Governance Architectures of the U-Society

Spring 2013

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The advent of ubiquitous, interactive, embedded electronic communication technologies portend significant socio-political and architectural changes, some of which may or may not be preferred. From smart dust to smart cities, information networks are radically altering how people interact with faces, races, places, and spaces. As the aegis of big data beckons, it is still unclear how these technological advancements might impact governance, even as many governments today begin to implement these platforms with scant concern for their impacts. There is still time to shape the futures of democratic forms of governance in a high-tech society.

This joint studio-based seminar explores possibilities and potentialities for preferred governance within a so-called "Ubiquitous Society" (U-Society) based on the theories and methods of political futures studies, especially anticipatory governance design, aligned with computer-based architectural modeling, primarily digital prototyping. Course participants will register either for Pols 673 or Arch 693, but will work together in teams to propose overall U-Governance designs for a transformational future in 2035, and render computer models that will demonstrate basic structural dynamic relations and human interactions.

**Weeks 1-2: Introduction to Political Futures Design and Performance-oriented Architecture**

The first two weeks of the semester explores theories and methods in political futures studies alongside critical issues concerning technology, economics, culture, and the environment. The concept of the "Anthropocene Epoch" will be discussed, and the basic contours of a high tech transformation society--based on "The Singularity"--will be developed

*Political Futures Studies*
- Dator, "Futures studies"
- Dator, "On society as an invention and you as a social inventor"
- Dator, "Trend analysis vs. Emerging issues analysis"
- Dator, "Next Generations: Reactives to Civics to Adaptives.

*The Anthropocene Epoch*
- Dator, "Assuming 'responsibility for your rose"
- Steffen, The Anthropocene: Are Humans Now Overwhelming the Great Forces of Nature?

*The Singularity*
- Chalmers, "The Singularity"
Dator and Seo, "Korea as the wave of a future: The emerging Dream Society of Icons and Aesthetic Experience"
Dahlin, "Our posthuman futures and education: Homo Zappiens, Cyborgs, and the New Adam"
Dunagan, "Neurofutures"

Performance-based Architecture
Theories and applications of interactive design in architecture
Rhinoceros 3D and Grasshopper Setting

Weeks 3-5: Futures and Governance Design
Evolution of governance structures— influence of cosmology, technology, and choice. Understanding that (and how) "structures matters". The idea of a "U-Society"

How Structure Matters
Riggs, "Constitutional reform: Some guidelines"
Dator, "Structure Matters"
Dator, "Governing the Futures: Dream or Survival Societies"
Dahl, "Framed Up"
Klarreich, "Election selection:
Mackenzie, "Best man lose"

Governance by Architecture
Katyal, "Architecture as crime control"
Zahm, "Design against crime"
Amedeo, et al., Three assumptions of "Person-Environment-Behavior Research"
Beaver, "Nature and Nurture of antisocial behavior"

Ubiquitous Governance
Bullinga, "Intelligence Government"
Mannermaa, Living in the European Ubiquitous Society"
Dator, "Ubiquitous Dream, Transformational and other Futures"
Greenfield, "Everyware"
Dunagan, "Designer governance"
Paige, "Nonkilling governance"

Design Concept & Strategy
Learning Rhinoceros 3D and Grasshopper with various interactive design examples
Developing Design Concept & Strategies

Week 6: Critical images of a U-Society
Issues of power, control, agency, participation, privacy, rights, resistance

Deleuze, "Postscript on societies of control"
Cheney-Lippold, "A new algorithmic identity"
Sweeney, "Catastrophe and progress in nonkilling futures"
MacKenzie, "Power"

*Design Concept & Strategy*

Learning Rhinoceros 3D and Grasshopper with various interactive design examples

Developing Design Concept & Strategies

**Week 7: Design scenarios and team engagement**
The scenario that each group will use as a baseline for their governance designs will be presented and discussed. Teams will engage in experiential exercises, charting metrics for their design solutions.

**Weeks-8-12: Finalizing governance designs**
Each week, teams will identify a specific portion of their design to articulate and test via verbal and visual concepts, and computer software.

**Week 13 and 14: Preparing for the final presentation**
Teams will present the drafts of their designs and interactive programs

**Week 15: Final presentation of team governance designs**
Final presentations via computer and poster boards.

**When you finish Pols 673 successfully, you will understand:**

- What futures studies is and is not;
- The four generic alternative futures;
- The difference between predicting, forecasting and inventing the futures;
- How to envision and design preferred futures and systems of governance;
- That society is a social invention and that you should become a social inventor, especially of systems of governance;
- That "structure matters" and how it matters in terms of governance design;
- How to analyze and model social, cultural, and aesthetic dimensions of a "Ubiquitous Society" (U-society);
- How electronic information technologies and architectural structures might be used to create "U-governance";
- Initial concepts and aspects of using Rhinoceros 3D and Grasshopper Setting to create dynamic computer models of structures of U-governance

**When you finish Arch 693 successfully, you will understand:**

*Interdisciplinary Connections*

- Ability to connect appropriate and deep and wide-ranging interdisciplinary knowledge with Futures Studies;
--Ability to incorporate deep and wide ranging interdisciplinary knowledge and factors into research or design project

*Design Methodology*
--Ability to self-consciously select and apply an effective team-based design method to a moderately complex problem regarding the design of an interactive system with U-governance

*Technology*
--Ability to use state of the art computer aided design and communication tools to evolve a complex design related U-City and U-governance

*Student Performance Criteria*

A.3. Visual Communication Skills
A.5. Investigative Skills
A.6. Fundamental Design Skills