

Government, knowledge and the business of policy-making

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Keynes famous comment that ‘there is nothing a government hates more than to be well-informed; for it makes the process of arriving at decisions much more complicated and difficult’ is coming to look anachronistic. Governments have become ravenous for information and evidence. A few may still rely on gut instincts, astrological charts or yesterday’s focus groups. But most recognise that their success – in the sense of achieving objectives and retaining the confidence of the public – now depends on much more systematic use of knowledge than it did in the past.

Why is this? One reason is that governments are bound up with the broader shift to a society and economy organised around the systematic creation and use of knowledge. A majority of economic growth derives from new knowledge and its application; so does most health gain, and most military might. For at least two centuries governments have been driving forces behind the rising importance of knowledge, as funders, promoters and champions of evidence and knowledge, so it is hardly surprising that their own practice has been influenced by a culture that puts a high value on proof and demonstrable results.

Another factor is a change in the nature of the public which governments seek to serve: today’s citizens are far more educated, more knowledgeable, and more confident than their predecessors. As they use scientific knowledge and evidence of all kinds in their own lives, in everything from dietary choices to business decisions, they expect the same of their governments, are less willing to accept that governments have privileged insights, or that government is a mysterious dark art. Instead in fields as varied as health care or climate change they may have access to at least as much reliable information as government and are unlikely to respect governments which ignore what is known.

As I will argue much of this is entirely for the good. It is likely to make governments’ better servants of their people, and better creators of public value. It is already supported by a growing body of institutions, practices and insights. It will be encouraged in the future, as in the past, by a substantial body of independent research, theory and analysis at arms length from government, able to speak truths to power.

However, its full impact will depend on three other changes to how government works which remain in their infancy:

First, better methods for making use of different kinds of knowledge, which I argue is at root about how strategy and strategy implementation are organised, and which requires more integration of research, policy and strategy;

Second, better systems for ensuring that the right knowledge, both tacit and explicit, is available to decision-makers at the right time (a goal that is broadly captured by the language of knowledge management, though less often by its practice)

Third, better systems for continuous learning around every aspect of the business of government and its agencies, to complement more traditional ex-post evaluations

Demand for knowledge

Greater demand for knowledge cannot be understood in isolation from the political and international context within which governments operate. The political climate is an unusually non-ideological one by comparison with the heydays of Christian and social democracy in Europe, communism in the east, and more recently of neo-liberalism in the English-speaking world. More pragmatic governments place a higher premium on what works; are more willing to copy good ideas from elsewhere; and may be less constrained as to the types of solution they adopt.

This pragmatism has been reinforced by greater international transparency. The work of the UN, World Bank, IMF, OECD and EU means that all governments are now continuously judged according to their performance on a range of indicators. These in turn shape how they are judged, how successful they are at attracting investors, and the perceptions of their own people. We live in a world where people much more naturally compare themselves to others – and see much more quickly if our trains work worse, our CDs cost more or our streets have more homeless people on them. This tends to put more pressure on governments to adopt policies that have been proven to work elsewhere, and all the international bodies cited above encourage, recommend and sometimes cajole governments to adopt what are deemed to be best practice (usually, but by no mean always for the good)). In Europe, for example, formal benchmarking in various areas of social policy by the EU, is now seen as a crucial spur to the modernisation of the European social models.

Supply

Demand has to some extent been met by supply. Some of that supply comes from international organisations, some from policy analysts and social scientists working in universities, some from think-tanks and corporate research, some from market research and some from NGOs.

Within academia greater supply has been encouraged by the main funders of research – foundations like Rockefeller or Joseph Rowntree Foundation, academic funding councils like the UK's ESRC - which have become more instrumentally focused on the use made of knowledge. There has also been a palpable shift in mood amongst many academics, a marked turn away from the inward looking focus of abstract economics on the one hand and theoretical sociology on the other during the 1970s and 1980s, towards a greater interest in work that has a real impact.

In the UK, a new set of institutions now exist to organise and create knowledge: in health the National Institute for Clinical Excellence; the NHS Centre for Reviews and Dissemination; the Cochrane collaboration; in education the Centre for Evidence-informed Education Policy and Practice; in social policy, centres like the Centre for the Analysis of Social Exclusion at the LSE, the Social Care Institute for Excellence, the Campbell collaboration and the ESRC Centre for Evidence based policy and practice.

Access to all of the knowledge being created and shaped by these bodies is greatly helped by a new panoply of web-based tools like policy.com in the US, and policybrief in the UK, Cochrane and Campbell, and search engines which allow policymakers to Hoover in thousands of research papers and examples of good practice in seconds. These are still in some senses prototypes – their future counterparts will presumably be able to sift better by quality of evidence, to manage and interpret. They have the weaknesses of the web more generally – many lack sufficiently rigorous means of judging the authority of information. Yet they have already transformed the day to day business of policy making.

To bridge supply and demand new structures have been created within government. In part this is a change in scale – for example the growth in numbers of social researchers from around 600 to over 900, much larger spending on formal evaluations of programmes like Surestart and the New Deal for Communities, and much more use of pilots to test promising ideas.

The knowledge used by government

Governments have always sought knowledge and evidence. Sifting truth and half-truth about the powers and intentions of friends and enemies, armies, markets and temples was essential to the survival of any ruler. More recently (as Michel Foucault and many other historians have shown) the growth of the sciences of measurement and social analysis paralleled the growing role of states which needed to better understand, and manage, their often unruly citizens.

Evidence based policy making is, in short, nothing new. Past states had to make use of multiple forms of knowledge, ranging from academic evidence (the early 19th century economics of Ricardo or the late 20th century economics of Paul Romer) to intelligence in all its forms (from conversation and anecdote to hard data). Today the breadth of types of knowledge has grown. These are some of the main headings that matter to modern governments:

- Statistical knowledge (for example of population size and migration)
- Policy knowledge (for example, what works in reducing reoffending)
- Scientific knowledge (for example on climate change)
- Professional knowledge (for example, on the impact of vaccination)
- Public opinion (for example quantitative poll data and qualitative data)
- Practitioner views and insights (for example how teachers view exams)
- Political knowledge (for example, the balance of opinion in the ruling party)
- Economic knowledge (for example which sectors are likely to grow or contract)
- Classic intelligence (for example on the capabilities and intentions of hostile states or terrorist networks)

One of the striking features of this list is that each type of knowledge has its own professionals and interpreters. In some cases each has its own semi-independent profession within government. For example in the British government, economists, operational researchers and statisticians each have their own professional structures.

In theory a generalist civil service is able to make use of all of these types of knowledge. However, in many governments, the ability of civil servants to be intelligent users and customers of different disciplines has fallen behind. The sheer pace of change, and the need to make full use of the knowledge of front-line staff to service users has also put a premium on different ways of organising knowledge.

The unit for which I am responsible is one consequence of this. The Strategy Unit (formerly the Performance and Innovation Unit), has an explicit role in promoting a more analytic approach to policy. It does this both through its own work on issues as varied as energy policy, childcare and drugs which bring together in a single process analysis, policy design and securing Cabinet agreement and preparation of implementation plans.

It also has a role in providing coaching, methods and support to a network of strategy units across government. With around 100 staff, half from within the civil service and half from outside, and a fairly high turnover of people back into other parts of government, the SU has become an effective way of embedding new practices across government, and is almost the opposite of the classic, semi-detached thinktank.

Our own experience has highlighted three crucial conditions for more effective use of knowledge.

The first is the importance of processes that strengthen demand for analysis. In the UK the most important of these are regular policy reviews and spending reviews that systematically draw on the state of knowledge, and send a strong message to ministers that bids for funding will stand a far better chance of success if they are founded on strong analysis showing which inputs which achieve which outcomes.

The second is the importance of improving strategy skills, which include formal skills, particularly quantitative analytic ones; skills in using diverse types of knowledge; and career paths that ensure a better feel for delivery on the ground.

The third is the importance of team working. All of our work is done by teams which bring researchers, policy-makers and implementers together to design strategy. We have explicitly rejected the division of labour which has shaped the organisation of research functions within government (formalised in the UK in the Rothschild principle that researchers should work on commission to clients), and the new public management principle that policy should be separated from delivery. In the SU's work, for example, the typical team includes half civil servants from the relevant departments, half outsiders from academia, business, or the voluntary sector; half experts and half generalists; and a reasonable number of people with direct front-line experience to ensure that the strategies which result are deliverable. We see this mix as crucial to achieving strategies that are analytically based, creative but also realistic about the capacity of implementing organisations.

The fourth is the importance of knowledge management. Project team working is also a partial answer to the problem of knowledge management. Government use of knowledge management systems even in their simplest meaning (IT based systems that allow easy access to repositories of information, or to the right individuals) remains rudimentary. Getting the right knowledge to the right decision makers at the right time is rarely straightforward. But this is particularly true in large bureaucracies where departmental and disciplinary boundaries may disincentivise the sharing of knowledge, and where the corporate memory is often remarkably hard to access.

How is knowledge used in different types of area?

Some of the earlier writing on the use of evidence in policy making assumed a fairly linear path from academic research, through policy design to implementation. In practice, however, the ways in which knowledge can be used vary greatly according to the state of knowledge. Three types of field can be identified.

i) Stable policy fields

First, there are the areas where knowledge is reasonably settled; the theoretical foundations are strong; governments broadly know what works; there is a strong evidence base; and the most that can be expected is some incremental improvement. Most of the research work involves filling in the gaps, and refining insights. Pilots can be designed relatively easily to isolate the key factors. In these examples – macro and some microeconomics, labour market policy, some curative and preventive health – the field is closer to a normal science. The professional bodies and leading experts can generally be relied on to give good advice; systematic reviews can generate clear-cut conclusions; benchmarking is straightforward; and good innovations tend to spread fairly quickly through formal networks.

ii) Policy fields in flux

In the second category are the areas of greater flux. The knowledge base is contested; there is disagreement over the most basic theoretical approaches. Many recognise that things need to change and that policies which once worked are no longer working. But fewer can agree on either the diagnosis or the solutions. In these areas – in which we might include a fair amount of education, some environmental policy, crime, the organisation of public services - there is often a great deal of fertility and experimentation. Evidence about what works exists, but is often patchy, and inclusive. It is more likely to reveal the weaknesses of policy, and provide a useful filter for false claims than it is to give convincing evidence

about what will work in the future. The professions in these fields may be as much part of the problem as the solution, and may be resistant to criticism. Their usual networks may be the last to recognise the need for change, and the most promising innovations are as likely to come from the margins. In these areas new mechanisms are often needed to make use of knowledge: the collaboratives in health used in the UK are one example, bringing together a diagonal slice of practitioners, researchers, and decision makers to consider what works, and valuing direct experience alongside formal research evidence; there will also be a need for support for heterodox ideas, pilots of promising innovations and scepticism about any methods that are over reliant on peer review or control.

iii) Inherently novel policy fields

The third category consists of genuinely new areas whose very newness precludes the existence of a strong evidence base: the regulation of biotechnology; e.government; privacy on the net; new forms of governance at the European or global level are all examples. No-one knows for sure what works or what doesn't because these are virgin territories; the pioneers are likely to make the most mistakes; the experts will only be just ahead of the amateurs; and the task of good government is to keep a very close eye on what is and isn't working so that we can at least reduce the proportion of mistakes we make. In these fields, again, traditional formal bodies may not be effective ways of organising knowledge. Systematic investment in innovation is vital – but through fast-learning models rather than piloting of fixed approaches. Often foundations at arms length from government are well-placed to organise communities of learning (as for example Nuffield has done with bioethics).

In all three types of field evidence has a critical role to play. But it will only be in the first that it is meaningful to talk of policy as based on evidence rather than informed by it.

Evidence and theory

The differences between these fields underscore the importance of theory. In the second and third categories our questions are changing as well as our answers. In such situations evidence does not exist in abstract, floating free. It exists in relation to theories and concepts which provide the prisms through which the world is seen. These theories are not alternatives to hard facts and evidence. They are the only ways of making sense of them. Indeed, as Kurt Lewin famously put it, there is nothing so practical as a good theory, and when fields are in flux what we often need most is better theory – one reason why it is unwise for funding councils to concentrate all their resources on policy-relevant research.

The importance of theory, or basic research, should be self-evident. The influence of modern economics would be inconceivable without a strong body of macroeconomic and microeconomic theory that provides frameworks for thinking, testable hypotheses, and directions of policy innovation both within economic policy and in neighbouring fields: for example, road pricing, internalisation of externalities, vouchers for learning, insurance for long-term care.

The social theories growing up around concepts of social capital also provide a frame for understanding the world, a series of research projects, testable hypotheses and directions for policy-making in everything from housing design to volunteering (for those who are interested the Strategy Unit papers on social capital, social mobility and life satisfaction provide summaries of the relationship between theory, evidence and policy – www.strategy.gov.uk).

Theories may be part of large and sophisticated systems, or they may be more detached ideas. But it is often the concept, not its application, that is the key unit of policy development and transfer in cases as various as monetarism; quasi-markets for health; public service broadcasting; equal opportunities; renewable energy; regulated utilities; or contract compliance.

The spread of new approaches to the labour market is a good example: many of the most successful models were designed by labour market economists, drawing on solid microeconomic theory. They were then pioneered in Scandinavia, particularly Sweden and more recently Denmark and Australia, and, for lone parents, in the US. They were then successfully promoted by bodies like the OECD; and then reinforced as the academic work became more sophisticated and was able to draw on extensive evaluation.

Theories wax and wane in part because of the power of their ideas and in part because of the evidence. The influence of neo-liberalism grew in part because of its clarity and simplicity: it offered a clear narrative explanation and diagnosis of many of the problems governments faced, with the added patina of close links to economic science. More recently its influence has waned in large part because of evidence that over time has shown its poor analysis of motivation, culture, public goods and the collective handling of risk.

Sometimes theory leads practice and shapes the field for research and its application. Yet in matters of public policy concepts don't necessarily come from theories. They can be embodied in applications, with the theory coming later. Take one of the most important diffusions of the last 100 years, the spread of Keynesian economics – and in particular demand management to sustain full employment. During the 1920s and 30s Keynesianism in different forms was separately 'discovered' in New Zealand, Scandinavia, and in Roosevelt's US, all

before, not after, the theory had been first formalised by Keynes himself, and then popularised (some said bastardised) to become the conventional wisdom of the post-war era. In this case, as with much science, the story is in part one of parallel invention, great minds thinking alike.

Today a good deal of conceptual innovation is taking place through practice, with relatively few areas in which academics develop theoretical frameworks which others then apply. More often – in cases as diverse as intelligence-led policing or drugs rehabilitation - the theorists are following behind, trying to make sense of what the practitioners are doing.

Learning from elsewhere

Much of the knowledge that governments need will be imported. Indeed, an increasing part of evidence-based government involves systematic scanning of lessons from around the world. There is, of course, a long tradition of copying in government. Throughout history the really useful innovations have spread quickly. Some spread through conquest – legal systems are a good example. Some because they caught the imagination of the public: universal suffrage spread from France and Germany in 1870 to Switzerland in 1874, Spain in 1900, Sweden in 1909 and to Britain after 1918. Others spread because they captured the imagination of governments. Income tax is a good example, introduced in Britain in 1842, then Sweden in 1861, Italy in 1864, Japan in 1867 and most of Germany in the following years. And others spread because governments faced parallel pressures: social security is a good example which spread from Bismarck's Germany via Lloyd George to every advanced countries followed suit – encouraged in part by fear of the growing labour movement (pensions reform today is a similar case, though the pressures are different).

Benchmarking is now becoming a more standard part of the toolkit for governments. In the UK, for example, we are now in the middle of a very systematic review of the evidence on where the UK stands. This will show where we are doing better than we think (for example, school results) and where we are doing worse (for example, traffic congestion). The great value of such an exercise is that it forces us to ask why we are doing worse than we might like, and what we can learn from others, particularly the 'positive deviants', the countries which are doing better than they might be expected to do. Hopefully too it reduces the risk of copying bad policies – the ones with impressive PR but which don't actually work. Benchmarking doesn't on its own tell you what policies to learn from: but it does tell you where to look. Fortunately governments already have networks in place to gather in knowledge from other countries – and increasingly embassies are having to retool themselves to become channels for policy learning rather than just for trade and traditional diplomacy.

Limits of evidence

The use of knowledge in government is never straightforward, and I want to focus now on some of the limits to the ideal of government decision-making that is based on evidence and objective knowledge. Three of these limits derive from the nature of government.

The first is democracy. In a democracy the people, and the politicians who represent them, have every right to ignore evidence. In some cases they have good reasons for being sceptical about expert knowledge, which often led them astray in the last century. In other cases they may prefer to trust their 'gut'. A good example of this is police numbers. Existing evidence gives little reason for thinking that more police on the beat will be an effective way of cutting crime. But if the public sees this as a good way to spend public money and to increase their confidence then it would be perverse of policy-makers to ignore their views.

The second concerns ambiguity. It is not necessary to accept Renan's definition of nations as forged by the things they forget in order to recognise that all societies are held together in part by accepted ambiguities and silences. In politics, as in personal life, full revelation is nice in theory but can be deeply destabilising and destructive of self and mutual respect. Where different groups have diametrically opposed views or interests the assertion of rationality and evidence may have little impact, and good politicians understand this often much better than academics.

The third concerns time. Research time is different from decision-making time. The highly pressured time-scales of government action simply preclude some kinds of testing and evaluation, and put a higher premium on quick judgements in conditions of uncertainty. These judgements are likely to be better if politicians and officials have internalised their understanding of how the world works – and often good government depends as much on this tacit craft knowledge as it does on explicit, formal knowledge.

These limits that derive from the nature of government are matched by limits that derive from the nature of social knowledge.

The most important is that all social science knowledge is historically contingent, not universal across time and space (Larry Summers once said that the laws of economics are universal, an error that Keynes would never have made). Knowledge bases need to be constantly replenished; and their users need a healthy scepticism about the validity of even the most robust research evidence. People change and systems change, and as they do so the theories and the practice need to change too.

Then there is the fact of reflexivity: all actors act in the light of available knowledge which transforms the accuracy of the available knowledge, and, of course, has fundamental implications for governments capacity to influence the behaviour of others (this is well understood in economics but applies in other fields too: for example if burglars can see performance data for different police forces, this may influence where they choose to commit their crimes).

Finally there are weaknesses which derive from the current disciplinary organisation of the social sciences which has left major gaps in precisely the areas that are likely to be of most interest to policy-makers in the next few years. One is the territory at the interface of culture, economics, behaviour and psychology: governments badly need to know what encourages people to drink less or to drive less, to save or recycle more, yet robust theory and practical knowledge in these areas remains weak despite some of the promising advances of the emerging school of behavioural economics. Another example is the theoretical and practical underdevelopment of future studies. There is, for example, a huge literature on trends in inequality over the last 30 years but almost nothing on trends in inequality over the next 30 years. There are good epistemological grounds for being wary of forecasting. However, Governments and businesses have developed many tools of scenario planning, foresight and simulations to gain better insights into possible futures, and this should be a fertile area for serious academic work.

Some conclusions

The new environment in which governments operate in a far more knowledge rich context, and serve a far more informed public is unlikely to be reversed, despite the threats of fundamentalisms and identity politics. Donald Schon's account a generation ago in which the evidence existed only in the fields that didn't matter much to the public is no longer relevant. There is plenty of knowledge and evidence in fields as vital as unemployment, crime, health and migration, and fierce debate both inside and outside government about its uses and meanings.

None of this makes the job of using knowledge straightforward. There are inherent complexities at work which derive both from the nature of government – its duty to create public value – and from the nature of social knowledge- in particular its contingency and reflexivity. New methods of organising knowledge – particularly at the level of strategy, in terms of knowledge management and continuous learning – are needed if the full potential of new knowledge is to be realised.

Above all, perhaps, those involved in the creation and use of knowledge need to face outwards to the public and the media as well as inwards to government.

Knowledge becomes most compelling not just when it is useful, but when its very visibility makes it hard for governments not to use it.

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