UNIVERSITY OF ILLINOIS
AT URBANA-CHAMPAIGN

Reflections on the psychology and sociology of evaluation

Thomas A. Schwandt

illinois.edu

Confucius:

- By three methods we may learn wisdom:

  First, by reflection which is noblest.

  Second, by imitation, which is easiest.

  Third, by experience which is the bitterest.

illinois.edu · AES Sept.2010 · 2

A Copernican revolution in evaluation?

illinois.edu · AES Sept.2010 · 3

Today's Topics

- "Just the facts ma'am"—Its an evidence-based world

- Living in an age of numbers—Metric mania and the quantified self

- Longing to grasp complexity—well, sort of

illinois.edu · AES Sept.2010 · 4

Today's Topics

- Combating phronemophobia

- Thinking may not save us—but consider the alternative

- Exploring a new world of 'use'

Joe Friday

"Just the facts ma'am"

Evidence-based Everything

Parenting
Medicine
Teaching
Speech therapy
Sex Education
Counseling
Mental Health
Youth Development
Management
Family Therapy
Occupational Therapy
Nursing
Physical therapy

What's wrong with using evidence?

Problems & Promises of Evidence-Based DM

- What constitutes 'evidence'—Evidence is something assembled in an argument for a particular claim

- Evidence is thus made not found

Problems & Promises of Evidence-Based DM

- Evidence is a cumulative matter

- Evidence-informed (vs. evidence-based)

Problems & Promises of Evidence-Based DM

- What kinds of claims need 'evidencing'?

- (More than simply claims of effectiveness)

Problems & Promises of Evidence-Based DM

- How evidence is used in decision-making?

  – Decisionism is not an adequate characterization

Living in an Age of Numbers

Living in an Age of Numbers

"Numbers make problems less resonant emotionally but more tractable intellectually"

--G. Wolf, "The Data-Driven Life," *New York Times*, April 26, 2010

Living in an Age of Numbers

- 2009: $2.4B USD spent on 13 OMB designated statistical agencies
- 2009: $5.5B USD direct federal funding for all statistical activities of $500K or more
- FY2011 US Department of Education budget request for R,D,&D = $272M

"Measuring Progress in Societies"

Is life getting better? Are our societies making progress? Indeed, what does "progress" mean to the world's citizens? There can be few questions of greater importance in today's rapidly changing world. And yet how many of us have the evidence to answer these questions?
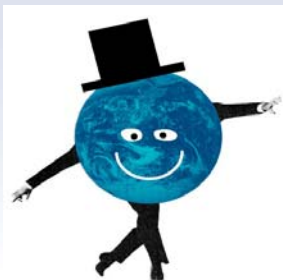
"Measuring Progress in Societies"

- The Global Project on "Measuring the Progress of Societies" seeks to become the world wide reference point for those who wish to measure, and assess the progress of their societies.

Happy Planet Index
http://www.happyplanetindex.org/

Measure of social well-being that goes beyond GDP

Happy Planet Index

"The social well-being indicator measures how people experience their connections with others and the strength of those relationships. It is comprised of two component indicators that measure supportive relationships and trust and belonging."
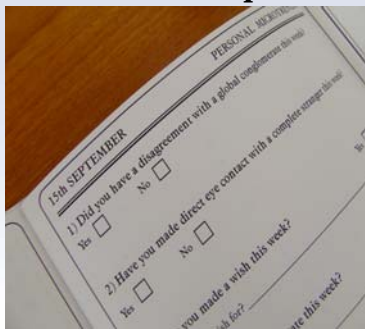
Happy Planet Index

"These can be thought of representing people's experiences of 'thick' and 'thin' relationships: 'thick' relationships are strong connections people experience with those who are close to them; 'thin' relationships are more numerous connections people establish with others encounter in broader social spheres"

Metric Mania

Self-experiments

Not clinical trials—goal is not to figure out something about human beings in general but to discover something about yourself
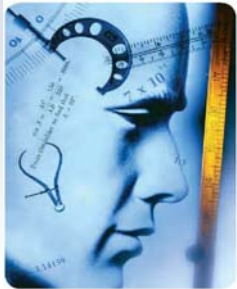
Evaluation tools for Self-experiments

- Trixie Telemetry (www.trixietracker.com)
- Bedpost (http://bedposted.com)
- Kibotzer (www.kibotzer.com)

The Quantified Self

LeanScale

TheBrain

PulseTracer

Philips DirectLife

Metric mania:
Just the facts ma'am

True: No method of measuring a societal phenomenon satisfying certain minimal conditions exists that can't be second guessed, deconstructed, cheated, rejected, or replaced

Metric mania:
Just the facts ma'am

False: Only the really easy to measure stuff is what is being counted and thereby skewing our sense of what it means to be effective, have impact, and so on.

Metric mania:
Just the facts ma'am

True: We may need metrics to fight metrics

True: Evaluators need to help stakeholders and clients decide how metrics might inform our decisions without becoming them

Are Metrics Blinding Our Perception?,
New York Times Nov. 21, 2009

Slide 29

Longing to grasp complexity

Slide 30

Longing to grasp complexity— well, sort of...

Complex adaptive systems

Complexity theory

Systems thinking

Network analysis

Agent-based modeling

Relational sociology

Complex social systems

Slide 31

Sociology and Complexity Science:
A New Field of Inquiry

http://www.springer.com/physics/book/978-3-540-88461-3

Sociology and Complexity Science (SACS) refers to a growing network of scholar involved in the intersection of sociology and complexity science for the purposes of enhancing sociological inquiry—be it in terms of the study of health care, economics, human organizations, crowd behavior or life on the Internet.

SACS is comprised of five major research areas:

(1) computational sociology,
(2) complex social network analysis,
(3) the Luhmann School of Complexity,
(4) sociocybernetics, and
(5) the British-based School of Complexity.

For a basic review of SACS, see our ARTICLE on Wikipedia

For an internet-based map of SACS, including links to all of the field's top scholars, CLICK MAP

UNDERSTANDING COMPLEX SYSTEMS   Springer: COMPLEXITY

Brian Castellani
Frederic Hafferty

Sociology and Complexity Science

A New Field of Inquiry

Our book introduces readers to the important work sociologists are doing in the burgeoning field of complexity science.

To order the book at Springer, CLICK HERE

To order the book at Amazon.com, CLICK HERE

For more information on the Complexity Science Series at Springer,

click on ABOUT SPRINGER COMPLEXITY SERIES

or visit BOOKS AND JOURNALS @ SPRINGER COMPLEXITY

To download all of the color figures from the book, CLICK HERE

Springer

Slide 32

Classical explanatory principles

- Reductionism/analysis
- Determinism
- Particularism

Slide 33

Stake's Countenance Model

DESCRIPTION MATRIX | JUDGMENT MATRIX

Intents | Observations | Standards | Judgments

Rationale

Contingencies | Congruence | Contingencies | ANTECEDENTS

Congruence | TRANSACTIONS

Congruence | OUTCOMES

Slide 34

Complexity

Slide 35
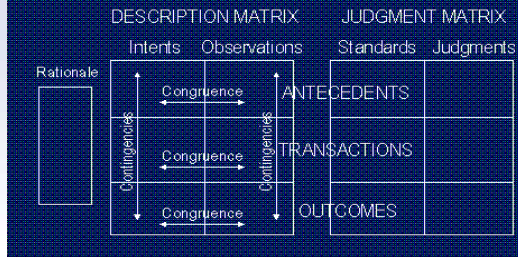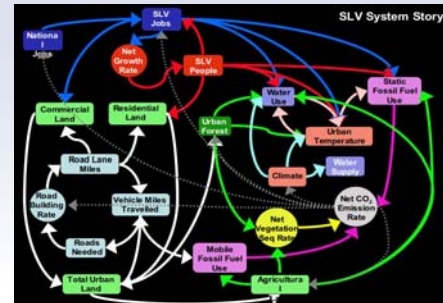
Complexity science principles

- Regards actors, social structures, and environmental circumstances as interactive, adaptive, and interdependent
- Holism; indeterminism, dissolution of strict observer—observed separation

Slide 36

Complexity Science

"An evaluation program must match the dynamics of the system to which it is applied"

--G. Eoyang & T. Berkas,
Evaluation in a Complex Adaptive System, 1998

Evaluators should ask:

- Do applications of evaluation methodologies/methods assume a typical results chain?

Input ➔ Activity ➔ Output ➔ Outcomes ➔ Impact

Evaluators should ask:

- Does counterfactual thinking govern our way of viewing causality?

Antecedent 'C' is cause of 'E',
if 'C' had not been then 'E' never existed
VS
Case-oriented explanation of outcome

Evaluators should ask:

- What does the evaluation assume about the system/organization in which the intervention (evaluand) unfolds with respect to change, outcomes, management, etc.?
- How do we move from evidence-based practice to practice-based evidence?
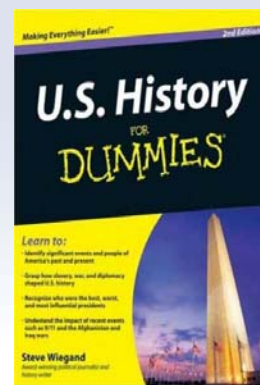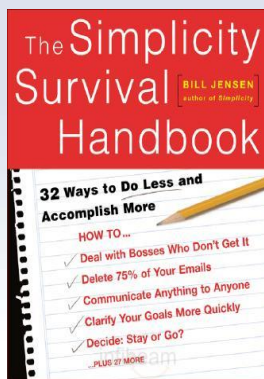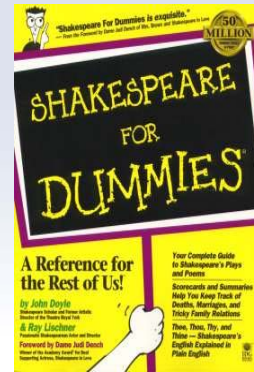
A Copernican Revolution?

- A new paradigm for evaluation—something like *evaluation as social navigation*: Organized action (based on evidence) focused on directing the course of social change toward a set of valued (but negotiable) goals
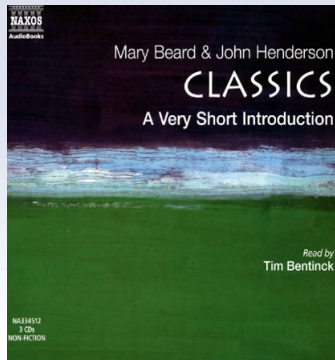
**Longing to grasp complexity—
well, sort of…**

We are in awe of complexity
but value simplicity

How else do we explain…

SHAKESPEARE FOR DUMMIES

"Shakespeare For Dummies is exquisite."
— From the Foreword by Dame Judi Dench of film, theater and Shakespeare in Love

A Reference for
the Rest of Us!

by John Doyle
Shakespeare Scholar and Former Artistic
Director of the Theatre Royal York
& Ray Lischner
Passionate Shakespearean Actor and Director

Foreword by Dame Judi Dench
Winner of the Academy Award® for Best
Supporting Actress, Shakespeare in Love

Your Complete Guide
to Shakespeare's Plays
and Poems

Scorecards and Summaries
Help You Keep Track of
Deaths, Marriages, and
Tricky Family Relations

Thee, Thou, Thy, and
Thine — Shakespeare's
English Explained in
Plain English

The Simplicity Survival Handbook

BILL JENSEN
author of Simplicity

32 Ways to Do Less and
Accomplish More

HOW TO…
✓ Deal with Bosses Who Don't Get It
✓ Delete 75% of Your Emails
✓ Communicate Anything to Anyone
✓ Clarify Your Goals More Quickly
✓ Decide: Stay or Go?
…PLUS 27 MORE

Making Everything Easier!™   2nd Edition

U.S. History FOR DUMMIES

Learn to:
• Identify significant events and people of America's past and present
• Grasp how slavery, war, and diplomacy shaped U.S. history
• Recognize who were the best, worst, and most influential presidents
• Understand the impact of recent events such as 9/11 and the Afghanistan and Iraq wars

Steve Wiegand
Award-winning political journalist and history writer

Slide 45

Mary Beard & John Henderson

CLASSICS
A Very Short Introduction

Read by
Tim Bentinck

NAXOS AudioBooks

NA334512
3 CDs
NON-FICTION

Slide 46

Longing to grasp complexity— well, sort of...

- We are uncomfortable with unpredictability, uncertainty & ambiguity
- 'Clear it up' by setting specific measurable goals
- 'Sort it out' by doing a logic model
- 'Get it under control' through accountability

Slide 47

Combating Phronemophobia

Slide 48

Phronemophobia: Fear of Thinking

Phronemophobia

- Thinking paralysis

- Minimalist thinking

Thinking may not save us— but consider the alternative

http://youarenotsosmart.com/

Misconception: Your opinions are the result of years of rational, objective analysis

The truth: Your opinions are the result of years of paying attention to information that confirmed what you believed while ignoring information that challenged your preconceived notions.
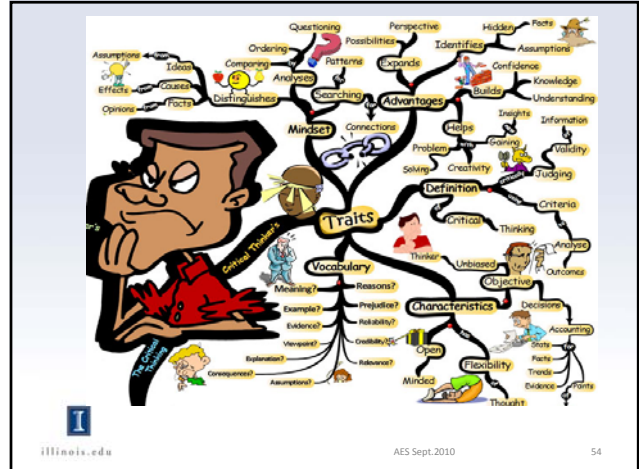
Some cognitive biases

Value attribution
Diagnosis bias
Recency effect

Critical thinking

"To think critically is to think clearly, accurately, knowledgeably, and fairly while evaluating the reasons for a belief or for taking some action"

--R. Carroll, Becoming a Critical Thinker, 2004

Exploring a new world of use

Traditional approach to use

- Instrumental
- Conceptual
- Tactical/strategic
- Persuasive
- Process
- 'Influence' vs. use

Developments affecting our understanding of 'use'

- Communicative/argumentative turn in policy & planning
- Studies of use of evidence in practitioner decision making
- The 'co-production' of science & society
- Implications of the risk society

Communicative/argumentative turn in policy & planning

- Judgment and decision is not the automatic application of rules or algorithms but a process of deliberation which weighs beliefs, principles, and actions under conditions of multiple frames for the interpretation and evaluation of the world.

                                        --John Dryzek

Use of evidence in practitioner decision making

- *What* information/data gets noticed
- *Whether* it is understood as evidence for some claim
- *How* it is used

    All depend on the situated cognitions and actual realities of work practices

'Co-production' of science & society

- The ways in which we know, interpret, evaluate, and represent the world are inseparable from the ways in which we choose to live in it

The risk society

- Managing risk not simply a matter of evaluation experts calculating impacts, costs and benefits
- "Using" social science and evaluation must entail examining aims of interventions

Concluding thoughts

Knowledge production/ Knowledge product framework

- Thinking about programs and policies (evaluands) and evaluation in terms of processes of knowledge production and consumption

Social monitoring & navigation framework

- Programs, policies, and evaluations ≠ products but are co-constructed, dynamic, evolving, learning, material & linguistic actor networks of continuous design and redesign, implementation, and individual- and system-level adaptive change

Shift focus:

From

Thinking in terms of educating/training for evaluator competencies

To

Thinking in terms of educating for evaluation capabilities

(Fraser & Greenhalgh, BMJ 2001: 323: 799-803)

THANK YOU FOR LISTENING