

Generative Shared Intelligence (GSI)

**A direction for
governments in
the uncertain
environment of
the late 2020s**

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I. Summary

The governments of the world sit in radically different positions. Some are flush with money, others struggling with debt. Some are democratic, others autocratic, some functioning, others failing, some stable others facing demographic crises that threaten sharp falls in economic growth and rising costs. As a result, they also face many different tasks – from promoting prosperity to climate mitigation, improving health or managing, migration, cutting crime or restoring trust. Any generalisations have plenty of exceptions.

There are, however, some common patterns and here I suggest a broad direction of travel that is relevant to all governments; (partly) underway in some; and highly desirable if we want future governments to be successful and legitimate in the future.

The focus here is on the 'how' rather than the 'what'. But everything I argue becomes more important if governments have bigger tasks on their plate and tougher constraints.

The core argument is that governments need to mobilise what I call 'generative shared intelligence', that increasingly complements the traditional focus of governments on law and finance.

This provides a broader framework for understanding and shaping the role of data and AI, citizen engagement and evidence, and much more. It's relevant both to the internal plumbing of governments – how they achieve results – but also to the renewal of democracy since it focuses attention on the gold in peoples' heads, the insights of citizens, workers and families, as well as hardware and data.

It requires:

- Recognition of the dynamic, unpredictable and complex nature of the contexts governments work in – contexts that are shifting, non-linear and always hard to grasp fully. Uncertainty and change are the new normal.
- Ability to mobilise all the different kinds of intelligence necessary to understand and act effectively, and respond quickly to

pressures, including many different kinds of data, algorithms, science, evidence and knowledge, as well as tacit knowledge and citizen insight ...

- A commitment to sharing that intelligence as widely as possible both inside government and outside, so as to ...
- Enable regeneration of the economy, society, politics and environment.

Governing with generative shared intelligence (GSI) should, I argue, be the defining goal for all governments, a mindset and method that runs through everything they do.

The approaches which then follow are very different from past traditions of public administration. These were often designed for more stable and predictable environments. They focused primarily on law and authority on the one hand, alongside finance and economics on the other. They viewed intelligence as something to be hoarded not shared. And they thought in terms of discrete problem solving rather than cultivating a generative capability across society.

The GSI approaches aim to avoid the mistake often made by governments around technology (from smart cities to AI) which typically exaggerates how much technology alone can solve problems, rather than addressing how combinations of different kinds of intelligence can contribute to better outcomes.

In what follows I first set out the key steps in the argument before describing twelve ways to operationalise these ideas, in each case providing links to much more in-depth analyses.

Finally, I relate the argument to other claims about the direction of travel for governments: the roles of data and AI; the importance of missions and challenges; and the desire to make governance more participative.

II. Dynamic contexts as the new normal

It's become a cliché that the world is amid a "polycrisis" (i.e., a series of overlapping crises, from finance to ecology and politics to health) that is placing huge pressure on governments. These crises are interconnected but also distinct, and the priorities constantly shift. In the last two years, for example, Europe has had to pivot sharply towards defence, in ways that few predicted at the beginning of the decade.

There never was a stable fixed environment for governments. However, their administrative methods were often designed with an assumption of predictable stability. Now in the face of uncertainty, governments have to do far more to scan for risks, assess warning signs, and reallocate resources, sometimes very quickly. The degree of interconnection of economies, the scale of human migration paths, the linking role of the Internet and much more, all mean that crises and challenges can spread fast too, again bringing new kinds of volatility.

At the same time, many governments' longer-term plans involve shifting whole systems – energy, transport, communications – in ways that will often involve surprising patterns.

The key in other words is to be able simultaneously to manage long-term projects and to be agile, both of which depend on not being trapped, whether in silos, rigid bureaucratic processes, or overly mechanistic plans and strategies.

This is why government has to be dynamic, agile and adaptable, with a repertoire of methods that range from the superfast to the slow and steady, which is challenging because they often move too slowly for tasks which have to be fast, and often try to do fast things that have to be done slowly.

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III. The central role of intelligence

In this context intelligence becomes more important than ever. Governments have always depended on intelligence. But in the past this was primarily thought about in relation to security – intelligence about external and internal threats.

Now governments need to orchestrate intelligence for all their activities, from education and welfare to the environment, and they need to define intelligence broadly to include data, evidence, models, tacit knowledge, foresight, and creativity and innovation -- all the means that can help governments make better decisions, particularly under conditions of stress and uncertainty.

This became obvious during the pandemic when Governments needed health as well as non-health data to help understand how the virus was spreading in real time; models -- for example to judge if their hospitals were at risk of being overrun; evidence -- for example on whether enforcing mask-wearing would be effective; and insights from citizens and frontline staff quickly to spot potential problems and frictions.

The same is true of everything from economic policy to plans for Net Zero. It follows that within any government it's now vital to ensure that intelligence is organised well. Yet in most governments, it is divided by functional departments – health, economy, education and others – with an overlaying division between specialisms – data, evidence, foresight, statistics and science advice. In the future these need to be run in ways that are both more integrated and more networked, helping decision makers to quickly assemble multiple forms of knowledge to guide decisions, and with skills for synthesis. Money, law and the other staples of public administration will continue to matter. But they will be less central than in the past.

IV. Sharing – a philosophy of open, engaged government

Some intelligence has to be kept secret, particularly in a more geopolitically competitive world. But most of the intelligence relevant to government becomes most useful when it is widely shared. This matters within government – where a crucial task is more systematic sharing of data, interpretation and evidence across government silos. But the task goes much wider. How to tap into the widest range of sources of expertise? How to involve citizens in decision-making?

The answers include the long shift to open knowledge and data – which began with governments publishing statistics, reports, and commentaries, and then in the 2000s spawned the open data movement, the idea that governments should share as many data sets as possible in open, machine-readable form. It includes the curation of living maps of evidence; futures work that creates insights briefings; and much more. And it includes much more use of methods from collective intelligence, that tap into widespread expertise across society.

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V. Being generative

The methods described here aim to be generative in several meanings of the word (the essence of the word is the ability to produce or create something). They offer alternatives to mechanistic, stultifying approaches of too governments, that block innovation and creativity, diffuse accountability and leave states sapping energy rather than amplifying it. Instead these methods aim to:

- Generate new solutions dynamically, and constantly, in response to change
- Re-generate societies that risk stagnation or distrust
- Re-generate a natural world that has been damaged
- And re-generate politics that has so often lost trust and capability

A little reflection also shows that generative intelligence should be at the heart of any economic strategy. Economic growth depends on mobilising the full potential of the people – their creativity, skills, problem-solving abilities, so as to drive up productivity. This is easy to miss as much 20th century economics had relatively little to say about intelligence in all its forms (defaulting to the simplistic idea that markets are a sufficient tool for mobilising information and knowledge or focusing only on money). It's easy to miss that most of the value from AI will come from the ways it amplifies and combines with human intelligence rather than replacing it.

Generative shared intelligence should also be at the heart of any progressive agenda. Progressive politics is at root about seeing a society and citizens in terms of their unrealised potential and everyday genius, and working to better see, nurture and grow it.

VI. A dozen ways to operationalise 'generative shared intelligence'

What does this mean in practice? Here I summarise how governments can put some of the ideas of generative shared intelligence into effect (the links in each section connect to much more detailed answers).

1. Intelligent centres of government

First, it implies different ways of organising the centre of government (as set out [here](#)) with the core brain of government requiring more capacity, a much more networked structure, agility to redirect resources of all kinds to respond to changing pressures, and ability to engage in continuous conversation with society, not solely mediated through traditional media or platforms.

These imply putting the organisation of intelligence at the heart of government (as set out [here](#)), as well as making the most of generative AI and collective intelligence for everyday tasks, from research and policy design to large scale transactions. And they require skills and knowledge networks across government, ideally with named curators whose job it is to ensure that knowledge flows, that key problems are identified and that many sources of solutions are tapped into.

In this view, centres of government become orchestrators of knowledge of all kinds – connecting the silos that currently separate not only different departments (health, education, economy etc) but also different professions (data, evidence, foresight, statistics, science etc).

2. Whole-of-government action and missions

Next, to handle tasks such as net zero, pandemics or prosperity, Governments need to be able to organise horizontal clusters rather than being trapped in traditional silos, with ‘whole of government’ action around selected key missions (as set out [here](#)).

They need a good repertoire of options rather than overly-generic approaches. These include cross-cutting budgets, roles, teams and strategic clusters, fitted to the different tasks (what works for economic prosperity will be very different from what works for health, for example). The traditional model of relying on committees is no longer an adequate response. In the future governments will look more like matrices, with a mix of vertical and horizontal roles, structures and processes.

3. Modernised public finance linked to impact

Money drives much of the behaviour of governments, so generative shared intelligence implies different approaches to public finance to better align finance methods with an era when most government spending focuses on people, and with varying timescales of impact.

These methods require much more systematic links between money and impact, using investment models and data to track impacts and enable learning (drawing on the options described [here](#)).

4. Digital infrastructures

Digital technologies underpin much of what governments do. The key lesson of recent years is that some standardisation allows for much more flexibility and efficiency, with models like Estonia’s X-road and India’s Digital Public Infrastructures providing common approaches to authentication, data sharing and service design, not just within government but also serving the private sector. These often require some central teams to develop and improve underlying modular elements that can be

used across the public sector. Platforms can then be used to organise provision of public services as well as cheaper access to commercial goods and services for citizens (as, for example, with India's Open Digital Commerce Network).

5. Mesh organisation

Modern government has to align multiple tiers of governance as well as stakeholders in business and civil society. That requires what can be called '[mesh](#)' approaches, that connect many players into partnerships, often with formal compacts setting out the contributions and responsibilities of each player, shared data and knowledge, and mutual accountability. Many of the next generation public institutions will be organised as meshes – and within nations there need to be not just committees linking national ministers, mayors and governors but also a shared organisational and intelligence capacity to support them and the lattice of collaborative plans, budgets and actions.

6. Innovation, experiment and learning

Generative shared intelligence implies continuous learning to discover better solutions. That means use of experiments wherever possible (again with a wide repertoire of tools, see [here](#)); service and social innovation (as set out [here](#)) testing out different approaches to everything from care to policing; and then capturing the lessons in systematic ways to guide policy, procurement and adoption. This requires linking innovation to [evidence about what works](#) and ensuring that is widely shared with professionals and practitioners. It may require new roles, such as Chief Exploration Officers (Netherlands), innovation teams and funds (which exist in many governments and cities), and more radical ideas like Ministries of Possibilities (UAE).

7. A more relational state

Much of what government does is done for the people. But much has to be done with citizens, particularly in education, health and social policy. That

requires a 'relational state' approach, with intelligence shared between state and citizen, drawing on lived experience and citizen experience, which implies changes to roles, metrics and accountabilities, and often bigger roles for personal coaches, mentors and guides (as set out [here](#)).

8. Richer engagement with the public

Shared intelligence means a different relationship with the public, and serious attention to public engagement between elections – with a broad repertoire from participatory budgeting and citizens assemblies to consultations and full society wide conversations on the most difficult issues (as set out [here](#)).

Many new technological tools make this much more feasible than in the past, combining collective and artificial intelligence – from Poli.s to the methods developed by organisations like Crowdsmart, Mindhive and Unanimous AI.

A critical issue is using the right methods for the right tasks – knowing when variants of citizens assemblies are most useful (and how best to connect into representative politics and bureaucracy), when formal decision-making power can be devolved (as with participatory budgeting), and when shared diagnosis of a problem is needed well before attending to possible solutions.

9. New fit-for-purpose public institutions

Governments need to continuously shape and design institutions that fit the tasks of the times, while also culling institutions that are no longer needed. To do this they need to learn both from history and from the best available methods of the present (using the methods set out [here](#)). The lack of organisational design creativity in the public sector compared to the private sector (which has seen radical innovation in the last two decades, with leading companies based on algorithms, search engines and platforms) has become a major impediment to action in fields ranging from energy transitions to mental health and AI.

10. Risk management and foresight

Governments need to constantly keep an eye on risks, scanning for potential timebombs and crises, while also scanning for likely geopolitical threats – focusing on resilience and adaptability, using simulations and, since prediction is impossible, aiming to inculcate agility. Equally, they need to attend to potential opportunities. Recent experience shows that societal collective intelligence can greatly help attune governments to potential risks. But this requires [a capacity at the centre to scan](#), assess and warn, applying lessons from international security to domestic policy, tapping into networks and mobilising citizen ability to spot potential risks.

11. Synthesis and new tools for holistic thought and action

The most vital capability of government is the ability to synthesise – to draw on many forms of intelligence to guide action. The inputs will range from science and statistics to public opinion and implementation insights. The key is to have a strong central capability to understand these inputs and synthesise to guide action, as set out [here](#). New tools can help this work such as [policy steering rooms](#) which help ministers and officials absorb the key dimensions of decision-making (facts, evidence, innovations and systems change).

12. Skills and training aligned with tools and tasks

Finally, governments, like all organisations, need to pay sustained attention to skills and capacity, for decision-makers at every level, including both officials and politicians (as set out in [this](#)). There are many gaps in skill, knowledge and mindset that seriously impede governments' ability to act, and the collapse of the training system in the UK is a particular problem.

VII. Generative shared intelligence and the renewal of democracy

Much of this agenda is about how government works in practice. But it also touches on the **future of democracy**.

There are many signs that democracy could be in long-term decline, partly because of problematic outcomes (stagnant incomes for large groups in countries like the US), but also because its processes are antiquated, with democracy still organised primarily around nineteenth-century methods involving Parliaments in capitals, elections every 4–5 years, parties that are meant to represent large bodies of opinion, programmes and manifestos. It is not surprising that survey evidence shows significantly declining trust in democracy by generation.

How to repair it? To rebuild democracy we have to understand it not as a single thing but rather as an assembly – including elections, courts, norms, regulations, constitutions, free media, consultations, referendums and much more. In this respect it is like the car or the computer which are also assemblies of multiple varied elements – in the case of the car from tyres and wheels to software and engines, brakes and interior furnishing.

The reinvention of democracy through a ‘generative shared intelligence’ lens leads to innovations that tap into a much wider range of voices and expertise and can guide reforms to the many parts of that assembly.

They include hyperlocal innovations giving local communities powers to propose, decide and allocate money, drawing on many successful experiments around the world with PB; it sometimes involves Citizens Assemblies, consensus conferences and other tools; the various AI tools like Poli.s which help to nurture consensus and mutual understanding; citizen science – mobilising the public as observers of air, nature, social phenomena and health; crowd-sourcing, backing ideas and innovations

from citizens; and broader approaches to big conversations with the whole of society on challenges like net zero.

These collective intelligence approaches have a double quality – they are partly about voice, the ability of the public to speak and be listened to; and they are partly about expertise, how to ensure the best knowledge and ideas are used to guide decisions.

“The reinvention of democracy through a ‘generative shared intelligence’ lens leads to innovations that tap into a much wider range of voices and expertise and can guide reforms to the many parts of that assembly.”

VIII. Simplification and complexity

Some of what's advocated here involves more sophisticated and complex methods. But paradoxically these may work best in tandem with strategies for simplicity. Otherwise, the overheads of coordination will tend to grow. The lesson of history that too much overhead or complexity can lead to problems.

So shared intelligence methods need to coincide with radical simplification: using shared and standardised protocols, and infrastructures; sometimes pushing responsibilities back to citizens, businesses and societies; regularly slimming or culling institutions.

And it needs to involve reducing complexity and friction for citizens and businesses, so that interactions with the state are as easy and automatic as possible, freeing up time and cognitive energy for other tasks.

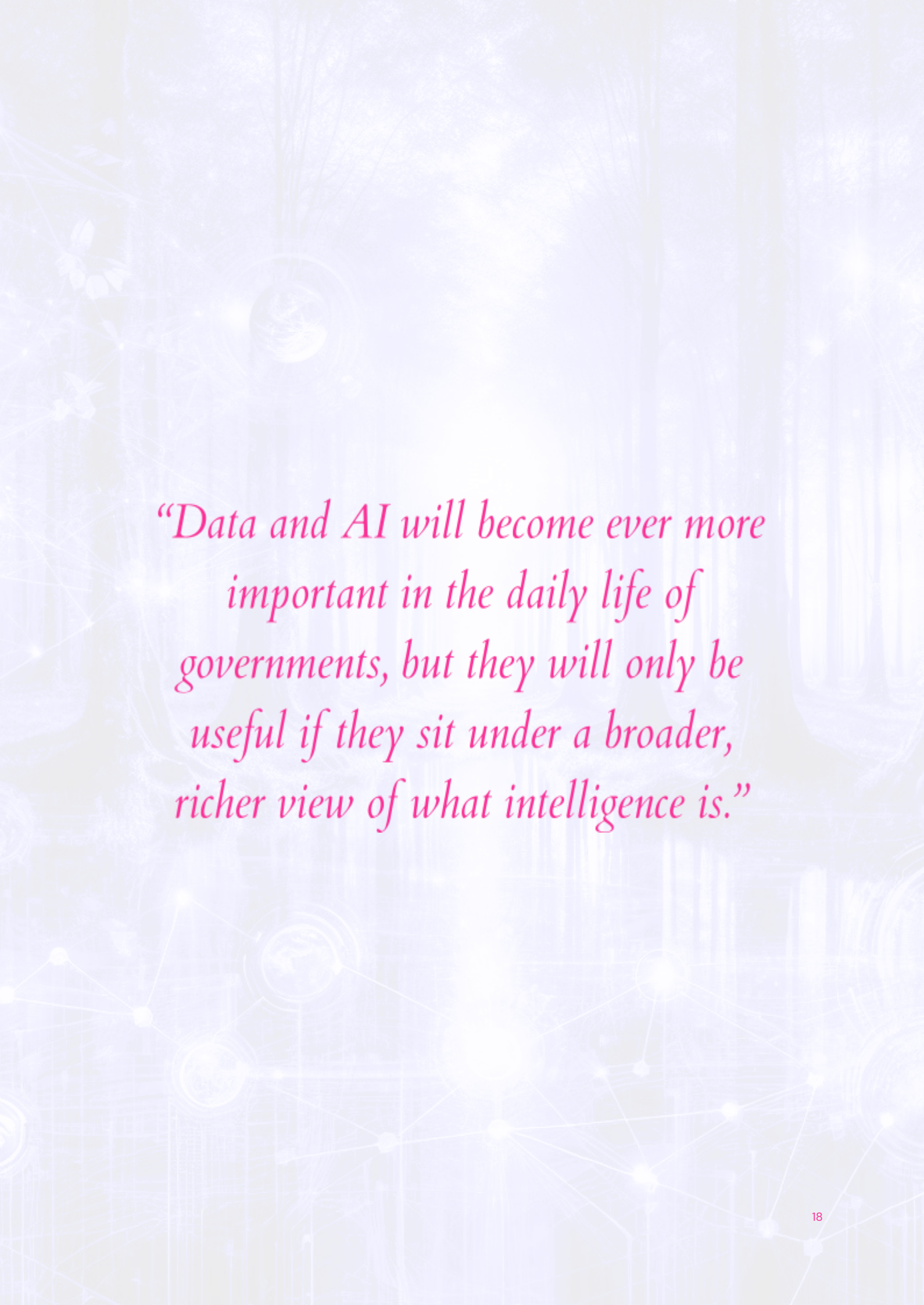
Many of the newer mesh options don't fit into a traditional choice between centralisation and decentralisation. Instead, some common foundations make more diversity possible – as in the case of the Internet which builds on very standardised protocols.

IX. How this approach relates to other claims

The GSI argument overlaps with other claims about the direction of travel for governments but is significantly different. I share the view that data and AI will become ever more important in the daily life of governments – but argue that these will only be useful if they sit under a broader, richer view of what intelligence is (including human collective intelligence, tacit knowledge and much more). Without it, they risk fuelling new failures, scandals and crises of the kind that have hit many countries (from Horizon in the UK to Robodebt in Australia and the various AI scandals in the Netherlands). The same is true of much digital transformation – it's vital to make government easier to use and engage with, but there also needs to be plenty of human engagement and oversight to avoid mistakes.

I also share the view that big challenges, missions and strategies will, and should, animate many governments. But if these are taken too far they become traps, introducing rigidities and counter-productive bureaucracy: governments need to be agile and able to think and act long-term. Strategy should shape structure not the other way round.

Finally, I share the hope that government will, and should, become more participative. But, again, I see this as part of a bigger picture: the public should be more involved in many decisions, feeding in views and expertise. But there are many technical issues where it makes little sense to promote active participation. Generative shared intelligence therefore provides a broader umbrella under which many specific elements can sit.



“Data and AI will become ever more important in the daily life of governments, but they will only be useful if they sit under a broader, richer view of what intelligence is.”

Further reading

This short publication draws on several decades of work and reflection on government, including working with over 50 national governments around the world, as well as the European Commission and United Nations.

It's meant to be a prompt, not a blueprint, since the best answers will vary greatly depending on context.

The background includes work on:

- how to organise strategy (in my book [The Art of Public Strategy](#));
- how to understand Collective Intelligence (in my book [Big Mind](#))
- how to organise intelligence across government (e.g., [this](#) study on intelligence in the pandemic, 'Navigating the Crisis' and various pieces on government as a brain);
- how to organise 'Whole of Government' action and innovation (e.g., [this](#) project for the European Commission);
- how to organise evidence in governments (e.g., [this](#) recent paper on evidence ecosystems);
- how to organise the relationship between science and government (covered in ['When Science Meets Power'](#));
- how to reform public finance (e.g., this paper on ['Anticipatory Budgeting'](#));
- how to organise centres of government (e.g., the paper ['Rewiring the Brain'](#));
- how to organise a 'relational state' (e.g., my various papers setting out the theory and practice, [here](#));
- what wisdom in government looks like (e.g., set out [here](#));

- how to win back trust by drawing on lessons of history (as set out [here](#)).

All in different ways are about how governance can be reformed with generative shared intelligence.

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