, *The World Cities*, p. 88.
Utrecht as Greenway Plaza. Houston and the Randstad are both flat and watery, both are characterized by a poly-nuclear structure, and share a history of reluctance by planners to deal with the whole as a system. Furthermore, both suffer from collective growth syndromes: the Randstad’s rapid growth will require the construction of about one million new homes by 2015\(^{58}\). Numbers such as these present a Houston-like strain on any form of coherent development.

Movement, not static perspective, determines the way in which Houston and the Randstad are to be approached and analyzed; both can be described in terms of "domains of flows"\(^{69}\), as they are the sites of significant transportation and distribution centers. Houston is the oil and gas capital of the United States as well as a significant port, while the Randstad is Europe’s most important transport- and distribution center: Rotterdam is the busiest port in the world, while Amsterdam Schiphol Airport is the fourth-largest airport in Europe in terms of passenger volume and ranks second in cargo. Furthermore, twenty-seven percent of all intra-European road cargo is shipped by Dutch transport companies, while 35 to 40 percent of all foreign distribution companies have their European headquarters in the Randstad\(^{60}\). No less than 40 percent of all goods that enter the Netherlands transfer immediately to another destination.

Houston as well as the Randstad display an obvious infatuation with the modern pastoral ideal. Houston can be regarded as a big park with human settlements dispersed throughout, whereas the Randstad accommodates a

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\(^{60}\) Musterd, Sako, and de Pater, Ben, *Randstad Holland: Internationaal, Regionaal, Lokaal*, p. 52.
string of urban settlements around one collectively shared ‘park’, the Green Heart. Both share a lack of dominant natural features in their flatness, with only rivers, swamps, bayous and a proximity to the sea as noteworthy physical features. As a result, artificial landscapes predominate in both urban systems, and both share a tradition of large man-made structures and infrastructural works. Whereas in the case of Houston, these are predominantly for private appropriation, in the Randstad it concerns mainly large civic works (sea barriers, dikes, land reclamations, canals, water gates, etc.) for the public good.

Figure 19. Holland’s Delta Works, the world’s largest sea barrier

Houston and the Randstad share a discreteness of landscape: not only are their respective landscapes entirely artificial, they are also highly manipulated in terms of spatial control. While Houston is marked by a profusion of fences and other means to emphasize landownership, the Randstad is subject to the immense tentacles of the Dutch ‘planning machine’, which has managed to allocate exactly one function to every plot of land available (this is also known as ‘destination planning’ and will be elaborated on later).
Thus, Houston and the Randstad seem to share a quality of being very transient places yet at the same time possessing a strange monumental quality which shows in their large structures as well as the empty flatness of the landscape. While Houston's openness is primarily the result of a collective 'tabula rasa' mentality, the Randstad supplements this with the sense of a lieu de mémoire. The layers of history of this open urban system manifest themselves in the landscape, albeit in a fragmented fashion.

ARCHAEOLOGICAL SUBSTRUCTURES OF THE RANDSTAD

The urban landscape of the Western Netherlands is a veritable composite phenomenon. A twenty-minute drive takes the Randstad dweller past "sculptural oil refineries, colorful bulb fields, intimate garden cities, medieval rings of canals, eight-lane highways, hypermarkets, high-rises, lakes for recreation, old Dutch windmills, university campuses, beaches, glass roofs of greenhouses, reflecting business parks, motels, furniture megastores, golf courses, airports, sea ports, markets, squares, and mosques." Despite the disappearance of a contrast between city and country, this landscape is not devoid of a structure. In an attempt to understanding this structure, the delta concept offers a useful context: the urban landscape of the Western Netherlands as an urbanized delta.

The composite nature of the urban landscape of the Randstad is intimately related with the structure of its subsoil. The Netherlands is located by the sea, in the outlet area of three major European rivers: the Rhine, the Meuse,

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and the Scheldt. The dynamics of the sea and the rivers has marked this landscape more than anything else.

Figure 20. Lagoon and Delta

Figure 21. Estuaries and Tripartition

When the area now known as the Western Netherlands was reclaimed, brought under cultivation, and inhabited during the Middle Ages, a tripartite structure of the delta could already be identified. On the north side (now Amsterdam) was a wild lagoon with expansive lakes which were connected to the sea through streams. On the South side (now Rotterdam) was the actual delta with broad river mouths and several flats, deposited by the rivers and the sea. The area in between was much calmer, situated behind a solid strip of dune, and was intersected only by old delta arms such as the Amstel, Vecht, and Oude Rijn, and by streams such as the Gouwe and Rotte. Over the course of centuries, an enormous layer of peat developed in this calm middle area.

For the most part, this peat has been reclaimed bit by bit since the early Middle Ages and brought into cultivation mainly from the higher grounds behind the dunes - which were occupied much earlier - as well as from river banks. The reclamation occurred by means of digging parallel trenches at short distances
from each other. At first, these ditches provided a natural drainage system, but as the peat level dropped due to reclamation, dikes were needed to curb the water from the sea and rivers. The influence of the sea was excluded by a series of dikes of varying sizes. These were complemented by two large river dike complexes, one on the North side (near Amsterdam), and one to the South (near Rotterdam). Combined with a network of ditches, waterways, water gates, and windmills, these two vast dikes were the centers of a fine-grained system by which the water economy of the delta could be regulated.

![Figure 22. Settlement and Cultivation](image1)

![Figure 23. Three Systems](image2)

In the period following reclamations and inhabitation during the Middle Ages, great changes occurred in and around the middle area of the Western Netherlands. In the seventeenth century, a series of cities in and around the dune areas rose to international prominence during Holland's Golden Age.

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62 This system has been controlled since the early days by several so-called *waterschappen* (water boards), a typically Dutch social and organizational phenomenon. These are powerful organizations which in fact constitute the basis of the Dutch planning system. The management and maintenance of the water is such an essential condition for life in the Netherlands that planning, communication, and consensus, particularly in the flood-prone Western parts of the Netherlands, are a commonly accepted phenomenon. Planning 'from the bottom up' has always constituted an essential part of the collective well-being in the history of the Netherlands.
Despite their modest size, these cities took advantage of their proximity to the world's most important sea trade routes.

![Figure 24. Seventeenth-century water transport](image)

As Ed Taverne has demonstrated, the Dutch Republic was already in the seventeenth century based not on homogeneity but on *heterogeneity* in terms of geographic and governmental affairs. The cities of Holland (the most important state at the time) enjoyed far-reaching autonomy. However, this urban archipelago was at the same time unified in an ideological sense by means of a 'collective dream'. It consisted of memories of a collective heroic past, which Taverne has named the "Batavian myth". This myth was an exponent of the joint eighty-year war against Spanish rule as well as the eternal war against water, represented by a great number of collective 'works of art' which developed the seemingly uninhabitable delta into a political, military, and economic unity.

Most infrastructural works which have left their archaeological marks in the contemporary Randstad landscape were (or still remain) related to the

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63 Taverne, Ed, "Randstad Holland: Horizons of a Diffused Metropolis," p. 28/29.
military and economic domination of water. In the seventeenth and eighteenth century, many new canals and waterways were dug to improve the water networks for trade purposes. At the same time, a large part of the peat layer was excavated to cater to the cities' fuel needs. This resulted in a large number of lakes which would come to occupy about half of the intermediate area.

The canals continued to fulfill a role in the transportation network until the modern era, comparable to that of the highways in today's transportation system. "As the cities of Holland lost their leading international position in the course of the eighteenth century," writes Taverne, "it became all the more important to organize the surrounding region with an effective infrastructure. In this sense, the seventeenth-century system of roads and waterways provided the archeological substructure for the later Randstad: initially for the railway network, which often shadowed the routes of existing canals, and alongside which the country's network of major highways was built a century later."\textsuperscript{64}

The same applied to the subsequent military defense systems. Holland's unique water management inspired the development of collective defense lines, the most famous being the \textit{Hollandse Waterlinie} (Dutch Water Line). Flooding proved to be a very effective defense mechanism against the Spanish forces in the Eighty Years' War. The resulting system of inundations, floodgates, towers, batteries, and forts which ran north-south to defend the Western Netherlands was more than a military network; it was a landscape design. The \textit{Hollandse Waterlinie} was the largest spatial element in the Netherlands until the construction of the national highway network\textsuperscript{65}. It resembled an English

\textsuperscript{64} Ibid., p. 29.
landscape park, with a water line organized according to a hidden pattern of
unobstructed firing positions and vantage points. It was also a fine example of
landscape collage in which fragments of older defense works, strategic plains,
old dikes, and sections of major rivers were embraced in a *mis-en-scene*.

![Figure 25. Hollandse Waterlinie](image)

![Figure 26. Infrastructure/Polders](image)

In the course of the nineteenth century, the landscape of the Western
Netherlands changed again. Nearly all lakes, sections of major rivers such as
the IJ as well as the entire Haarlemmermeer, were reclaimed. The intermediate
area was once again turned into land. The reclaimed marshlands - some twenty
percent of the current Randstad area - formed a sharp contrast with the flowing
contours and the small-scale structure of the earliest reclamation. They added
an entirely new structure at yet another level: that of the agricultural parceling,
with great, perfectly flat rectangular lots, deep and narrow ditches, and high
edges in places where they bordered the original non-reclaimed areas. A
significant part of these reclaimed lands has been occupied by green houses
and bulb farming in the last few decades.
The extension to the large-scale reclaims of the Randstad area was formed by subsequent twentieth-century works which were even larger in scale: new canals to the sea, the systemization of railroad lines, highways, the Flevopolders (huge reclaimed lands in the former Zuiderzee), the Afsluitdijk, the Deltaworks (sea barriers), the Maasvlakte (artificial land to accommodate the growth of the Port of Rotterdam), Schiphol Amsterdam Airport, and so forth.

**TOWARDS THE OPEN URBAN SYSTEM**

The Randstad is thus at once a place of memory and modern life, accommodating on the one hand artifacts that refer back to Holland's emergence by means of superb water management, while on the other hand, it is also marked by a conspicuous display of Dutch postwar spatial planning principles. During the post-war reconstruction, the Netherlands evolved into a densely urbanized country with no clear urban center. It provided the most contemporary alternative for 'classic' metropoles such as London and Paris in the form of functionally more or less complementary cities organized around an agricultural heart, the Green Heart. The Randstad today consists of four urban nodes that are more or less of equal size, interspersed with 'urban confetti': smaller, seemingly random settlements that have begun to assume a life of their own.

This extraordinary situation finds its roots in the economic, administrative, and cultural developments of the Netherlands after 1815. When the political and economic unification was completed under the Monarchy during the nineteenth century, it was accompanied by a trend of urban decentralization, in
complete contrast to surrounding countries. Amsterdam lost its position as the seat of government to the Hague, but remained the capital in name. Rotterdam evolved into a center of international trade and transit at the expense of Amsterdam, which transformed into a center of finance, commerce, and tourism. The pattern of this awkward region with its four centers of national importance spontaneously developed into a horseshoe shape, which was first recorded in 1924 on a demographic map. It was immediately regarded as a disturbing phenomenon; however, it was not until after the Second World War that the Randstad was targeted for planning at the national level.

The Randstad in its present form has a distinct spatial pattern which is an extension of the historical developments in the Western Netherlands as described above. On the one hand, it is a region preoccupied with density and congestion; on the other hand, enormous value is placed on the landscape as the provider of natural and recreational amenities. Traditionally, the urbanization of the Randstad area has been regulated in terms of an even

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68 Taverne, Ed, "Randstad Holland: Horizons of a Diffused Metropolis," p. 31.
distribution of people, housing, and industry over several units. This prompted an organization principle which centered around the preservation of the historically evolved urban centers in the ring as well as preservation of the central agricultural area as an open space. This strategy has been appropriately nicknamed "disaster prevention planning"\textsuperscript{67}: it was thought that haphazard urbanization could be avoided by carefully spreading it out beyond the urban borders.

This model of urbanization came to define the living and working environment of Randstad residents: a rigorous distinction between working along the urban ring and living outside it. It resulted in a rather one-sided view of the Randstad and its immediate surroundings. Not only did this view imply a significant monocultural strain on the outlying areas which were to serve the Randstad's housing needs, it also reduced the central area to an agricultural production center, thus impoverishing the cultural significance of the Green Heart.

This functionally separated environment was quickly challenged by artistic circles as well as reality. The well-known office of Van den Broek & Bakema and Cobra-artist Constant Nieuwenhuis launched 'Randstad City' as an alternative to the Randstad ring. They proposed a radical penetration of city and landscape and an end to the myth of the complete city surrounded by an unspoiled landscape. Reality has in fact validated these visionary schemes: traffic problems resulting from the Randstad's outward expansion as well as 'stealth' developments within the Green Heart have demonstrated the need for

a critical rethinking of the 'city' and 'landscape' concepts within the Randstad boundaries.

**PLANNING THE UNPLANNED: THE DUTCH FUNCTIONALIST TRADITION**

The power of the Randstad concept is at once its greatest weakness: there is no centralized governing body for the Randstad. Thus, the elaboration and execution of spatial plans - as is the case in Houston - has been strongly influenced by ever-changing coalitions in a complex field of forces.

The concept of the Randstad was introduced in the *Report on the Western Part of the Country* of 1958. The concept was expanded in 1966 when the Dutch government presented its new vision on the Randstad in the *Second Report on Physical Planning*, which openly advocated the policy of decentralization. The report commented on the spatial effects of the Dutch welfare state - a strong expected growth of the population as well as a resulting traffic congestion - and sought to alleviate these by facilitating the overflow of people, economic activity, and above all recreational amenities away to more peripherally located areas in the Netherlands. This fear of congestion, which was concurrent with that of Houston, resulted in the virtual abandoning of the concept of the Randstad as a diffuse, ring-shaped metropolis.

The principles of economic, expansionist thinking of the *Second Report* were dismantled not long after its appearance. National population forecasts were lowered significantly, rendering obsolete the motive of a population explosion for an expansionist policy. Moreover, the newly created peripheral urban districts outside the Randstad, such as Alkmaar, Hoorn, Purmerend,
Almere, Lelystad, Spijkenisse, and Hellevoetsluis, taught policymakers some important lessons. For one, the employment market proved to be much less flexible than the government expected. The jobs which were supposed to leave the Randstad for these ‘centers’ never moved. To the contrary, a countermovement of rising employment along the Randstad’s inner edges seems to have emerged since, with Amsterdam Southeast and Schiphol Airport being the clearest examples. Furthermore, increased mobility and traffic counts which were triggered by the new ‘centers’ generated problems at bottleneck connections across rivers in Amsterdam (North Sea Channel) and Rotterdam (Nieuwe Maas).

The end of the 1960’s saw a radical break with what has been called the ‘rational description method’, a Dutch tradition that found its roots in methods of land division outside the sixteenth-century cities of the Dutch Republic. This was the work not of architects but of engineers and land surveyors, who rendered the Dutch landscape its functional and rational look: the dikes, land reclamations, and military water defense projects whose forms were based mainly on efficiency, and which rearranged the land into a geometric patchwork. This archaeological structure of the Randstad was transformed under the Netherlands’ new zoning policy: every piece of land was given a color, and the entire map was filled in. Hence the term ‘destination planning’.

This resolute form of functionalist separation contrasted sharply with the Dutch urban design tradition, which had evolved through masterpieces such as Berlage’s Amsterdam-South Plan (1913-15). This was a monumental urban design which provided the basis for a new design pattern which hinged on the aesthetic appearance of the cityscape by means of ‘urban architecture’. Urban
architecture involved a combination of architecture and urban design which reformulated the ideal relationship between the city block and the development of the street pattern.

The second stage of the famous Dutch modern tradition in urban design was the *General Extension Plan for Amsterdam (AUP)* of 1935 by C. van Eesteren, which set the trend of basic urban planning based on quantified social research. The rather abstract urban design method developed by the AUP anticipated the organizational principles of the Randstad by opting for the collage form as a guide for the actual design process. The structuring elements were not the individual building blocks, facades, or public spaces, but the pattern of highways. For van Eesteren, the infrastructure was no longer an architectural design item as it was for Berlage, but an *organizational principle*.

Monumental planning efforts concentrated around pre-war Rotterdam as well: city planner Witteveen viewed the environment as a landscape and saw room for a narrative urban design method to give architectural expression to the newly discovered relationship between city and countryside. Following trends established by the American Garden Movement, Witteveen emphasized the organization of the city and its surrounding countryside as a complementary whole; that is, a contrast between the green landscape which penetrated from the periphery and collided with the city. Essential component of his design was the American parkway, as can be seen in his *Extension Plan for the Left Bank of the Meuse* (1926), and the provision of park, sports, and recreation areas in the city, as is visible in his *Extension Plan for Rotterdam* (1928). The parkways and greenbelts were introduced as structural bearing elements for industrial and
port areas as well as city annexations, thereby improving Rotterdam's quality as a regional city.

Thus, Dutch pre-1940 urban planning efforts concentrated around the concept of *narrative urbanism*, which sought to create a scenography for the programme and the way the city fit into its regional context. The spatial concept of the Randstad finds its roots in this narrative tradition, and reminders of this still abound in the form of canals, green belts, parkways, and garden cities. The post-war *Basisplan* for Rotterdam (1946) which called for reconstruction of the bombed city center, formed another prelude to the spatial form of the Randstad. Led by the new city planner van Traa, there was no looking back to the pre-war years at the City Planning Department. The Nieuwe Zakelijkheid (New Sobriety) was granted its first chance at the mega-level of an entire city. Rotterdam's urban programme disengaged itself from its archaeological substructures; urban design was reduced to a zoning system which confined itself to the act of 'destination planning', that is, the coloring in of two-dimensional areas.

Destination planning was facilitated by van Traa's conception of the city as little more than a grid. The plan attempted for the first time to erect a continuous network of boulevards which extended over the entire city. The dual objective was to render the city structured more clearly as well as to facilitate the flow of traffic. Writes Taverne: "The city did not pretend to be an artistic expression of the welfare state; that was the job of architecture which, released from the straitjacket of urban design, was supposed to transform Rotterdam into a city of grand buildings. And it did. In addition, implementation of the Basisplan brought about an emancipation of office and shop architecture,

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and led to the development of architectural typologies which lent to Rotterdam an entirely new dimension, of which the Lijnbaan shopping street [is] an excellent example.\textsuperscript{69}

Rotterdam’s new nickname “Manhattan on the Meuse” was in fact quite telling. Witteveen’s pre-war city, conceived as a unit, had been reduced to a self-sufficient American downtown, around which a large number of inward-looking developments were located. What emerged was an urban body not unlike Houston: it lacked the necessary structuring function of the former parkways and green belts, which had been reduced to mere buffer zones or residual spaces marked ‘recreational areas’. Such a planning mentality would in fact come to be at the heart of the Randstad’s spatial planning: “a green anti-metropolis built up of fragmented residential areas and several subcities devoid of any recognizable urbanistic pattern.”\textsuperscript{70} The Randstad had become a playground of functional urbanism.

Recently, the concept of the Randstad as an open urban system has at last gained a great deal of support due to the publication of the \textit{Fourth Report on Spatial Planning} (1992). The Randstad has returned to the forefront of the urban planning debate in the Netherlands due to its two-fold function of ‘economic engine’ of the country as well as its function of a \textit{lieu de mémoire}. The policy of decentralization has been abandoned to make room for a concentrated development in the economic heart, particularly in the urban ring of the Randstad. However, a new dilemma in Dutch planning has come to the surface. In the \textit{Fourth Report}, the government commits itself to the preservation

\textsuperscript{69} Taverne, Ed, “Randstad Holland: Horizons of a Diffused Metropolis,” p. 43.
\textsuperscript{70} Ibid., p. 46.
of the Green Heart, yet also makes mention of the need for construction of 800,000 to one million new homes in the Randstad before the year 2015\(^7\).

The *Fourth Report*, despite its progressive, commercially-inspired vocabulary, still suffers from a 'to develop or not to develop' neurosis. While emphasizing two demands on the landscape of the Randstad which are at opposite sides of the spectrum, the *Fourth Report* forgets that the mostly agricultural Green Heart is losing its economic base at an accelerating rate. Also, the neurotic need for fixing and upholding city boundaries is the result not of the scale at which new developments are proposed, but of the *quality* in which these are planned. Out of embarrassment for the unavoidable desecration of more meadowland, new urban overspills seem cramped and introspective. Previous layers of reclamation of the landscape are erased and, more importantly, this is a surreptitious process\(^7\). To approach urban planning by continuing to define 'development' and 'non-development' areas is not only an extremely unsubtle strategy which reinforces the neurosis, it is also a dangerous one given the reality of the need for up to one million new homes.

The most acute problem challenging the concept of the Randstad today is the increasingly problematic relationship between its 'urban confetti' and the Green Heart. The confetti is starting to threaten the existence of the Green Heart as it has started to assume a life of its own. This is due primarily to the Dutch inexperience with the scale of the metropolis. The emphasis of Dutch urban planning has been on the autonomous development of the historic cores, failing to take into account the dynamics of the Randstad as an open urban system. On


the planning map, this has translated into a vision which concerns itself exclusively with the opposites of 'city' and 'nature', which are represented as 'red' and 'green', respectively.

This outdated mode of urban planning has led to the current debate about the future of the Green Heart in which two disturbing extreme possibilities are presented. The first - advocated by the national government - prescribes the erection of the natural equivalent of a Berlin Wall around the Green Heart to safeguard it from the so-called 'evil' forces of urbanism. In this scenario, the current urban cores would be densified and expanded outward as a further elaboration on the 'Rim City' concept. The second option would be to do away with the concept of the Green Heart and give way to an unbridled urban growth in what was once the Green Heart.

![Figure 29. Randstad 2015 - scenario I](image1)

![Figure 30. Randstad 2015 - scenario II](image2)

Given the seriousness with which both future scenarios are being considered, the time has come for Dutch urban planning to become more critical in thinking about issues such as location, and more generally, the phenomenon of the city. With the government designating space for future
urban expansion, the phenomenon of location - the employment of potentials - is hardly an issue in Dutch urban planning; it is only utilized after the location is already determined. Furthermore, Dutch urban planning must develop a vision concerning the creation of new urban milieus which address issues such as mobility, work, culture, and the way we like to live.

Despite its famous tradition, urban planning in the Netherlands is currently exercised only at the level of what Rem Koolhaas aptly named 'the architecture of social remedy': row housing, orphanages, nursing homes, community centers, and so forth. The Dutch planning machine has managed to propose a single building type to cure each of society's problems, resulting in an overly deterministic environment where everything - particularly use - seems prescribed.

Figure 31. Architecture of Social Remedy

As I eluded to in the analysis of Houston as an open city, it seems in fact inappropriate to maintain that urbanism must derive only from 'building'. In a number of contemporary plans since Bernhard Tschumi's design for Parc de la Villette, the center is no longer formed by cultural or commercial amenities, but

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by landscape or park. Perhaps this observation - more than any discussion or debate - is a proof that 'urbanity' has definitively changed character.

Related to this, attention has shifted towards the grand open urban space. This concerns not only the large open areas such as the Green Heart, but also the open space surrounding the cities. As the Houston experience demonstrates, open space can be quite urban. It points to what links the Randstad and Houston and what can be seen as the most interesting trademark of the open city: the concept of the density of the void. This concept describes the dual experience of being at once 'in the middle of nowhere' as well as at the heart of a metropolis. Particularly in the case of the Randstad, which after all is situated in the world's most densely populated country, this is a fantastic phenomenon.

EXPERIMENTS WITH EMPTINESS: MAASVLAKTE & HAARLEMMERMEER

The greater part of the built landscape in the Netherlands is quite young: more than seventy percent has been erected since 1945\textsuperscript{74}. Many parts of the 'natural' landscape are young as well; for the most part, this is a result of large-scale land reclamation projects called polders. While the first polders were cultivated in the eighteenth century through the use of windmills for water drainage, large pumping engines made possible the reclamation of vast sections of land in the nineteenth and twentieth centuries. The largest polders, the Flevopolders, were developed between 1918 and 1967, adding 556,000

\textsuperscript{74} Lootsma, Bart, “West 8 Landscape Architects,” in: The Landscape, p. 81.
acres of artificial (mostly agricultural) land to the Netherlands. Previously, polders were constructed more out of necessity: drainage of the Beemster Polder of 1612 (17,000 acres) and the Haarlemmermeer Polder of 1852 (44,500 acres) served to rid the country of a constant threat of inundation.

The polders and other reclaimed lands of the Netherlands are known primarily for their emptiness. The visual qualities of their landscapes have such a subtle nature that if one lives there for some time one tends not to see them anymore. The mental state called *polder blindness*, which affects car drivers in polders, involves no longer being able to estimate the distance to an obstacle on the road in relation to their speed. It is a typically Dutch phenomenon and has caused serious accidents. Whereas elsewhere, church towers and other landmarks provide points of orientation in the landscape, this is hardly ever the case in a polder. To those who are victimized by polder blindness, the landscape seems dull and gray. One no longer sees the spectacular cloud formations, or the way everything seems to assume a different color on sunny days, rendering a beautiful surreal quality which is so unique to this landscape. The beauty of the Dutch landscape is not as commanding as it is in the hills and mountains, where in the course of one day one can walk purposefully from one viewpoint to another and where one can frame a landscape as if it were a painting.

In this sense, the polder landscape is more challenging than a hillside landscape for designers who take their own creativity as a priority. The polder has an inherent sense of monumentality which is at once beautiful and ruthless.

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*Constandse, A.K., Planning and Creation of an Environment: Experiences in the IJsselmeerpolders, p.9*
Its emptiness creates an unmatched delirium, while any frivolity is wiped out like a sandcastle on the beach.

City dwellers discovered the polders as peripheral areas of infinite opportunity long before architects and planners. The Maasvlakte, an artificially created land in the outskirts of the port of Rotterdam, serves as an excellent example. It has developed into an icon of the contemporary landscape in the Randstad, a product of on the one hand simple and functional planning and on the other hand an unplanned creativity and optimism. The road to it dead ends into the sea; it is an end point, a climax of the void.

The Maasvlakte is the glorious deep sea port of the future: its mostly empty land embodies the anticipation of further growth towards the sea of container and petroleum activity at the port of Rotterdam. However, it also assumed a second nature by means of the Dutch ‘destination planning’ ideology. The starting point of this ideology was to color every field on the map; however, due to the great political charge of these maps, another principle of the ideology became the coloring in with only socially accepted functions. This resulted in the deletion of any undesired, unreconcilable, or unforeseen functions from the planning map. For these functions, the maps included what Adriaan Geuze aptly named ‘emergency valves’: white areas devoid of any code or destination. These were generally peripheral and abandoned industrial areas such as the Maasvlakte.

Thus, the Maasvlakte came to accommodate a huge power plant, thirty-six mega-oil drums, and the ore- and coal terminals for the heavy industry in the German Ruhr area. The Maasvlakte assumed an appearance quite like Houston’s Westpark Drive area, including high voltage power lines, bulk
carriers, furnaces, cranes, containers, and a horizon of white drums. All elements appear in their mega-version, yet in this scaleless landscape they have no measure. By means of a lack of reference, a traffic sign and an oil drum assume the same appearance: intangible and scaleless.

Figure 32. Maasvlakte

The Maasvlakte is no longer an empty expanse; it has instead become the ‘city of taboos’, with a 25 meter-high artificial dune concealing the oil drums for the town of Hoek van Holland across the waterway, a uranium terminal, a shunting yard, dozens of experimental wind turbines, dredging facilities, a chemical waste dump in an artificial mountain landscape, the world’s largest container terminal, a motor cross track, an airport for wind gliders, the Dutch Explosives Recovery Service testing site, as well as a trout farm. The most bizarre program is the World Disaster Prevention Center, located adjacent to the cross track: a site where high-rises, ‘off-shore’ oil rigs, airplanes, a refinery, and so forth have been reconstructed and which are set ablaze several times a day. Firefighters and disaster units from around the world receive training here around the clock.
While this planning free-state developed without any form of architecture, it has proved to be a great attraction. The Maasvlakte has been possessed by mass recreation: city dwellers have discovered this area without the provision of any recreational amenities, while designated ‘recreation areas’ elsewhere are left unused. What has moved the public to such a collective experience of this rather surreal sensation?

The annexation of the Maasvlakte by the general public exemplifies the changed perception of the relationship between city and nature. The public cherishes its self-discovered sensations, loves the artificial nature and the decorum of modern technology. On holidays, masses of people escape Rotterdam to the Maasvlakte to practice new and adventurous forms of recreation. Public recreation is no longer based on the pre-programmed recreational amenities here, but on anarchy, exploration, and self-expression. The public here appears very well able to find its own place and attach its own meaning to it; it has developed from ‘urban victims’ into intelligent, well-equipped, and ever-curious explorers, able to define its own exotic culture.

This neglected but rediscovered landscape in fact contains the seeds for the future of the Randstad as an open urban system. The identification with the landscape of the Maasvlakte serves as a proclamation for a contemporary approach to urban planning and the design of public space. The next stage in the development of the city must lead to a revolution in the ideology of the park and take into account the changing behavior of the inhabitants of the open urban system: they are at the heart of potentially exciting future developments in the Randstad.
There is much to be learned from the social models used in Houston and the Randstad as applied to architecture and urban planning; they are often at odds with demographic reality. First, only a minority of city dwellers live in family situations in the contemporary open city. Second, areas like the Maasvlakte illustrate the changing interests and recreational needs of 'new' city dwellers: they are confident and adventurous, extremely mobile, have technological skills and access to various media. The environment thus does not have to keep adapting to the supposed yearnings of urban dwellers, urban dwellers adapt to their environment. Third, the city dweller's house no longer forms the center of his/her universe. These people continually change environments, unwind near bayous, seaports, or mountain resorts, and sleep and work in various places. The image of varied densities, cultural and social patterns in suburban "conceptual Nevadas"78 such as the Maasvlakte links up seamlessly with the profile of the urban dweller.

The intellectual baggage of the Maasvlakte and the new urban dweller of the open urban system is relevant to the future structuring and occupation of the Haarlemmermeer Polder near Amsterdam. It is here, at the edge of the Green Heart and the ring-shaped urban zone, that the important lessons from Houston and the Randstad are to come together in an exhilarating new landscape.

The Haarlemmermeer Polder is an intermediate area in the Randstad that has survived the stealth processes of suburbanization relatively well. Far more impacting on its physical structure has been the creation of a 'physical inbetween' - particularly over the last decade - due to the fact that this polder, more than any other area in the Netherlands, has been affected by the Dutch

boom in mobility. The entire East-flank of the Haarlemmermeer has become an area dominated by cars, trains, and airplanes. The busy A4 highway which connects the Northern and Southern parts of the Randstad, runs straight through the heart of the polder, with the A44 branching off to the south.

In the northeast corner lies Schiphol Airport, whose ambitions have turned the Haarlemmermeer into a 'hot spot' for building activity. Since the opening of the Schiphol railway line in 1981, office buildings have shot out of the ground amidst farming land at a stone's throw away from the airport. The effects of expedient railway-to-air connections will magnify due to the Dutch extension to the TGV network (the Paris-Amsterdam line will stop at Schiphol), and particularly by the Schiphol Mainport Plan, which is to lift annual passenger counts at the airport from around 25 million to 40 million to remain among the top three or four in Europe. This type of growth not only requires that more space be reserved for Schiphol itself, but increasingly for related activities as well: many business demand to be located in proximity to the airport - at whatever cost.
Figure 34. Aerial view of Schiphol Airport

The eagerness with which private investors now raid the Haarlemmermeer is reminiscent of its 'Wild West' history. The polder was a project of unprecedented scale; it was drained by three steam-powered pumps with enormous capacity for the time in 1852. This was a period in which liberalism reigned supremely and government interference in the economic and social affairs of the country was shunned whenever possible. For this reason, the government did little more than draw up a plan whereby the land was divided into gridded plots of 200 by 1,000 meters which were the elements of blocks of two by three kilometers bordered by roads.

Government involvement ceased abruptly following the drainage of the Haarlemmermeer, without any provision being made for an adequate infrastructure. Once the State had collected its profits (300 percent) from selling the ground, it was left to the colonists to develop. A local council was not elected until five years after its inception; five years of 'slaving away in the mud', alcohol
abuse, prostitution, and high mortality rates\textsuperscript{77}. In tradition with the polder's disorderly inception, the population did not confine itself to the planned villages at two points along the main canal running lengthwise through the middle of the polder. The northernmost village of Hoofddorp developed the quickest and became the principal village. Other villages developed like a string of beads along the Ringvaart, which collects the polder's drainage water. Another striking element in the expansive landscape is the Geniedijk, a relict of the ancient fortifications surrounding Amsterdam, which intersects the rectangular polder parceling like a postmodern diagonal.

To understand the process of transformation in the Haarlemmermeer, it is useful to analyze its separate functions. First, the importance of Schiphol for this area cannot be overstated. While much of the discussion about its growth has concentrated on passenger flows, cargo is an equally important aspect here. Schiphol's goal of becoming a 'mainport' in terms of cargo has been overlooked by planners, who are forgetting that Europe will be Europe's second-largest airport in terms of cargo next year\textsuperscript{78}. Contrary to the bulk transfer in the port of Rotterdam, Schiphol's cargo concerns mostly smaller items, such as electronics parts which are sent all throughout Europe from the many Japanese distribution centers located just south of the airport. Other cornerstones of Schiphol's rapidly growing cargo flows are flowers and bulbs, which are grown in the Southwest corner of the Haarlemmermeer as well as in the greenhouses on the southeastern edge. To the east of Schiphol, just outside the polder's border, is Aalsmeer, which accommodates the world's largest flower auction. Aalsmeer

\textsuperscript{77} Colenbrander, Bernhard, "1700 Airplanes a Day," p. 56.
and Schiphol are like Houston and NASA; here, too, one finds a 'mission control room' which monitors the world weather to anticipate people's buying habits: if the sun breaks through in Tokyo, the shipment of flowers is doubled.

The Haarlemmermeer is thus a vital link in advanced distribution networks which not only operate at the scale of the flower auctions, but branch out into the entire Randstad. It is the perfect example that the Randstad is no metropolis in the traditional sense, but an open urban system with an emphasis on functions of the production/distribution complex.

In terms of living, there has been a global trend towards increased differentiation based on mobility and socio-economic status. The emergence of non-traditional households, for instance, has lowered the average residence occupation and rendered it more instable. These trends, combined with Schiphol's growth, have contributed to a larger and more diversified demand for housing. The Haarlemmermeer could respond to this demand by taking advantage of the difference in character between the West (dunes) and East (Green Heart) sides. Another option is to locate the required housing on the western fringe to make way for the concentration of a large-scale production/distribution complex in the form of an urban system at the heart of the polder.

The development of a recreational network is imperative, since there is little to do at present in the Haarlemmermeer. The proximity of the coast line, dunes, bulb fields, interconnected recreational lakes, windmills, and the woods surrounding Amsterdam offer a number of recreational possibilities unmatched by any other metropolis. A fine-grained system of pedestrian and bicycle paths could be developed in a green environment including a number of intensive
recreational amenities. The natural component deserves further promotion next to the roar of Schiphol, and could in fact reinforce it. Schiphol's air zones, for instance, could be modeled after the wood clearings at Houston's Intercontinental airport and be filled in with exciting flower patterns that could be used as orientation devices for planes.

Several forms of agriculture are represented in and around the Haarlemmermeer. In the polder proper, it is arable farming, in the peat areas mostly cattle-breeding and dairy farming. Aalsmeer is the center of glasshouse cultivation, while the bulb industry has settled along the inner fringes of the dune area. The greenhouse farming sector has a dominating international position; to maintain this position, expansion is required. The bulb region has gone through significant transformations: while tourists continue to flock the fields in the Haarlemmermeer for expositions, the regular fields have been moved to the Flevopolders and scarcely populated areas well north of Amsterdam. In the Haarlemmermeer, the emphasis has shifted to distribution and processing: giant halls have appeared in the landscape. The dairy sector is
suffering from structural overproduction, while arable farming and cattle breeding are feeling the pressure of urbanization in the form of withdrawal and dispersal of farming land. To remain competitive within the EC, the average farm size will have to double to 70 hectares\textsuperscript{79}.

The current allocation of space in the Haarlemmermeer is not by any means indicative of the social balance of power. For instance, 40,000 people work at Schiphol while those employed in agriculture - by far the largest consumer of this area - total around 1,500\textsuperscript{80}. Local, provincial, and national planning agencies are presently discussing the future of the Haarlemmermeer. Their first decree was that space be reserved for agricultural use. How much space will depend on developments in farm economics, but even more on claims on open space made by other interests, such as the High-Speed Rail Line and a fifth runway at Schiphol (which will occupy a substantial portion of the Haarlemmermeer’s central area). These proposals were made some time ago and received government approval in recent months. It remains much less clear what will happen to demands made by businesses who wish to establish themselves at this ‘international traffic intersection’, as well as the claims by local facilities such as housing, regional public transportation, recreation, greenhouse horticulture, bulb industries, and so forth.

A key element in the Haarlemmermeer’s future will be the development of infrastructure at a regional scale along with the already well-established internationally-oriented provisions. In contrast to Houston, the Randstad has a truly multi-modal traffic network in which bicycle (almost 30 percent of all trips)

\textsuperscript{80} Colenbrander, Bernhard, “1700 Airplanes a Day,” p. 57.
and car are in fact quite competitive, particularly in the inner cities\textsuperscript{81}. Until recently, however, the use of public transportation lagged behind in the Randstad; this was due mostly to the decentralization policies of the 1960's which created a network of branches to outlying 'bedroom communities' but with inadequate capacity for a metropolitan area. As a result, a multitude of new stations and lines have been added in recent years. The station typology has been transformed into a genuine 'traffic machine', particularly in the case of stations along the Ring Amsterdam and the Schiphol Line\textsuperscript{82}.

New developments in the Haarlemmermeer will require adequate connection with Amsterdam, Haarlem and Schiphol. Furthermore, the new High Speed Rail line will be located in this polder. While its future impact on Schiphol has already been planned for, these tracks could also bring about significant changes in commuter traffic if they were supplemented by so-called 'transferia': transfer points from car to train. Unlike commuter stations, transferia could develop into highly visible elements of the landscape around which new amenities and job opportunities might develop.

While the Haarlemmermeer has become a zone of planological combat, no structural plan has been effected to guide its development into the future and to preserve the image of the polder as a landscape unit. Only certain trends are visible. It is clear that without concerted planning efforts, the polder's characteristic openness will diminish due to urbanization and changes in agricultural land use. Whereas the polder can presently be described in terms of a grand void with occasional urban patterns, it will give way to an urban

\textsuperscript{81} Dieleman, Frans, and Musterd, Sako, \textit{The Randstad: A Research and Policy Laboratory}, p. 154.

pattern with occasional large voids in the future. Furthermore, the clarity of the
reclaimed landscape (polder grid) may be obscured by an increasing number of
intersections.

Given these developments as well as the context of the open city, the
goal of a future scenario for the Haarlemmermeer Polder should be to create a
powerful transparent landscape which on the one hand has an archaeological
dimension as the landscape becomes a bearing element for relics of the past as
well as future scenarios. On the other hand, it should provide tools for a
renewed colonization of the void by transforming the existing grid pattern to
create a new urban milieu where one can reside on the way to somewhere
else. In this context, urban planning at the general level should maintain a high
degree of neutrality with respect to architecture: the organization of the
landscape facilitates freedom.
V. PLACE AND PLACELESSNESS IN THE OPEN URBAN SYSTEM

In an attempt to approach the open urban system in an unbiased manner, this investigation seeks to eliminate the useless confrontation between two caricatures. On the one hand there is Europe, a place of ancient civilization where everyone reads books, visits museums, and lives within walking distance of each other, and on the other hand there is the United States, a non-place of semi-literate savages, watching TV and eating junk food while living on the road, with Disneyland and Las Vegas as its cultural horizon. One look around in any European urban periphery, however, reveals that the ‘American condition’ has surreptitiously crossed the Atlantic Ocean and can now be found everywhere on the European continent.

To be sure, the complaints about what Deyan Sudjic has called the “conventional demonology of the metropolitan intellectual”\(^3\), which invariably includes discussions of the suburb, the shopping mall, and Disneyland, are a useful aspect in any analysis of the open city. More important, however, is the fact that the newly formed periphery is at the verge of creating an entirely new type of city for which new terms are needed and in which a new type of ‘urban behavior’ has emerged. In this context, it is important to determine the precise leaping point from quantity to quality, from mere periphery to the emergence of a new city type. The Houston and Randstad models suggest that this point is located where the suburbs become more or less independent from the old city center in terms of infrastructure.

\(^3\) Sudjic, Deyan, *100 Mile City*, p. 207.
It is common knowledge that the emergence of the shopping mall has not only accelerated these developments, it has created a new type of semi-public space, a new interiorized meeting place which is independent from the old urban infrastructure and which also deprives the city from an important function. The mall is the most visible example of the distortion of two anachronous ‘fundamental orders’ (Virilio) which have been at the heart of the disappearance of traditional city form. The first is one of place, characterized by the stability of form, the second of speed, characterized by the fading of form (‘non-place’). While this phenomenon is as old as the city itself, it deserves closer attention in the light of the ‘urban entropy’ law, which states that where things disappear, other things emerge. Indeed, a new place - one with positive attributes - is emerging.

**ON PLACE AND PLACELESSNESS: SUBVERSIVE RECONCILIATION**

“Signs which refer to a totally different place and time and which, at least apparently, do not belong in a certain place, are also called Fremdkoerper. By means of a confrontation with the other and unfamiliar, one starts to view the commonplace in the environment more sharply or differently. Looking, in such a moment of confrontation, becomes seeing. "

Hans Warnau, 1922-1995

While Virilio’s juxtaposition of ‘place’ and ‘non-place’ is of vital importance for the open urban system, it is often experienced exclusively in terms of the latter component. In *The Image of the City*, Kevin Lynch quotes a resident of Los Angeles saying: “It’s as if you were going somewhere for a long time, and when you got there you discovered there was nothing there, after

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*Quote from Vroom, Meto J., *Outdoor Space*, pp. 25/26.*
all.” In Venturi’s terms, place often refers to enclosed space, because “it is the easiest to handle.” Non-place, as used in the context of the open city, carries a sense of incoherence or strict predetermination. The history of the open city as well as the park (chapter one) indicate that the open city requires a combination of both place and placelessness in which landscape and the vector become the primary artifacts. It is thus useful to closely examine some of the discussion surrounding these concepts.

Several approaches to the concept of ‘non-place’ can be taken; one is incoherence. An open city like Houston might be labeled incoherent for its chaotic, cacophonous appearance: seemingly endless commercial strips of neon signs, billboards, and a mix of large, seemingly permanent structures and small temporary shacks dominate the landscape. The variety of different land uses that manifest themselves in a small area is dazzling, as well as the difficulty in telling a building’s function.

Incoherence may also refer to the perception of sameness, predictability, and blandness. The parking lot around Houston’s Astrodome, the largely abandoned parts of the warehouse district, but also the clamor of festive-looking car dealerships along I-45 North invoke such feelings. Whether silent or loud in appearance, the landscape appears undifferentiated and one-dimensional.

A third way in which incoherence might manifest itself in the open city is through a lack of conformance between expectation and actual appearance, resulting in a kind of disbelief or disappointment. As Peter Rowe points out, “the suburban landscape as a whole is rather complex in its irregular mosaic of different land uses and buildings. In much of its detail, however, it is surprisingly

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simple. What the metropolitan landscape seems to convey is an overall complexity yet simplicity in its parts: those points of origin and destination and the places where we spend most of our time."\textsuperscript{87}

Another approach to 'non-place' is a lack of commitment or passion. Edward Relph, in his book \textit{Place and Placelessness}, compares Kierkegaard's sentiment about our time being "a reflective and passionless age" with what he calls "the landscape of reflection and reason: the well-engineered suburban living environment.\textsuperscript{88} Throughout the book, Relph condemns the contemporary landscape for its lack of 'deeper experiences'. The concept of incoherence can also be coupled with the comforts of our suburban existence: the combination of convenience and frictionless negotiation which characterizes suburban environments can be disengaging. This view seems to be shared by Jean Baudrillard, who decries the fact that much of the contemporary landscape is simply what it is, and makes no pretense to anything beyond\textsuperscript{89}.

Both incoherence and passionless coexistence can fuel feelings of disassociation and alienation. One might be made to feel like an outsider by means of the unfamiliarity of the urban terrain, the repelling qualities of our environment (such as noise or visual pollution), or by the incidentally of our environment to our actions. Relph calls the last concept "incidental outsideness," which engenders "an unselfconscious attitude in which places are experienced as little more than the background or setting of activities and quite incidental to those activities."\textsuperscript{90}

\textsuperscript{86} Venturi, Robert, \textit{Learning from Las Vegas}, p. 7.
\textsuperscript{87} Rowe, Peter, \textit{Making a Middle Landscape}, p. 57.
\textsuperscript{88} Relph, Edward, \textit{Place and Placelessness}, p. 125.
\textsuperscript{89} Baudrillard, Jean, \textit{America}, p. 85.
\textsuperscript{90} Relph, Edward, \textit{Place and Placelessness}, p. 52.
At the other end of the spectrum, Melvin Webber contends that ‘incidental outsideness’ and other alienating phenomena are to be expected from modern metropolitan environments. In his essay *The Urban Place and the Nonplace Urban Realm*, Webber rejects the idea that spatial proximity and place are tied so closely to such notions as community, goodness, and caring. He maintains that already in medieval towns, travel frictions were quite high, resulting in the necessity of geographically centered cities. With the advent of modern transportation and communication technologies, we find ourselves capable and oftentimes quite willing to take part in what Webber calls the “nonplace urban realm,” maintaining a network of contacts based more on personal affinities than on geography and propinquity. According to Webber, the creation of these kinds of realms as well as a functional revolution have constituted some of the most profound changes that have marked metropolitan regions in recent times.

*The Urban Place and the Nonplace Urban Realm* is a refreshingly lucid essay, particularly considering the time in which it was written (1960's). It helps elucidate some important concepts surrounding placelessness, and raises the valid question whether cities are bound to place only. Of course, one recognizes the constant tension here between the view which renders a sense of refamiliarization to the city and the other view of the city as a place of experience and experiment.

For one thing, a sense of placelessness could help resolve the absurd modernist separation of living/working/recreation. As analyses of Houston's Post Oak area and the Dutch practice of ‘destination planning' have made clear, this separation has taken much of the challenge and excitement out of our contemporary urban landscape. What is required here is what Bernard Tschumi
called "the mediated metropolitan shock": the creation of spaces and textures which the urban dweller can subsequently appropriate.

In the open city, says Adriaan Geuze, "the economy and the functioning of the city are based on an optimal layout of functions and a perfect infrastructure. The euphoria of mass culture results from accessibility and interchangeability of different cultures, which render to urban life the metaphorical freedom of combination of the video clip. This freedom, however, is a paradox. The price which is paid for it is the fully pre-programmed space. [...] This efficiency geared toward the collective has a cretinizing effect on the individual. The preprogrammed space is one-dimensional; people are debased to commuters, tourists, or shoppers. Their behavior is fixed. This one-dimensionality disregards the intelligence of the inquisitive city dweller." Judging from the Maasvlakte example, new public space has the potential to manipulate its users in such fashion that they will become conscious of their behavior, that they can no longer default to pre-programmed automatic actions. Such a space transforms anonymity into exhibitionism, spectators into actors. Seen thus, design must facilitate the sensation of a 'disjointed' culture - what is created by the user.

Given its capacity for adaptation and physical change, the grid seems of value in the elimination of the ideology of functional separation. Several American cities reveal that continuations of connections to their historic structure are able to function as the principle bearers of a varied urban street life. New York’s Washington Square, one of the most famous examples of

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92 Geuze refers particularly to Dutch examples here.
public space and repose, and Fifth Avenue as the center of fashion and taste, serve as examples. As Rem Koolhaas has shown in *Delirious New York*, the grid on the one hand invites to an 'optimal layout', yet on the other hand it facilitates the occurrence of unexpected effects by means of the juxtaposition of events that take place within it. Unlikely combinations of spaces and events are charged with subversive capabilities, since they challenge both the function and the space: "eating oysters with boxing gloves, naked, on the n\textsuperscript{th} floor."\textsuperscript{94}

Furthermore, the open city is by virtue of its own development evidence of a common longing for mental placelessness in the city. The city dweller evidently needs spaces for drifting, whether it be physical or psychological. While the saying "to need one's space" refers to the mental colonization of space for the purpose of reflection, this principle holds at the larger level of an entire society as well. The concepts of the journey and transience are relevant in this respect: space can be colonized by means of motion or in a purposeless yet attentive meander through the urban landscape: the dérive\textsuperscript{95}. Both can bring the subject 'back to himself': physical travel does so by means of the anxiety surrounding departure and arrival, and mental travel by means of temporarily receding from the commodified urban environment to rediscover the autonomy of place.

Concepts such as the dérive suggest that our perception of 'place' is in fact quite discontinuous. My meeting with a Japanese cycling team and giving


\textsuperscript{94} Koolhaas, Rem, *Delirious New York*, p. 155.

\textsuperscript{95} The dérive was defined by the Situationist International as "a mode of experimental behavior linked to the conditions of urban society: a technique of transient passage through varied ambiances". See Sussman, Elizabeth, *On the Passage of a few People through a rather brief Moment in Time: The Situationist International 1957-1972* (introduction), p. 9.
directions to them in the middle of the Haarlemmermeer Polder illustrates the point. In their contrast with the surrounding farms, cows, and tulips, these 'foreign elements' made me realize - more than any windmill or tulip - that this was in fact a Dutch place. The subversive, destabilized event has the ability not only to attack functionalism and modernism, but also to provide a 'subversive reconciliation' with the contemporary urban environment. These ideas are not far removed from the spirit of the Situationist International, whose terms I have borrowed here.

In his 1967 study The Society of the Spectacle, leading Situationist Guy Debord stated 221 theses analyzing postwar consumer society as a totality in which commodities (desire) and mass spectatorship (the spectacle) produced a completely alienated system. According to Debord, "the spectacle is the moment when the commodity has attained the total occupation of social life. The spectacle is not only visible, but one no longer sees anything but it; the world one sees is its world."96 In this realm, commodities transcend their materiality to become spectacular events: "The spectacle is capital accumulated to such a degree that it become an image." This has evolved into a situation where "everything that was directly lived has moved away into a representation."

The construction of 'situations' (momentary ambiances) and their transformation into a superior passionate quality in essence represented the construction of a kind of 'non-place' as well: détournement (diversion) in the form of "violent excisions of elements from their contexts, and [the] consequent destabilization and recontextualization through rupture and realignment"97 was

96 Debord, Guy, The Society of the Spectacle, p. 42.
considered a key means of restructuring culture and experiences. *Psychogeography*, a pseudo-science investigating “the effects of the environment on the emotions and behavior of individuals" explored the hidden trajectories of desire that existed in the midst of otherwise banal urban ambiances\(^9^6\).

In this context it is interesting to recall Constant Nieuwenhuys' *New Babylon* project (1956-74), which was a critical response to the institutional planning of the Randstad. A Situationist himself, Constant accused planning authorities of shamelessly sacrificing the use of space to industrial and capital needs. What started out as a gypsy camp in 1956 developed into a plan for an urban environment which catered to the delights of the *dérive*. *New Babylon* consisted of hovering structures which would be responsive to the self-discovered needs and active will of its inhabitants, setting free Homo Faber (man the maker) who turns into Homo Ludens (man the player). "It would be a ceaselessly changing, endlessly dramatic habitat (...) a vast chain of megastructures, each of which could be internally reorganized at will to satisfy the desire of its transient users and creators."

Figures 36,37. New Babylon planned at Randstad scale: map and photomontage (1965-67)

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With its emphasis on nomadic existence, *New Babylon* was the first postwar urban design to take mobility rather than the living environment as a theme. Another proposal sympathetic to the idea of the city as a system of events rather than as place-centered realms was made by Archizoom Associati in their *No-Stop City* project of 1970. This project responded directly to the profound changes that the city had undergone: "the modern metropolis has ceased to be a place and has [instead] become a condition [...] a state of being that is uniformly articulated throughout society by consumer goods."\(^9\)\(^9\) Contrary to the Situationists, Archizoom viewed the culture of consumption as a way of "fulfilling the highest potential for creativity."\(^1\)\(^0\) They envisaged a city composed of behavioral modes, consumer products, and above all, information, "stretching as far as the media's reach."\(^1\)\(^0\)\(^1\) The proposal involved large inhabited warehouses equipped with artificial lighting and air-conditioning, allowing for the free flow of merchandise.

![Figure 38. Archizoom Associati, No-Stop City, 1970](image)

\(^{100}\) Ibid., p. 54.
\(^{101}\) Ibid., p. 66.
Having recognized the need for 'place' and 'non-place' to coexist in the open city, the vector and landscape gain importance as its principal artifacts. *No-Stop City* reflects the importance of the vector quite compellingly as an element of (dis)connection as well as the importance of siphoning off it to ensure new modes of communication. By default, *No-Stop City* shows the significance of landscape as well; if there is ever to be a non-interiorized place devoid of the tentacles of consumer society in the open city, landscape will be a prime candidate. Not only can the landscape bear archeological and cultural artifacts from the past into the future, its potential to accommodate more 'challenge' has been greatly undervalued. In the Haarlemmermeer Polder, the landscape reveals the potential to become an 'inside-out' version of the *No-Stop City*.

In the light of these observations, the work of the Rotterdam firm of West 8 is quite relevant. Their project for the East Scheldt storm-tide barrier can be considered as a monument to the completion of the Delta Project, the largest sea barrier ever constructed by man. Under the commission of the Department of Public Works, West 8 investigated the commercial and recreational potential for the dam and made proposals for the design of the remnants of the sand dumps and storage areas at the north and south ends of the dam as well as on the artificial construction island Neeltje Jans. There was hardly any money available (the barrier was billions of guilders over budget), and environmental experts played an important role in the project. Their ideal, an imitation of a natural landscape, was not realized literally; however, West 8 did take into account their observation that there were insufficient nesting spaces for sea birds. The result consists of large alternating areas of black and white shells, a
waste product of the oyster beds in Zeeland. White birds nest on white shells and black birds nest on black shells for camouflage.

Figure 39. West 8, Eastern Scheldt Storm Barrier Project, 1991-92

People driving through this modern nature reserve see these strips as oscillating fields which are related to the their level of observation. Writes Adriaan Geuze: “In his triumphal parade over the highway, the city dweller is launched out of the polder of Schouwen-Duivenland, which is four meters below sea level. In a long, gradual curve, the highway creeps towards the level of the East Scheldt barrier, which is at +13 meters. Halfway during this ascent, the overwhelming horizon of the East Scheldt reveals itself in a cloud of hysterically squawking seagulls. A perspective of a variety of birds takes shape on the plateau: the largest living Zen-garden in the world. Besides the city dweller, nature proves to be a creative interpreter as well. The textures of the landscape form the next phase of evolution.”

THE VOID IN THE LANDSCAPE: FROM RESIDUAL SPACE TO POCHÉ?

In scenarios such as described above, the void assumes the capacity of a mediating support structure. It becomes a potential rather than a denial: “where there is nothing, everything else is possible.”\textsuperscript{103} While architecture and urbanism in Houston and the Randstad have concentrated their efforts on the solid (i.e. that which can be distinguished from the void: the Astrodome, the glass-clad office tower), a good void must be designed as well. If the void is seen as the result of a clearing, it will never assume a quality; rather, it will be rapidly and randomly filled in. The void must be designed to the point where it will be recognized as something important. This requires materials and textures for the creation of a ground plane, but also for objects which occupy this empty space. This appears a paradox, but objects can turn a void into a contested terrain instead of a wasteland prone to future speculation.

Public space in open cities like Houston is weak and vulnerable since it is little more than a residual space, the mold which remains amidst buildings and infrastructure. Can the void become a form of urban poché? The runaway strips carved out of the woods at Houston Intercontinental illustrate the importance of the ‘poché of the void’ to be created by carving rather than clearing. While the Astrodome parking lot is a clearing which simply makes way for yet another manifestation of the urban positive, the runway strips become the Texan equivalents of the ‘carved out’ rooms in the Parisian Hotel de Ville. The radio waves, signals, lights, and the concrete of the runways begin to render significance to the void as a field of opportunity which requires further

elaboration. In many cases, the public, undefined void has the potential to become a guiding principle to create order. This requires a scenario for the void.

Dutch landscape architecture has an obstinate tradition called the ‘Fine Dutch Tradition’, which manifested itself once again during the construction of the Flevopolders. This tradition of designing the void involves on the one hand the rendering transparent of the physical and functional structure of the land while on the other hand, it also reflects cultural and architectural projections. The flat Dutch landscape is thus seen as a stage where the changing relations between the rational scheme and cultural (urban) determinations are played out. The elements of this constructed landscape are: 1) a treatment of the topography of the land which facilitates a confrontation between the solid and the void; 2) a spatial redefinition of the landscape expressed in the choreography of space. This involves a juxtaposition of the objective (functional) landscape and the mythological (cultural) landscape, creating a pictorial expression in which a tension is built that exceeds the technocratic underground and ‘ensouls’ the landscape in a contemporary way. In the Netherlands, this often involves an expression of the continuous conquest and regulation of nature; 3) a pictorialized version of nature. This reveals the polder as a place where the boundaries between the Arcadian and the cultural landscape have been lifted: wells, cascades, and fountains exist next to canals, pumping stations, and dikes; and 4) programs geared to production, recreation, and culture. In the Dutch tradition, functional exploitation and urban occupation
of the void are part of an Arcadian delight in the landscape. Nature, culture, and production have been inextricably linked in the Dutch cultivation of the void\textsuperscript{104}.

These elements are subsequently \textit{mis-en-scène} by dismantling the form schemes used in the traditional formal garden. In an (unrealized) plan for the 1992 Floriade flower show, for instance, the axis of symmetry is for instance transformed into a set of three diverging axes, thus deconstructing the perspectival view and reassembling it into something different. I would like to refer to this re-assembly as the 'enscenation of the fragment'.

![Floriade](image)

\textbf{Figure 40. Unrealized plan for 1992 Floriade, Zoetermeer}

The landscape of the Haarlemmermeer and environs can be disassembled and subsequently re-assembled from elements with different dynamics, creating a 'synthetic Arcadia'. The spatial appearance is determined by means of a zoning into solids and voids as well as by certain formal operations. It is in essence a restructuring of time. After all, the notion of time is discontinuous in the Haarlemmermeer, where archaeological fragments coexist with the future of Schiphol Airport; the moment is thus its only reality. The

\textsuperscript{104} I have borrowed these elements from Clemens Steenbergen: "De Poezie van de Vlakte," in: Smienk, G. (ed.), \textit{Nederlandse Landschapsarchitectuur: Tussen Traditie en Experiment}, pp. 41-54.
moment is no longer a point on a historic line of development but is rather the product of a complex relationship between the past and the future. The polder can thus be organized as a mixture of living, working, and recreation which is framed into an integrated landscape-architectural connection.

The zoning into solids and voids is an important aspect of the open urban system. However, it does not suffice: both clamor and silence require organization in the urban landscape. Taking into account the formal elements of the Dutch landscape, the strip parceling of the peat polders, the open polder plane, the ‘Fine Dutch tradition’ can flourish once again as a spatial design where the potential of the void, the clarity, and the tranquillity of the polder are brought to a virtuose expression. After all, the poetics of the landscape in the open city are to be revealed by means of a careful balance between utility and pleasure, between order and chaos, between the city and the void.

NEW VECTOR TYPOLOGIES IN THE LANDSCAPE

One of the principal challenges for architects and planners of the open urban system will be to establish a reconciliation with the landscape of the modern world. While the current view of our landscape invokes the romantic notion that it is being destroyed by urbanization, it will become increasingly important to reconcile people with the idea that the contemporary landscape contains all the attractive elements as well. For example, it is often considered a shame when a new road is planned through farm land. Subconsciously, however, the same people enjoy driving through a sloping curve at 60 mph and to watch the landscape and the city unroll. Solutions to this inherent
contradiction - in essence the mediation of the machine and the garden - will be at the heart of typological inventions for the open urban system.

The airport is in fact a good starting point: it is typical in many respects of the way our contemporary word is structured. It is saturated with information and systems which are complex and unintelligible, yet it also appeals to our most basic instincts of continuously being ‘on the move’. Since airports are at the same time fantastic achievements and terrifying prospects, design ought to come to terms with the ambiguities that surround them.

The days in which an airport was just about getting from one place to another are behind us. In fact, it is not so much the experience of flying but the experience of not flying which has profoundly changed airports. They are turning into veritable cities with an astonishing amalgamation of public and private spaces, offices, factories, churches, housing, shops, recreational facilities, and public transportation. The interesting aspects about airports are that they provide for a variety of people; they are environments in which the pedestrian is still actively catered to, and perhaps most important, airports are environments which provide people with the opportunity to shape space to their own ends and which often have nothing to do with the purpose they were designed for.

Several trends are important concerning the development of the airport from a centrifugal into a centripetal type. While the intrinsic quality of airport design has improved significantly over the last decade, the disjunction between the airport and its environs remain. Nevertheless, opportunities abound to take advantage of the economic and landscape-architectural potentials for development which airports possess.
First, airport planning needs to devote greater thought to organizing aviation-related firms into 'villages'. Clustering can help maximize efficiency of airport operations and strengthen the linkages between passenger concourses (passenger planes are carrying an increasing amount of cargo) and aviation distribution, inventory, and business facilities.

Second, airports have the potential to become the twenty-first century equivalents of the eighteenth-century seaport or the nineteenth-century railroad station - shapers of national economies. This requires the development of the airport into a multi-modal transportation center where highways, rail lines, and possibly waterways, bike paths, even jogging trails converge. The Haarlemmermeer offers fantastic prospects in this regard.

Thirdly, airport development plans rarely include manufacturing facilities, except for the occasional aircraft production and maintenance industries. Full-fledged business parks with flex space are only beginning to emerge. Off-airport comprehensive planning also frequently overlooks manufacturing and business park possibilities. Too often, secondary airport-related uses for which there is an immediate demand (car rentals, parking lots, gas stations, drive-in restaurants, and lower-echelon hotels) are allowed to gobble up well-situated lots that should be reserved for more sensible future uses.

Fourth, airports such as Amsterdam Schiphol are turning into semi-civic spaces, attracting many people who never enter a plane. They are now home to regular supermarkets, golf ranges, casinos, convention centers, and many other activities which have nothing to do with the experience of flying.

Lastly, the aspect of airport tourism is completely overlooked: air travel and its facilities continue to exert a grip on the public imagination. The many
airplane spotters which populate the runway periphery every day, armed with lunch bags, beach chairs, binoculars and airband scanners, constitute a permanent tourist group which should be provided for.

The train station has seen significant changes as well: conceived in the nineteenth century by engineers who transformed it into architecture, it is now designed by architects who have rendered the station into a work of engineering. The late-twentieth century station has become a node of transportation lines, leading to interesting new types such as the berm station, the viaduct station, and the TGV/airport station.

In the context of the disappearing distinction between city and country the open urban system, certain stations could develop into an entirely new typology: the transferium. Transferia are places which are designed to link automobility and public transport in an effort to curb commuter traffic. Conceptually, one could leave one's car behind at a transferium to continue the journey by train, metro, or bus. Scenarios could be constructed concerning the further development of subsidiary centers around transferia, including living quarters, offices, and service amenities, which could help finance their construction.

The landscape of the Haarlemmermeer, with its broad polder expanse and vast dikes, lends itself as a good backdrop for large infrastructural interventions such as tranferia. Moreover, it could mark "an important step concerning the phenomenon of the Randstad, which, despite furious attempts to make compact cities and bundled deconcentrations, is winding into an intense ball of urban activities."  

Lastly, there are opportunities for the development of a 'kinetic architecture' along the freeway, which not only responds to visual aspects surrounding speed, but also siphons off the road. The freeway is thus seen as the 'elevator shaft of the horizontal skyscraper': the landscape.

Interestingly enough, the possibilities which exist for a kinetic architecture are rarely capitalized on, even in automobile Arcadias like Houston and Los Angeles. Much is to be learned in this respect from the way in which seemingly tasteless typologies like gas stations, car washes, and chain restaurants employ different means to gain the attention of the passer-by: color, lighting, the grand lines, as well as the sequence of elements are applied with a better sense for kinetics than the static office buildings along the freeways. At most locations visible directly from the freeway, corporations manage to do little more than affix great letters with the company name to the building.

Most buildings along freeways are designed from the perspective of the passing driver but not adapted to the arriving car. Even though they are invariably within easy reach by car, the lack of any recognizable threshold between public road and private lot as well as the complete inarticulation of parking lots are confounding. Without exception, the car must be parked in front of the building and the last few yards must be covered on foot. Much is to be learned from the 'drive-in' phenomenon in this respect, bringing roadways into contact with and even through parts of the buildings they serve. This has already been achieved by Kevin Roche John Dinkeloo Associates in several large-scale commercial complexes such as at the General Foods, Johnson-Vicks, Conoco, and the Union Carbide headquarters, and is all but routine at airport terminals.
The challenge for design here becomes the creation of a poetic procession from the road or freeway to activities which require very different spatial configurations and modes of movement. New 'city vestibules' could be created off the freeway to create the sense of having arrived somewhere. The ever-dull parking lot could take on a different character; it might be integrated into the building's architectonics (as in Willem Jan Neutelings' European Patent Office), become a park-like setting, or take on different functions outside office hours.

![Figure 41. Willem Jan Neutelings & Frank Roodbeen, winning competition entry for European Patents Office, Leidschendam, 1989](image)

In the context of 'place' and 'placelessness', buildings along major traffic arterials might be differentiated more in terms of use, taking into account different user populations as well as different periods and lengths of use. Furthermore, buildings could serve as connectors between different landscapes; this would be particularly useful in the case of freeways that bisect landscapes into two disconnected halves. Lastly, the building could become an compressed extension of the surrounding landscape and/or refer back to it. This
could provide for a multi-dimensional experience as one would be allowed to hover between different sensations that the surrounding landscape has to offer.

In conclusion, an aesthetic could be adopted along the freeway that would celebrate the dynamism of modern-day movement, using ramps, roadways, colliding volumes or intersecting buildings. Similar to Le Corbusier’s fascination with ships and grain elevators which translated into his architectural landscapes, the juxtaposition of such an aesthetic with the surrounding landscape seems quite promising in generating a modern-day equivalent of the ‘machine in the garden’ ideal in which Homo Viator and the landscape can poetically sustain each other.
VI. POETIC INTERVENTIONS IN THE OPEN CITY

The design thesis takes the Randstad as an open urban system as a starting point; its foundation consists of two major premises for the generation of a future scenario for the Haarlemmermeer Polder:

1) *new sense of cosmopolitanism*. The architecture of social remedy as well as mass culture and the media have instigated a collective journey of discovery among the urban dwellers of the Randstad. The urban dweller spends a great deal of time traveling and has come to enjoy ever-changing configurations linked together by motion. Moreover, the urban dweller has assumed the capability to colonize any space: he/she has no difficulty setting up base camp 'in the middle of nowhere' to begin exploring.

2) *Dutch landscape as a work of art*. The subsequent investigation concentrates on the making of the Haarlemmermeer Polder, which over time has been a peat excavation area, a life-threatening body of sea, an important trade route over water, a malaria-infested swamp, farmland, and most recently, a place for colonization from surrounding cities. The interaction between man and water not only shaped this place literally, but also at a phenomenological level. The agricultural strip landscape is seen as a metaphor for the open metropolis where speed and time have replaced the traditional understanding of space. The grid thus becomes a rhythm or pulse that links and juxtaposes a great variety of cultures already present in the Randstad.

With these parameters established, the subsequent step is formed by a further elaboration on the concept of the density of the void in order to complete
the framework for a future scenario for the Haarlemmermeer. My approach comprises a stepped densification of the polder up to Manhattan levels; however, without all the implied building(s). Furthermore, the gradual departure of agriculture to the Flevopolders as well as the Northern provinces of the Netherlands is employed as a potential in the form of wilderness: i.e. reeds that will appear on this highly fertile land. The wilderness forms the base layer which is to absorb further layers of ‘densification’ such as landscape and infrastructure. This densification occurs by employing a mix of local as well as national government decisions, market forces, and of course the architect’s insight into urban issues and his ability to integrate the urban landscape of the Haarlemmermeer into the larger framework of the Randstad.

THE LANDSCAPE DESIGN

The landscape design is comprised of 4 facets.

First, three separate zones of a different general character are distinguished: the airport zone in the extreme North that will change character due to the addition of a fifth runway; the intra-urban zone between the towns of Hoofddorp and Nieuw-Vennep which will see the most change, and the mostly agricultural zone to the South which remains virtually unchanged.

The second stage includes the generation of so-called ‘void scenarios’: seven rules that will differentiate the polder void according to my urban analysis and the context of the Randstad as an open urban system. They are set up to elicit interpretation and activate a creative dynamo of landscape-architectural development. The rules include: a) linear forest to act as an urban absorbing
element; b) *foundation restraint* and c) *ban on building above 1.50m* to prevent the towns of Hoofddorp and Nieuw-Vennep from clustering; d) *minimum plot size and infrastructural amenities* for the projected emergence of so-called 'superfarms' and large industrial settlements along the railroad and important secondary roads; e) *ban on asphalt at grade level* to avoid the all-too-familiar office buildings with surface parking lots arranged along the freeway; f) *obligation to reconvert a percentage of land to water* to heighten one's sense that the polder was at one point literally lifted out of the water and secondly, to expand the surrounding system of recreational lakes which are all the result of complex hydrocultural management; g) *obligation to plant a percentage of ecological texture* adjacent to the new fifth runway, which will seriously threaten the continuity of the farm grid in the Northern part of the Haarlemmermeer, and h) *DBA zone* determined by the national government which restricts the number of residences in this area to 10,000 due to noise regulations.

The third facet is the transformation of the farm grid (i.e. the pattern of ditches) into a more accessible system using the dynamic qualities of the grid. Circulation patterns would be left for the market principle to develop. Each strip would develop its own optimal pattern of roads, but would at the same time influence and be influenced by its neighbors, creating increased accessibility as well as variety. The existing farm/dirt road system cannot be changed, only expanded. The six suggested models are divided into two categories, autonomous and incorporated circulation, and can be devised in any combination. They include, respectively: semi-open circulation, corridors, and a street greed; irregular divisions, defined divisions, and bands.
Lastly, the architect's task is to create a set of textures in the void which can be colonized by the urban dweller: point grids, bleeding, weaving/grid restoration, shared infrastructure, a ground plane, materials and textures, buildings as framing devices, and landscape as framing device. These will help transform the void from abandoned into contested space.

**HOMO VIATOR**

With the landscape framework in place, the next focus of attention is the ways by which it is traversed. Five different modes can be distinguished: by airplane, by car, by train/TGV, by bicycle, and by foot. Per mode, the analysis describes three facets of traveling through the Haarlemmermeer: the conceptual path, one's relationship to the grid while in motion, and the visual experience.

**ARCHITECTURE**

The poetic of the Haarlemmermeer consists of on the one hand its majestic openness and on the other hand the experience of penetrating its dense void. In this context, architecture derives meaning from its *heuristic* capacity - it no longer shapes the city per se, but it exists as an 'intelligent framing device'. Visually as well as physically, it encourages to explore the urban landscape while it allows one to hover between different sensations: one may be riding a bike, but may sometimes feel like an airplane passenger. Architecture in this sense assumes the ability to *connect* in a medieval yet
modern sense. This enabling refers back to the poetic of the polder. A new, more fleeting sense of collectivity based on strategic position emerges.

The strategic position of my choice has been the threshold between the freeway and the surrounding landscape. Freeway and landscape are regarded here as extensions of each other - rather than autonomous entities - with architecture as the facilitator. Also, an additional dose of tension between permanence and impermanence is introduced in the sense that architecture is viewed not per se as a resting stop; it can also complement the surrounding infrastructure.

The first example is a so-called ‘freeway center’ which siphons off the major highway running through the polder. It attempts to establish a connection with the landscape at various levels. Physically, the connection occurs by means of ramps that allow cars, bikes, and pedestrian to turn from the freeway feeder road directly into the landscape strips; visually, an elevated wrap-around parking structure (a product of the ‘no asphalt on grade’ rule) and the drama of a suspended pool looking out over the watery landscape attempt to establish the connection. The program is geared to both a semi-permanent population (office workers) and passers-by (tourists), and is striated vertically for this reason: the longer the stay, the higher up in the building.

The second example involves the conversion of an existing highway bridge restaurant into a ‘metropolitan connector beam’: a multimodal traffic intersection for cars, bicycles, golf carts, and pedestrians. The mechanics of its circulation system are altered into a sequence for an automated car wash and the structure is expanded to accommodate more traffic flows as well as a greater variety of program. What was once a benign bridge restaurant is
transformed into a means to get from one hole to the next on a golf course or a link between a ship wharf and an ATM machine. The beam thus becomes a connector of a variety of landscapes.

In the end, this design thesis is not a veritable 'design' in the sense that it has produced a finalized, determined product. Rather, it takes joy in the creation of framework that is able to absorb a variety of potentials. Following the character of the poetic of the Haarlemmermeer Polder, it aims to contribute to the discussion of possible future urban milieus for the Randstad, suggesting a healthy mixture of Dutchness and other-directedness.
Figure 42. New Cosmopolitanism
Figure 43. Dutch landscape as work of art
Figure 45. Three zones
Figure 46. Void scenarios
Figure 47. Transformation of farm grid
Figure 48. Void as contested space
Figure 49. Site model of Haarlemmermeer Polder
Figure 50. Homo Viator - conceptual path / relationship to grid
Figure 51. Homo Viator - visual experience
Figure 52. Homo Viator - visual experience
Figure 53. Freeway center
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