



FIRST GLOBAL CONFERENCE ON

RESEARCH INTEGRATION
AND IMPLEMENTATION

SEPTEMBER 8-11 2013
CANBERRA, AUSTRALIA
AND ONLINE

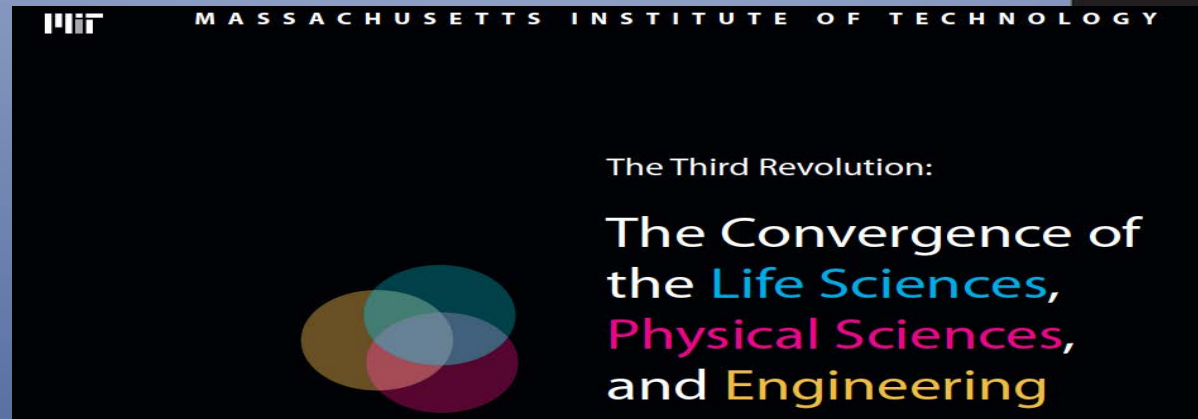
**Interdisciplinarity Then, Now,
and Into Networked Futures**
Julie Thompson Klein
Wayne State University (USA)

Then and Now: Handout 1

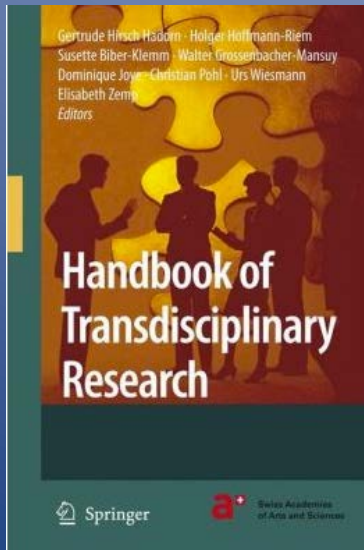
- **New Fields & Interdisciplines**
- **New Syntheses, Theories, and Paradigms**
- **Prominent Initiatives**
- **Quiet Daily Flow of Influence**
- **Educational Reform**

Trendlines

- 4 Drivers of *Facilitating IDR*
- Heightened imperative
- Expanding literature



- **Disciplinarity <> Interdisciplinarity**
- **Shadow Structure of IDR and IDS**
- **Ascendancy of Transdisciplinarity**



interdisciplinarity management science integrated assessment

adaptive management **implementation science** multidisciplinary

complexity science modelling and simulation policy science impact evaluation

system dynamics sustainability science **systems thinking**

public engagement action research ecological economics decision sciences

team science theory of change project management post-normal science

systemic intervention **transdisciplinarity** operations research

mode 2 coalition theory cybernetics Integration and Implementation Sciences (I2S)

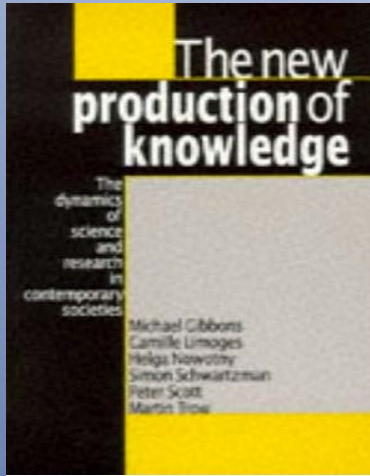
Rethinking “Institutions”

- **Mobilizing Networks** (Cathy Davidson and David Theo Goldberg, *The Future of Learning Institutions in a Digital Age*)
- **Place versus Space** (Michel deCerteau, *The Practice of Everyday Life*)



From Structure to Network

- Crosshatching
- Crossfertilizing
- Inter/transecting



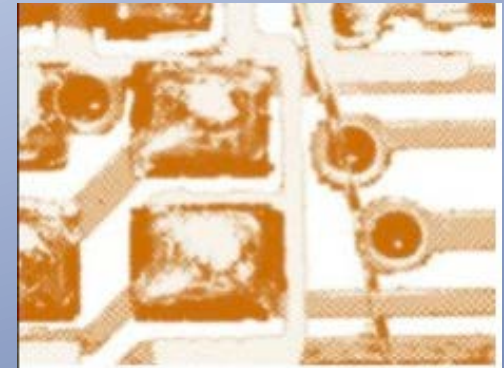
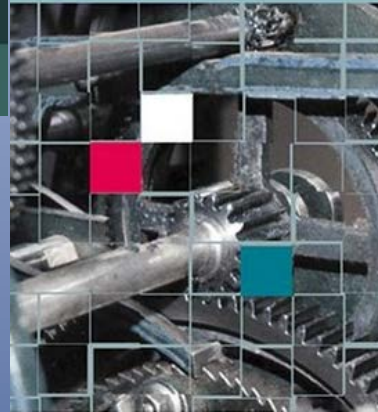
td-net

Network for Transdisciplinary Research



Christian Pohl, Gertrude Hirsch Hadorn

Principles for Designing Transdisciplinary Research



Matthias Bergmann, Thomas Jahn, Tobias Knobloch, Wolfgang Krohn, Christian Pohl, Engelbert Schramm

METHODS FOR TRANSDISCIPLINARY RESEARCH

A Primer for Practice

campus

The Science of Team Science

Assessing the Value of Transdisciplinary Research



National Cancer Institute

Team Science Toolkit

Home

About Team Science

About the Toolkit

...and significant change technique, essential to...
 ...technology, systems planning, soft systems...
 ...strategic, assumption-making, and...
 ...critical mass, internal judgement, carbon...
 ...pilot, design technique, future, search,...
 ...change technique, critical mass, technique,...
 ...systems planning, soft systems methodology,...
 ...assumption-making, and testing, proposed...

Research Integration Using Dialogue Methods

David McDonald
 Gabriele Bammer
 Peter Deane



ANU

THE AUSTRALIAN NATIONAL UNIVERSITY

Integration and Implementation Sciences

The Digital Horizon

dynamic

flexible

transactional

user-generated

controlled thesauri

semantic mapping

tagging (clouds)

great granularity

crosswalks



Interdisciplinarity and I2S Premise

Page 429: John Unsworth
(Klein Commentary)

“The introduction of Web 2.0 shifted emphasis from the computer as platform to the network as platform, especially the network of interactions and synergies.

An I2S ‘college of peers’ beckons a networked platform that is not possible with current groups operating in separate or even in tandem.”



Sustainability – Environment – Climate Change Agriculture – Health

799: Joint Thinking and Action

709: ID/TD Teams

748: MD/ID/TD
Collaborations

582: *ID Research Journeys*

727: Historical Perspectives

696/708: Methods and Factors

695/749/800: Integration

563/785: Communication

**713/759/802
Education**

577-78: The University

601: Funding Agencies

526/571: AIS

663: INIT

605: td-net