New agendas for the study of wicked problems

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Panel T04P01 Wicked Problems in Public Policy – from theory to practice

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Defining Wicked Problems

- In the late 1960s and early 1970s, Rittel and Webber at University of Berkeley drew upon urban planning theory, cybernetics and systems theory, to identify 10 features of "wicked" problems.

- Not about 'immoral' or unethical

- More about wild and untamed

- Rational-choice assumptions don't work.

- In short, WPs are about intractability, seen from the perspective of legitimacy in contested social interventions.

- WPs flourish where there are seen to be high levels of uncertainty, complexity, and value diversity.

Defining Wicked Problems

- The subsequent literature has focused on key features:
  - Difficult to define -- clearly and consensually
  - Many interdependencies and multi-causal aspects
  - Proposed measures may have unforeseen effects
  - Problems may be unstable and continue evolving
  - No clear and correct solution
  - Problems are socially complex with many stakeholders
  - Responsibility stretches across many organisations
  - Solutions could require behavioural changes by citizens and stakeholder groups.   (see APSC 2007)

My argument

- The wicked problem (WP) conceptualisation has important theoretical and practical lessons about how to understand and manage difficult /controversial policy issues.

- It is useful to identify these features with care, study how these features interact, and study how they influence strategies for problem-solving and program management.

- Taken separately, each singular WP feature is already well recognised in policy & management literature. But it is the WP 'package' of features (the ideal-type cluster) that constitutes its provocative shock-value.

- Rather than isolate the literature on WPs as a specialised sub-literature, it would be more productive to develop the links to policy and organisational studies more broadly.

Toward some conclusions

- Historical and institutional context matters
  - The nature and significance of the challenges will be perceived differently in the light of previous experience, perceived familiarity, and established political narratives.
  - Breadth, depth and scale of issues matter.
- Policy capacity matters
  - Skills, resources, leadership and good governance practices make a large difference
  - Perceptions and practices of senior leaders matter.
- Appetite for policy change matters
  - Sometimes, new directions or paradigms are probably needed but the socio-political situation is not yet 'ripe'.
- Good governance capacity is essential. Governance capacity is sorely tested by major shocks.

The journey in more detail

- Rittel and Webber (1973) asserted that conventional approaches to scientific analysis and rational planning are inadequate for guiding **researchers** and **practitioners** in tackling complex and contested, or 'wicked', social problems.

- Policy analysts, academic researchers and planning practitioners have grappled with the claim that conventional scientific-technical approaches might be inappropriate or insufficient for understanding and responding to complex social issues.

- The WP perspective continues to **challenge** modern notions of evidence-based policymaking, policy evaluation, and performance-based public management.

Is the whole world 'wicked'?

- The literature (40+ years) has tended to use the 'wicked' metaphor in a loose manner. For example, some authors:
    - apply the term indiscriminately to all 'complex' issues
    - imply that most policy issues are inherently intractable under modern conditions
    - overlook the wide **range** of problem-challenges and problem-response situations
    - prescribe just one favoured response-approach -- typically relying *either* on top-down power *or* horizontal collaboration.
- We need a more nuanced approach taking account of contingent or situational contexts.

Special problems require special measures

- The wicked problems literature generally contends that special methods are needed for addressing highly contested arenas of policy and planning.

- This is because the plurality of views about the problems and solutions are anchored in differing values and perceptions and interests.

- These differences cannot be adjudicated and settled by positivist science.

- They require inclusive processes of argumentation and conflict resolution among stakeholders.

Key relevant themes in policy & public governance studies

However, there are strong arguments for attempting to 'mainstream' wicked problem analysis by linking these big policy challenges more clearly to recent literature on key public policy themes and challenges.   For example:

- problem framing
- policy design
- agenda setting
- policy implementation
- policy capacity
- good governance
- evidence/evaluation

- risk management
- crisis responses
- coping with complexity
- coping with deep conflicts
- adaptation and resilience approaches

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Debates about problem-framing & policy success involve several interactive dimensions

- **cognitive**: mainly about science, knowledge and ideas about causality;

- **communicative**: mainly about how messages are circulated, challenged or reinforced;

- **organisational** or institutional: mainly about how practices and viewpoints are embedded;

- **political**: mainly about how power is exercised and how stakeholders mobilise to change or defend policies and practices;

- **consequential**: mainly about how actions and policies make a difference to people's lives (outcomes).

# Types of situations and contexts

Decision-makers face a range of situations, risks, and policy challenges.

Especially important factors include:

- whether stakeholder values are aligned, and

- whether the knowledge base is robust.

- This leads to four scenarios (see Table below), ranging from relatively 'tame' situations (type 1) through to relatively 'wicked' problems (type 4).

	High agreement on values	Low agreement on values
State of knowledge: well developed	1. Relatively easy decisions. Periodic expert review and adjustment	2. Focus on dialogue among stakeholders to resolve differences
State of knowledge: Tentative and disputed	3. Knowledge gaps need to be tackled by experts, with periodic stakeholder engagement	4. Wicked problems requiring repeated dialogue among experts and stakeholders

Source: Balint et al, 2011

The basic typology
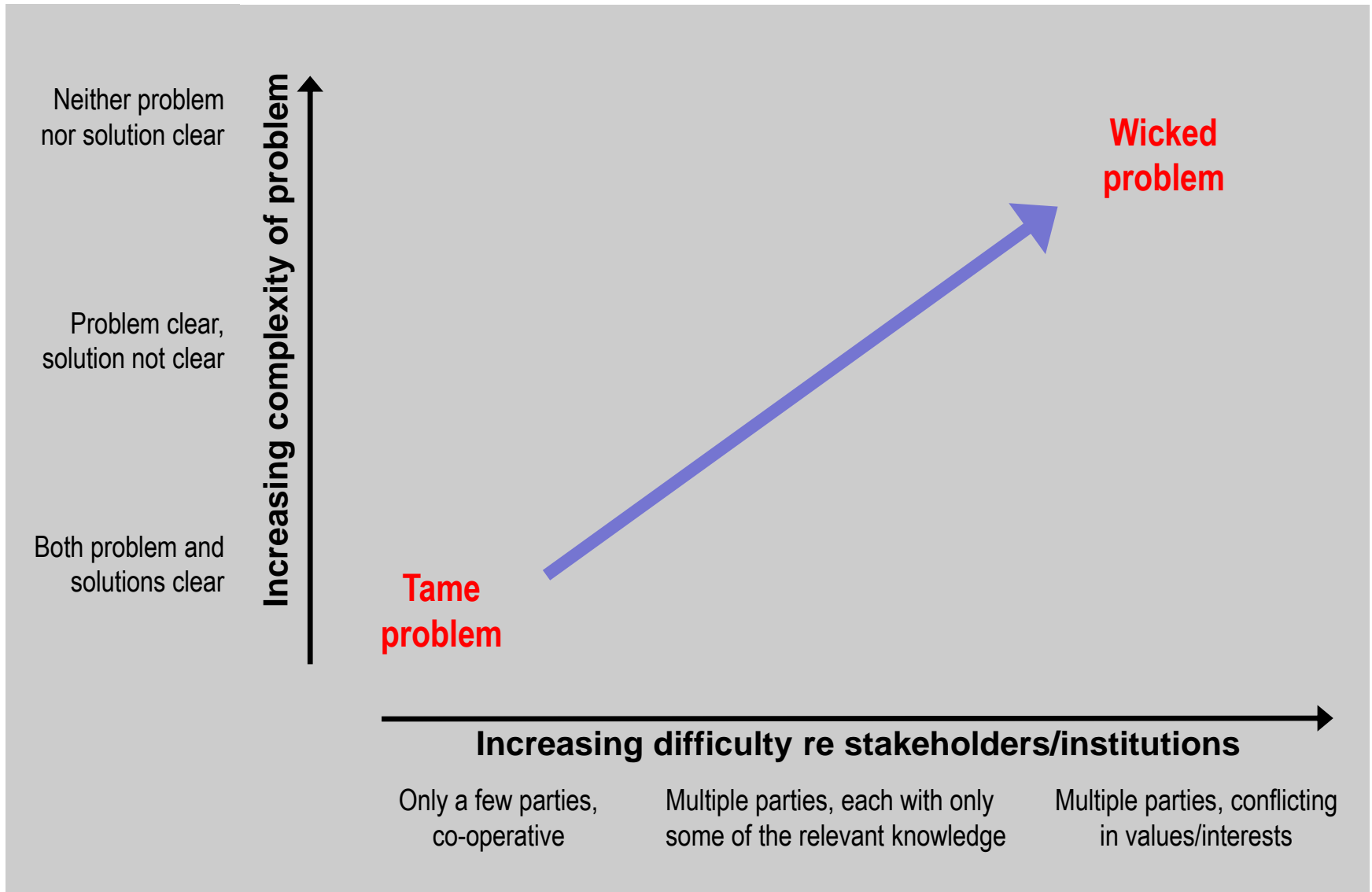
(Source: Alford & Head 2015)

Spectrum of modalities for solving problems?

Technical expertise

Problem definition

⬇

Solution selection

⬇

Implementation

Examples:
- Apollo moon-landing
- UK-FR Channel Tunnel
- designing smart phones
- vaccination for disease

Socio-political conflict

Solution selection

Implementation

Policy debate

Externalities

Political influence

Examples:
- urban poverty
- war on illegal drugs
- environment policy

Different problem-types are linked to different managerial approaches

- 1. **Administrative and technical** approaches become standardised within large bureaucratic organisations.

  - Note the 'conversion' process by which problems are transformed into **routines**/rules/programs/scripts which serve to manage, stabilise or "tame" issues.

  - Note also the widespread use of '**project**' modes of public management which operate through rational planning modes.

Different problem-types are linked to different managerial approaches

- 2. **Adaptive** approaches are increasingly seen as needed to address intractable issues.

- These typically use:
  - Innovative design thinking
  - Systems thinking about both socio-technical and socio-ecological processes
  - Resilience thinking
  - Participatory engagement
  - Place-based community development processes
  - Collaboration and joined-up processes

Let's learn by analysing a range of cases

- Frameworks for analysing wicked problems need to be tested against a range of cases with different characteristics in different locations. How do decision-makers and stakeholders respond and mobilise?

- Longitudinal studies are also valuable as part of evaluation and learning. Problems change in nature (and even recede) over time.

- For example, the debates on climate change and sustainable development have given rise to three decades of cross-cutting conflict and contestation -- multi-layered, cross-jurisdictional, many nested problems, conflicting values and interests, and major knowledge gaps.

Refining the forms of 'wicked'?

- For 'wicked' to be a useful analytical concept (rather than a 'spray-on' metaphor), we need to make some distinctions between situations where:
  - there are few (**or** very many) key actors & organisations
  - there is basic consensus (**or** fundamental disagreements) about the *nature* of the challenge
  - there is basic consensus (**or** fundamental disagreements) about *how* to address the challenge
  - there is a reasonable level of knowledge (**or** very weak knowledge) about *causal* links and the likely *impacts* of various policy responses
  - there is general support (**or** deep fragmentation) concerning the need for concerted action.

Making progress rather than 'solutions'

- Wicked problems can be 'tackled' and 'addressed' and even 'well managed' but are unlikely to be 'solved' in the short term. Expecting definitive 'solutions' is to invite failure. What counts as 'progress' for the actors?

- Understanding 'the context' or 'the situation' is essential for knowing where to seek leverage points and knowing how to build support.

- Taking a pragmatic approach is needed because we often don't know when a satisfying 'provisional' or 'intermediate' benefit will be developed down the track.

- In practice, the pragmatic challenge is to push to achieve as much as possible until that is no longer possible.

- Thus the limits are situational as much as a test of human agency, knowledge and perseverance.