DESIGN RESEARCH 2014

Things That Talk
THINGS THAT TALK
DAILY AGENDA

NETWORKS & ECOLOGICAL EXTRAPOLATIONS
Moderns, Models, & Making
Latour's Displacements, Demings Experiments

SYSTEMS, STRUCTURES, CONJECTURES
Eco (Nature) abstracts to extrapolations (general literacy & lateral research)
Group research exercise

REVIEW (SCALE, CONFLICTS, CATALYSTS)
group mock-up discussion

ASSIGNMENT/SCHEDULE
fellow feedback (will email revised google list, cc-ed responses to peer elaborations)
Research Extrapolations
"The horizons, the stakes, the time frames, the actors -- none of these is commensurable, yet there they are, caught up in the same story."

What are Latour’s three types of criticism (in crisis)?

What vantage point do they assume and structure do each adopt?

How/Whom does his rhetoric echo from prior readings?
WE HAVE NEVER BEEN MODERN

Latour- “Crisis”

“we pass from a limited problem- why do networks remain elusive? - to a classical and broader problem: what does it mean to be modern?”

What are Latour’s ‘modern’ promises (in relation to his crises and events)?

What in his schema does ‘never having been modern’ do and to what end?
WE HAVE NEVER BEEN MODERN

Latour- “Crisis”

“As soon as we redirect our attention simultaneously to the work of purification and ... hybridization, we immediately stopped being wholly modern.”

What are Latour’s rough theses on the trajectories/structures of current modernity?

What relation do these redoubled dialectics have to do with design, with design research?
MODERNITY, MODELS, & PROCESS
Latour’s dialectic to Demings’ everyday means, disciplinary models

• ‘natural’ hazards/crises
• water quality
• energy efficiency
• micro-climates/habitats
• soil conservation
• stream restoration

• cross-cultural issues
• collaborative design
• common landscapes

• environmental design/public health
• active living
• outdoor comfort

• landscape urbanism
• brownfield redevelopment
• storm-water mgmt

• digital design media
• virtual interfaces/pr presence
• visualization methods
• climate (change) simulation

how might one proceed through research (topics, left) following these dialectics?

are there ideas of sites, scales, & extents within this structure?

what tools or design techniques align with translation and purification?

how has/might this position manifest in ecological approaches or structures, experimental approaches/design structures?
“descriptive research is deceptively simple...”

What types of collation, coordination does Deming explore in Description?

What observational techniques, triangulations might we assume between observation, purification, translation?

Between description and modeling?

MODERNITY, MODELS, & PROCESS

Latour’s dialectic to Demings’ everyday means, disciplinary models (Chapter 5, 7)

observation + field sampling: Gilies Clement @ CCA’s Environment show
MODERNITY, MODELS, & PROCESS

Latour’s dialectic to Demings’ everyday means, disciplinary models (Chapter 6)

What is a model?

What differentiates:
- synthetic
- predictive
- dynamic variants?

Their ends?

Their internal means?
What is a model?

What differentiates: the two schematic types of dynamic variants?

How might we conceptualize them aside Latour’s networks, aside familiar or well known design/planning examples?
MODERNITY, MODELS, & PROCESS

Latour’s dialectic to Demings’ everyday means, disciplinary models

What is a model?

What differentiates:
the two schematic types of
dynamic variants?

Their ends?

Their internal means?

Resilient Infrastructures Lectures Series (Holmes at U. Minn.):
http://www.youtube.com/watch?v=rjYAWIMqNLc
(12-13.5 systems, distribution & failure, 40-46 student samples)
ECO ABSTRACTS TO EXTRAPOLATIONS
Scenario/Model Brainstorming Exercise

towards translation:

latour's entanglements

deming's decision & impact models

• GENERALIST LITERACY
• INDETERMINACY
• SIMPLIFICATION & SPECIFICATION (EDITING, CHOOSING DRIVERS)
• RELATIONAL THINKING (EXTRAPOLATION)
ECO ABSTRACTS TO EXTRAPOLATIONS
Scenario/Model Brainstorming Exercise

TOPOI (ABSTRACTS FROM NATURE)

TIMING
• 10 MIN - individual skim - simple summary for group
• 10-30 MIN- group select/hybridize systems - extrapolate project/projects
• 30-60 MIN- collaboratively sketch potentials, patterns
• 60-80 MIN- summary incorporations

perma-frost
- thaw speed & plant succession
- thaw soil carbon & methane dynamics
- thaw lake sequestration dynamics
  (consider arctic energy/excavation/sustainables, logistics)

desertification
- nutrient cycles under aridity
- wildfires as (re)new(ed) dynamic
- global drought review
  (consider aside California water & soil cycles/foodsheds)

forest biomass
- biochar nutrient/carbon potentials
- hurricane/forestry impacts on biomass, behavior
- forest/fish exchanges
  (consider aside biofuel debates, delta politics/climate cycles of the south)

ocean acidification
- coral die-off and foodchain effects
- western oysters and legislation
- volcanic ecological simulation
  (consider aside fisheries, marine protection, & oil exploration)
ECO ABSTRACTS TO EXTRAPOLATIONS
Scenario/Model Brainstorming Exercise

TIMING
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PICK SITE & EXPLICATE OPERATING ASSUMPTIONS:
• 30-60 MIN - collaboratively sketch potentials, patterns
  • person 1: follow-up research
  • person 2: phasing/temporal openings
  • person 3: spatial drivers, key patterns & mechanisms
  • person 4: social conflicts/ends
PERSON 1
FOLLOW UP ON RESEARCH

ECO ABSTRACTS TO EXTRAPOLATIONS
Scenario/Model Brainstorming Exercise

TASKS INCLUDE
*(read at least 3-4 additional articles, skimmed; prepare to present 1 with group)*:

1) find related environmental articles, plant profiles, news pieces that help your teammates elaborate how particular environmental dynamics could catalyze new land-use ideas
2) have a sentence elaboration of where/how assumptions may conflict with group’s design (scale of study, thesis and conclusion, etc.)
3) “how that effects social agenda and appropriation and thus how you’re bridging assumptions, extracting, or translating specific features for team
4) and, a key for the process, highlight (quick and dirty pdf markups) key factors or parameters for members modeling spatial and temporal system dynamics
ECO ABSTRACTS TO EXTRAPOLATIONS
Scenario/Model Brainstorming Exercise

PERSON 2
PHASING
+ TEMPORAL OPENINGS

TASKS INCLUDE
(elaborate feedback cycles and temporal dynamics of your system at two scales):
sketch 2 scales of temporality: process cycles with key thresholds
anthropocene durations/cumulative impacts):

1) with initial abstracts/articles & additions draw out 2 scales/phases of your system (collab w/ person 1)
2) the first temporal sketch (phasing/systems diagram) should a) elaborate the key internal processes and potentially the moments of programmatic/ecological coupling creating new ops according to geophysical changes, climatic or chemical cycles b) clearly mark the key thresholds for feedback or change activating both (collab w/ person 3)
3) the second temporal sketch (phasing/systems diagram) should locate the first within a larger or longer duration of contested futures (collab w/ person 4)
ECO ABSTRACTS TO EXTRAPOLATIONS
Scenario/Model Brainstorming Exercise

PERSON 3
SPATIAL DRIVERS
KEY MECHANISMS
+ PLAUSIBLE PATTERNS

TASKS INCLUDE
(elaborate spatial dynamics, material intensities of your system):

1) with initial abstracts/articles & additions, draw out the shifting footprints of your system at key points in its anticipated cycle (3 min, collab w/ person 2)

2) make sure to elaborate the ecological, chemical, or climate drivers at work in the background system (collab w/ person 1) as well as how hypothesized interventions amplify such characteristics (collab w/ person 2)

3) very roughly, suggest what settlement, land-use, energy extraction or other projective spatial pattern might look like if extrapolated/captured at 50 years (collab w/ person 4)
PERSON 4
SOCIAL CONFLICTS
SOCIAL METRICS
SOCIAL ENDS

ECO ABSTRACTS TO EXTRAPOLATIONS
Scenario/Model Brainstorming Exercise

TASKS INCLUDE
(read at least 3-4 additional articles, skimmed; prepare to present 1 with group):

1) find related environmental code and news pieces on social conflict/concerns that help your teammates formulate or revised potential policies to catalyze ecological dynamics for cultural ends/improvement (w/ 1)
2) have a sentence elaboration of key social goals and conflicts being mediated including key agents/institutions involved and conceptual components (draw from articles)
3) a flow chart of policy implementation or key metrics for feedback (note temporal alignments, an territorial issues) (w/ 2, 3)
4) and, again highlight (quick and dirty pdf markups) key factors or parameters for members modeling spatial and temporal system dynamics (w/ 1)
ECO ABSTRACTS TO EXTRAPOLATIONS
Scenario/Model Brainstorming Exercise

christopher  distributed sewage
alanna        green roof (water systems)
geoffry       streams (evolving hydrological cycles)
jerome        acoustics articulated (what’s at stake in sound?)
andrea        Informal settlement (NYC squatters or other infrastructural cases)
steve         wetlands (edge engagement)
amarie        homelessness (zoning, categorical deconstruction, adaptations)
anina         Institutional engagements
fern           hyperaccumulators
julia          botanical mission creep
said           solar roof (light/energy systems)
xiaochao       roadkill/crossings (relocate/expand conflicts)
kristen       alterates to the urban forest
zhuo          brownfields as habitat (novel ecologies, social conflicts)
eli            public mediation&production/light performance
ashley        environmental injustice metrics

TOPOI

• perma-frost
  (arctic energy/carbon/development)
• desertification
  (water cycles/soil cycles/foodsheds)
• biomass impacts
  (energy crops/carbon/sequestration)
• ocean acidification
  (fisheries/marine protection/petrol)
IMAGE CREDITS

see articles listed in Weekly Readings.
"xxxxx"

**What is a model?**

**What is a ?**

**What is a ?**

**(limits to) experimental strategies:**

- overall structure- first paragraph
- dependent/independent variables
- internal/external validity,
- classic/field/quasi experiments (controlled, research station, theirs social-but ours...typical modelling)