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## DEALING WITH WICKED PROBLEMS IN PUBLIC ADMINISTRATION

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### Abstract

This article addresses an approach to explore and tackle some of the existential threats (wicked problems) that face public administration globally. It seeks to build on existing work to suggest some defining traits in terms of 'wicked' issues and problems that are being explored again by governments and international organizations such as the OECD in order to develop leadership cadres that are equipped to advance and deliver focused policies that can strategically combat these problems. The paper discusses how and why an innovative and indeed entrepreneurial approach to dealing with these issues requires effective bureaucracies and explores the barriers to public administration academics to getting involved in delivering real world support to policy makers and public servants.

**Keywords:** public administration, wicked problems, public service reform, bureaucracy, innovative state.



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## 1. Introduction

The late US academic, Don K. Price, referred to public administration as the seamy side of politics. By this he meant that the institutions of public administration are what make things happen; public administration is responsible for the successful delivery of public services (Price, 1983). These services vary across countries, but usually include internal and external security and the provision of justice, a mix of educational and social provision and the regulation of the private sector. It also involves dealing with some problems that have been termed ‘wicked’. We see these different interests referred to time and again in different ways through explorations of the link between senior public servants and politicians (elected or appointed) in different countries and how the policy process seeks to address the demands made on public administration. In those countries that pursue a classic Weberian or Wilsonian dichotomy the politicians are responsible for strategic control and planning and public officials responsible for delivery (Kattel, Drechsler and Karo, 2022, pp. 24–90). Except of course, the reality is a lot more complicated than that. Especially if we factor into the discussion different notions of democracy and definitions of accountability (Massey, 2021, pp. 201–226). Then we must also take into consideration the most recent innovations in public administration research and theory with regard to conceptions of public value, efficiency, value added and policy impacts; all things that challenge public services globally and call for innovative solutions.

This paper will: (1) briefly discuss some of the existential threats (wicked problems) that face public administration globally; (2) look at some defining traits in terms of ‘wicked’ issues and problems; (3) explore how this is being addressed by bodies such as the OECD as well as individual nations; (4) and briefly discuss how and why an innovative and indeed entrepreneurial approach to dealing with these issues requires bureaucracy. In the space available, the paper obviously cannot do justice to all of these points but will draw the reader’s attention to them as a guide to some of the challenges discussed in this special issue.

## 2. Threats

There are a variety of known threats public services need to address and these vary according to the global and local context and over time; that is, there is a temporal nature to many of these (Pollitt, 2008; 2013). Clearly amongst the most pressing are:

- Climate Change and environmental degradation in their various forms. But public administrators need to explore whether they have the pertinent technology to ensure the goal to achieve, for example, zero harmful emissions do not exacerbate poverty. In a world where energy resources are scarce it is the poor who will suffer most if we do not pay careful attention to how we deliver this (Tigabu, Berkhout and van Beukering, 2017).
- The end of globalization, or at least the most recent phase. The realization by many nations that they need to reduce their dependence on others for energy and food. This is not new, but we see renewed attention to it during the COVID crisis and the

Ukraine war and it will be a major challenge for our integrated economies and supply chains (Van Bergeijk, 2010).

- Inflation. Uncontrolled inflation destroys economies, ruins societies, and topples regimes and governments (Forbes, Lewis and Ames, 2022).
- Large scale migration that will continue to grow all the time there are areas at war, suffering drought or with failing economies. This is also frequently connected to international organized crime groups (UK Crown Prosecution Service, 2022).
- Loss of faith by the general population in their governments and in experts. This varies across different parts of the globe, but research suggests that in many countries this loss of faith, or respect, or deference is rising. It means collective or community supported action to address these issues and threats is itself at risk (Newton and Norton, 2016).

There are other threats, of course and all of the above are interrelated, they constitute a seamless web of circumstance, and this interconnectedness often makes it seem problematic to address them (Massey, 2021; 2022).

### **3. Wicked issues or problems**

Head and Alford (2015) resurrected a conversation located in the ‘wicked’ problem discussions that arose in the 1970s from a critique of rational-technical or ‘engineering’ approaches to complex issues of social planning and public policy. These theoretical criticisms of the then existing approaches to public policy evolved due to the perception that the prevailing methodologies included a ‘need’ for impossibly high levels of goal-clarity, coordination and performance information (Pressman and Wildavsky, 1973 *apud* Head and Alford, 2015), or their neglect of the ‘lived’ experiences and perspectives of stakeholders and service providers. The best-known critique was Rittel and Webber’s ‘Dilemmas in a General Theory of Planning’ (1973). Alford and Head returned to discuss these again, as did the Australian Public Service Commission (2003) in its review of how to address seemingly intransigent problems from the perspective of the Australian Public Service. Their report delivers a useful benchmark on how these wicked issues may be defined and current techniques and technologies deployed to focus on delivery.

The Australian government adopted the Rittel and Webber critique that claimed modern social problems are generally ‘ill defined,’ and rely on political judgments rather than scientific certitudes. In this sense, most major public policy problems are ‘wicked’ (Rittel and Webber, 1973, p. 160), that is, they are inherently resistant to a clear definition and an agreed solution. It’s interesting that this paper was written over 50 years ago and we are still as public servants and as academics discussing similar things with regard to addressing problems via the improved recruitment and training of staff and delivering policies. Rittel and Webber identified ten primary characteristics of wicked problems and for many accounts, including the Australian Government’s, these provide the starting point for

understanding how to approach the problem. These characteristics, or traits, are:

- There is no definitive formulation of a wicked problem;
- Wicked problems have no ‘stopping rule’ (i.e., no definitive solution);
- Solutions to wicked problems are not true or false, but good or bad;
- There is no immediate and no ultimate test of a solution to a wicked problem;
- Every (attempted) solution to a wicked problem is a ‘one-shot operation’; the results cannot be readily undone, and there is no opportunity to learn by trial and error;
- Wicked problems do not have an enumerable (or an exhaustively describable) set of potential solutions, nor is there a well-described set of permissible operations that may be incorporated into the plan;
- Every wicked problem is essentially unique;
- Every wicked problem can be considered to be a symptom of another problem;
- The existence of a discrepancy representing a wicked problem can be explained in numerous ways; and
- The planner has no ‘right to be wrong’ (i.e., there is no public tolerance of experiments that fail) (Rittel and Webber, 1973 *apud* Alford and Head, 2015, p. 714).

Given the remote chance of even defining and understanding wicked problems from a policy perspective, if we accept these characteristics, any in-depth research into the amelioration of them has the potential to induce deep pessimism. Undaunted, however, the Australian researchers working for the Australian Commission, refined their approach. They sought to identify a range of current wicked issues besetting Australia, to argue that even with something as apparently obvious as climate change, which is in reality hugely scientifically complex as well as socially unpredictable, there are public administration approaches that can be attempted. They argued:

- ‘Wicked problems are difficult to define’. Different stakeholders have different versions of what the problem is. No one version is complete or verifiably right or wrong. The debate concerning the causes, the extent and the solutions to climate change is a good example.
- ‘Wicked problems have many interdependencies and are often multi-causal’. There are also often internally conflicting goals or objectives within the broader wicked problem. In dealing with the use and effects of illicit drugs, for example, there is tension between the goal of minimizing harm to existing drug users via measures such as the provision of safe injecting rooms and clean needles and sending a message that illicit drug use is illegal. It is the interdependencies, multiple causes and internally conflicting goals of wicked problems that make them hard to clearly define. The disagreement among stakeholders often reflects the different emphasis they place on the various causal factors.
- ‘Attempts to address wicked problems lead to unforeseen consequences’. Because wicked policy problems are multi-causal with interconnections to other issues, it is often the case that measures introduced to address the problem lead to unforeseen consequences elsewhere. Some of these consequences may well be deleterious, the unintended consequences effect often referred to in the policy literature.

- ‘Wicked problems are often not stable’. Frequently, a wicked problem and the constraints or evidence involved in understanding the problem (e.g., legislation, scientific evidence, resources, political alliances), are evolving at the same time that policy makers are trying to address the policy problem.
- ‘Wicked problems usually have no clear solution’. Since there is no definitive, stable problem there is often no definitive solution to wicked problems. Solutions to wicked problems are not verifiably right or wrong but rather better or worse or good enough.
- ‘Wicked problems are socially complex’. The social complexity of wicked problems, rather than their technical complexity, overwhelms most current problem-solving and project management approaches. Solutions to wicked problems involve coordinated action by a range of stakeholders.
- ‘Wicked problems hardly ever sit conveniently within the responsibility of any one organization’. For example, even if the solution to achieving safer communities is opaque, it is clear that it involves many organizations beyond the police.
- ‘Wicked problems involve changing behavior’. The solutions to many wicked problems involve changing the behavior and/or gaining the commitment of individual citizens. The range of traditional levers used to influence citizen behavior — legislation, fines, taxes, other sanctions — is often part of the solution but these may not be sufficient. Increasingly we use behavioral science to effect change.
- ‘Some wicked problems are characterized by chronic policy failure’. Some long standing wicked problems seem intractable. Indigenous disadvantage (in Australia, but also it may be argued in other countries such as Canada and the US) is a clear example — ‘Its persistence has not been for want of policy action. Yet it has to be admitted that decades of policy action have failed’ (Australian Government, 2007, pp. 3–5).

#### **4. So, what ought we do as public servants?**

Recent work originating from the OECD (2022) attempts to suggest ways in which public services can address wicked problems through new organizational structures and focused leadership training. Individual governments are also exploring ways of doing the same, for example, in Korea, Singapore, the Australian Public Service Commission, the UK and elsewhere. It is a series of attempts to reimagine working to address wicked problems but to do this in the era of innovative public value (Connolly and van de Zwet, 2021).

Senior public servants who lead government functions, for example, are the focus of recent OECD publications, especially the ‘Leadership for a High Performing Civil Service’, published in 2022 (Gerson, 2022). It cites ‘OECD Recommendation on Public Service Leadership and Capability’ (PSLC). That contains 14 principles for a fit-for-purpose public service, which include specific recommendations on developing leadership capabilities for innovative policy and service design, innovations that can address the complex problems facing public administrations across the OECD and beyond. A series of case studies explored two themes: (1) leadership capabilities (i.e., skills, competencies, behaviors, styles) that are necessary to respond to complex policy challenges; and (2) the policies, processes

and tools needed to develop these capabilities and support senior civil servants (SCS) in using them (i.e., the senior civil service system) (Gerson, 2022, p. 6).

The Report identified various common leadership capabilities despite a wide variation in topics and national contexts. These have been grouped into the following four capabilities:

- Values-based leadership: Individual SCS are required to negotiate multiple and often competing values that guide their decision-making towards the public interest.
- Open inclusion: Successful leaders challenge their own perceptions by searching for voices and perspectives beyond those they normally hear from (open) and ensuring psychological safety for these voices to contribute to their leadership challenges (inclusion).
- Organizational stewardship: SCS reinforce a trust- and values-based culture and equip their workforce with the right skills, tools and working environments.
- Networked Collaboration: Finally, looking beyond their own organization, successful SCS are adept at collaborating through networks, with other government actors, and beyond (Gerson, 2022, p. 6).

This is essentially a skills-based approach, but one that updates the simple mapping of a series of skills for each level in any hierarchical structure. It promotes innovation within leadership competency frameworks. For example:

- Senior civil service (SCS) job profiles should identify leadership capabilities appropriate to the position, often aligned to leadership competency frameworks.
- Selection and appointment mechanisms should be appropriate to the position, in order to assess the capabilities required, and ensure the right fit between the leader and the job.
- Pipeline development should ensure that there is a potential pool of candidates with the abilities and motivation required to take up these positions.
- Additionally, these tools should not only be used to bring in the best individuals, but also to ensure a diversity of people and backgrounds in the senior civil service as a whole (Gerson, 2022, p. 7).

It is clear that a range of official organizations are wrestling with ways to develop and implement similar approaches to find a solution to these wicked issues, many of which can quickly translate into threats to social order and safety if not addressed. Organizations such as the OECD and mature polities often view it from the perspective of leadership development for senior public servants. The attempted long-term re-wiring of the UK civil service in terms of the policy profession and operational delivery is an example of this (NAO, 2022). Similarly, in response to their analysis of the way to approach wicked problems, the Australian Government suggested the following methodology to operationalize dealing with these issues:

- ‘Holistic, not partial, or linear thinking’. This is ‘Big Picture’ thinking. Includes the interrelationships between the full range of causal factors underlying the wicked problem. Traditional linear approaches to policy formulation are inadequate. Wicked

policy problems as linear thinking is inadequate due to their complexity, interconnections, and uncertainty. There is a danger in handling wicked issues that they are handled too narrowly. The shortcomings of traditional approaches to policy making are also due to the social complexity of wicked problems.

- ‘Innovative and flexible approaches’. The public sector needs more systematic approaches to social innovation and needs to become more adaptive and flexible in dealing with wicked problems. For example, blurring the traditional distinction between policy development and program implementation is one way of making it easier to modify policies in the light of experience about what works and what doesn’t, and focusing on creating learning organizations — Covid vaccine.
- ‘The ability to work across agency boundaries’. Wicked problems go beyond the capacity of any one organization to understand and respond to. This includes working in a devolved way with the community and commercial sectors.
- ‘Increasing understanding and stimulating a debate on the application of the accountability framework’. It is important that pre-set notions of the accountability framework do not constrain resolution of wicked problems. The accountability framework needs to be applied in a way that can meet the goal of maintaining acceptable levels of accountability while minimizing as much as possible any barriers to innovation and collaboration. Internal governance arrangements also need to support this goal.
- ‘Effectively engaging stakeholders and citizens in understanding the problem and in identifying possible solutions’. Because wicked problems are often imperfectly understood, it is important that they are widely discussed by all relevant stakeholders to ensure an understanding of their complexity and interconnections. Behaviors are more conducive to change if issues are widely understood, discussed, and owned by the people whose behavior is being targeted for change.
- ‘Additional core skills’. The need to work across organizational boundaries and engage with stakeholders highlights some of the core skills required by policy and program managers to tackle wicked problems. Traditionally, more weight has been placed on high-level analytical, conceptual, and writing skills and traditional project management skills. A multidisciplinary team approach is a practical way to garner all the required skills and knowledge for tackling wicked problems.
- ‘A better understanding of behavioral change by policy makers’. This needs to be core policy knowledge because behavioral change is at the heart of many wicked problems and influencing human behavior can be very complex. Nudge theory and behavioral science – old-fashioned marketing.
- ‘A comprehensive focus and/or strategy’. Successfully addressing wicked policy problems involves a range of coordinated and interrelated responses given their multi-causal nature: a sustained effort and/or resources.
- ‘Tolerating uncertainty and accepting the need for a long-term focus’. Successfully tackling wicked problems requires a broad acceptance and understanding that there are no quick fixes and levels of uncertainty around the solutions to wicked problems need to be tolerated. Successfully addressing such problems takes time and resources and adopting



innovative approaches may result in the occasional failure or need for policy change or adjustment. Policy makers have to be flexible (Australian Public Service Commission, 2007, pp. 35–36).

Because this is so often difficult to achieve in practice, leadership objectives should provide a clear sense of direction for leaders, aligned to the political objectives of the government, and be matched with appropriate levels of autonomy and accountability to achieve them.

As noted, various countries are working on ways to modernize and upgrade their public service. Australia, Korea and Singapore are obvious examples, but so are other OECD countries including the UK, which has recently divided the central civil service into the Policy Profession and the Operational Delivery profession. Recruitment and Training is defined in several key areas and core competencies by the UK Cabinet Office. Core UK skills: (1) understand the foundations of public administration; (2) how to work in government; (3) leading and managing; (4) integrating specialist skills; and (5) domain knowledge (UK Government, 2021).

Mature states operate according to a process of continuity and change; continuity of core values, which in democracies include transparency, accountability, and honesty. Change in the form of constant adaptation and innovation, marrying together technological innovation to developments in managerial structures and performance.

## **5. Innovation requires effective bureaucracy**

Institutions are important, if they were not, they would not have been invented or permitted to continue (Berger and Luckmann, 1966; Scott, 2001). As Drechsler argues:

‘We live in an administered world; the reality humans inhabit is to a considerable extent, and I would say will remain for times to come (Drechsler 2018), an administered one. To be aware of its foundations is crucial when what we thought were the foundations of our life together all of a sudden break away, both in a political sense and in a philosophical one, and when the future of technical change is now. And globalization, in its various forms, means we should be more open to other perspectives and at the same time recognize our limitations as well’ (Drechsler, 2019, p. 231).

There is a huge body of work that explores institutions and in particular public administration in all its forms. From Goodsell’s case for bureaucracy (1983) to Kattel, Drechsler and Karo’s perspective on why (state) innovation needs bureaucracy (2022), there is a corpus of research and literature that seeks to deliver the perspective of societal continuity and change demonstrating that good governance requires good government and a stable and secure civil society replete with citizen participation in communities and a range of activities. This is based upon permissive and progressive public administration. Kattel, Drechsler and Karo (2022), explore many of these issues and discuss the problem of dealing with change, both technological and societal, from a variety of perspectives and look



at ways of designing effective entrepreneurial states to do so. Much of what they explore links into the foregoing perspectives of the Australian government, Head and Alford and the OECD report.

They argue New Public Management (NPM) reforms over the last few decades hived out of modern public services many of the dynamic aspects of public service, outsourcing them to private contractors and management consultancies. Much of what remains in many countries is designed to maintain social and public stability, a Weberian concentration on creating order out of chaos, especially in times of threat (Kattel, Drechsler and Karo, 2022, pp. 193–205). Innovation does come, but it is often through a reliance on dynamic outsiders who bring new skills, solutions, and ways of working. The challenge for the public sector is to combine the creation of agile organizations alongside systems that promote stability and deliver routine, but important services. What is needed at one and the same time and in existing bureaucracies is continuity and dynamic change; quite a difficult thing to build (Kattel, Drechsler and Karo, 2022, pp. 193–205).

## 6. Some final thoughts and conclusions

In an earlier work, exploring the future of research into public administration, it is worth citing Drechsler at length for his trenchant review of the efficacy of applied academic research, applicable as it is to understanding wicked problems. He is especially critical of the western public administration's hegemonic approach to wicked problems and argues that if there is to be a genuine adaptable understanding and approach to wicked issues then it must also take cognisance of non-western public administration (NWPA) traditions and perspectives, even if they seem to threaten (as they do) some of the perceived core values of much of the European, North American and Australian literature. He notes:

‘Among the two perhaps most important NWPA traditions still alive today, i.e., those that form genuine challenges to the universalism of the global-Western approach, the first that comes to mind is the Islamic one (Drechsler 2018). This is the main NWPA tradition bordering, and thus challenging, the West, and one that is often perceived as based on a threatening ideology. It calls out the non-connectedness of religion and PA as a choice (and a wrong one), not something ‘given’, and it is something the West might have to react to beyond facile insisting that it should not be so. Much of Islamic state thought, however, has developed in close conjunction with the Greek philosophers, and institutional Islamic *PA* is usually ‘moderate’. In PA itself, the non-delegatability of responsibility that is prominent, e.g., in the *Nizām al-Mulk* (1960), or the highly sophisticated and philosophically grounded Ottoman PA with its insistence that — yes — the welfare of many is worth the sacrifice of the few; with its legacy of ‘creative low-level discrimination’ to preserve social peace; with its emphasis on good-enough governance (better much less taxes received than levied than no taxes at all), arguably derived from Islam’s rapid expansion, and with a civil service that in many ways was ‘super-Weberian’, may serve as illustrations’ (Drechsler, 2019, p. 229).

He continues this approach by noting the philosophical challenge of Confucian public administration, a challenge that has barely registered in western literature. Drechsler argues Confucian public administration:

‘is the main philosophical challenge, the intellectual ‘other’ to the Western paradigm, not least because it was earlier and because it did and does again work so well (Drechsler 2018). The fact that it is problematic for some to call it ‘Confucian’ rather than ‘Classical Chinese’ PA already indicates some pitfalls here, as we have Confucian PA not only in Mainland China but also in Hong Kong, Taiwan, South Korea, Vietnam and Singapore; historically also — and quite philosophically grounded — in pre-Meiji, Edo Japan. The idea of a state that is an extension of, rather than a juxtaposition to, the family; the unquestioned supremacy of the bureaucracy even in fine arts and culture; dealing with human flaws such as nepotism and other forms of corruption institutionally rather than by demanding that the human person changes; and the focus on performance, so strongly so that an originally legitimate government can be removed even by force if it does not deliver, are aspects which underline both otherness and parallelism’ (2019, pp. 229–30).

Drechsler, building on the work of earlier critics (Brynjolfsson and Silberholz, 2016), expounds on his critique of academic western public administration and its utility for real-world influence, a critique that is applicable across much of academia. He notes that careers and journal reputations are built on citations and that only certain types of papers are accepted by journals, thus drawing a narrow paradigm for what is academically acceptable. Furthermore, ‘algorithms can even write these certain types of papers themselves’ (2019, p. 230). Computers and algorithms are not capable of genuine artificial intelligence (yet) but:

‘What computer programs can do is to look at a topic, see how humans have written about it before, see that just the data change, and then take the sentences, thousands of texts on the same topic, tie the particles and connections around new information and present it as a report, or statement, or even an essay (so it is not even genuine Artificial Intelligence, which will change the game even further). If a text is nothing but a story based on data, a computer program is probably even better than a person writing the text around it. And so, these texts — so far, mainly sports texts, weather texts, financial report texts — can be replicated, as *whenever prose narrates a table, algorithms can write it as well* (Kurz and Rieger 2013, 251). Around the mid-2010s, this development reached the level of normal news (Dorrier 2014), and today, *Times Higher Education* can write, “Rise of the research-bots: AI software that writes your papers for you” (Pells 2017). And precisely this structure, this shape, this content reducible to a table are typical, as explained *supra* in section 3, of what counts for some of the most successful PA articles today the ones the archetypical Dutch Associate Professor would write’ (2019, p. 231).

It is, he scathingly notes a form of ‘fake research’. This makes many academic disciplines in danger of becoming obsolete in terms of original research. Because in terms of many including public administration:

‘scholarship today means that the incentive is to write replicative papers that state the same thing that we know already, for mainstream top journals; even high citation numbers do not count that much, although this is changing as we speak. By and large, this is what makes a career. And these are essays that put method over contents and that tend towards the countable, the quantifiable, the ‘rigorous’ — towards what can be put, in essence, into a table, an equation, a graph. Not scholarship, meaning, and relevance — and if the latter matters, then indirectly, as measured ... Academic modesty in the face of reality seems fairly good advice then — but, unfortunately, not good career advice’ (2019, p. 232).

In calling out these restrictive practices, Drechsler is performing a critical, indeed disruptive role. But this fits well with the advice given by the OECD and Australian government in their approach to dealing with wicked and persistent problems. The list of methods implied in the aforementioned styles fits this disruptive multi-disciplinary approach. Future public administration research will need to be promiscuous, borrowing magpie-like from history, sociology, archaeology, engineering, medicine, anthropology and many other disciplines. Old ideologies ‘wither to be replaced by contemporary creeds’ and much of contemporary life is more akin to a palimpsest than a novel (Massey, 2019, p. 1). Despite the initial despair a reading of Rittel and Webber’s list of traits may induce, or the gloom Drechsler’s rage against modern academia’s pusillanimity may prompt, these things too will pass, and today’s wicked issues will be resolved; but they will also be replaced by others.

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