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Beyond Control Towers, Vending Machines, Networks and Platforms
towards more dynamic, living metaphors for governance

Abstract

Metaphors affect how humans perceive and interact with reality, not least in governments, so our metaphors for government and governance matter. In this article, early metaphors such as government as Leviathan, machine, control tower and vending machine are shown to be limited, as are their replacements, like government as network and government as platform. Instead, the article suggests conceptualising government and governance as a 'moral ecology', to do justice to the complex and evolving roles of public sectors and public officials amid global turbulence and increasingly challenging domestic circumstances.

Keywords governance, public administration, public policy, metaphor, complexity, paradigms

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Introduction

What unites the following sentences?
- I will defeat that argument.
- Children blossom into adults.
- I don't have room for this in my life!
- Life has cheated me.
- Scarcity has given birth to a generation of paranoid teenagers.

I've started several recent talks by posing this question to the audience. After a few attempts at identifying similarities in the sentences' very diverse content, someone in the audience usually picks up that none of them is a literal description. Instead, each employs a metaphor of some kind – a comparison of one thing to another – to highlight particular characteristics. Arguments are likened to battles or fights; children to flowers; life to a physical space or game. The concept of scarcity is anthropomorphised: treated as human in its ability to 'give birth'.

Metaphors like these matter. Usually seen as the exclusive tools of writers and poets, they are in reality used by nearly everyone and have been among the most basic building blocks of communication for as long as language has existed (see Box 1). Metaphors shape how we perceive the world and think about issues; how we

Box 1: Metaphors - a brief recent history

Lakoff and Johnson recognise the centrality (and what they call the 'systematicity') of metaphors, devoting a whole book to *Metaphors We Live By* (2003). Not everyone uses their exact terminology, including the term 'metaphor', but there is a consistent and substantial body of scholarly work on this issue.

Senge (2006) and his broader work on systems thinking and learning organisations centre on what he calls 'mental models', defined as 'deeply ingrained assumptions, generalisations, or even pictures and images that influence how we understand the world and how we take action'. Senge's 'pictures and images' are essentially metaphors.

Similarly, Goffman's seminal work *Frame Analysis* (1986) proposes the notion of mental frames (essentially metaphors) that shape our perceptions of the world and the information we process.

Bolman and Deal discuss metaphors and frames for leadership.

Their *Reframing Organizations: artistry, choice, and leadership* (2017) observes that leaders' priorities and decisions differ according to whether they see leadership as a process that fundamentally involves structure and analysis; human resources; symbols and culture; or navigation of political power relationships.

Morgan (2006) examines metaphors for composite entities like companies, government agencies and teams, noting that different images (machines, families, cultures, and others) each highlight, but also elide, different aspects of what it means to be an organisation.

Inayatullah (1998) cites 'myth and metaphor' as the foundational layer of 'causal layered analysis' (a framework for having generative conversations about possible futures), from which other aspects like 'structures, discourse and worldviews', 'social causes' and 'litanies' emerge.

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conceive of and carry out life in an institution; how we view ourselves and one another in relation to our organisations. Our choice of metaphor can subtly affect not just what we think, but also what we do. For instance, in relation to the first sentence on the list above, consider how saying 'I will *engage* in that argument' instead of 'I will *defeat* …' might change the tone and tenor of our interaction with the source of that argument.

Building on these ideas, and some of my previous work on metaphors for strategy (Maniam, 2016), creativity (Maniam, 2018) and learning (Maniam, 2022), this article explores how some current metaphors for public service are proving increasingly limited, given the more complex work expected of public officials, and the more volatile and turbulent environments in which they operate. It also suggests a new set of metaphors and examines how they might do more justice to the wider, richer range

of roles played by public sector agencies and their staff.

Metaphors for government – the story so far

Metaphors for the public sector are as old as government itself. Hobbes compared the work of governments to the biblical beast Leviathan, capturing the sense of scale and power that governments were meant to possess. Weber's image of the 'iron cage of bureaucracy' is another well-known metaphor, for how bureaucratic rules can end up constricting public officials' discretion: this starts with the best of intentions, to limit the power of vested interests, but has pernicious long-term consequences when the creativity and innovation of public service providers is curtailed. In my previous policy roles, when meeting counterparts from other countries, we often found ourselves referring without question to the idea of 'the government machinery', echoing the

metaphor of machines that Morgan (2006) discusses.

More recent metaphors include Slaughter's (2009) image of government as a network, referring particularly to the sources of American power in its foreign policy, and O'Reilly's (2011) image of government as a platform, building on his earlier work popularising the terms 'open source' and 'Web 2.0'. Both Slaughter's and O'Reilly's metaphors are juxtaposed against two prior ideas: first, the aviation metaphor of government as a control tower, possessing all relevant information and hence able to make decisions about where and when policies or programmes might be implemented, much like air traffic controllers make decisions allocating flight timings and airspace; second, the metaphor of government as a vending machine (Kettl, 2008) providing a range of choices and responding to popular preferences as long as citizens pay their taxes.

The ideas of governments as networks and platforms certainly capture more than their antecedents. Both metaphors share a core conception of government as more open than either Leviathans or iron cages, and providing diverse options for citizens. Both make space for non-linearity in governments' own work and their operating environments, through ideas like network effects and platform synergies. Both capture the interdependent nature of government work, with connections among government agencies being akin to the links among nodes in networks or among different platform users.

But both metaphors also suffer from three particular limitations. Most fundamentally, they present a view of public sectors as essentially static and structured, rather than dynamic and evolving. Both networks and platforms can, of course, be replaced by newer versions, much as smartphone operating systems can be regularly updated; but can the network and platform itself be living, dynamic, untidy and evolutionary, breathing with life rather than dying and being replaced? This seems a critical requirement for any government of the future, which will have to deal with constant flux and strategic discontinuities like financial crises, pandemics, the emerging effects of climate change, and

ever more pervasive digital technology, and will need to constantly reinvent rather than having the luxury of starting anew.

Second, both metaphors assume government dominance vis-à-vis other actors. While public sectors will certainly continue to be central players, rather than systems descending into anarchy, the rise of phenomena like public–private–people (3P) partnerships and participatory policymaking (e.g., through deliberative polling and other modalities) suggests that different stakeholders will play more, and more diverse, roles in public life. Individual citizens, businesses of all sizes and civil society organisations will not just be consumers of government decisions, even if those decisions come from networks or platforms and result in an admittedly larger choice set than offered by a vending machine; rather, non-government stakeholders will be active shapers of and contributors to policy processes. Put another way, governments will no longer solely form the networks and platforms, nor will they even be primary players; instead, they will share that space with other agents, in a more polyarchic system. Emerging literature on collaborative governance points in a similar direction (see, for instance, Ansell and Torfing, 2018). In response, we need metaphors for the broader process of governance – how governments, businesses, citizens and civil society organise themselves in complex interactions – rather than metaphors for government alone.

Third, the network and platform metaphors have a distinctly positive (as opposed to normative) air to them. The connections between network members or platform agents are substantive but often transactional and functional, involving transfers of ideas or capital of various kinds. There is little concomitant space for the moral dimensions of the interactions among their components – mutual investment in collective outcomes, and mutual regard for one another's welfare. We speak of networks and platforms, after all, and not communities with kinship ties. This is not to suggest that all the agents and components in a governance group coexist harmoniously; the existence of increasingly sharp and polarising identity politics and other sources of inter-community friction

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clearly suggests otherwise. But even these more negative occurrences suggest the existence of an in-group, defined in opposition to an out-group, within which members are connected by moral affinities and allegiances that are not fully reflected in the ideas of networks or platforms.

Towards better metaphors
What metaphors can improve on the images of networks and platforms, to address the three pitfalls cited above? Several candidates come to mind.

The problem of overly structured approaches is well addressed in Raymond (2008), which uses the language of software engineering to contrast and distinguish between two different free software development models. In the cathedral model, source code is available with each software release, but code developed between releases is restricted to an exclusive group of developers – much like clergy in a cathedral control access to and flow of

information. This is unlike the bazaar model, in which the code is developed over the marketplace of the internet in full view of the online public.

Applied to public services, cathedrals are similar to the earlier metaphor of the control tower, with all its structure and systematisation. The bazaar metaphor captures some of the inherently and increasingly messy aspects of public sector work. A better metaphor for governance would involve something more ordered and less idiosyncratic than the bazaar, but also less rigidly ritualised than the cathedral.

Drawing from art, one might consider governance as a sculpting process – creating something new and locating what Michelangelo described as 'the 'angel in the marble'. This metaphor is attractive not least because it makes removal a form of adding, chiselling leading to a more refined final product. This seems particularly important when many governments worldwide are experiencing bureaucratic bloat and prove far more adept at adding than removing functions of public agencies. The downsides of this metaphor are the static nature of the final product – it is difficult to change a sculpture after completion – and how it emerges from a singular artistic vision that dominates others, even if the process of stonework is shared among multiple apprentices. If governance is an act of sculpting, and governments are the main sculptors, then there are still insufficient roles for citizens, business, civil society and other players.

The lack of allowance for moral ties and other normative considerations could be addressed by seeing governance as a process of family interactions, which would capture the interlinkage that networks and platforms downplay. In my previous work in the government of Singapore, we often spoke of 'ministry families' when referring to clusters of agencies. Families can be extended, so the reach of this metaphor could be quite wide. But an immediate problem arises: governance involves mutual moral links and commitments, but these are not always as close as family ties. The family metaphor can also be problematic when we note its potential darker side – families can be dysfunctional, even abusive to their members – which good governments should seek to avoid or minimise.

Governance as moral ecology

One way to fill the three gaps in earlier metaphors – dynamic evolution, governance rather than action by governments alone, and the need for links between actors that are moral, not just transactional – is to conceptualise governance as a moral ecology. This is a more complex and slippery concept than the metaphors listed earlier, and is characterised by two core qualities: first, governance is a dynamic ecological system; and second, it is an ecological system governed by moral, not just natural biological, laws.

On the first quality, governance as an ecology would be dynamic in a living, breathing way. This metaphor acknowledges the aliveness of the actors in governance – people, collectivities like companies and communities that comprise people, and other living entities with which people interact (this last group is particularly important as we contemplate imminent climate change and the lack of consideration in past policies for the broader natural environment). The diversity of these actors is also recognised, almost by definition. The healthiest ecologies (whether gardens, oceans, rivers, forests, deserts, savannas or a mix of these) house multiple life forms, each with unique contributions, and avoid over-reliance on any one. Tellingly, many recent innovations in governance reflect this living, organic nature of governance. Citizen juries, the inclusion of design thinking principles when developing public services, and the incorporation of behavioural insights into policy design, to name a few, all reflect a tilt towards recognising and harnessing the interests and agency of citizens as living, evolving beings.

The second quality, on moral relationships, is important because ecologies alone are still imperfect metaphors. In natural ecological systems, apex predators hunt prey, which in turn consume other entities lower in the food chain, but with impunity since animals are, in most circles, not assumed to have the capacity for moral reasoning. In governance, however, such mutual moral connections are critical. Citizens vote for political leaders; public officials are bound by codes of conduct to create public value and not

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harm the public interest; companies operate by at least minimal principles of responsibility, as seen in the advent of ESG (environmental, social and governance) as corporate priorities; citizens increasingly understand that they have moral duties to those around them, even those they might not know or like. Governance of human society aspires to be more than just a collection of impersonal predator–prey relationships. The qualifier that governance ecologies must also be 'moral' is therefore key to capturing how all of us – governments, businesses and citizens alike – are invested in the lives of those around us.

The deeper one probes, the richer the metaphor of a moral ecology proves to be as a representation of governance processes. Such ecologies are inherently untidy and subject to feedback loops that can be difficult to anticipate, but become clearer over time. This is much like governance of any human group, where policies can have unintended consequences that the best governments learn from and adjust to over time. Longstanding examples exist in

policies to manage demographic trends, which have evolved over time to be less blunt, while recent experiences with the Covid-19 pandemic reflected the need for governments to constantly monitor responses from citizens to initiatives like mask-wearing and vaccinations, and to regularly incorporate these responses into future iterations of each policy.

Moreover, death and destruction are important parts of any ecology, to be accepted rather than feared. Some of this can occur naturally, as with cycles of life and regeneration, but some can also be induced, as with processes of pruning a garden. In a more alive way than the earlier metaphor of sculpture and chiselling, ecologies capture the reality that life must ebb and flow – something that many bureaucracies acknowledge conceptually, but struggle to implement. One senior leader in Singapore once commented that all policies should come with a sell-by date, to reflect that circumstances will evolve and good public policy should not remain wedded to old assumptions and world views. Thinking of governance as being characterised by such ecological cycles makes the process of revisiting and revising policies much less controversial, as such changes will be normalised rather than interpreted as critiques of previous policies (and their originators).

Policy implications

What would adopting 'moral ecologies' as a guiding metaphor mean for scholars and practitioners of public policy?

At its core, the processes of policy formulation, delivery, execution and operationalisation must evolve. Citizens and businesses need to be involved by design, not just as afterthoughts. Policymakers need to provide space for iterative adjustments to policy as it is being developed and implemented, rather than assume that policy research, assessment, implementation and evaluation can happen in a neat and linear fashion. Communication of each policy should also be baked into all stages of the formulation–implementation process, rather than only developed at later stages. The core priority should be to recognise and value the living, dynamic nature of the different actors and stakeholders in a policy process, rather

than have the process be a black box within a government agency.

Many of these ideas, particularly the notion of dynamism and experimental iteration, are reflected in disciplines that have begun creeping into policy processes, including systems thinking, design thinking and complexity science. In Singapore, for instance, such approaches have begun to permeate more deeply into the policy and political process, with such vocabulary featuring much more prominently in policy formulation in the past decade. In the US, the more entrepreneurial members of the Santa Fe Institute, which specialises in complexity thinking, as well as design consultants at global firms like IDEO, have managed to incorporate their methods into public sector agencies, including sections of the Office of Personnel Management. More of these insights should be included in policy processes as features, not bugs, so that the ecological potential of governance systems and processes can be more deliberately harnessed.

Much will also need to change in how we educate and train current policy practitioners – but also citizens at large, given their more active and substantive roles in governance-as-ecology. Singapore has for several years now included complexity, design and systems thinking (alongside other skills like futures thinking and scenario planning) in the core syllabi of its leadership training programmes for civil servants earmarked as talent, who are groomed for future leadership positions. Public policy schools like the one I teach in have also begun to include such skills in their curricula, and adopted creative training methodologies like simulations and immersive experiences to cultivate the instincts needed by civil servants of the future. Such approaches also need to include citizens, businesses and civil society leaders, so that members of the entire ecosystem are included in capacity-building efforts; which means that schools will need to include such skills in syllabi for much younger students than currently practised.

Government recruitment will also need to evolve. Specialists like engineers, economists and lawyers will continue to be critical, especially as some of the most pressing challenges facing societies call for high levels of technical fluency – designing and managing digital technology; challenges of poverty alleviation, international development and climate change; harnessing the benefits while managing the risks of increased trade and interconnected global supply chains. But governments will also need to hire historians, philosophers, ecologists and biologists, who understand the ecological and moral interconnections among human agents, and between humans and their broader world. Critically, there will also be a more pronounced need for broader generalists who can bridge multiple disciplines, since many of the most complex and wicked problems of governance will involve both highly technical and highly human elements – what I like to tell my students is a combination of 'high tech and high touch' approaches. These generalists may be easily criticised as shallow practitioners of all trades, rather than having deep mastery; but their job will be to keep the entire moral ecology in mind, with all its intricate interconnections, both the obvious and less visible.

All this will involve significant effort, in terms of resources, time, stamina and shifts in mindsets and culture. There will be tensions and trade-offs involved, including between governments' drive to optimise, run efficient agencies and be part of 'representative' democracy, while catering for the untidiness and contingency capacity needed in dynamic ecosystems, as well as more participatory aspects of democratic life. Like all metaphors, which highlight some aspects of phenomena while downplaying others, the idea of a moral ecology will need to be seen as an approximation rather than an exact description of everything that happens in governance; and at some point, it may require updating in its own right. But for now, it seems a useful conceptualisation to ensure that the full, dynamic and living potential of governance can be realised.

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