48-363 Urban Design Media

URBAN ANALYSIS AND THE DATA IMAGINARY

...I mean spaces with many things circulating with them, many activities that do not form part of an overall plan or totality, many impulses that constantly change the character of the space, many actants who have to constantly jostle for position and influence, many impositions of order...

Ash Amin, Collective Culture and Urban Public Space, 2008.

This design seminar expands on the notions of data and analysis that have come to occupy a fundamental entry point of contemporary understandings of urbanism and urban design. We will discuss the ways in which cities are organized and communicated as information through quantitative data, graphic maps, and spatial models. In particular, the course is interested in the moments of overlap that have potential to rework the relationship between material and representation to thicken the connection between that codified presentation and the design of physical space.

Class sessions will combine lecture and discussion of cases and key texts with design exercises. During the first half of the term, discussion topics will focus on various methods of analysis of urban space and networks along environmental, morphological, and sociomaterial axes. In parallel with the discussions, students will generate a series of maps that each individually explore the mechanics of that analytic technique and will also subsequently respond with design charettes that critically analyze the operative potential and embedded ideology of the thematic with regard to urban design. These maps will be executed at various scales but applied consistently on a selected city. At the end of this sequence, the maps will be collated into a reference atlas for that city.

The second half of the term will focus more on modes of communication and presentation (including interactive or dynamic modes) and the charettes from the first half will by synthesized into a final project that draws from the assembled data potential.

The course will rely heavily on Rhino and Grasshopper to facilitate many of the analytic operations, including some utilization of ghPython. Familiarity with the software is certainly beneficial, but not strictly necessary.