Columbia University Graduate School of Architecture Planning and Preservation A4003: Core Studio 3, Fall 2013

## Stress and Wellness in Housing: Rethinking the Social through Form

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New York City historically has been at the forefront of new types of housing and new means of maintaining health. Contemporary NYC is no different although the types of housing and health that exist today are radically different than they were at the beginning of the city's history. Mayor Bloomberg's New Housing Marketplace plan competition for housing composed of micro-units, an affordable unit, at just 300s.f. is approximately the size of two parking spaces, is a paradox to the national obesity epidemic that presents an increase in overall human proportion. There is a debate over whether the city supports healthy individuals or does the very nature of urban life attract more active and healthy individuals? While this is one question to consider, what this studio seeks to explore more deeply are the relationships between health and housing through the topic of stress.

Stress is above all a physical manifestation. And for the purpose of the studio should be explored through every possible meaning, no definition is off limits.

Beauty of Failure G. Robert LeRicolais (1894-1977) examined the beauty of failures. Similarly if we begin with the most basic and bodily, we can think of stress through structures and physics. The stress of the elements upon a built form, gravity, physics, wind loads, shear, lateral forces, and the strain placed on its structure. What type of structure can be made in response to such stresses? Imagining a stress diagram does the type of stress produce a response formally? Is this stress examined from the inside out? Or is it from the outside in? Structural concepts shall be explored through model making. The structural stress should promote a fundamental concept for the project that equally reflects a particular position on the domestic.

Stress is also found in urban settings, and here the very idea of our social relationships are being reconfigured based on new modes of communication and data exchange. If Mark Wigley says X, how does the social replace the urban and what happens to the urban? East Harlem is arguably one of the most contested places within the city. At the edge of development, seemingly out of reach from the developments and boom of other parts, see nytimes article,

Similarly if the urban is stressed socially, it is also stressed infrastructurally, roads, bridges, highways, sewers, railroads, waterways, maintenance systems are all also being pulled to thin to the point of failure. If the City builds and proposes new infrastructures from Greenways, to the new 2<sup>nd</sup> avenue subway line, how do these new infrastructures eliminate stresses? What does this do to existing or remaining infrastructures? Can or should housing respond? How are economics a thing of stress? Stress on the body, if East Harlem has seen an increase in its aging population what can this do for architecture? Alison Smithson wrote about the effects of stress upon public housing in her *Byelaws of Mental Health*, and responded through design of a "stress free zone" in their Robin Hood Garden's project. A simple hand sketch illustrates the influence of ideas of health upon both the architecture and larger urban plan of the project.

Stress offers a critical lens into further understanding housing, architecture, urbanism, site, economics, infrastructures, and so on. The examples presented here by Le Ricolais and The Smithson are but two references. Each team should collect their own references throughout the term.

The studio can be thought of as three phases, acts, which means that each student is required to be proactive and take responsibility for themes to be developed, also think of how architecture acts or performs. Forms is literally understanding through concepts forms under different types of stress, and finally ends requires that these studies produces ends or end results that are meant to be critiqued and evaluated within a collective setting.

The question for our studio is of the stresses that exist what formal architectural solution can be produced through subtle games of form making, material and structural analysis, and spatial readings?

i http://www.design.upenn.edu/archives/majorcollections/lericolais.html