2016

Time and transition
Bloom, Jabe and Ansari, Ahmed

Suggested citation:

Time & Transition

Ahmed Ansari
PhD Candidate
Carnegie Mellon University
aansari@andrew.cmu.edu
@aansari86

Joshua Bloom
PhD Candidate
Carnegie Mellon University
jabe@cmu.edu
@cyetain

Systemic Design for Social Complexity
I am privileged with nearly complete freedom of travel.

This privilege allows me to be seen, published and be heard in ways not available to many.
Design has a key role to play in societal transitions to more sustainable futures. Interconnected and interdependent ‘systems problems’, exist at multiple levels of scale within the social and environmental spheres. Designers need to understand how to work iteratively, at multiple levels of scale, over long horizons of time.
Branching Futures

Game Theoretic

the Planning Model
Changing Milieu

Present Condition

Present Milieu
How to Dissolve Tomorrow’s Crisis... Today

Idealized Design

Creating an Organization's Future

“...There is no excuse for any manager not to read about one of the most significant developments in management of and for the 21st century.”

—Jan Mitroff, The Marshall School of Business, USC

Russell L. Ackoff | Jason Magidson | Herbert J. Addison
Each of us sits in a long dark hall within a circle of light cast by a small lamp. The lamplight penetrates a few feet up and down the hall, then rapidly attenuates, diluted by the vast darkness of future and past that surrounds it.

Discounting the Future

The light dims even more rapidly in the opposite direction, toward the future. Although we are titillated by Sunday Supplement descriptions of a cooling Sun, it is our own mortality, just a few years away, and not the Earth’s, with which we are preoccupied. We can empathize with parents and grandparents whom we have known, or of whom we have had first-hand accounts, and in the opposite direction with children and grandchildren. But beyond that circle our concern is more curious and intellectual than emotional. We even find it difficult to define which distant events are the triumphs and which the catastrophes, who the heroes and who the villains.

Thus the events and prospective events that enter into our value systems are all dated, and the importance we attach to them generally drops off sharply with their distance in time.
A Digression
Extrapolation / Resource Frame

Linear Growth
Extrapolation / Resource Frame

Exponential Growth
Extrapolation / Resource Frame
Extrapolation / Resource Frame

Collapse
Extrapolation / Resource Frame

Chaotic
Information Frame

Uncertain
Information Frame

Branching
Teleology Frame

Certain
At an End
“…we credit men with practical wisdom in some particular respect when they have calculated well with a view to some good end…it follows that in the general sense also the man who is capable of deliberating has practical wisdom.”

Aristotle, Nichomachean Ethics
"However acute one's intelligence may be, it is better to rely on the potential inherent in the situation"; "even with a mattock and a hoe to hand, it is better to wait for the moment of ripening."
“The ancient Chinese tell us that it is enough to know how to make the most of the way a situation develops and to let yourself be "carried" along by it. You do not rack your brains, you do not struggle or strive. But that is not at all because you wish to disengage from the world; rather, it is the better to succeed in it. To describe this kind of intelligence that bypasses the theory-practice relationship and instead depends solely on the way that things evolve, let us use the term “strategic.””

Francois Jullien, The Efficacy of Things
“The science of warfare had begun to concentrate on the art of making weapons, constructing fortifications, and organizing armies, and the ways to get the latter to move as was required. It had thus shifted from siege strategy and military tactics toward an increasingly elaborate art of mechanics.”

Francois Jullien, The Efficacy of Things
Chronos
“For, in order to increase the energy inherent in the situation, the Chinese general does not merely exploit all the aspects of the topography and the state of the troops that may be unfavorable to the enemy. He also manipulates the situation in such a way that his own troops are driven to display the maximum degree of ardor...”
COLLAPSE TO THE PRESENT
John Boyd's OODA Loop

1. **Observe**
   - Implicit Guidance & Control
   - Unfolding Circumstances
   - Feedback

2. **Orient**
   - Implicit Guidance & Control
   - Feedback
   - Outside Information
   - Unfolding Interaction With Environment

3. **Decide**
   - Feedback
   - Unfolding Interaction With Environment

4. **Act**
   - Action (Test)
   - New Information
   - Previous Experiences
   - Genetic Heritage
   - Cultural Traditions
   - Analysis & Synthesis
Seen from the viewpoint of man, who always lives in the interval between past and future, time is not a continuum, a flow of uninterrupted succession; it is broken in the middle, at the point where “he” stands; and “his” standpoint is not the present as we usually understand it but rather a gap in time...

-Hannah Arendt
we seem to be neither equipped nor prepared for this activity of thinking, of settling down in the gap between past and future.

-Hannah Arendt
PAST \arrow{left} \textbf{PRESENT} \arrow{right} \textbf{FUTURE} \arrow{loop}{right}
What is Present is That Which Makes Itself Present
What is Present is That Which is Indeterminate
• **Evaluation** of a situation, rather than planning for one

• **Rapid adaptation** to changing situations is key

• The **exploitation** of the situation when the time is right

• What is disadvantageous at **one point in time** may turn to one’s advantage later

“…Determining the circumstances with a view to profiting from them. ”
- Sun Tzu

“When your partner has doubts, you "modify" your conduct…”
- Guiguzi

“the potential of the situation is whatever profits from that which is variable.“
- Du Mu

“it is on the basis of what is harmful to my opponent that I perceive what is profitable to myself.”
- Wang Xi
Our situation become irrevocably complex as we have pursued ever widening “futures” (futures we tend to imagine without imagining their concomitant defuturing)...

We must accept that our worlds have become... irrevocably radically contingent
The radical deduction therefor is the gap is not there to “cross”... there is no resolution...

*There is no end to the precarious worlds we find ourselves in.*

we must learn to live in the gap...
Designers must learn to stay with (to care for) what is present in the world. We must learn to design IN the transition.
Changing Milieu

Present Condition

Present Milieu

Seed Intervention

Exploitation of Situation

Transitional Shift

Seed Intervention

Seed Intervention

Seed Intervention

Seed Intervention

Seed Intervention
Design never comes to rest as product, it is always futural and as such it either futures or defutures. Finitudinally framed, it makes time or takes it away.

- Tony Fry

circumstances that are ‘overdetermined’

Tony Fry (2011) Time and the Political: Post-Urban Futures, Chronophobia and Unsettlement, Design Philosophy Papers, 9:2, 93-101