Arrest and Parole
[theories and practices of the unfixed architectural form]

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Proposal for an investigation.

Peter Reyner Banham Fellowship at the University at Buffalo, Faculty of Architecture.

Premise:

Investigations on structural and cultural aspects in the interaction of form and force as a
Critique of Pure Form; Searching the ground of play: Transience and re-figuration[1]
as a possible exit from the world of iconic formalisms; Locating generative aspects of movement and instability in architecture

Setup:

"we must concede that the universe we see is a ceaseless creation, evolution, and destruction of forms"
René Thom.

June 15, 1977, Tuesday, Las Vegas - The city has become the ultimate repository for architectural categories[2]. History as repository, reference of inquiry was exhausted, abandoned.

March 14, 2007, Wednesday, Las Vegas - With a deafening rumble and a cloud of debris that has become all but customary in this city of short-lived icons, the Stardust Hotel-Casino was demolished early Tuesday morning. The demolition ended a yearlong farewell to a 48-year-old resort that was, in its heyday, considered the ultimate in luxury… (as reported in the NYTimes)

Structural stability is the capacity of a formal entity to take and retain a certain form under the pressure of exterior conditions. With an undoubted idealism, production in architecture now more than ever is invested in the enunciation of unique uni-forms and static formalisms. Where are spaces of transience to be evidenced? Under which circumstances is a given form recognized as such? When does it become dissident?...[3]
The (in-) formal condition of the city harbors a destabilizing relation to the fixed and comes to being as the potential test site to refute accepted constellations of form and meaning.

How can instability as a given condition destabilize the paradigmatic concept of formal space and generate new in-formal, post-formal, trans-formal architectures? With the aim of a forced dissidence of form from being an end in architecture, a renewed architectonic vicissitude needs to be drawn.

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[1] "One of the central problems studied by mankind is the problem of the succession of form. Whatever is the ultimate nature of reality (assuming that this expression has a meaning), it is indisputable that our universe is not chaos. We perceive things to which we give names. These beings are forms or structures endowed with a degree of stability; they take up some part of space and last for some period of time. Moreover, although a given object can exist in many different guises, we never fail to recognize it; this recognition of the same object in the infinite multiplicity of manifestations is, in itself, a problem (the classical philosophical problem of concept) which, it seems to me, the Gestalt psychologists alone have posed in a geometric framework accessible to scientific investigation. Suppose this problem to be solved according to naïve intuition, giving to outside things an existence independent of our own observation." – Rene Thom , Structural Stability and Morphogenesis, W.A.Benjamin Inc., Reading, Massachusetts, 1975 (1972)
[2] Learning From Las Vegas, Venturi and Scott-Brown's book has mirrored the shift from historical epistemology to quotidian phenomenology fundamental to pop-art in the discourse of architecture.
[3] In the effort to find a sufficient structuring definition of form, Thom remarks that "Theoretically the equivalence group of these forms is a finite-dimensional Lie group, and they form strata of infinite codimension in the Hausdorff space of spatial forms; form a gestalt point of view, however, there is little doubt that they infact form an open set, since they do not stop to be recognizable under small deformations. This is certainly a sign that the blossoming of geometrical thought in man is an extreme case of threshold stabilization."

Trajectory:

The age of animation

The 20th century was when all started to move: the multiple perspectives of the cubists, the defamiliarizing urban sequences of the Situationists' excursions, the advent of cinema, all pointed to the dissolution of the Aristotelian ideal as a realizable singularity. Architecture was long obsessed with the elaboration of a fixed ideal form. Automobile culture, DSs as **déesses[4]**, manifested in the architectural promenade, in the futurists' delirious "will-to-power" gave way to a world of nudes descending staircases[5]: of space unfolding in time. Through the lens of morphogenesis, all form is a result of an interplay of forces.

1917, D'Arcy Thompson publishes his insights on the genesis of form[6].
1977, Bernard Tschumi searches the multiplicities of spaces in the wake of the metamorphosis of program into animated action: "If space is not matter, is it merely the sum of all spatial relations between material things?"[7]

Emergent multiplicities – the convocation of sequence to architecture leads to a fragmentation of space of varying realities $[\alpha + i\beta \mid i^2 = -1]$[8], the quest becomes to fix the position of these sub-spaces as containers in relation to each other (space, event, movement). Architecture becomes, through the dissolution of program to action, a dialectic of fixing and unfixing strategies, practice and theory take positions, polarize. By the end of the 20th century, "all buildings can be treated as landscapes"[9]. Landscapes as open systems are ecologies, where all is becoming, unfolding. Ecosystems of responses, behaviors, the expansion of the view from the present or a projected ideal future: snapshots, with the help of Henri Bergson's duree, all seems to come from somewhere and go somewhere else: cycles, migrations: interplay of forces are not anymore static, arrested. Instability in architecture is the expansion of the view from the ideal instant through the activation of time. Lines become vectors, forces are not arrested but engage in an active interplay: generate narratives and allow for the overhaul of the historical vocabulary of architectural form.

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[4] See: Allison Smithson: AS in DS – an Eye on the Road.

[5] 1912, Marcel Duchamp painted "Nu descendant un escalier n° 2", destabilizing singularity of form through the expansion of time.

[6] Eternality in form, enunciation of program that was meant to be encased permanently by fossil shells, ARCHITECTURE has long focused on the production of fixed forms. Thus the inquiry was centered historically on the ideal form, at times defined by beauty, at times excused by function. In architecture, investigations based on the work of D'Arcy Thompson have introduced formal patterns of growth, giving rise to architectonic *formalities*. Through the lens of morphogenesis, all form is a result of an interplay of forces, yet where is the stage located in architecture for the play to unfold?

[7] Question 1.2 – Bernard Tschumi – Questions of Space – Architecture and Disjunction – pp 54-9

[8] complex numbers, consisting of a "real" and an "imaginary" unit, first detected by Heron of Alexandria in the 1st Century, finally deducted by Caspar Wessel in 1799, fragment the initially hermetic numeric space. The scaffold of imaginary numbers in algebra is used to resolve cubic formulae (x^3): is the emergence of the concept of the *imaginary* correlated to investigations in the 3rd dimension of cubic space?

[9] See: Ábalos & Herreros in ElCroquis No.118, Madrid, 02/2004

Entry point:

From containers to *scapes - cities and other unstable forms

Discern with the transactional reality of the city[10], have led "to think of architecture not as form, but as organization, to influence the way lives are lived, an ultimate form of script writing."[11] Cities as unfixed sites have informed architecture of a new quality of instability, which apart from the overhaul of the formal language based on singular figures on one hand led to the gain of importance of the narrative, as action[12] contained by form, and on the other hand gave way to conceptualizations of integrated responsive environments.

With the maneuvering space granted by the fellowship, the conceit is to install a research un-hiding instability as a constituting ambient condition in contemporary architecture – understanding formal and structural transience, foregrounding motion as a generative device, surveying consequences and effects in the insertion of architectural time and sequence[13] into the discourse.

The power of form to express and to calculate processes through geometry was introduced by René Thom, setting the field for models apt to describe complex event based evolutionary processes such as catastrophes. Form as a calculating device is removed from being an end to being a tool. Topological space able to handle time based formations and transactions, begs the question to the adequate use of form in architecture. How can the ecology of transactions, processes and cultural transformations inform the contemporary model of the city? And in turn, how does the shift of attention from the building (object) to the *scape[14] (field) alter the conception of form[15]?

Connecting to the work of Reyner Banham, the proposed work seeks to animate a mode of inquiry by constructing commonalities in the seemingly cacophonic architectural discourse, grounding it to the cultural space outside the discourse: Architecture comes to being as a seismograph of the culture it is embedded in.

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[10] At the state of the things, **beauty** of the city is diagnosed in the complexity and multitude of activities, in its elasticity to accommodate and negotiate antagonisms (contradictions), in its uncanny intensities and territorial overlaps: does beauty hint to form?

[11] Found in: **Content** – R. Koolhaas – the proposed dialectic of motion in architecture is that of animation and simulation: the first centered on the rendering of a narrative, the second fueled by a complacency to operational open-endedness

[12] In the model proposed by B. **Tschumi**, architecture comes to being as a container – against which activity is measured as content: either aggressive, or appropriate, a theater, spectacle, rebellion, drama captive: the love (verliebtsein) of the architect to the narrative that he can initiate… This action is posterior to the space, has no involvement on the (morpho-) genesis of the container: is disjunct, like the first couple from garden Eden… can be only vandalism…

[13] "A logical succession of nuclei bound together by a relation of solidarity: the sequence opens when one of its terms has no solitary antecedent and closes when another of its terms has no consequences." – Roland Barthes – Structural Analysis of Narratives.

[14] **Landscape**, Bioscape, Urbanscape, Geoscape: All is (land)scape, all is seasonal: cyclic and as ecologies based on relationships between its members – (city)scapes are fuzzy architectures, in the design of which the challenge shifts to the formalization of relational strategies. *scapes as complex elusive systems challenge to find their contemporary depictions. Models remain incomplete and partial.

[15] Form is trapped in a dialectics of meaning and functionality. Is form invoked through its meaning, it becomes operational as a cultural container, indexical to historical forces. Yet, is form established as a result of a process, so it will contain the values of the operation, and at the end of the day will become a monument to a calculating society. Such is the catch 22 of the fixed form. In the end, this state hints to a similitude to the nature on morphogenetic forces independently if they are pragmatic material considerations or divine human values (these categories seize to apply as such)

Pedagogy

Arrest and Parole is a research in two acts. As autonomous units, they constitute in themselves consistent pedagogic cycles, as a constellation they fundamentally are antagonistic and aggressive as theory and practice in general, reinforcing each other by mutual erosion.

Commonalities of the units are in the foregrounding of instability and transition in architecture, transcending the illusion of fixed form. Emphasis is on the development of a procedural thinking, sensitivity to temporal phenomena and the construction of a repertoire of time-based design strategies. Ephemerality, material cycles, decompositions shall be introduced alongside conceptual design strategies.

Students in the course of each unit will be constructing a catalog space of precedents and solutions, understanding phenomena within and outside the discourse through the lens of Spinozian becoming. The focus shifts on to the relativity of forces involved in morphogenetic processes.

Collaborative action – movement as a political term stands for the alignment of individuals to a common cause, implies the forming of a collective organism with a given expiration event or date. The seminar will be conducted in the spirit of collaborative action, participants will be encouraged to dissolve, to take responsibility for the group, to find a relevant position, as such contributing to the utopia of architecture as a collective effort. Discussions will set aims, provocations, occupation of spaces, ambulant and improvised expositions of ideas will be carefully constructed and guided.

Body of work / Products

Seminar:

Catalog of events, transitions: Timeline of history as a narrative of metamorphoses and transformations (catalysts, crises …) Pamphlets, memo-grams: Techniques, inquiries and hypotheses Critical investigations (academic research papers) forming a critical investigation of a selected topic centered on a technique, event or subject

Studio:

1. Research – phenomenon, precedent, method – cinematic calculus – 2. Experiment – sequencing – compositional techniques of relations and processes – 3. Design – application of a strategy to a specific architectural task: transitory program? Generative kinetics? Evolving memories?

Part I: Arrest
Seminar work.

Investigations in the dialectics of stability (orthodoxy) and variation (heresy) in architecture

Form has traditionally been seen as a static response to structural and cultural needs, cast into ideals, mirroring ideologies, matter arrested to the end of days. With the eye on the film, aim of the seminar is to explore and compare durational strategies in contemporary architecture:

1
Search for the causes: cinema, (auto) mobility, cities, tele-technologies, cubism, invention of the quotidian. What taught architecture to walk?

2
Tracing the roots: Heraclit, Duchamp's Nude Descending a Staircase, Futurists, Archigram, Price and the second machine architecture; Who taught architecture to walk?

3
Exposure of the effects: types of movement in architecture: dislocations, slips, fragments, multiplicities, redundancies, overlaps and transparencies, open-endedness, etc.

Preliminary Categorization - the phenomenology of architectural instability:

Cat.1 – appliances and gadgets: kinetic architectures
Cat.2 – flesh against stone: narratives
Cat.3 – levels and zones: responsive environments
Cat.4 – quilts and arrays: stop-motion structures

Ad 1   V. Y. Tatlin: Tower for the 3rd In'l Congress, Archigram, C. Price, B. Khoury: Nightclub in Beirut
Ad 2   B. Tschumi, R. Koolhaas, J. Heiduk, etc.
Ad 3   K.Oosterhuis, cloud9, etc.
Ad 4   E. Douglis, G. Lynn, etc.

Preliminary Chapters – concepts and methodologies of the unfixed form:
(Generative strategies in motion capture and motion insinuation)

Motion and film (transition) – {Henri Bergson, Jacques Tati, Marcos Novak, Greg Lynn}
Motion and mobility (transport) – {LeCorbusier, Jacques Derrida, Vladimir Tatlin}
Motion and capitalism (transaction) – {David Harvey, Rem Koolhaas, Manuel DeLanda}
Landscape and transience – {Antonio Sant'Elia, Sandford Kwinter, Thomas Pynchon, Peter Eisenman}
Velocities and perspectives (kaleidoscopes) – {Reyner Banham, Kevin Lynch}

Part II: Paroles
Design studio.

Construction of critical methodologies, foregrounding strategies and concepts in the generation of unfixed (blurry) and destabilized architectures.

Arching and spanning to encapsulate void, was a genuine and archetypical task to the profession: It all had to deal with the overcoming of a transitory distance; masterpieces were measured upon bravery and elegance of the task.
The orchestrated migration of stone from one support to the other in a suspended space, has recently gained company as the profession comes to understand its immersion into a transitory global economy. Migration as a global condition, its orchestration has become the prime task…

City planning is traditionally governed by statistical data[16] and the need to spatially accommodate the obtained and known figures in the realm of the city. Aesthetic principles in city planning inform the priority of influencing qualities: traffic flows, health issues, but also propose predefined (ideologically charged) solution patterns: standard forms and containers. Is the town planner thus guided by numbers or by formalisms? Is the virtue buried in the skillful negotiation of the two? Which are the contemporary formalized polit-spaces? Non-formal? In-formal?
At the state of the things, beauty of the city is diagnosed in the complexity and multitude of activities, in its elasticity to accommodate and negotiate antagonisms (contradictions), in its uncanny intensities and territorial overlaps: does beauty hint to form?

The driving idea behind John Maeda's Design by Numbers project is the harnessing of arithmetic space to drive a process of automated graphical production. Mapping harmonies, concordances, relationships, revealing intensities, hidden events, cycles and relationships, designs from this project are scripted synaesthetic experiences, cross references between sensual worlds of numbers and of visual space.

Originating in the graph of statistics, it invokes the eye as an evaluating instance of numeric relationships. Form as an object of orientation and reference is treated as a map. What if one could by altering the map influence the underlying layer of (numerical) reality? By enabling a reversal in communication on the graphical surface, form becomes a layer, an interface, a medium inserted between the designer and his object: in this case the (formless) city.

Afterimages, stop-motions, quilts, narratives: the students will explore precedents in contemporary architecture from Rossi to Lynn and in a collaborative analysis foreground effects in instability, multiplicity, effects and dynamics emerging in the induction of time in these methodologies. The criterion is the positioning of the space of architecture, structure and the space of unfolding forces in relation to each other, to the public space, to the space of morphogenesis.

The methodology of the studio will be to focus on form, multiplicities of form, evolving figures and formal narratives, as a tool. Formal manipulations, techniques of transience, motion capturing, processing and representations of sequences, events and actions drive the investigation towards the finality of the formalized design. How does the architect behave, position himself, communicate unfixed architectures?

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[16] Statistics are political, hard facts never objective, numbers manipulative. Thus the city planner is a double victim of political agendas: once through numbers, second through form. The in-formalization (de-formalization) of the urban beauty (at this point discounting New Urbanisms) goes along with the de-centralization of data sources and pools. The stability of this apparently liberating heading towards distributed and participatory urban cataloging and sensing is yet to be seen, as central political agendas remain in control and the dependence of the urban agent (citizen) on commercial media appliances remains critical.