

The Future of
FUTURES RESEARCH
 Jay Forrest, Cindy Frewen Wuellner & Jay Gary

World Future Society, July 30, 2007

Abstract:

Futures Studies occupies a unique niche in social sciences research and knowledge creation today. Futurists share common methods, including environmental scanning, trend analysis, the Delphi method, scenario planning, extrapolation of time-series, and computer-modeling. But where did its research methods come from? What disciplines and research models shaped the modern futures movement? This session will 1) explore the mental models behind futures thinking from social, political, organizational, and systems theory, 2) discuss how mid-career futurists might improve our practice, and 3) consider how futures research might enhance the specificity and relevance of futures research to organizations.

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- **Jay Forrest, PhD** soon!
Improving Futures Methods Through Systems Thinking
- **Cindy Frewen, PhD** soon!
The Art of Urban Futures Research
- **Jay Gary, PhD** candidate!
Why Futures Studies Needs a Theory Base

<http://www.jaygary.com/futuresresearch.pdf>

How do we strengthen
 Futures as...

Discipline? Profession?

Basic Research Applied Research

Profession

Discipline

- **Futures: The journal**
<http://www.elsevier.com/locate/journaldescription>
cws_home/30422/description#
- **Technological Forecasting and Social Change**
<http://www.elsevier.com/locate/journaldescription>
cws_home/304740/description
- **Foresight: The journal**
<http://www.emeraldinsight.com/info/journals/fs/fs.jsp>
- **Futures Research Quarterly**
<http://www.wfs.org/frq.htm>
- **Journal of Futures Studies**
<http://www2.ou.edu.tw/~jfs/jfs/>
- **International Journal of Forecasting**
<http://www.forecasters.org/ijf/>



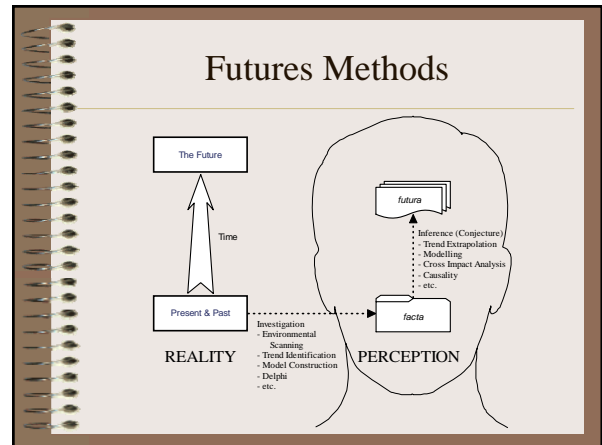
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My Thoughts...

Jay Forrest

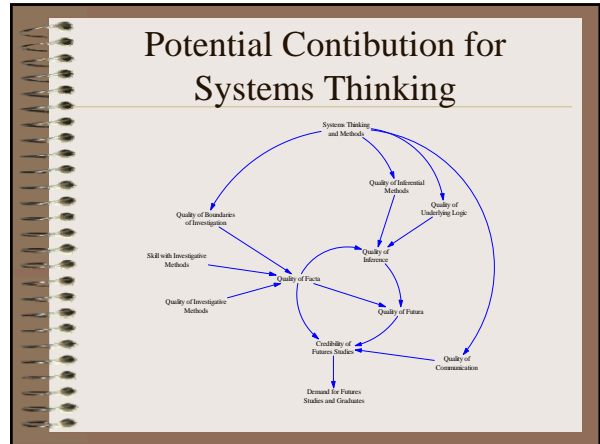
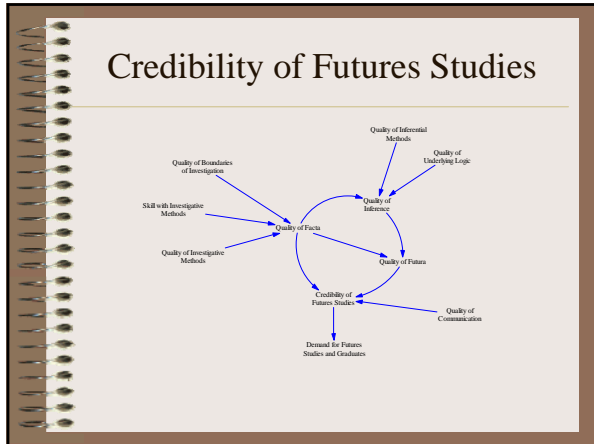


Putting Rigor in Futures?

- Quantitative Processes?
- Qualitative Processes
- Both?
 - Better Facta
 - Better Conjecture
 - Better Thinking
 - Better Logic
- Better Communication
- Better Demonstration of Value

???

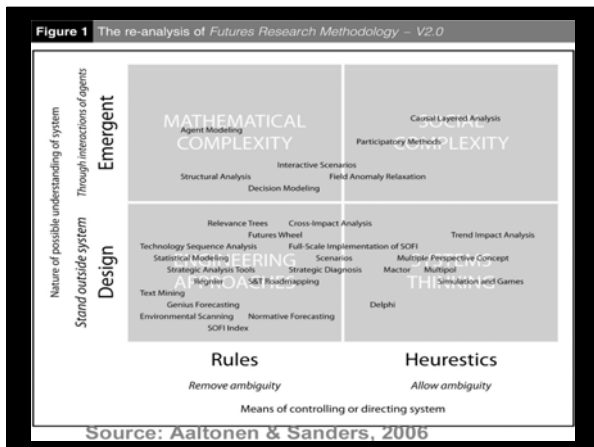
*Systems Thinking Seems
to Hold Much Potential*



- ### Where Is Systems Thinking?
- Causal loop and influence diagrams consistently show benefits of improved understanding, better communication.
 - Less than 2 percent of articles in Futures use causality or systems concepts or diagrams to explain or discuss the issue at hand.

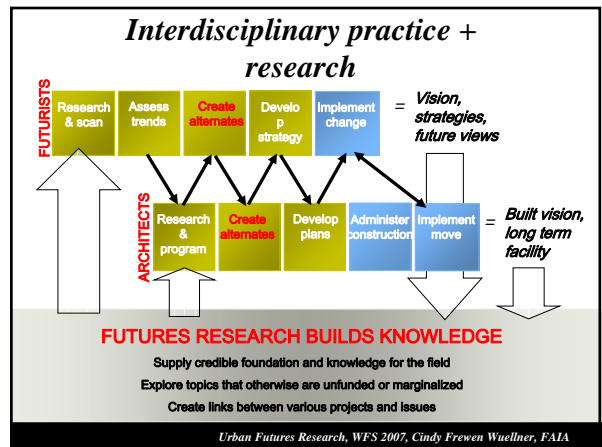
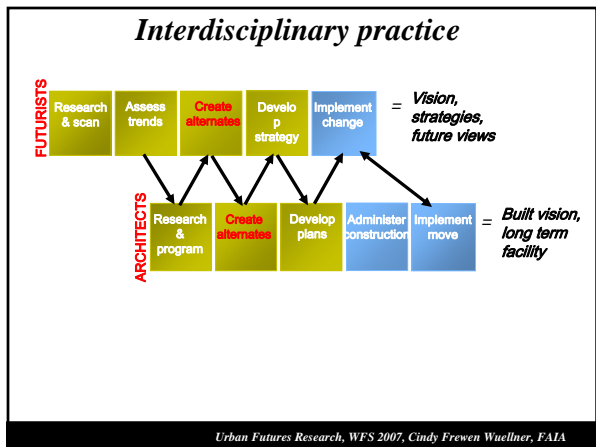
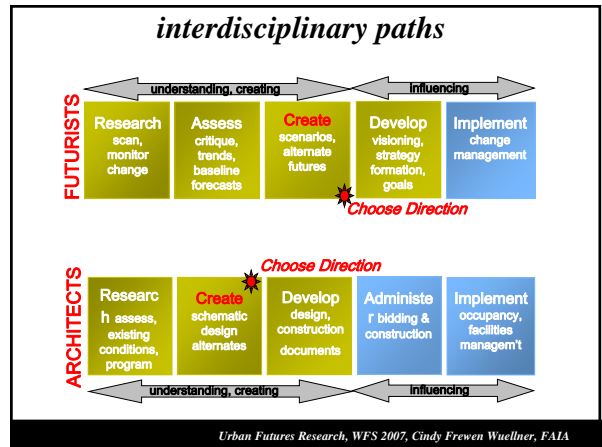
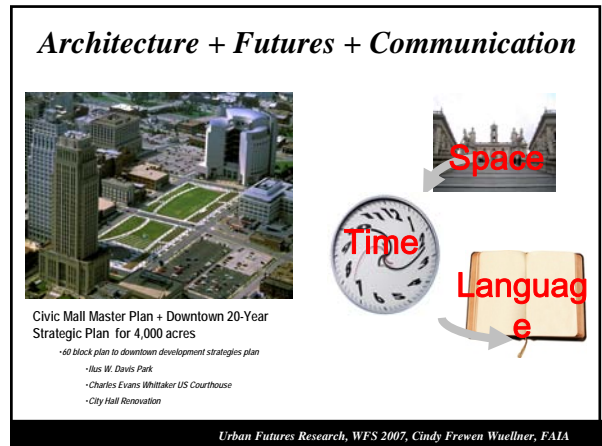
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Why Futures Studies Needs a Theory Base

- 1 Framing
- 2 Scanning
- 3 Forecasting
- 4 Visioning
- 5 Planning
- 6 Acting

Source: Hines & Bishop, Thinking About the Future, 2007

How Existing “Methods” Fit

Framing	stakeholder analysis, integral (meta-method) issue analysis, critical futures
Scanning	environmental scanning, content analysis, leading/lagging indicators, text mining, trend tracking
Forecasting	bellwether analysis, cross impact analysis, Delphi, emerging issue analysis, framework forecasting, gaming/simulation, historical analogy/pattern recognition, morphological box/field anomaly relaxation, scenarios (2x2, incasting, Manoa, etc), statistical modeling (time series), systems analysis, technology forecasting (TRIZ, roadmapping, patent analysis, etc), trend analysis
Visioning	causal layered analysis, futures wheel, implications analysis, appreciative inquiry, backcasting, creative imagery, visualization, Futures Search
Planning	decision modeling, risk analysis, strategic planning, technology assessment
Acting	action research, change management, coaching, consulting, issues management

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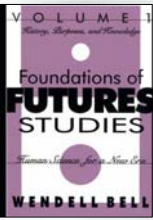
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The Stepladder of Futures

4. Philosophy
3. Frameworks
2. Theory
1. Methods


Philosophy

- 1. Futures studies recognizes that (a) "time is continuous, linear, unidirectional and irreversible," (b) "there is an independent and objective external world," (c) "the future is open—there are opportunities and freedom in directing the future", and (d) "there are better and worse futures."
- 2. Futures studies is concerned with (a) organizing "the most useful knowledge" for "decision making and social action," (b) "increasing democratic participation in imagining and designing the future," and (c) empowering "conscious or decisional human action."



Frameworks

Dr. Richard Slaughter has proposed a new framework of foresight to reorganize the field from the inside out: "Integral Futures" (<http://www.foresightinternational.com.au>)



	Interior	Exterior	
Futures Literacy	Critical Futures Studies Integral Operating System Integral Visioning Interior Practitioner Devt	Delphi Surveys Visioning Conventional ES Integral Operating System	Futures Strategy
	Critical Futures Studies, Post- Conventional (meta) ES, Integral Operating System, Transformative Cycle, Anthropological PS, CL.A, GLA or Integral LA, "Soft" SF, Integral Macrohistory, Integral Critique	Scenarios, Trend Analysis, Forecasting, Modeling, Systems, Visioning, Wild Cards, Layered Analysis, "Hard" SF, Strategic Anticipation, Conventional Macrohistory, Conventional ES, SNOT, STEEP, Competitive Intelligence, Strategic Anticipation, Integral Operating System	
			Individual Collective

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Methods




Table 1 AC/UNU Millennium project taxonomy of Futures Research Methodology - V2.0

Method	Quantitative	Qualitative	Normative	Exploratory
Environmental scanning		X		X
Delphi		X	X	X
Futures wheel		X	X	X
Trend impact analysis	X			X
Cross-impact analysis	X	X		X
Structural analysis	X			X
Systems perspectives		X		X
Decision modeling		X		X
Statistical modeling	X			X
Technology sequence analysis		X	X	
Relevance trees and morphological analysis		X	X	X
Scenarios	X	X	X	X
Interactive scenarios		X	X	X
Participatory methods		X	X	X
Simulation and games		X	X	X
Genius forecasting, vision, intuition		X	X	X
S&T road-mapping		X	X	X
Field anomaly relaxation		X	X	X
Text mining		X	X	X
Agent modeling		X	X	X
SGRI index	X	X	X	X
Multiple perspective concept		X	X	X
Causal layered analysis		X	X	X

Source: Glenn and Gordon (2003)

Why Futures Needs a Theory Base



1. Methods
2. Theory *the missing rung!*
3. Frameworks
4. Philosophy

Example: Anticipatory Leadership



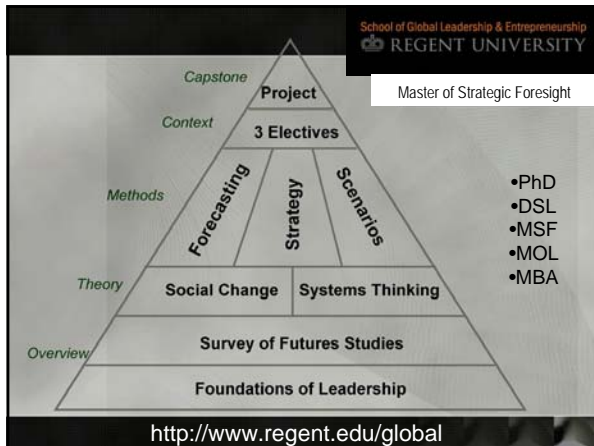
Question	Does anticipatory thinking enhance long-range innovation of groups?
Construct	<ul style="list-style-type: none"> • Futurist: A relentless fascination with the future. • Strategist: An ability to think systemically. • Mensch: Interpersonal skills that motivates great groups.
Variables	Leader: foresight, complex thinking, inspirational Followers: creative performance
Measurement	Instruments: Environmental Scanning behavior, ENTRE scale, MLQ? Sample: Technology executives, with time span of discretion of 7 years or more

Source: row 1 & 2: Anika Savage & Michael Sales, <http://www.artofthefuture.com/AL.html>

Borrow, Adapt & Create Foresight Theory

Type	Theory	Source
Framing	Action Science	Argyris & Putnam & Smith, (1985)
	Sensemaking	Daft & Weick (1984)
Scanning	General System Theory	Bertalanffy, (1968)
	Organizational Adaptation	Miles & Snow (1978)
Forecasting	Environmental Scanning	Hambrick, D. C. (1981)
	Probability theory	Rescher (1998)
Visioning	Innovation theory	Rogers, (2003)
	Transformational leadership	Bass & Steidlmeier (1985).
Planning	Hope theory	Snyder, C. R. (1995)
	Decision-making	Simon, H. A. (1997)
Acting	Strategic leadership	Finkelstein, & Hambrick, (1996)
	Planned Behavior theory	Fishbein, & Ajzen, (1975).
	Goal-Setting theory	Locke & Latham, (1990)

Source: Jay Gary, <http://www.jaygary.com>



Building & Validating Futures Theory

I am concerned that we futurists sometimes fail to test adequately our beliefs and ideas. If our beliefs—even our most cherished beliefs—are wrong, we ought to want to find out that they are indeed wrong. But designing research so as to put ideas at risk, rather than merely seeming to confirm them, is challenging (Bell, 1996, *Futures*, 28, p. 529).

Wendell Bell, PhD

Why Futures Studies Needs a Theory Base

Philosophy
Frameworks
Theory
Methods

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Break-out Groups

Discipline: PhDs & candidates	Profession: Business consultants
Innovation & Research Anyone	Systems Thinking Anyone