



.studio3

“Mutant City”

Architectural mutants and urban monsters

e8

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Marcos Novak. *Turbulent topology* 2008

Mutations provide the raw material for evolution, fuel for the Darwinian factory. They arise from random errors in the translation of the genetic code and are the method devised by Nature to ensure the survival of living species subjected to unpredictable environmental changes.

Architecture and urbanism face the same question as Nature does: how can one design for a changing world? Perhaps the answer is also the same: that, paradoxically, the only way to develop robust design solutions is to encourage “mistakes” in the transmission of established design rules, so that the architectural and urban gene pools can become more diverse, enriched by freak mutations, architectural mutants and urban monsters that may prove better adapted to new circumstances.

Complex systems, whether natural or artificial, thus have to maintain themselves “on the edge of chaos”, sufficiently stable to ensure continuity and sufficiently unstable to allow for change.

The programme for Studio 8 stems from these fundamental considerations; it calls for the exploration of architectural and urban mutations, design processes that imitate Nature not so much in her forms but rather in her mode of operation, her reliance on chance to ensure change and challenge the unknown.

Conceptual project: Mutating device

The initial studio exercise will be to design and construct, in the first four weeks of the semester, a device that investigates, precisely and playfully, the working principles of mutations. It must be a live demonstration of a mutation process happening “in real time”, the partially unpredictable unfolding of a chance event. It is not so much the end result as the on-going process of mutation that is interesting, the desire to trigger new events, to seek surprises, to induce radical change. This initial exercise will set the intellectual ambitions for the studio and explore different ways in which these ambitions can be materialised.

Main design project: Mutant city

The design project that will follow the conceptual exercise and last for the whole semester will be a project in which you will be invited to demonstrate processes of mutation both at the architectural scale and at the urban scale. You will be asked to look at a significant fragment of a city (location to be announced), analyse its genetic code, the design DNA of its urban fabric and of its buildings, and to explore ways in which stochastic manipulations of this genetic code can lead to design mutants that are radically different, and from which a completely unexpected form of architecture as well as a new urban typology can emerge.

The design of buildings changes very slowly and cities change even more slowly. The aim of this studio is, through experimentation and through the analogical use of mutation processes, to accelerate this process of change and, in doing so, to bridge the gap between architecture and urbanism: it is, through the evolution of its architectural components, the city itself that has to evolve radically. We must show sympathy for the future and allow it to happen.

Professor Colin Fournier

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References:

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- James Gleick: *Chaos*
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- Kevin Kelly: *Out of Control*
- John Frazer: *An evolutionary architecture*
- John Cage: *Silence*
- Brian Eno: *A diary, with swollen appendices*
- Wikipedia : *Mutation and Mutant.*