



Complex Adaptive Systems

Implications for Leaders, Organisations, Government and Citizens

Policy Brief 1

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This policy brief provides an overview of key concepts of complex adaptive systems – and why understanding them is important for modern Australian society. An approach called ‘systems thinking’ is described as a tool for making sense of a changing world.

Implications of complex adaptive systems and systems thinking, though relevant for any sector or individual, are framed here in the context of leaders, organisations, governments and citizens.

The key message is that the way we think about complex adaptive systems needs to be different from the way we think about simple systems. We also need different skills to thrive.

- We need **leaders** with humility, willing to draw upon the emergent and self-organising nature of complex adaptive systems through empowering others and continuous re-calibration.
- We need **organisations** that can keep up with the dynamic nature of complex adaptive systems by being able to learn and adapt to changing circumstances. This in turn requires processes of evaluation and reflection. It also requires taking risks, experimentation, and accepting failures.
- We need **governments** that are willing to do all these things.
- We need **citizens** that will accept – and encourage – them doing so.

For those that learn how to adapt and navigate an unpredictable world with incomplete information and uncertain outcomes, complexity won't be a liability. It will be an advantage.



Concepts in this policy brief are derived from a range of sources, available in the reference list at the end of the document. For ease of reading, limited citations are used within the text.

1 WHAT IS A COMPLEX ADAPTIVE SYSTEM?

Imagine you were throwing a rock. Where the rock ends up will pretty much depend on you – your strength, aim and coordination. You could easily predict where the rock will go and the trajectory could be accurately modelled using maths and science. Now imagine throwing a live bird (this isn't encouraged in practice). Even though the bird is subject to the same laws of physics as the rock, there is no way for you to know for sure where it will end up. Its trajectory is not something that can be easily predicted. You could try weighting the bird down to control its path, but this destroys a key and defining capability of the bird – flight. A more effective approach might be to place food at the desired destination, but again, there are no guarantees. (I am borrowing an analogy here from Richard Dawkins cited in Chapman, 2004 and Plsek, 2001.)

A complex adaptive system is more like the bird. It is dynamic and self-organising – which means it can be highly organised without any conscious leadership, direction, or management

A system is a group of parts that function as a whole. A simple system is relatively stable and has straightforward cause-and-effect relationships (a bit like a rock). In simple systems, it is appropriate to use reductionist or mechanistic thinking (often associated with Bacon, Descartes and Newton and highly influential since the 18th century). The basic premise is that it is possible to analyse the parts of the whole at their most reduced or basic level in order to learn about the sum. Like a machine, the parts can be dismantled, fixed and reconstructed. This is great when we are trying to fix a car. It is far less helpful when trying to understand more dynamic systems (or birds).

A complex adaptive system is more like the bird. It is dynamic and self-organising – which means it can be highly organised without any conscious leadership, direction, or management. A complex adaptive system exists within other interdependent systems and is driven by interactions between system components and governed by feedback. Its complexity comes from these patterns of interactions. It is constantly adapting. Changes in one part of the system can cause changes in other parts of the system, often in nonlinear and unpredictable ways.

The whole is more than the sum of its parts – something that is referred to as emergence. Emergence means that the characteristics or phenomena of the whole appear due to the collective behaviour of the system. Like a flock of



birds or an ant colony, the pattern that emerges cannot be seen through the analysis of any one of the individual parts. Only when the system is viewed as a whole does the behaviour exist or emerge.

The bird and rock analogy is of course an over-simplification, but the key point is that a complex adaptive system is able to adapt and thus survive by changing its behaviour and internal processes. A rock can't do this. Why does the difference between birds and rocks matter? It matters because the way one would study, think about and work with a rock is different from the way one would (hopefully) interact with a bird. When implementing organisational change and policy reform, all too often we apply the wrong approach to the right idea. Why do we need TO THINK ABOUT systems? Our minds are full of concepts and constructs that humans have developed and passed down over millennia to make sense of the world around us. The problem is that our world today is full of challenges that have reached unsurpassed levels of complexity and uncertainty, and full of complex systems that are increasingly connected and interdependent.

An action in one part of the system can have unanticipated effects on another seemingly unconnected part of the system. Results can be counterintuitive. You can make the changes you want, but you might not end up in the place you would expect.

Complex food, financial services, energy, government and administration systems all provide tangible examples. In each case (eg. grains, money, electricity, policy), systems are so extended and intertwined that it is not possible for any single person to have a complete understanding of the system as a whole. These systems still function despite our inability to understand them, for they are self-organising. Much of our food arrives at the grocery store thanks to global value chains that unite farm products from multiple countries on an international journey through handling, storage, transportation, quarantine, processing, packaging, wholesale and retail. No single individual or organisation has total oversight of this process, and yet we all (those who can afford it) can eat every day, 24/7 if we want to.

In the face of this complexity, traditional linear frameworks (where $a+b=c$) and reductionist mental models are insufficient. As the second decade of the 21st century progresses, it is clear that alternative approaches such as 'systems thinking' will play an increasingly important role in how we make sense of the world.

Systems thinking focuses on the interactions that characterise the whole. This is useful for understanding a complex adaptive system, with its properties of self-organisation and emergence. It is also useful that it focuses not only on the component parts, but also on the interactions between components and

Our era is destined to be marked by accelerating deep change ... a new normal awaits us, and it is likely to have rough edges

Fuerth, 2011, p32

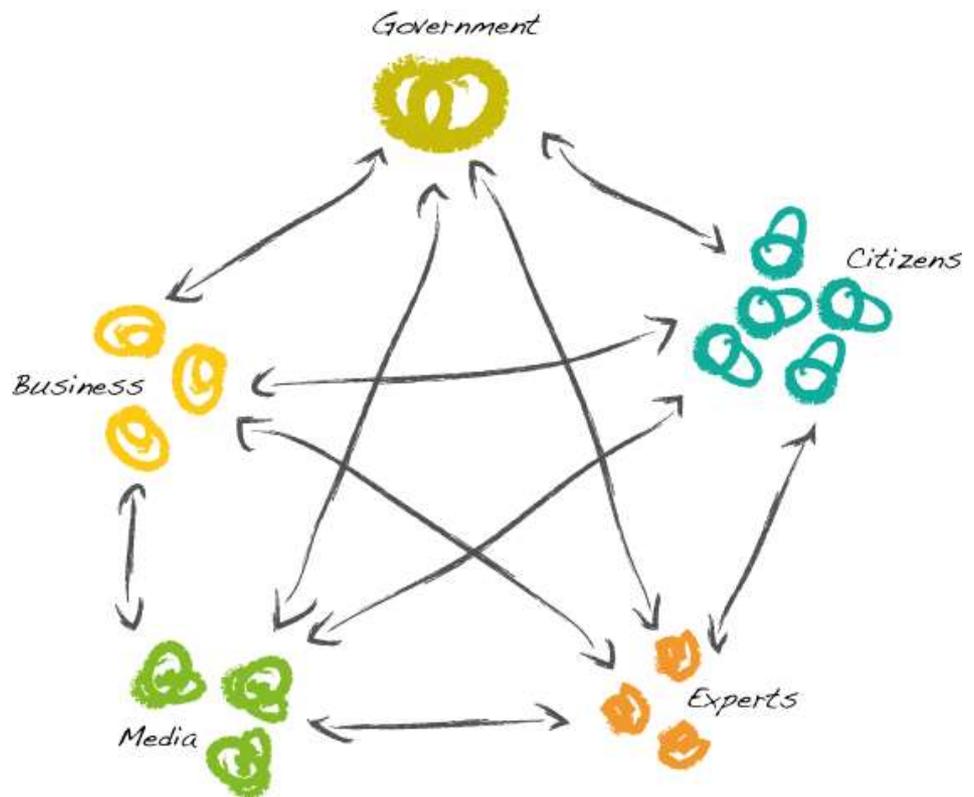


how these interactions change the system (Ollhoff & Walcheski, 2002; Chapman, 2004; Best & Holmes, 2010).

Rather than just focusing on single activities or events, systems thinking helps us to step back and identify different underlying patterns of behaviour, structures and mental models that influence the overall performance of the system (Meadows, 2008). Events are much easier to observe than systemic structures or mental models, but the degree of leverage is greater the more these underlying drivers are understood.

2 VISUALISING A SYSTEM

FIGURE 1. AUSTRALIA'S DECISION MAKING SYSTEM (AUSTRALIAN FUTURES PROJECT, 2013)





In the context of Australia's decision-making system, the components of the system can be conceptualised as **Actors** (formal and informal), which can be diverse (such as those in Figure 1) and how their actions and interactions are influenced by factors such as:

- **Relationships** (e.g. reflected in networks, values, trust, engagement, power, leadership)
- **Structures** (e.g. laws, regulations, institutional rules, social norms and mores)
- **Processes** (e.g. agenda-setting, decision-making, policies, implementation)
- **Resources** (e.g. skills, data, knowledge, money, technology, time)

Mapping these interactions (and the nature of relationships, structures, processes and resources governing them) in the system can help us to understand the way the system works and the points of leverage for transformative change. We can better see how linkages between multiple levels of government, media, business, experts and citizens all create feedback loops and how these drive the bigger picture.

To this end, 'system mapping' can provide a useful way to illustrate how different elements influence each other. It provides a visual representation that would be difficult or impossible to explain in words or numbers alone. It is not meant to be precise but rather to bring to light opportunities for action and different points of leverage or influence. A system map provides a rough picture of the dynamics of the system – what influences what (causation); where are there feedback or feed-forward loops; how factors reinforce each other; and so on.

One good example is an obesity system map prepared as part of a UK Government Foresight project looking at drivers of the increasing incidence of obesity in the United Kingdom. Only a small snapshot is shown above (Figure 2). It is worth looking at the full image, available online (see references for URL).

Figure 3, on the US military position in Afghanistan, provides another example. It is apt given that much of the thinking around systems and systems change originated in the military with complex tools for understanding nuclear conflicts and choices.



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FIGURE 2. OBESITY SYSTEM MAP (UK GOVERNMENT OFFICE FOR SCIENCE, 2007)

Foresight

Obesity System Map

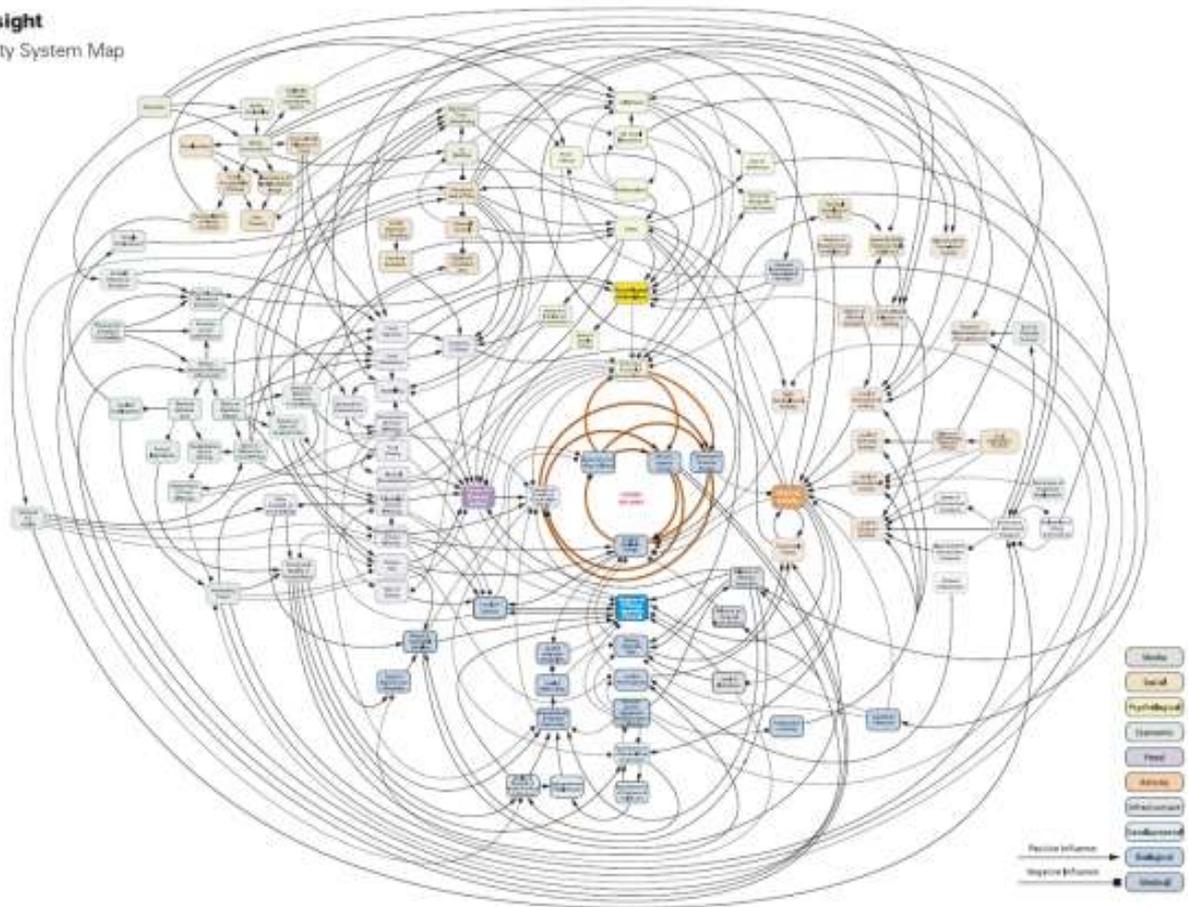
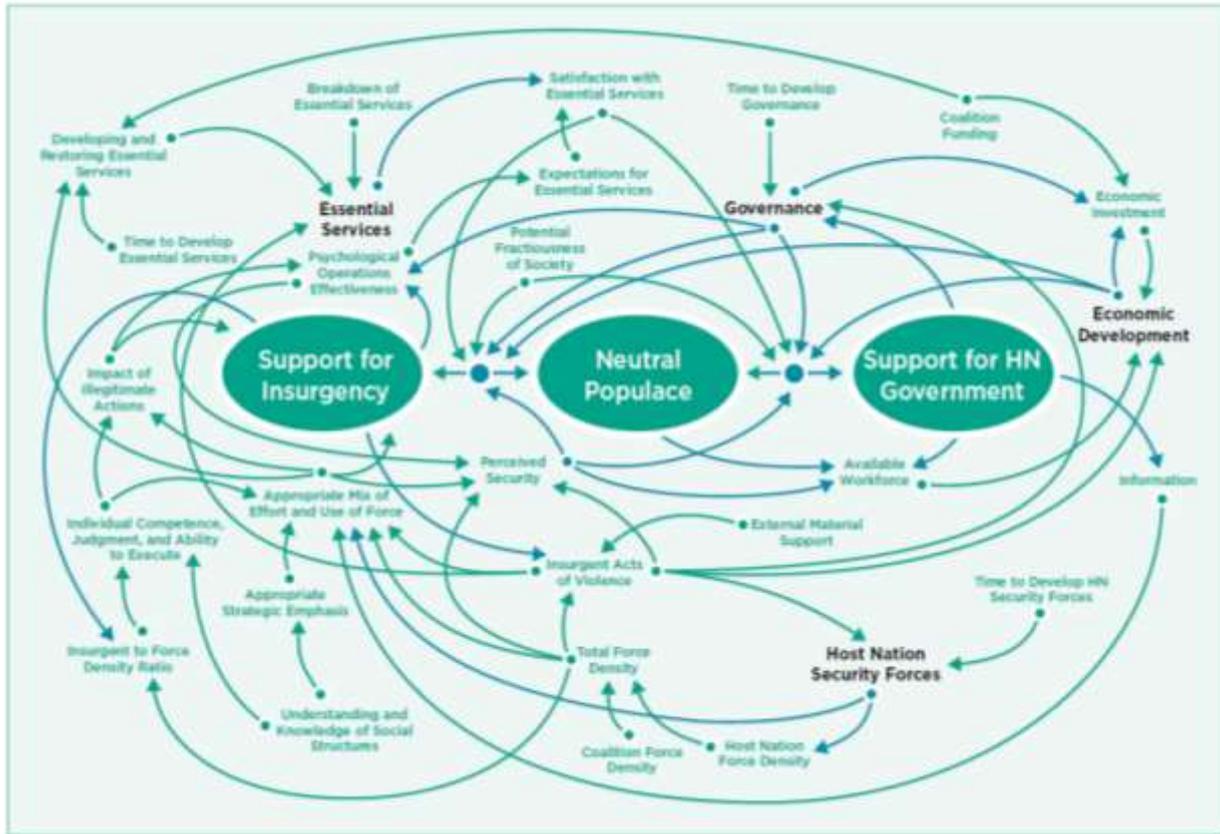




FIGURE 3. SYSTEM MAPPING OF US POSITION IN AFGHANISTAN (MULGAN & LEADBEATER, 2013)



HN = Host Nation

3 IMPLICATIONS FOR LEADERS – HUMILITY AND THE SPACE BETWEEN

Just as we need different tools in our kit to work with complex adaptive systems, we also need different skills for leadership. To adapt to complexity, people in positions of leadership need skills to engage with others to identify the interconnected causes of issues and events. Leaders need to be able to focus on collective, dynamic priorities for change in the system, as well as on supporting different ways of conceptualising challenges within and across organisations.

Leaders still have a role in setting the agenda and communicating a compelling vision, but they also need to provide the support and personal



advocacy to lead others towards it. They need the sophistication to understand indirect as well as direct effects of their actions. Where there is a problem, they need to have the humility to acknowledge that a perfect solution (however that may be defined) may not be available and to be committed to scoping alternative pathways to better outcomes. Their behaviours can enable others to participate and to create, and for leadership to emerge from within the system (Fawkes, 2012). This requires the ability to communicate the problem, the destination and the (potentially unpredictable) journey to get there in a way that galvanises support and maintains momentum, even in the face of prolonged uncertainty and delays in achieving results.

Such systems leadership also requires challenging the prevailing values, attitudes and mental models of actors in the system. This includes creating space for dialogue that allows thoughtful conversations to be held among participants of the system so that new understanding and insights can be collectively developed. Ideally, leadership promotes outcomes such as:

1. Direction: collective agreement on overall goals and mission
2. Alignment: collective organisation and coordination of knowledge and action
3. Commitment: individual willingness to put the interests of the collective first

In addition to the right skills, we also need to be thinking about leadership in a different way. Traditional views of leadership assume that people at the top of a hierarchical organisation fill the leadership role (especially the CEO, the senior management team, and the individuals with the authority to command and control the actions of others). Yet one of the key elements of leadership is the capacity to influence others, and in complex adaptive systems, influence can occur anywhere at any time. This means that leadership is not so much about the quality 'in' someone, as the quality of the 'space between' individuals, reflecting networks of interactions. In this sense, leadership can emerge across individual members and managers, networks, and organisations – rather than only through the behaviours of a formal manager (Lichtenstein & Plowman, 2009). Existing leaders need to be willing to make room for new leadership wherever in the system that it emerges.

Further, just as influence is everywhere, control isn't anywhere (think of the bird). This means – when faced with complex adaptive systems – we have to give up the idea of the heroic leader, which rests on the comfortable illusion that someone is in charge. Instead, as Wheatley and Frieze (2011) suggest, we need to invite in the leader-as-host. We need to support those leaders who know that problems are complex and that in order to understand the full complexity of any issue, all parts of the system need to be invited to



participate and contribute. In this sense, leadership needs to favour agility over control. It needs to rely more on facilitation and empowerment (free the bird), self-organising structures, participatory action, continuous evaluation, and re-calibration, rather than on imposing actions from above. This type of leadership takes advantage of the ability of emergence (described above). Leaders can generate the conditions for emergence through their own specific actions and behaviours. They disrupt existing patterns by embracing uncertainty, surfacing conflict and creating controversy. And they can encourage novelty by allowing experiments, encouraging rich interactions, and supporting collective action.

BOX 1. LORD NELSON AND THE BATTLE OF TRAFALGAR

The skills needed for leadership in complex adaptive systems are not a new invention. An example of a leader who could be described as having this kind of approach was Admiral Viscount Lord Nelson. In 1805, during the Napoleonic Wars, he and his fleet defeated a superior French and Spanish fleet at the famous Battle of Trafalgar. The story goes that Nelson did this by changing the rules of the battle. Instead of following the traditional mode of organising ships along a line parallel to the enemy, he and his captains created a new approach. They broke up enemy lines and created a series of smaller battles in which agility and teamwork was more important than firepower. His captains knew what they were doing, shared a sense of purpose, helped one another, and rapidly exchanged information. They outmanoeuvred the enemy even though they were outgunned. The more open, fluid and complex systems are, the more there is a need for this kind of distributed leadership (Mulgan & Leadbeater, 2013).



4 IMPLICATIONS FOR ORGANISATIONS – EMBRACING RISK AND FAILURE

According to Ollhoff & Walcheski (2002), organisations have common, predictable patterns of behaviour that can be understood from a systems perspective. Two important keys to understanding how an organisation works are to understand homeostasis and differentiation.

- Homeostasis is the level of compensating feedback to maintain the current state of the system. In many ways it is a reflection of resilience – the ability to maintain the status quo in the face of forces for change. It can also turn into resistance, which can be frustrating when organisational change is the actual objective!
- Differentiation is the perception of personal boundaries and emotional maturity, which impacts on decision-making.

It is hard to know ahead of time how these factors will impact on (and provide resistance to) change processes within an organisation. Therefore, an alternative approach to improving organisational performance in complex adaptive systems is to take a range of actions, evaluate the results and gradually shift time and attention towards those things that seem to be working. In other words, learning is important not only to individuals but to organisations.

This lesson can be easily forgotten. Learning (action, evaluation, reflection and adaptation) is a key way for organisations to handle complexity and its associated lack of predictability and control (Senge, 1990; Chapman, 2004). The problem is that an aversion to risk or failure, exacerbated by the political processes, prevents learning. A blame culture also inhibits the telling of the truth about what actually works. If we accept that we are operating within a complex adaptive system, which we cannot control and whose behaviour we cannot predict, then it is perverse that managers who admit to failure, or that they cannot control outcomes, are often replaced by those who claim they can.

In contrast, in the business world, experimentation is much more accepted. One of the more famous examples comes from the 1980s, when Microsoft was a relatively small company. Windows did not yet exist and IBM was perceived as a serious threat. Microsoft's existing operating system, MS-DOS, was reaching the end of its life. In moving forward, Bill Gates didn't just pursue one strategy. He actually undertook six strategic experiments. One was the creation of a new operating system called Windows. He also: kept on investing in the existing system, MS-DOS; partnered with IBM on their OS/2



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operating system project; bought a stake in a company selling Unix systems; and built software for Apple Macintosh. Over time, the successful experiment, in this case Windows, was amplified while others, the 'failures', were wound down (Beinhocker, 2006).

Another example of tolerance for experimentation is taken from business management – the concept of 'logical incrementalism'. The term was coined by Quinn (Quinn, 1980a, b). In writing about strategies for change, he observed how successful company managers acted logically and incrementally to improve the quality of information used in key decisions. This approach allowed them to: overcome resistance to change; better sequence critical decisions; and build the organisational awareness, understanding, and commitment essential to effective strategies. It allowed them to test and learn. The total pattern of action, though highly incremental, was not piecemeal. This approach, which combines planned and emergent strategy development processes, is now used by many managers and organisations. Informed by a high level vision, strategic developments are allowed (and encouraged) to occur across the organisation through innovation and experimentation. In a 2002 interview, the then Chief Executive and Managing Director of Wesfarmers, Michael Chaney, used the term 'logical incrementalism' to describe how the company had successfully grown over time (Cheatley, 2002).

In order for 'failures' to be acceptable to stakeholders in organisations (whether shareholders, union members or football team fans), it would be essential to win the argument that experimentation and discovery are a more effective route to improving system performance than centralised design and high stakes bets on picking winners. Admitting uncertainty and taking on a portfolio of experiments doesn't mean not having any strategic direction. Being strategic doesn't necessarily require backing just one horse or trying to predict the future. It can mean setting a common vision or destination, but still creating room for a diversity of approaches in how to best get there. This may not appeal to those who prioritise efficiency over evolution, but it doesn't necessarily require more resources to apply a different mindset. Creating a greater level of comfort with this idea will take time. As a start, organisations could take steps to encourage learning by prioritising process improvements rather than just focusing on outcomes or targets. Implementation could include deliberate strategies for action, evaluation and reflection. A key part of the evaluation and reflection process might involve identifying both successful approaches and, equally importantly, those that have failed (Chapman, 2004). A proliferation of experiments is not the goal. The ultimate goal is the creation of a system that can learn for itself, based on real time feedback, continuously. In nature, if you don't adapt you eventually become extinct.

We can read mission statements, job descriptions, and organisational flowcharts until we are blue ... but if we don't understand the patterns of interactions between people, we will not understand how the organisation works

Ollhoff & Walcheski, 2002, p54



5 IMPLICATIONS FOR GOVERNMENT – ANTICIPATION, ADAPTATION AND ACCOUNTABILITY

Only systemic change, as opposed to incremental or piecemeal reform, will allow government to keep pace in a rapidly changing world

Blair, 2012, p11

In complex adaptive systems, challenges do not lend themselves to permanent solutions, but instead tend to morph into new predicaments, even as the result of our interventions to deal with them. Therefore, they cannot be permanently resolved. Instead, they must be constantly monitored and managed. Fuerth (2011, p36) suggests that this requires a new type of 'anticipatory governance'. He describes anticipatory governance as 'a system of institutions, rules, and norms that provides a way to use foresight, networks, and feedback for the purpose of reducing risk and increasing capacity to respond to events at earlier rather than later stages of development'.

This is similar to Ho's (2012) call for more adaptive government. Ho suggests that in a complex operating environment, governments should be adaptive, emergent and able to navigate situations characterised by problems with multiple or poorly-defined causes. Governments will often have to make big decisions and develop plans and policies under conditions of incomplete information and uncertain outcomes. There are parallels with the 'search and discover' approach adopted by the military.

FIGURE 4 THE ADAPTATION CYCLE (AUSTRALIAN ARMY, 2009)





An oft-cited example is Boyd's OODA model (observe, orientate, decide, act) – a recurring cycle of decision-making that acknowledges and exploits the uncertainty and complexity of the battlefield.

In the Australia Army, their approach of 'adaptive campaigning' uses the 'adaptation cycle' termed ASDA: Act – Sense – Decide – Adapt (Figure 4). Rather than being seen as an undesirable deviation from a plan, adaptation is seen as an effective way of tackling complex problems. After all, adaptation is another key characteristic of complex adaptive systems. We may as well embrace it. Current governance frameworks are a legacy of 19th and 20th century concepts of organisation, derived from industrial principles. The silos of government were created based on the understanding that problems could best be solved in isolation, with clear boundaries for authority and responsibility. Hierarchical management structures within the public service and between ministers and departments were adopted with a 'command-and-control' mental model. This approach can still work for many issues. But for complex predicaments, these traditional hierarchical and siloed structures are not always sufficient. Complex predicaments can require an integrated approach to the formulation and execution of policy. In the end, responsibilities still have to be broken down and assigned to individual agencies. But at some point, the efforts of all these agencies have to be coordinated. The objective is to increase the networking, coordination and collaboration between diverse actors who are working towards a shared strategic direction. Good practice would mean that (Chapman, 2004):

- Interventions are ongoing and based upon learning what works, not just meeting specified targets
- The priority is to improve overall system performance, as judged by the end-users of the system
- The focus is on processes of improvement rather than the control of actors involved
- Responsibility for innovation and improvement is widely distributed
- Implementation deliberately fosters innovation and includes evaluation and reflection as part of the overall design

The concept of nodal governance can be useful in explaining how actors interact along networks. Authors such as Drahos et al (2005) define a node as a site of governance where knowledge (mentalities), capacity (technologies) and resources are mobilised (through structures / institutions) to manage a course of events. Robins et al (2011) suggest that an effective governance



network system would require the presence or the emergence of at least the following:

- Network structures that can facilitate effective coordination of action, the development of trust, and team-like collaboration
- Agreement among network actors about goals and actions
- Specific goals and actions that are adequate to address the broader intent of the governance system

From a systems perspective, policy makers might benefit from thinking in terms of overseeing an overall governance system, rather than in terms of launching another stand-alone initiative that tries to ignore or supplant all its predecessors (Hallsworth, 2011). To this end, policy statements would ideally:

- Clearly establish the direction of change and boundaries for implementation
- Allocate resources with clear deadlines, but with potential for further funding and latitude for a diversity of approaches
- Grant permission to explicitly allow (and encourage) innovation
- Specify core evaluation requirements based on the experiences and outcomes of the end-users of the system

In this context, monitoring and accountability are still essential, although the means for gauging performance may need to change. Feedback systems need to be designed that incorporate greater latitude for experimentation, and rapid, local response to stimuli (while protecting against rogue behaviour). System sensors (people across the system who are in a position to observe change) should provide an early alert to policymakers of the consequences of actions already taken.

While a whole-of-government approach is an essential response to complexity, it is not easily achieved. Like all large, hierarchical organisations, government functions tend to run most smoothly when confined within a single department. This makes sense given that existing structures mean that information flows most efficiently within departmental silos rather than across departments. Changing what works would require changing structures. This in turn would require a change in mindsets (at all levels) and in our information management practices. That being said, there is no such thing as a perfect structure and structures shouldn't stay the same forever. What is important is the ongoing observing, reflection and learning and, if required, adaptation to deliver the required outcomes.

Current governance frameworks are a legacy of 19th and 20th century concepts of organisation, derived from industrial principles



There will no doubt be resistance to taking an approach that isn't well defined and doesn't meet the usual requirements for being actionable, administrable and of course 'announceable'. It may take time to become comfortable with an adaptive approach when the use of detailed top down plans and timetables is the habit. Likewise, it will take time to develop the skills and cultures needed. And it will take time for citizens to accept such an approach (see Section 7). Patience is a virtue! Meanwhile, not everything is complex and not all existing governance structures should be abandoned. It is perfectly valid to allow formal command structures to co-exist with (and be complementary to) alternatives modes of governance.

6 IMPLICATIONS FOR CITIZENS – PARTICIPATION AND TOLERANCE

Democratic government functions with a mandate that comes from the community. Recognising that the distribution of power, money and influence is uneven and that democracy doesn't always function the way it should, there is still a role for greater participation by citizens.

Rather than disengaging in the face of complexity, citizens need to have a much stronger voice in the competition of ideas. This voice needs to extend beyond the politics of elections. However, speaking up isn't enough if no one is listening.

Our decision-making system should prioritise not only representation (through elected members of parliament), but also meaningful deliberation and debate of policy and processes across society (Berggruen & Gardels, 2013).

This is partly about learning, but also about empowering actors within the system and strengthening weak interconnections between different sectors (see, eg, Figure 1).

Collectively, citizens can ensure accountability by being aware and engaged. They can demand policy implementation and reform that includes deliberate strategies for experimentation, evaluation, reflection and innovation. There is also scope within the decision-making system for much greater real-time feedback from citizens and the community to inform policy roll-out and adaptation.

The challenge for everyone is to resist reverting to political point-scoring over failures, and instead giving genuine consideration to the results of

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experimentation – to the learning, discovery and adaptation that are essential to good government. This may mean operating on different time scales from what we (think we) are used to and may require patience if results are going to take time – or if the benefits are skewed to the long-term.

As described in Section 4 above, if leadership is the quality of the space between individuals, then followers are just as important as leaders. Followers actively and explicitly influence leaders' perceptions, attitudes, behaviours and decisions (Oc & Bashshur, 2013).

If leadership is a social process, then all sectors of society, citizens included, should be demanding leaders that understand what it is to facilitate and host that process.

We don't need another hero (Tina Turner was right). We need leaders willing to experiment (sometimes fail), innovate and learn. It is in our power to be part of the solution by encouraging (and by being) leaders who have the humility to admit they don't know the answers over those who pretend to have control.

We all have the chance to be part of a system that can foster positive change.

7 CONCLUSION

The world is changing. It is becoming increasingly complex. This complexity doesn't have to be a liability. It can be an advantage, so long as we realise that a complex adaptive system is not so much like a rock as a bird.

The way we study, think about and work with a bird is different from the way we interact with a rock. We need to think differently.

We need to be aware of the patterns of interactions that characterise the whole and how these patterns create points of leverage or influence, often in unexpected places.

We need to be able to conceive of the whole in order to understand the parts (not the other way around).

And just as we need to think about complex adaptive systems in a different way from simple systems, we also need different skills.



We need:

- **Leaders** who can draw upon the emergent and self-organising nature of complex adaptive systems through facilitation, empowerment, participatory action, evaluation and continuous re-calibration.
- **Organisations** (not just individuals) that can keep up with the dynamic nature of complex adaptive systems by being able to learn and adapt. Learning requires action, evaluation and reflection. Learning also requires taking risks and acknowledging failures.
- **Governments** that are willing to do both. The big challenge for leaders, organisations and governments is to be more adaptive with greater capacity to navigate policies and plans under conditions of incomplete information and uncertain outcomes.
- A **citizenry** that takes part in the system – that encourages deliberation, humility in leadership, learning on the job, and experimentation and adaptation as essential to good government.

Systems thinking is not a panacea. It is a tool that may have a 'use by' date or need adapting over time. For now, it provides a useful framework for navigating the complexity around us. Intervening in a 'system' is neither easy nor for the faint hearted. It is hard. It's even harder to inspire people to do something about it. This is true for Australia's decision-making system. But it is all we've got and, given there are few in the world that work better, we owe it to ourselves to constantly strive to make it great for ourselves and – hopefully – as a model for others.





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ABOUT THE AUSTRALIAN FUTURES PROJECT

Australia is a wonderful country. But, are we as good as we could be – and need to be – at making and implementing decisions for our long-term strategic benefit? If you're like many Australians, you answered 'No'. Why not? What can be done?

Imagine an Australia that had addressed the uneven economic impacts of the mining boom, unleashed the next wave of productivity gains, built the infrastructure to take advantage of the Asian century and make our communities more livable and healthy, achieved gains in equality and opportunity for Indigenous Australians, reined in our growing ecological footprint, and dealt with obesity, diabetes, and mental health problems.

The objective of the Australian Futures Project is to build Australia's capacity to make decisions for a flourishing shared future in the 2020s and '30s. We are multi-sector, non-profit, and non-partisan, hosted by La Trobe University.

We find, test, and roll out improvements to Australia's decision-making system. We engage broadly and work collaboratively. We are about making long-termism easier in Australia. Our engagement has uncovered four ways to do so:

1. Fostering a national identity, vision, and leadership – across all sectors
2. Encouraging and enabling accountability and contribution – across all sectors
3. Building competence for the modern world – including in complex adaptive systems
4. Repairing and strengthening relationships – between and within communities, between sectors, between politicians and bureaucrats, and between levels of government

We are now working with partners to improve Australia's decision-making system in concrete ways. Find out more from our website...

Support us: www.australianfutures.org

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Imagine an Australia where decisions with positive long-term impact were easier to make – and successfully implement