

INFORMATION TO USERS

This manuscript has been reproduced from the microfilm master. UMI films the text directly from the original or copy submitted. Thus, some thesis and dissertation copies are in typewriter face, while others may be from any type of computer printer.

The quality of this reproduction is dependent upon the quality of the copy submitted. Broken or indistinct print, colored or poor quality illustrations and photographs, print bleedthrough, substandard margins, and improper alignment can adversely affect reproduction.

In the unlikely event that the author did not send UMI a complete manuscript and there are missing pages, these will be noted. Also, if unauthorized copyright material had to be removed, a note will indicate the deletion.

Oversize materials (e.g., maps, drawings, charts) are reproduced by sectioning the original, beginning at the upper left-hand corner and continuing from left to right in equal sections with small overlaps. Each original is also photographed in one exposure and is included in reduced form at the back of the book.

Photographs included in the original manuscript have been reproduced xerographically in this copy. Higher quality 6" x 9" black and white photographic prints are available for any photographs or illustrations appearing in this copy for an additional charge. Contact UMI directly to order.

UMI

A Bell & Howell Information Company
300 North Zeeb Road, Ann Arbor MI 48106-1346 USA
313/761-4700 800/521-0600

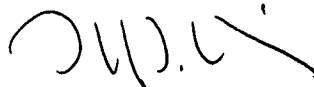
RICE UNIVERSITY

The Interlocutor and the Metropolis

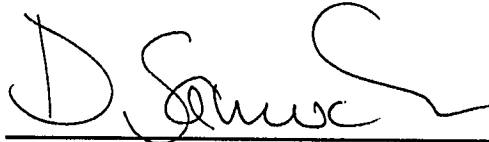
by
Peter Rockrise

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

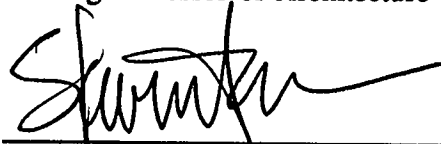
Approved, Thesis Committee



**John Casbarian FAIA
Professor of Architecture**



**Danny Samuels FAIA
Visiting Professor of Architecture**



**Sanford Kwinter
Assistant Professor of Architecture**

Houston, Texas

May, 1996

UMI Number: 1379485

**UMI Microform 1379485
Copyright 1996, by UMI Company. All rights reserved.**

**This microform edition is protected against unauthorized
copying under Title 17, United States Code.**

UMI
300 North Zeeb Road
Ann Arbor, MI 48103

ABSTRACT

The Interlocutor and the Metropolis

by

Peter Rockrise

Architecture can be defined as the manifold of space, movements, and events. This project, located in the City, utilizes movement as the primary ordering device for the production of space and the encounter of events. Movement, both determined and aleatory, can be understood to have spatial consequences which locate and materialize the architectural project. The repertoire and methodology of this thesis utilizes analytic portraits of observed movements within an urban context to determine the location, extent, density, and program of the architectural project. This thesis posits that form and space which is produced in this manner will be primarily conditioned by the local contexts and has the potential to proliferate relationships with those contexts.

Table of Contents

Introduction	1
Overview	3
Repertoire	6
Methodology	9
A Project	11
Conclusion	21
Bibliography	22

Introduction

*"Where urban phenomena are concerned, everything is hypothetical; the city is not verifiable. Every observation, every verdict can turned around easily by a change of perspective."*¹

The urban condition may be understood as the collective basin of many singular instances of perception, action, and articulation which are manifested by its inhabitants. These singular instances may exist with relative autonomy in the urban milieu, or they may combine to form assemblages of interrelated perceptions, actions, and artifice. The urban inhabitants potential for perception, action is conditioned by the degree of freedom which is available in any given situation. How may two or more inhabitants of the City, each with their subjective position and perspective into the City, collectively utilize the degree of freedom which is available? For the project of architecture in the City, this thesis proposes an abstraction, or repertoire, which locates and assesses degrees of freedom, strategizes actions, and models articulations. This particular repertoire (there are many available repertoires²) is utilized for this thesis for two reasons. First, its language is familiar to the architect; ie. it is a collection of formal entities with "physical" properties which have relations in space. Second, this formal repertoire is contextually conditioned and allows the modeling of sustained contextual inquiries concurrently with the modeling of site interventions. This sustain of inquiry and design

¹ Josue V. Harari and David F. Bell "Introduction: Journal a Plusieurs Voies , Hermes: Literature Science and Philosophy" Johns Hopkins University Press 1992

²The repertoire utilized in this thesis is primarily derived from Martin H. Krieger "Doing Physics: How Physicists Take Hold of the World" Indiana University Press 1992

is possible, in part, because the methodology used to construct this repertoire is fundamentally iterative (ie. it is a repetitive, horizontally structured process), as opposed to reductive (a top down process) or emergent (a bottom up process).³ In other words, at the outset of this thesis, and well into the determination of its location, program, extent, and density of its architecture, the simultaneous development of discreet site strategies was permitted without violating hierarchical boundaries and rules.

Movement is selected as the primary ordering device for this thesis for a number of reasons. Movement (displacement) is how we perceive space and difference. Movement (exchange) suggests the possibility of relationships and systems. Movement (dislocation) breaks symmetry and facilitates assemblage. Movement (circuit) is how we participate in the habits of the Metropolis. Movement (surge) triggers our urban strategies. Movement (speed) characterizes advantage in global culture. Movements in the metropolis create a milieu of simultaneous possibilities. This can be a strangely enduring and promiscuous context; while the City may be extremely dense with movements, collisions, failures, and destruction are the exceptional consequence. More in the norm are the instances of deflection, inflection, entrainment and coupling which reveal, constructively, the presence of movements in the City.

³An introduction to architecture and complexity, which refers to the applications of an iterative process, see Greg Lynn "Blobs", "Journal of Philosophy and the Visual Arts No. 6", Academy Editions

Overview

*" The essential contradiction of society is the confrontation between abstract space, or the externalization of economic and political practices ... and the social space, or the space of use values produced by the complex interaction of all classes in the pursuit of everyday life."*⁴

Comprised of a vast Metropolitan area of almost 500 square miles, Houston is multi centered, horizontally organized urban field. At the City's geographic and historic center, an area circumscribed by freeways is designated as Houston's Midtown.

This area is visibly differentiated from all of its adjacent perimeter areas by the divisive gestures of the freeways and by its difference as distinctive urban field which possesses neither physical densities or homogenous fabric. The areas recent history as a location of accumulated capital and the subsequent devaluation of that capital⁵ has produced a fragmented space which is inhabited, generally, by either the most enduring institutions or the most transient individuals. As evidence of this dislocation of capital and population, Midtown remains an expansive center city void, stretched thinly between the more populated areas of Houston. However, the voids of Midtown serve as essential fields of movement for the City at large. Daily surges of automobiles, transit vehicles,

⁴Henri Lefebvre "Space: Social Product and Use Value", "Critical Sociology: European Perspective", 1979 New York, Irvington Publishers

⁵the 'devaluation of capital' is a term used to describe, in part, the devaluing of the investment made in urban space as the circuit of capital is rerouted to other spaces. See M. Gottdiener "The Social Production of Urban Space", University of Texas Press 1985. For a specific history of Houston's Midtown transitions, see F. Charles Le Blanc "Application for Tax Increment Finance District, Midtown, Houston" August 1994 Midtown Redevelopment Association

commercial transport and pedestrians move across its extent and along its perimeter. This habitual movement produces repeated instances of proximity and overlap, yet relatively few instances of coupling or exchange in the area of Midtown. For those whose passages remain susceptible to the attractors which persist in Midtown, their destinations therein are perceived as monadic targets; ie a destination which is localized but is without a relevant context. For most en route, this area is perceived as an interval between significant events outside of its periphery, and therefore it exists as a shadow in the citizens image of Houston.⁶ This real and perceived void, in combination with the mute utility of its location within the greater metropolis, have produced a condition of symmetry (defined as lack of preference and order) in the economic landscape of Houston. Midtown Houston is unable to reproduce or renew its urban spaces because capital and populace have no certain entry into Midtown and few favorable contexts therein. The local space which is produced is a smooth and continuous sub-urban landscape which permits, without exception, the movements of the Metropolis to wander, surge and oscillate throughout its extent.

This overview of the Houston Midtown frames a complex urban milieu in the simplified terms of the forms and movements which have been observed on location and in a series of aerial photographs. Movements have been observed in two types of spaces in the Houston Midtown; in the physical space of buildings, open space, and everyday life, and

⁶one of the barriers to the redevelopment of Houstons Midtown is the inability of the citizenry to "image" the place in their cognitive maps. See Romedi Passini "Wayfinding in Architecture" Van Nostrand Reinhold New York

in the abstract space of capital and information. This project is modeled in both movement spaces; as architecture in the physical space, and as program in the abstract space. Both movement spaces are modeled with the same repertoire of entities (fields, walls, and particles). These observed movements, the utilization of an abstract repertoire, and the modeling of architectural and programmatic interventions, comprise the scope of this thesis.

Repertoire

" What distinguishes the map from the tracing is that it is entirely oriented toward an experimentation with the real. "⁷

The visual survey of the Houston Midtown reveals an expansive landscape in low relief, sparsely dotted with freestanding buildings or discreet clusters of structures. Within this landscape the low relief of ground surface is differentiated by bands of streets and areas of abandoned slabs and wild grasses. Trees are infrequently located, occasionally gathered into small clusters. Freeways circumscribe a perimeter as elongated shadows and walls, terminating in ramps which delaminate the ground plane. Observations of daily life here indicate that in particular areas there are extreme regular surges in vehicular traffic volumes and also periods of intermittent pedestrian activity. These observed conditions suggested a repertoire comprised of fields, walls, and particles.

Fields

A field is continuous and reasonably smooth space. It is connected to one or more sources (these are particles) which condition its properties as a field. Conversely, the field conditions the proximity and accessibility of a particle. Thus a field can be said to objectify particles. Fields represent the unshielded or leftover degrees of freedom which "leak" from a particle and become the provisioning properties of a space. A field

⁷Gilles Deleuze and Felix Guattari "A Thousand Plateaus: Capitalism and Schizophrenia" University of Minnesota Press 1987

does not require shielding (a function of walls) in order to sustain its properties, and it may often act promiscuously to overlap or invade other fields or particles. When fields overlap (ie. at a certain point there is more than one particle which is conditioning the space), this point conserves the intrinsic properties of each field within the composite field. Fields provide for local interactions and conveyance, and also can become an agent of walls, taking over their functions. Every point in the field has a value (contingent upon the value of nearby points) and the experience of every path in the field is a varied depending upon the sequence of points.

Walls

A wall creates two sides in space and mediates a relationship between the two sides. A wall may function as a boundary (shielding), an interface (intermingling), or a skin (binding). A wall is said to shield many degrees of freedom so that those degrees of freedom cannot express themselves. Walls define what is distantly separate and what is near. If there is enclosure, the insides have limited influence on outsides, and the insides are finite in size. Outsides have limited influence or knowledge of the insides, and may extend to infinity. Two points inhabit in the same "inside" if the path between them does not collide with the wall. A wall must be resilient and withstand a normative range of insults and remain relatively unchanged. However, a wall is rarely without some transient permeability and indeterminate fluctuation of its functions.

Particles

A particle must be localized, having a position in space and a characteristic size. It must be distinct and separate from other particles, with the possibility of space in between. Like a wall, a particle must be able to withstand a range of insult and remain unchanged. It is known and objectified by its invariant set of properties, although the same particle may exhibit seemingly different properties from various perspectives. A particle may interact with other particles forming composites and assemblages which do not violate the particles integrity. Particles are relatively stable and additive. Walls condition the relation of a particle to its outsides, and may make a complex particle appear simple.

Methodology

Initially, a frame of reference is placed upon the landscape with the intention to locate and qualify relevant contexts within that frame. Contexts are the organizing views which define the limits of expected possibilities. When information is first distinguished from a background of noise, it is the context which locates and clarifies the simple identity of the information. Multiple contexts can have relevance to a single location in the frame of reference. Contexts adjust as perspective changes. An emergent context indicates preference and a history of dynamical relations between a specific location and its environment.

The process of "determining the site" first posits the location of walls, particles, and fields present within the existing contexts, and localizes potential sites for interventions. The first interventions (new particles and walls) are made with the intention of developing site specific strategies. In this process areas of stability are located, and multiple relationships and proximities are superimposed. Schema of density, movement, perception, utility etc. are identified and superimposed. The degree of freedom at the site is increasingly conditioned as the interventions accumulate at the site.

The methodology of this thesis concludes with what is defined as "expanding the dimensionality" within the model. Expanding the dimensionality means to adjust the extent or intensity of the properties (degrees of freedom) of the interventions. The

intention is to frustrate or entice connectivity between fields and particles. The potential for connectivity is increased as nearness (close proximities) in the model increase. Nearness is understood not only in terms of adjacencies but also in terms of attraction, similitude and accessibility. Expanding the dimensionality begins carefully at discreet locations; initially these are inquiries, or probes. A probe is carefully designed for specific functions prior to its insertion into the model and is preprogrammed relative to known contexts. A well designed probe will, in of itself, only create marginal lasting effects in the model. For example, a probe may slightly adjust an existing field or wall such that it is encouraged to fluctuate or reveal new possibilities. Or a probe may make visible complexities within a particle was which previously hidden by walls. A probe may simply proliferate other probes. Probes have a simple function which seeks only to register the potential for connectivity between other entities; the task of expanding the dimensionality of a model belongs to the fields, walls, and particles which are already present. Actual connectivity is verified by the presence of composites and assemblages in the model.⁸

⁸one essential characteristic of a composite which makes it similar to an assemblage is that each part of such a multiplicity endures as a singularity, regardless of the complexity or history of the multiplicity. See Greg Lynn "Blobs", "Journal of Philosophy and the Visual Arts No. 6" Academy Editions

A Project

The south west corner of Midtown Houston is defined at the junction of the Interstate 69 and its connecting spur to the downtown. The spur parallels Main Street, two blocks to the East, and crosses over two major east/west arterial, Richmond Avenue and Alabama Street. Ramps enter the street grid at these crossings, and also near where Main Street and Highway 69 cross. Like most of Midtown, this corner of the district is more void than structure. Large institutions and a few small enterprises now reside in relatively close proximity here, loosely organized in a wide north south band whose longitudinal axis corresponds with Main Street. Approximately half of the vacant area serves as parking and circulation. Some remnants of small commercial remain, as stand alone particles or brief linear frontages.

The mapping of movements observed at this location is recorded in temporal and geographic models. These initial of the models identify the contexts which subsequently locate and condition three sites for architectural intervention. These notations in space and time record the "habits" of movements within the temporal and geographic landscapes. The graphic conventions of the notations (point, line, and plane) correspond to the repertoire of particle, wall, field, and may be understood in terms of the properties and conditions of the repertoire.

Contexts

The model reveals relevant contexts, which include;

- the context of the institutions; large particles which function as attractors to orient, deflect, and relay movements. The institutions within the frame of reference include a large church and its related campus, two large retailers, a large motel, an apartment complex, a community college campus, and a variety of fast food and quick-stop service outlets. Because the location and operations of the fast food and quick-stop service outlets are dependent upon the presence of the larger institutional attractors, they are defined as oscillators. Due to the church's enduring presence in Midtown and the adaptability of its community out reach programs, the church is selected as the attractor around which all initial strategies are to be biased.

- the context of the moving vehicles; extreme states of speed, linear determination, mobile autonomy, and privileged and remote perspectives are attributes of vehicular movement which create this context. As extensions of the freeways dimensions into the ground plane of this area of Midtown, the daily habits of regulated and unregulated vehicular flows constitute walled corridors inhabited by transient particles. All three sites,

are significantly localized and conditioned by the presence of freeway ramps at Richmond Ave. and Alabama St.

- the context of stationary and aggregate vehicles; these are the fields of parking which accumulate and disperse relative to the programmatic intervals and proximities of the local particles. The church daily propagates small fields of parking through out the open space of its loosely organized campus, and on Sundays induces one massive surge which spills over into the adjacent streets. These fluctuating fields transform from very smooth and oceanic space into to striated and granular space. The sites at Richmond Ave and Alabama are significantly conditioned by these fields. The site determining strategies utilize the inevitable presence of large parking areas to attract and superimpose the fields of nearby particles.

- the context of pedestrians; a pedestrian reveals the fractures, bumps, and subtle gradients of other contexts. The models notation registers the convergence which occur where a pedestrian must navigate around an obstruction in order to progress towards a destination. At this location in Midtown the pedestrian presence can be characterized as a wide drift of movements which extend from the north west to the south east within the of the frame of reference. The absence of buildings and fences permit

this diagonal pedestrian movement. All three sites acknowledge this pedestrian context to different degrees, and present intentions to entrain, braid and couple with it.

- the context of shadow and darkness; in the daytime, the areas of shade under the freeways and the clusters of trees shift across the ground plane. At night, a continuum of darkness pervades the entire frame of reference, effectively isolating each illumination source in an envelope of darkness. These instances of shadow and darkness present a field of uncertainty. This field is a potential threat to all perceptions which seek certainty and security. The perceived element of uncertainty is capitalised upon by a significant transient population who strive to cope with the real threats which often appear from the darkness. The city, however, deflects or barricades itself against these shadow fields, and allows a certain degree of freedom to proliferate within them. The site at Alabama St. employs determined strategies to gentrify these fields of shade. The site at Richmond Ave. utilizes shutters and probes to appropriate and manage these fields. The third site proposes to inhabit and adjust its dimensionality to the opportunities inherent within this context of shade.

From the superimposition of these contextual portraits, the frame of reference is characterized as a milieu of movements operating within a continuous field. While the

field contains widely spaced particles and oscillators, these are largely hidden behind resilient walls which rarely fluctuate and have few leaks. As a consequence, the fields are weakly conditioned, have little gradient, and are susceptible to even mild insults. The contexts are, in general, very unstable. The subsequent iterations of the geographic and temporal models develop the site strategies which increase stability, introduce gradients, and reveal the interior complexities of particles.

Determining the Temporal Model

The contextual model identifies the institutions as attractor particles with related fields. For the temporal model, a graph showing the density of occupancies of these fields over a seven day period is developed. The graph uses visual estimates of the quantities of persons/vehicles attracted to the frame of reference by the programs of the church, two major retailers, the apartment complex, the community college campus, commuter traffic, and the transient street population. The fields shown on the graph represent that the sites are occupied each weekday beginning with an abrupt surge of commuter traffic, and vacated at the end of each weekday when a second surge of commuter traffic occurs. In comparison, the weekend days has only one surge which corresponds to the church Sunday service. Also, the abrupt vertical edges of each weekday field contrast with the inclined gradient of the edges of the weekend days. The fields of the graph also articulate a regular void interval at night, occupied by only a shallow, flat band which corresponds to the overnight presence of residents (the apartment dwellers and street population).

The temporal model is essentially a composite of fields which may be occupied by particles corresponding to programmatic interventions. The final iteration of this model determines the following sites;

- sites which occupy the night time interval; during the day, these sites become entrained in the fields of existing programs. This extensive residential intervention includes the dwellings of retired persons, part time workers and home based offices, and includes sites for day care and transitional housing programs.

- at the edges of the weekday commuter surges; here sites are located which momentarily perturb the surge of traffic flows. These include drive-through and quick-stop services.

- in the early weekday evenings, and also into the late hours of Thursday, Friday and Saturday nights; these sites are which couple and braid against the larger fields already present. These sites include cafes, a nightclub, and a health club.

- within the existing field of the church; here existing sites are expanded (library, school, administration, and parish) or added (recording studio, transitional storage lockers, and commercial development).

At the conclusion of this iteration of the temporal model, its composite form exhibits a continuum of large fields which are entrained with regular intervals less extensive fields. In and about the proximities of this composite form, the sites of smaller fields proliferate and suggest the possibility of instances of congestion.

Determining the Geographic Sites

In the contextual portraits, large institutions are identified as particle attractors. In addition, fast food and small retail enterprises which oscillate in response to the flows generated by these attractors are defined. The movements propagated by these attractors and oscillators describe localized field of influence. These existing fields are the basis for the first determining interventions. The initial determining act places walls (unconditioned by particles) into the frame where the existing fields are extremely unstable due to the absence of nearby particles. This determination provides the schematic scaffolding into which new particles will intervene in subsequent iterations. Two localizations which result in determined sites are identified as the first walls are introduced;

-the Alabama St. site; localized as a centripetal relation of the existing apartment complex, a community outreach facility of the church, the corner of Main and Alabama Streets, and the planned improvements to the Alabama St. freeway ramps.

-the Richmond Ave. site; localized as a linear relation stretched between Main St. and the freeway overpass.

As a result of this intervention of unconditioned walls, the large fields are divided into smaller ones which initiates new proximities and possibilities for more complex conditioning of each field. The next iteration, locating new particles and fields in the model, is undertaken at a greater level of resolution, and requires a reduced frame of reference.

Utilizing the bias identified in the contextual portraits (ie. the church attractor) the first articulation in this new frame inscribes the distinct field which is conditioned by the church. This longitudinal field (derived from an understanding of the church's current landholding, long range scenarios for operations, and speculation regarding adjacent real estate holdings) roughly corresponds to the freeway spur, Main St., Richmond Ave. and Alabama St. At this iteration, the introduction of the new particles identified in the temporal model propagates new fields;

-at the Alabama St. site; stable particles are centripetally arranged along the walls from the previous intervention. Specific locations of these particles are at the corner of Main and Alabama streets, at the curvature of the long wall adjacent to the freeway ramps, and at the existing building which accommodated the churches community outreach

programs. These particles condition three fields, which are superimposed upon the extended field of the existing apartment complex.

-at the Richmond Ave. site; stable particles are composites in a linear arrangement which corresponds to the extent of the of the wall from the previous intervention. The fields from this series particles extended away from the wall in all directions to condition the existing campus of the church and the multiple contexts of the freeway overpass, the Richmond Ave. strip, and the Main St. and Richmond Ave. intersection.

-the third site, located in an isolated vacant lot south of Richmond Ave., is first identified at this resolution. Here the existing context and program (a self help mission accommodated by large trailers) is already localized and defined. As such, no walls intervene at this site; a single transient particle, program undetermined, is nested into the existing field.

Extending the Dimensionality

The Alabama St. site is selected for the concluding iterations of this thesis. The frame of reference is again adjusted so that the subsequent interventions can be architecturally scaled (1"=16'-0"). Specific programs from the temporal model (residential dwellings, health club, cafe, video rental, day care, community service center, and transitional dormitories and storage) are dimensioned and inserted into the stable particles from the

previous iteration. The dimensions of these particle are extended and scaled to accommodate new complexities. Probes reveal multiple relevant contexts. Significant potential for connectivity is identified at the frontages along Alabama and Main streets, and also continuously along the central facing elevations of these walls. The three and four story height of these walls determine a boundary at the edge of the freeway spur, and also propose an urban scale which is compatible with the existing church and apartment complex. The central facing walls are inflected and perforated along their lengths and support most of the circulation for the buildings. These walls serve as the scaffolding from which three primary particles (library/lobby, mini mart/community service center/swimming pool terrace, and health club/day care center) extend their fields in the form of lobbies, decks, terraces, ramps and breezeways. The central area where these fields converge is also a highly conditioned public realm where the existing fields of the church, the apartment building, and the vehicular traffic eddy from Main St. converge. Multiple circulation routes under and through out the buildings allow movement circuits to be completed at many levels of the structure.

Conclusion

The path we take toward any context conditions our perception of that eventuality. The same destination, by a different path, will reveal different information. Things which reside in our grasp ultimately remain hidden if we cannot contextualize outside of our own histories and instances. This is not to say that we should empirically experience all paths or desire to repeatedly transgress from our haptic center. What is useful is a repertoire which reveals other biases as it reveals our own. For the project of architecture in the Metropolis, this repertoire should facilitate our position as interlocutors who continually renew our invitations to the environment. The possibility of a multiplicity behaving like a singularity suits the project; integrities are no longer debated but are permitted to assemble and reassemble. If our architectural catalogues of parts exist because our practices are conditioned by the spaces which commodify the project, the repertoire should operate with those spaces as well. Our project is not fluid but granular, striated, and asymmetric. The project may not emerge as much as iterate. We do not inform the composite as much as we probe, reveal, and hide that which already exists.

"On each level everything quivers, therefore the architect has to be neither manipulator or victim, but simply someone who has just enough imagination to find and stretch endlessly the gulfs in between those fields of force. Which in another definition are not tensile holes, but cohesive points of contact"⁹

⁹Ben Van Berkle and Caroline Bos "Mobile Forces", Ernest und Sohn, Verlag fur Architektur 1994

Bibliography

Baird, J. and A. Lutkus ed. 1982. "Mind Child Architecture". Hanover: University Press of New England.

Debord, G. 1994. "The Society of the Spectacle". New York: Zone Books.

Deleuze, G. and F. Guattari. 1987. "A Thousand Plateaus: Capitalism and Schizophrenia". Minneapolis: University of Minnesota Press.

Gottdiener, M. 1985. "The Social Production of Urban Space". Austin, Tx.: University of Texas Press.

Krieger, M. 1992. "Doing Physics: How Physicists Take Hold Of the World". Indianapolis: Indiana University Press.

Krieger, M. 1989. "Marginality and Discontinuity". New York: Russell Sage Foundation.

Kwinter, S. 1992. "Landscapes of Change: Boccioni's Stati d'animo as a General Theory of Models". "Assemblage 19". Cambridge: Massachusetts Institute of Technology Press.

Lefebvre, H. 1991. "The Production of Space". Cambridge USA: Blackwell Publishers.

Lerup, L. 1994. "Stim & Dross: Rethinking the Metropolis". "Assemblage 25". Cambridge: Massachusetts Institute of Technology Press.

Lucan, J. 1991. "Rem Koolhaas: OMA". New York: Princeton Architectural Press.

Lynch, K. 1991. "Good City Form". Cambridge: Massachusetts Institute of Technology Press.

Lynn, G. 1995. "Blobs". "Complexity: Art Architecture Philosophy". London: Journal of Philosophy and the Visual Arts, Academy Editions.

Passini, R. 1992 "Wayfinding in Architecture". New York: Van Nostrand Reinhold.

Samuels, D. ed. 1995. "Book Notes: Recent Readings in Structure, Form Order, and Complexity". Houston Tx.: Danny Marc Samuels.

Serres, M. 1982. "Hermes: Literature, Science, Philosophy". Baltimore: The Johns Hopkins University Press.

Taki, K. 1994. "Conversations With Peter Wilson". "El Croquis 67". Madrid, Spain: Christina Poveda and Yolanda Muela.

Tschumi, B. 1994. "Architecture and Disjunction". Cambridge: Massachusetts Institute of Technology Press.

Tschumi, B. 1994. "Event Cities: Praxis". Cambridge: Massachusetts Institute of Technology Press.

Van Berkel, B. 1994. "Mobile Forces" Wissenschaften, GmbH: Ernst und Sohn, Verlag für Architektur.

Zaera, A. 1995. "Conversations with Enric Miralles". "El Croquis 72". Madrid, Spain: Christina Poveda and Yolanda Muela.