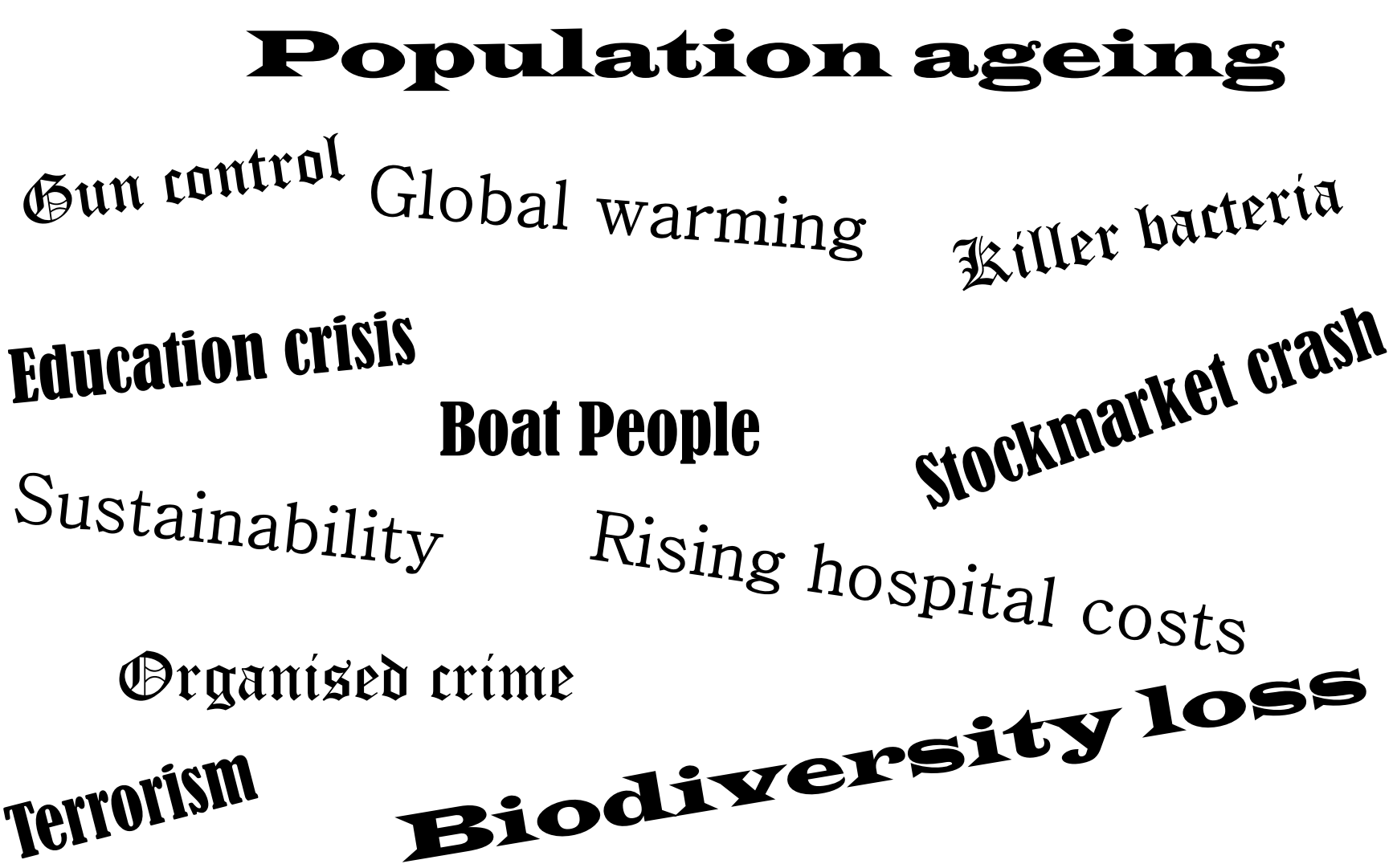
Australian National University

Complexity, Imperfection and the Future of Public Policy

Gabriele Bammer


Population ageing
Gun control
Global warming
Killer bacteria
Education crisis
Boat People
Stockmarket crash
Sustainability
Rising hospital costs
Organised crime
Biodiversity loss
Terrorism

value conflicts

ambiguity

uncertainty

constraints

contradictory solutions

ripple effect

unintended adverse consequences

unpleasant surprises

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IMPERFECT SOLUTIONS

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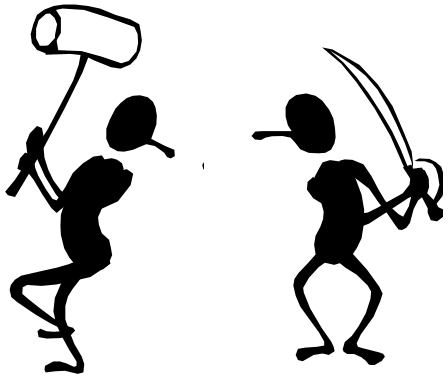
unpleasant surprises

IMPERFECT SOLUTIONS

- increased political risk
- danger of politics trumping good policy
- risk of poor governance



What could or should universities do to support strong democratic governance and effective public policy?

Complex real-world problems

Horn, R. E. and Weber, R. P. (2007), *New Tools For Resolving Wicked Problems: Mess Mapping and Resolution Mapping Processes*. http://www.strategykinetics.com/files/New_Tools_For_Resolving_Wicked_Problems.pdf

Connected to other problems

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Contradictory solutions
Numerous possible intervention points
Consequences difficult to imagine

Complex real-world problems	What good at	
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Kulla’s Ripple by Tim Spellman

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Points of leverage… 1

1. Capture knowledge developed by politicians and public servants

Points of leverage… 2

1. Capture knowledge developed by politicians and public servants
2. Link currently fragmented knowledge

Points of leverage… 3

1. Capture knowledge developed by politicians and public servants
2. Link currently fragmented knowledge
   - existing approaches to complexity

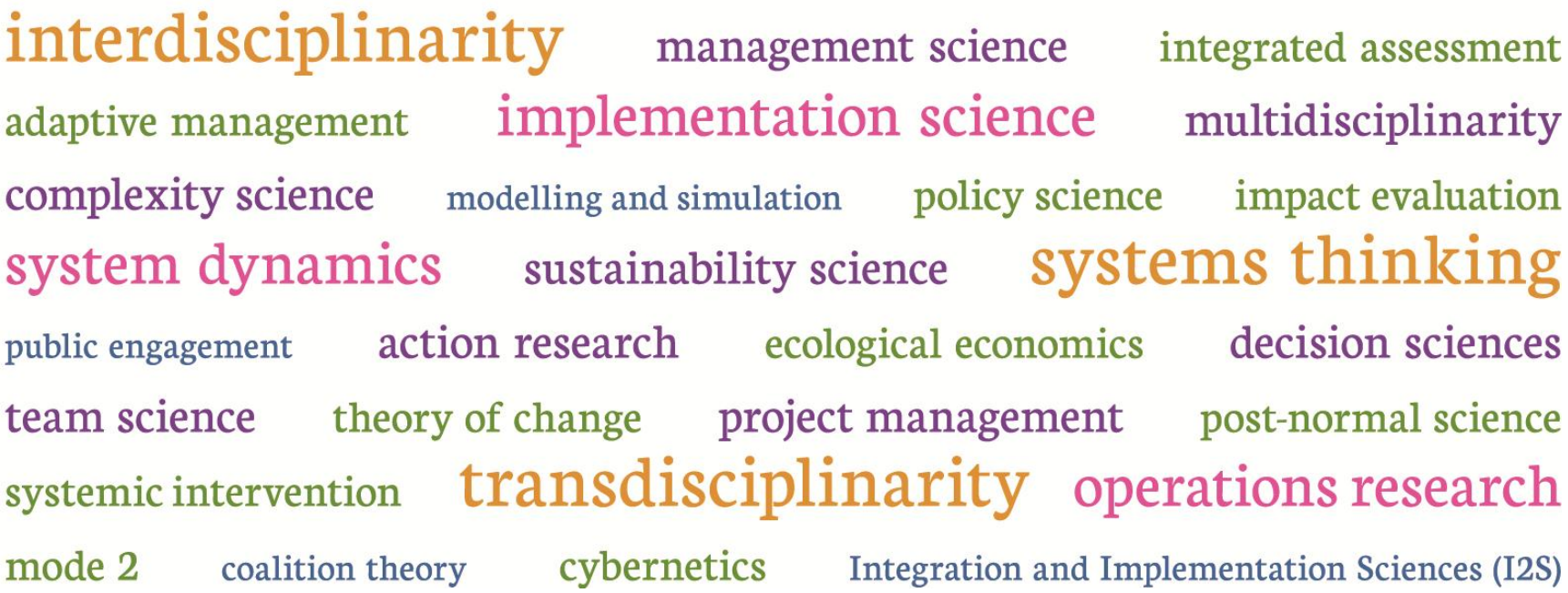
Points of leverage… 4

1. Capture knowledge developed by politicians and public servants
2. Link currently fragmented knowledge
   - existing approaches to complexity
   - problem-based experience

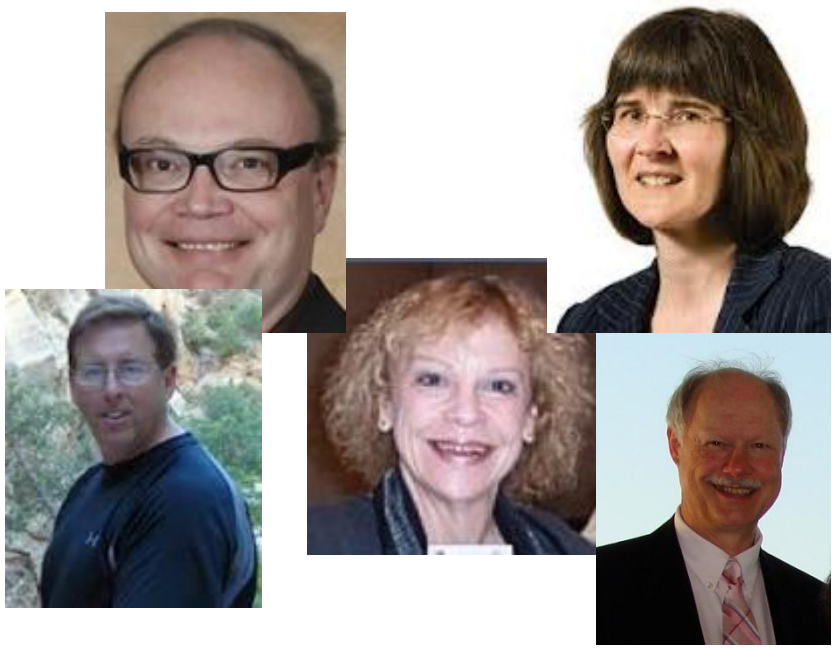
Points of leverage… 5

1. Capture knowledge developed by politicians and public servants
2. Link currently fragmented knowledge
   - existing approaches to complexity
   - problem-based experience
   - existing insights on fundamental topics

Overcome fragmentation… in existing approaches to complexity



Link research communities … 1



Interdisciplinary Communities

Link research communities … 2

Interdisciplinary Communities

System Dynamics Communities

Link research communities … 3

Interdisciplinary Communities

System Dynamics Communities

Implementation Science Communities

Fragmented research communities

=

Fragmented resources

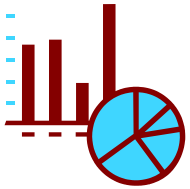
Organise repositories…

Points of leverage…

1. Capture knowledge developed by politicians and public servants
2. Link currently fragmented knowledge
   - existing approaches to complexity
   - problem-based experience
   - existing insights on fundamental topics

Existing insights on fundamental concepts… UNCERTAINTY

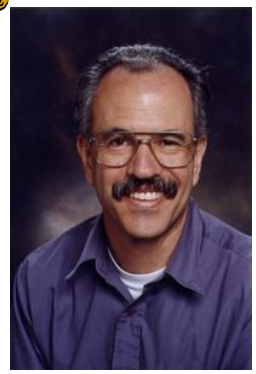
STATISTICS - probability theory



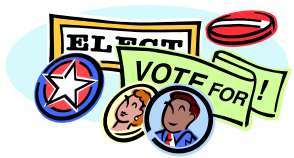
Music – essential for creativity

History – moral dimension

Intelligence – gaps or overload



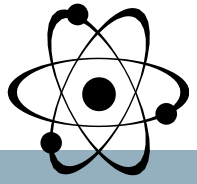
Art – certainty and uncertainty are a continuum, not opposites



Complexity - irreducible

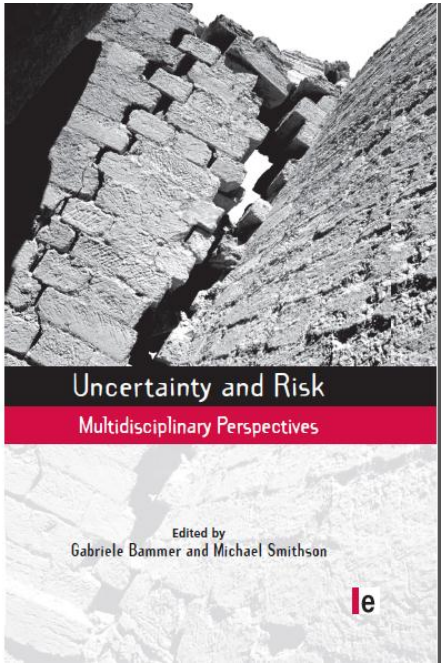
Futures – unknown unknowns

Religion – desirable vs fundamentalism



Existing insights on fundamental concepts… CHANGE

interdisciplinarity management science integrated
adaptive management implementation science multidi
complexity science modelling and simulation policy science impac
system dynamics sustainability science systems th
public engagement action research ecological economics decisi
team science theory of change project management post-no
transdisciplinarity operations
cybernetics Integration and Implementation

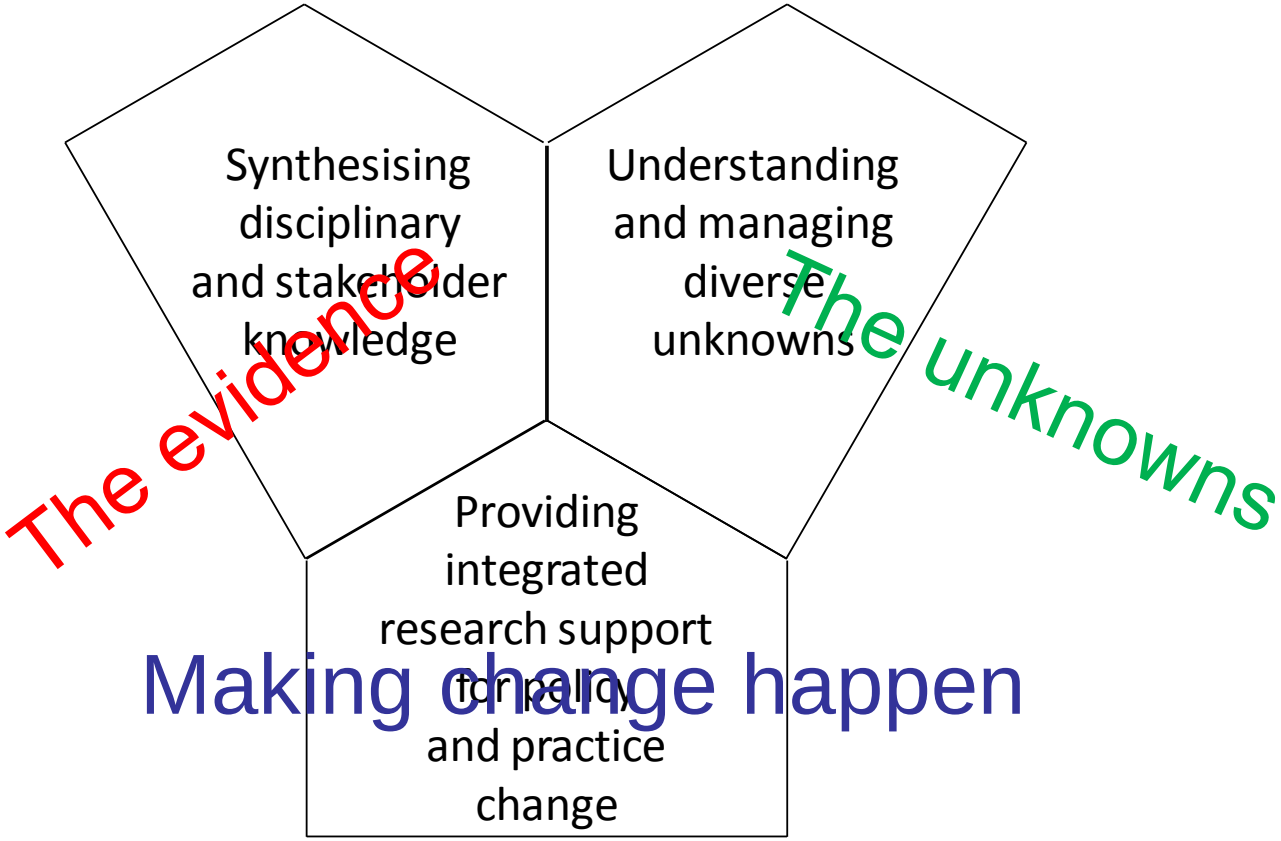


New framework for reporting: Integration & Implementation Sciences (I2S)

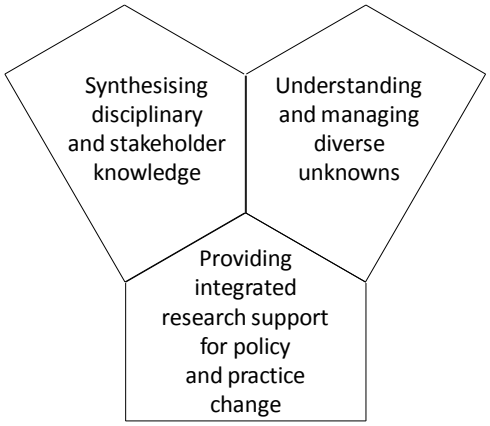
3 domains

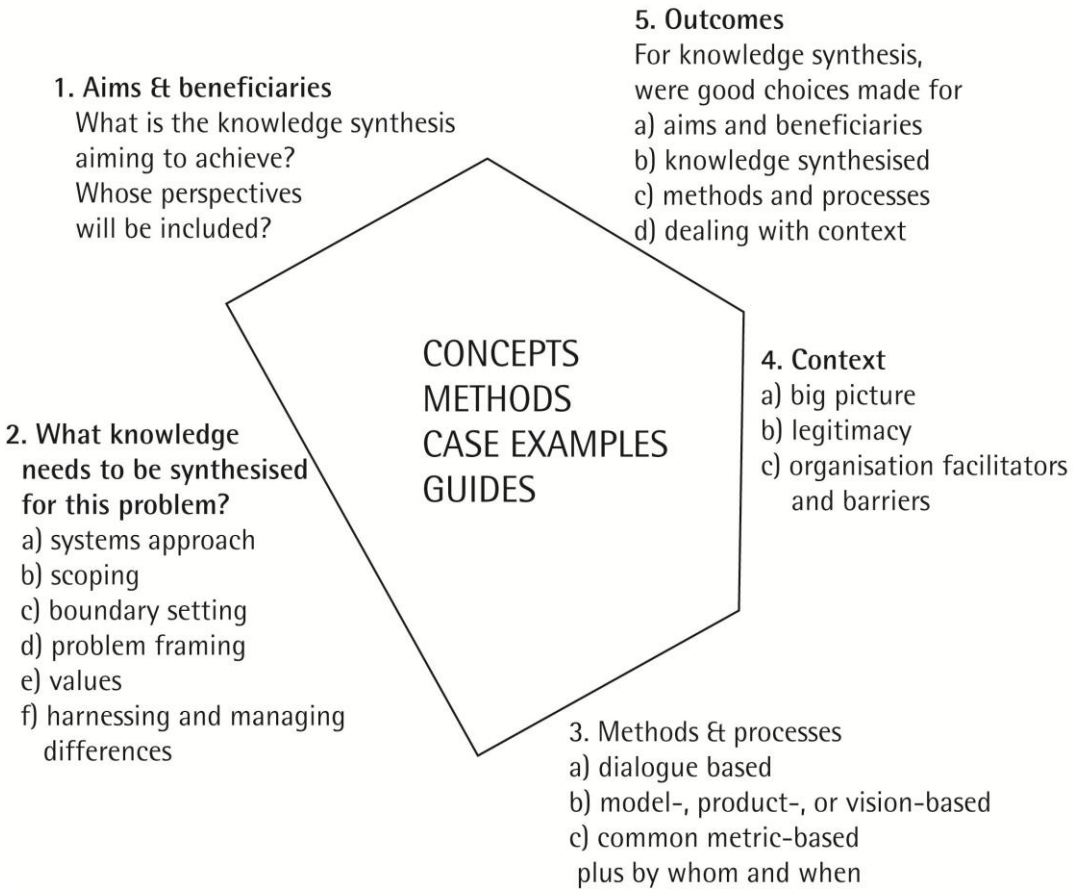
5 questions

Three domains of I2S

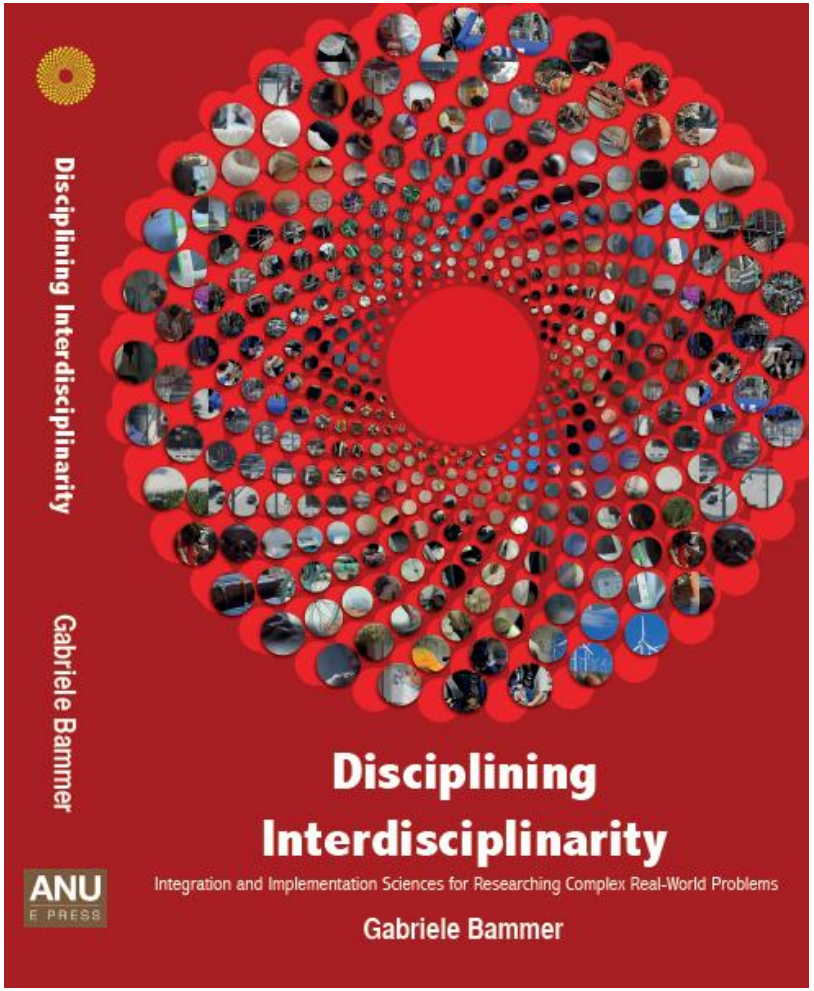


Five questions… for Domain 1





http://epress.anu.edu.au/titles/disciplining-interdisciplinarity



Plenaries

Digital posters

Join us!

In Canberra or on-line

Sept 8-11, 2013

Online co-conferences

Networking

I2Sconference.org