

Govern softly by carrying a big stick: official statistics in the shadow of hierarchy

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Abstract

While there is broad agreement that contemporary public administration relies on horizontal governance mechanisms to secure cooperation across organizational boundaries, research also shows horizontal governance is often “backed-up” by hierarchical governance mechanisms. Statistical administration is an excellent case for exploring the relationship between hierarchy and horizontality, since official statistics require coordination and consistency, yet production in many jurisdictions is increasingly dispersed across multiple government agencies. Interviews with senior government statisticians in Australia and the United Kingdom are used to investigate central statistical agencies’ efforts to secure compliance with methodological standards among new government data producers. The qualitative data show horizontal governance does depend on hierarchy, but not primarily because of the back-up function. Rather, new statistical producers with more hierarchical seniority are more inclined to interpret the governance initiatives of central statistical authorities in softer, more horizontal terms, leading to greater cooperation. Furthermore, increasing the hierarchical powers of central statistical authorities counter-intuitively encourages them to focus more on horizontal mechanisms such as informal dialogue, networking and “value-adding”.

1. Introduction

Like many parts of the contemporary public sector, statistical agencies face new challenges and demands. If it was ever enough for these agencies to focus narrowly on producing methodologically sound indicators, this is no longer sufficient (Brackstone 1999). Now, in addition to “accuracy”, statistical agencies are also expected to produce results quickly, to make sure their products are relevant to the evolving needs of users, to maintain coherence across indicators, to make their data affordable and easily accessible, and to ensure their statistics are easy to interpret (ibid; Holt 2007). They must also save costs in an era of budget pressure (UNSD 2003). As commentators are quick to acknowledge, these different dimensions of statistical quality create conflicting demands for statistical production, meaning statistical agencies must engage in a complicated

balancing act between the different imperatives of statistical production (Edmunds 2005; McLennan 2002; UNSD 2003).

A major driver of these new pressures is the growing number of official data sources and government statistical producers existing outside central statistical agencies. Although there has been little qualitative or quantitative research exploring the growth of new producers, contemporary political and statistical commentary suggests leaders and practitioners see the dispersion of statistical production as a significant trend (Holt 2007; UNSD 2003). Bloggers and politicians wax lyrical about the ‘data explosion’, ‘data revolution’, ‘big data’, and ‘data democracy’, and there is considerable enthusiasm at the highest levels of governments that the burgeoning new sources of data and indicators will help meet policy makers’ ever-expanding requirements for evidence (Clinton 2012).¹ The development of ‘open data’ sites like data.gov, data.gov.au and data.gov.uk is driven by the goal of making more raw government data freely and easily available to new users and producers. The rise of administrative databases and point-and-click software packages enable policy decision makers in line departments to carry out analyses themselves. In jurisdictions with dominant central statistical bureaus, governments have shown willingness to spread funding around to new producers, while in historically ‘decentralized’ statistical systems there are indications that the range of official statistical producers and sources is also growing (Groves 2011).

From the point of view of administrative theory, these developments pose two clear problems for statistical governance. Firstly, the emergence and expansion of producers operating outside the statistical agency bypasses the hierarchical command structure available for managing relationships within central statistical agencies. Secondly, the proliferation of producers increases the likelihood that statistical products will be produced under different conditions and according to different methods, with the risk that they will be incompatible and untrustworthy (Banks 2009; Groves 2011a; UNSD 2003). Whereas central statistical bureaus typically enjoy formal autonomy from the government of the day, statistics produced elsewhere in the state may be subject to direct ministerial control, which may undermine trust in the whole body of government

¹ For an influential blog on the subject, see datademocracy.org.

numbers (Fellegi 1996). Central statistical authorities thus have an interest in ensuring that their counterparts in other government divisions produce good numbers (UNSD 1980). Thus, while the dispersion of statistical production erodes and evades the power of existing hierarchical governance mechanisms, it also heightens the need for new tools that can ensure adherence to methodological standards across organizational boundaries.

Despite the fundamental role of official statistics in public administration and policy, statistical bureaus have not received dedicated attention in public administration scholarship. This is probably because they are rarely seen as sites of exciting or important administrative developments. The widespread formal separation of statistical agencies from political executives, combined with the highly technical nature of the work and the stereotype of statisticians' procedural conservatism (Duncan 1989) have meant statistical bureaus largely fly under the radar of administrative research.

This paper asks: *how are central statistical authorities attempting to govern other statistical producers within government operating outside their hierarchical chain of command? What is the relative balance between the use of hierarchical vs non-hierarchical means in these efforts and how do they interact with each other?* The research draws on a series of qualitative in-depth interviews with senior statisticians in Australia and the United Kingdom to learn about how they are reacting to statistical dispersion. These interviews were deliberately conducted in two significantly different 'statistical systems'. Australia represents a highly centralized model with the Australian Bureau of Statistics (ABS) enjoying strong legislated autonomy from the elected government. By contrast, the United Kingdom has a decentralized system in which approximately 80% of official statistical operations occur in ministerial departments, making them potentially subject to more direct influence from political masters (Laux et al 2007). The interviews reveal central statistical authorities in both jurisdictions increasingly seek to influence dispersed statistical producers, and to this end both have developed and deployed horizontal governance approaches.

The United Kingdom experimented first with a horizontal governance system in which the Office of National Statistics offered to certify statistics produced in other government departments, along with an autonomous Statistics Commission that audited and published critical reports on government statistics. This ineffective voluntary model

was replaced with a new independent United Kingdom Statistics Authority, with formal powers to demand information and compliance from other producers. Yet this central authority complements the new regime of powers with horizontal strategies to secure influence and outcomes, and is “softer” than the old voluntary model in several ways. In the centralized Australian system, the ABS tried to develop a new role both collaborating with and regulating the statistical work of other government agencies, but encountered resistance because the relatively junior forum participants from other departments interpreted the ABS’s initiatives in overwhelmingly controlling rather than collaborative terms.

The research deepens our understanding of horizontal governance ‘in the shadow of hierarchy’, meaning contexts where formal vertical authorities persist alongside new horizontal initiatives (Héritier & Lehmkuhl 2008; Whitehead 2003; Schilleman 2008). This literature has consistently sought to rebut the suggestion that hierarchy and horizontality are incompatible and mutually exclusive. Rather, these authors observe that hierarchical authorities can empower horizontal governance by constructing ‘rules of the game’, insisting on cooperation, and threatening to penalize actors who do not behave collaboratively. In these ways hierarchy acts as a framework to mandate and steer actors’ horizontal efforts, and also as a back-up or fail-safe to be invoked when horizontal mechanisms falter. Statistical governance reveals a subtler interdependence between hierarchy and horizontality in two senses: 1. Actors who possess hierarchical power are more likely to interpret a horizontal initiative in positive, collaborative terms, leading to increased cooperation, whereas more junior officials are likely to feel coerced; and 2. Increasing the hierarchical authority available to a given actor can result in them perceiving an imperative to govern softly.

The paper begins by applying established administrative paradigms to interpret the history of government statistical organizations and recent dispersion of statistical production. The next section addresses the interview methodology and findings. The conclusion addresses implications for horizontal governance and the shadow of hierarchy.

2. From specialized bureaucracy to dispersed network

While administrative scholarship has paid limited attention to government statistical production, some influential scholarly histories of statistics make reference to the evolution of statistical administration (Gigerenzer et al 1986; Hacking 1990; Porter 1986; Starr 1987). This literature suggests a gradual formalization of government statistical administration beginning in the c19th and culminating in the establishment of dedicated statistical bureaucracies in most industrialized states by the early c20th. Meanwhile, more recent literature suggests the erosion of the bureaucratic model of statistical production and the emergence of greater competition and pluralism in government statistical production, spurred by government policy shifts, technological developments, administrative reforms and changing user expectations (Holt 2007; UNSD 2003).

Readers will be familiar with the bureaucratic organizational form, in which complex functions like statistical production are allocated to specialized organizations staffed by experts who each have clear, separate, designated roles in the organization's division of labour. Production takes place entirely within the organization's boundaries and is coordinated under the authority of a single official, who is responsible for organizational performance (Weber 1968). National Statistical Offices adopted many of these bureaucratic principles in the c20th. As Ian Hacking (1990) suggests, the idea of a technically specialized, politically neutral government agency dedicated to statistical production had been unusual in the c19th, but gradually became the standard:

Prussia inaugurated the anomaly that became the wave of the future. It is tempting to describe the Prussian statistical bureau as an office of numbers-in-general. The bureau was a resource for all the other branches of government. Such an institution presupposed that there is a special type of knowledge, and a new kind of skill, the ability to collect, organize and digest numerical information about any subject whatsoever. That skill will present itself as neutral between parties, as independent of values, as objective (Hacking 1990: 29).

These statistical bureaus adopted the bureaucratic model in three key ways (Starr 1987):

1. they were overseen by a single chief statistician, in whom authority for most decisions was formally vested through legislation;
2. most statistical bureaus exhibited a formal division of labour, with statistical experts carefully organized into specialized subject

matter domains and/or statistical production stages; and 3. clear rules usually existed concerning data collection, storage and analysis as well as publication of indicators.

Of course, not every country followed the “Prussian” model of a single bureaucratic statistical organization. In Britain, for example, statistics were never concentrated in a dedicated agency, but were instead

. . . piecemeal, pragmatic, by turns sensible and bungling, occasionally a source of radical reform, more often the handiwork of the Circumlocution Office. When an authority was needed to gather a new kind of information, some committee or other would establish a board with a designated mission or tack a department on to an existing bureaucracy (Hacking 1990: 28)

Similar points have been made about the historically decentralized system in the United States (Young 1918). In these decentralized statistical regimes there was often no central authority that coordinated statistical producers across government, though some decentralized systems maintained the notion that dispersed statisticians were members of a statistical “cadre” or “service”, as in the United Kingdom’s “Government Statistical Service” (Edmunds 2005; Holt 2003; Laux et al 2007).² Nevertheless, these decentralized systems retained core principles of bureaucratic governance. In the U.K. for instance, statisticians worked in discrete, functionally specialized areas, and there was no systematic inter-organizational coordination between statistical silos (Laux et al 2007).

There has been a general shift away from formal bureaucratic organizational models to more informal ways of organization and governing that involve interactions and relationships between actors outside bureaucratic hierarchies (Castells 1996; Hill and Lynn 2005; Provan 2007). In the public sector this reflects three key trends: a blurring of organizational boundaries; a more complex and unstable division of labour; and the need to demonstrate value to multiple stakeholders. The following summary is deliberately cursory on the assumption readers are familiar with these by now well-established administrative trends. It gives an overview of how statistical agencies have experienced such developments.

² Such cadre arrangements complicated the idea of a bureaucratic command structure, because dispersed statisticians were answerable to both their ministerial superiors and the head of the statistical service. In the UK before 2007, the latter relationship was restricted to a notional observance of professional principles, since ministers had the final say over statistics produced in their departments.

Bureaucratic governance constructed discrete, self-contained government organizational units. Once legal mandate and budgetary resources were secured, units were (ideally) self-sufficient with respect to producing outcomes, and could be held responsible for performance of their designated functions. Outputs were produced internally and delivered as finished products to external stakeholders. In the late c20th these conditions were challenged in several ways (Castells 1996). There is a shift from vertically integrated production to “co-production” as statistical agencies increasingly make their microdata available for others to analyze, but also depend more on datasets produced by other departments (cf. Goldsmith and Eggers 2004). The explosion of administrative databases, combined with the emergence of point-and-click statistical packages and exponential increases in the power of personal computers have dramatically expanded the capabilities of small statistical producers in other parts of the state. Furthermore, central statistical agency datasets are being linked with administrative data from other agencies to produce powerful ‘composite’ indicators for policymakers (ABS 2012). Statistical agencies are now players in a complex network of statistical actors, and they rely increasingly on the efforts and cooperation of suppliers and users beyond their organizational boundaries to produce official statistics.

Both bureaucratic and post-bureaucratic governance are based on a specialized division of labour. However, in the new era, specialization becomes more contingent and fluid (Kickert et al 1997; Rhodes 1997). As a result of declining public budgets and the introduction of new public management (NPM) principles, public sector organizations increasingly compete with each other for funds and responsibilities (Pollitt and Bouckaert 2004). NPM encouraged governments to tolerate duplication and overlap of functions if it led to lower costs and better policy outcomes (Hood 1991). In some traditionally centralized systems such as Australia, governments have created new bodies with prominent statistical functions such as the Australian Institute of Health and Welfare (AIHW), Australian Institute of Family Studies (AIFS), and Australian Housing and Urban Research Institute (AHURI), which are all outside the ABS. While national statistical agencies continue to specialize in statistical production, they may find other statistical producers intruding on and/or collaborating with them in their traditional tasks.

The key implication of the literature is that one can no longer assume the existence of a stable, legally mandated division of labour in official statistics (cf. UNSD 2003, 3-9).

Bureaucratic organizations follow rules and procedures that are supposed to deliver the desired outcomes for whoever authorizes and funds the bureaucracy. The extent to which other external stakeholders value their work is not of great concern, at least in the short term, since they do not face competitive pressure (cf. Niskanen 1971). Increasingly however, public sector organizations must demonstrate “value” to multiple stakeholders in order to retain their authority and secure funding (Alford and O’Flynn 2009; Goldsmith and Eggers 2004). Another way of putting this is that there has been a shift from assessing public services in terms of inputs and processes, towards an emphasis on the usefulness of outputs (Peters 2011). As a result the credibility and legitimacy of statistical agencies’ actions increasingly depends on being seen to create value for multiple external stakeholders, as opposed to adhering to rules, applying professional principles and rigorously adhering to technical criteria (Brackstone 1999; Holt 2007).

The rise of horizontal governance – efforts of ‘hierarchical equals’ to shape respective behaviours - is a response to these three developments (Bakvis and Juliett 2004). Yet research consistently shows the ongoing importance of bureaucratic command structures for policy development, program implementation and public service accountability (for a summary see Howard and Phillips 2012). Some authors concentrate on the tensions and contradictions between horizontal and hierarchical dimensions of governance, and point out that hierarchy tends to trump horizontality, because the vertical structures are vastly more institutionalized, provide the bulk of budgetary resources and continue to be the major avenue for the application of sanctions for underperformance and failure (Bakvis and Juliet 2004). An alternative view stresses the interdependence of hierarchical and horizontal structures and practices (Héritier & Lehmkuhl 2008; Whitehead 2003; Schillemans 2008). For these authors, horizontal initiatives operate in the ‘shadow of hierarchy’ because they are dependent on, and - as the metaphor suggests - outsized by, conventional authority structures. Thus Whitehead (2003) shows how local governments in the U.K. engaged in collaboration because of mandates and frameworks laid down by central government. Schillemans (2008) argues horizontal accountability

mechanisms carry greater power in The Netherlands because of the threat that horizontal actors can report their findings to senior officials, who have the power to shape budgets. Thus by providing frameworks and back-ups, hierarchy has been shown to enhance rather than undermine horizontality. Does the same ‘shadow of hierarchy’ facilitate horizontal initiatives in the technically complex and politically sensitive domain of government statistical production?

3. A tale of two statistical systems

This study uses the well-established interpretive elite interview method to determine how senior government statisticians are interpreting and reacting to the rise of new statistical procedures in other parts of government. Interview data were collected through in-person visits to statistical agency offices with a small number of follow up telephone interviews. The fieldwork included 11 interviews of one hour length between 2005 and 2012 with current and former Australian Bureau of Statistics employees, and 14 interviews between 2004 and 2010 in the United Kingdom with members of the Office of National Statistics, United Kingdom Statistics Authority, and “Heads of Profession” (the officials in charge of statistical work within ministries) from three Whitehall ministries. Interviewees’ names and specific job titles are not revealed to ensure anonymity in accordance with the project’s ethics protocol. All interviews were recorded and transcribed, then uploaded into the N’Vivo qualitative software for thematic coding and analysis.

This section reports on four aspects of statistical agencies’ interactions with other statistical producers: 1. Statistical agencies’ recognition of dispersed production as a major governance challenge; 2. Agencies’ efforts to govern statistical producers in other departments through horizontal and hierarchical means; 3. Reactions of other statistical producers to agencies’ efforts; and 4. Agencies’ efforts to modify their approaches in response to initial reactions.

Dispersion as a major governance challenge

Interviews and documents in both Australia and the UK suggest dispersed statistical production is seen as a major challenge for statistical governance. In Australia, concern

about governing external producers emerged as the number of producers of statistics outside the ABS grew. According to its enabling legislation, in effect since 1975, the ABS has authority over other government agencies enabling it to “formulate, and ensure compliance with, standards for the carrying out by official bodies of operations for statistical purposes”.³ No specific powers or mechanisms are stipulated to ensure enforcement of such rules, and one ABS interviewee suggested this provision has historically been regarded as a “dead letter”. However, as the number of other government bodies producing statistics grew in the late c20th, the ABS leadership began to take this legislative provision more seriously:

Around the year 2000 the focus in the ABS started to shift to paying more attention to the other government players in statistics. There was a sense that our coordination function, which is spelled out in our legislation, needed to be beefed up. There was increasing recognition that we are not the sole player in the universe. We could see that other agencies were sitting on a lot of capability (ABS official).

Another senior statistician reflected on the increasing role of other statistical producers, and the competitive pressure this put on the ABS:

There’s no doubt that others have moved into the field. They want to own the data, and not be subject to our requirements. So we are operating in a more complex environment. And we need to do more, better. It’s about productivity. We need to provide service that is perceived to be right for the times. Users want quicker turnaround (ABS official).

A senior official noted that new statistical producers were well established and could not be ignored:

. . . there’s a lot more information around and a lot of that information is of tawdry quality, and the ABS had got to fight for its space. And they’ve got agencies like the AIHW and ABARES, which have got substantial places in the statistical firmament now (Senior Australian government official).

³ *Australian Bureau of Statistics Act (1975)*, s. 6d

As part of its attempt to develop closer relationships with other government producers, the ABS promoted the concept of an interconnected “National Statistical System”:

The ABS is in a strong position. We are a trusted organization that performs well. The main challenge facing the ABS is in the development of the National Statistical System. In essence, this is more than the agency. Increasingly, statistics are collected elsewhere. So the National Statistical System creates challenges. It is our biggest challenge. We have responsibility for the whole system (ABS official).

In summary, although it was not the only governance challenge mentioned in interviews, respondents consistently stressed the point that building and managing relationships with other government statistical producers was a major impending challenge for the ABS leadership.

In contrast to Australia, the United Kingdom has long maintained a dispersed production system. What has changed in recent decades has been the political appetite to protect statistical work from political interference and implement consistent production and dissemination standards across government. Serious concerns emerged about the accuracy and political independence of U.K. official statistics in the 1980s, when there was widespread cynicism that revisions to the methodology for counting the unemployed were part of a political effort to reduce the reported unemployment rate (Slattery 1986; Tant 1995). In 1996 a new Office of National Statistics (ONS), responsible for some population and macroeconomic statistics, was created as an agency answering directly to the Treasury. In the following year, New Labour made rebuilding trust in statistics and establishing an independent statistical service part of its election manifesto. The Blair government conducted an official inquiry into the statistical system and in 2000 released the *Framework for National Statistics* (ONS 2000). The framework proposed a non-legislative Code of Practice to be maintained by the Office of National Statistics that would apply to all government statistics, and also created a small independent Statistical Commission to review and critically comment on the production, publication and use of government statistics (Laux et al 2007; ONS 2000). With the creation of these new

institutions, the stage was set in the UK for more centralized management of dispersed statistical producers.

Governing new statistical producers

So far we have established that dispersed statistical production is recognized as a key contemporary governance challenge. What have central statistical agencies in the two jurisdictions done about this?

Emboldened by its legislative mandate to promote statistical coordination and standards throughout government, in 2002 the ABS created the Australian Government Statistical Forum and invited senior officials from other federal departments to discuss how they might work with each other. According to senior ABS officials, the purpose was to encourage other government producers to follow good statistical practice:

We wanted to promote the objective of other agencies to be statistical citizens. We saw it as a kind of obligation on their part to produce good statistics. We were thinking in terms of a connected government space, or a cross-agency perspective. It's a really important strategic shift (ABS official).

Another official noted that the formation of the AGSF was not only motivated by concerns about methodology, but also reflected a survival imperative for the ABS:

The AGSF was about us trying to cope with salami slicing of the budget. The budget for statistical work was being shaved at our end and spread out to places we had little or no control; divide and conquer, if you will. So it was strategic. We were looking at more money for the system as a whole that would come from cooperation (ABS official).

The ABS leadership used the AGSF to promote of a new concept: "Tier-One Statistics". Under this proposal, the ABS would review statistics produced in other government departments and determine whether or not these met a quality standard to be designated Tier One:

There was recently a proposal to develop a quality standard for statistics produced in other departments. These would be called Tier One Statistics. This would mean a certain quality standard,

certain protocols being followed in the production of data. The ABS would review statistics and determine if they were Tier One or not (ABS official).

Thus the ABS developed three governance tools in its effort to build relationships with and influence new statistical producers: the concept of *shared membership* of an integrated National Statistical System; *discussion and collaboration* through a high-level governance forum; and the Tier One *standard*. The first two tools were overwhelmingly horizontal in their orientation, while the standard carried a hierarchical element since the ABS had the sole authority to determine compliance.

In the UK, two major mechanisms were introduced in the early 2000s to empower the ONS and independent Statistics Commission to exercise greater influence over dispersed statistical producers. The first was the concept of “National Statistics”, which referred to statistics that had met the standards of the Code of Practice. All ONS internal statistics were classified as National Statistics in 2002, while statistics produced by other departments could be formally deemed National Statistics if the ONS reviewed them against the Code of Practice and judged them to meet the standards in the code (Laux et al 2007). The National Statistics approval was referred to as a “kitemark” or “quality stamp” (Statistics Commission 2004: 26). Crucially, it was up to a minister to decide if their department’s numbers would be submitted for ONS quality review, making the system essentially voluntary and dependent on ministers wanting the quality stamp (Laux et al 2007:51).

The second key mechanism was the creation of the independent Statistics Commission with an expansive mandate to review statistical practices (Statistics Commission 2001). Like the ONS reviews of National Statistics, the Statistical Commission did not have the power to compel ministers and their departments to cooperate. As one former staff member of the commission reflected, the watchdog had no special powers of request or appeal, and no authority to enforce its recommendations beyond the ability to “name and shame” statistical producers who failed to comply.

Reactions of new statistical producers

In Australia, initial external reactions to the ABS's AGSF initiative were apparently supportive, though one interviewee expressed disappointment that the ABS could not attract the most senior officials from other departments. However, the reaction of departments to the ABS's Tier One Statistics proposal was decisively negative:

The AGSF is the basis for the development of the National Statistical System. That's the forum we put the proposal to about Tier One Statistics . . . It started off on a high but then crashed and burned when we put forward specific proposals. March 2003 was the disastrous meeting when the Tier One idea was presented. They hated it (ABS official).

Another official reflected on why the departments were hostile to the Tier One idea:

Stakeholders rejected the proposal. It's dead and buried. Departments didn't want the cost of compliance, and they didn't want the exposure of their data to external scrutiny (ABS official).

A senior ABS official suggested that lack of senior representation on the AGSF meant that forum members didn't see the strategic importance, but just focused on the direct costs and threats to their own autonomy:

At the very top there is strong support. They want information to be compatible with their systems. At middle levels, it's mixed. There is concern about us trying to control. It will take a few years for people to see that we're here to help, not control (ABS official).

Despite this apparent emphasis on helping rather than controlling, one member of the AGSF observed some tensions in the ABS over how to approach the forum:

. . . the ABS secretariat, from the very outset, tried to use the AGSF as an authoritarian structure. And I didn't support that at all, and we had a lot of quite strong debate in the early meetings about that, when Dennis [Trewin, Australian Statistician] would always come down and say "No, no, no, I'm not trying to rule the roost, I'm trying to coordinate." He'd say all the right things, but the papers that came out afterwards would take that hard line (Senior Australian government official).

The failure of the Tier One initiative reveals the importance of perceptions in this horizontal governance context. Whether or not coercion was intended – indeed, senior

ABS figures did not portray the Tier One model as coercive in interviews – nevertheless, the perception of coercion undermined other departments’ willingness to cooperate.

What about the United Kingdom, with its history of decentralized statistics? What was the reaction to the work of the Office of National Statistics and new Statistics Commission? The overarching sense in interviews was that the voluntary system of the early 2000s was not effective in engaging other departments in statistical improvement, as a senior ONS official reflected:

. . . certainly there is a perception that National Statistics as a concept and brand under the old arrangement wasn’t particularly useful which is why I guess further reform was needed. I can’t defend it as a great and effective system if the Government subsequently felt the need to change it (ONS official).

Several officials suggested the ministerial interest in and take up of the “National Statistics” kitemark fell significantly below expectations. The independent Statistics Commission also relied upon government departments’ cooperation with its investigations:

. . . one very strong message came out of [our] early audit work and from our consideration of some of the specific issues . . . This was the extent to which we depend on the cooperation and availability of National Statistics staff to make information and background material available to our secretariat team and/or to our expert researchers (Statistics Commission 2001: 17).

The Commission expressed concerns about the potential for agencies to stonewall, for instance by using resources as an excuse to not cooperate:

We are concerned that our work can be substantially delayed. This could effectively allow areas of National Statistics to “opt out” of our scrutiny . . . We shall pursue this resourcing issue vigorously over the coming year (Statistics Commission 2001: 17).

The core reforms of the 2000 Framework for National Statistics thus left significant problems surrounding the governance and oversight of official statistics in the UK. Fundamentally, they did not address the broader problem of persistent public distrust:

A survey carried out by the Office for National Statistics in February 2005 identified that less than one in five (17%) of those surveyed thought that official statistics were produced without any interference by government, 59% perceived that the government used statistics dishonestly, and only one-third (34%) felt that government figures were accurate (Laux et al 2007: 50).

For these reasons, numerous calls emerged for a rethink of the 2000 reforms, especially in the area of introducing legislation concerning national statistics and giving more formal authority to the review functions of the Office of National Statistics (for a summary of the arguments see Holt 2003; Statistics Commission 2004).

Modifying their strategies

Statistical agencies in both systems have modified their approaches in response to these unfavorable reactions. The ABS consciously sought to reduce its emphasis on overseeing, steering and auditing statistics produced by other departments. Instead, it has tried to make progress by contributing expertise and advice in areas such as the integration of different administrative datasets. The experience with the AGSF and Tier One Statistics taught the ABS that, in the words of one official, “we can’t force our standards down other departments’ throats”. Although the ABS used the language of “coordination” in the AGSF to highlight that it was not trying to coerce other producers, coordination is now regarded as too strong:

What we are now emphasizing is statistical leadership. This is a better concept than coordination. The latter sounds like blocking. Our role is to influence and lead, not to control or stop people (ABS official).

In a similar vein, the ABS has dropped the language of “protocols” in favour of less directive ‘principles’: “The National Statistical System was supposed to be about protocols, but it ended up as principles.” The AGSF has evolved into an informal consultative forum, rather than a formal governance body as the ABS leadership had envisaged: “The AGSF may evolve into a governance forum. Now it’s about discussion, sharing of ideas.” Meanwhile, in more recent initiatives involving other departments, such as the National Data Network (NDN), the ABS has adopted a softer, more

collaborative approach. The use of “network” terminology in this context is not accidental, and is intended to suggest a more decentralized, cooperative model:

We can assist with the infrastructure. We can develop collaborative systems, such as open source models, to build shared statistical infrastructure across the statistical system. The National Data Network governing board is highly collaborative. It’s an attempt to utilize and expand operating capacity for the whole system. Along with that is a conscious attempt to create new governing systems (ABS official).

Although the NDN appears not to have been maintained⁴, the ABS has pursued several opportunities for collaboration with other government agencies (ABS 2012: 95-102). According to the agency’s most recent annual report, achieving “data integration” across government is an ongoing project (ABS 2012: 100). Thus, the recent trajectory of statistical governance in Australia begins with a centralized bureaucratic model, followed by the emergence of efforts to both centrally coordinate dispersed producers and build relationships, which were rejected, and finally a repositioning of the ABS’s role as a provider of leadership, education and network building across the statistical system, as well as a focus on the areas where the ABS can demonstrate and deliver ‘value’ to external producers and users.

In the United Kingdom the trajectory of statistical governance reforms is less clear-cut. In important ways, the United Kingdom has shifted to harder, more hierarchically oriented governance of dispersed statistics. With mounting concerns about the ineffectiveness of the 2000 Framework for National Statistics, advocates of statistical legislation prevailed and in 2006 the government introduced the *Statistics and Registration Service Bill* to the parliament, which received royal assent the following year. The Act disbanded the old Statistics Commission and created a new statutory body called The United Kingdom Statistics Authority (UKSA). The authority reports directly to parliament and is comprised of a board of senior statisticians and academics. The 2007 Act transferred the Office of National Statistics from Treasury to the UKSA, thereby formalizing and enhancing ONS independence. In addition, the 2007 Act created a new position of “Head of Assessment” within the UKSA. This office combines the quality assurance work performed by the ONS with the monitoring and auditing work performed

⁴ Since 2009 ABS Annual Reports do not mention the initiative.

by the old Statistics Commission. The separation of the assessment function from the ONS means the latter is now subject to independent review. The new assessment function has the power of legislation, so that the UKSA can decide which statistics to review, demand necessary information, and (in theory) insist on acceptance of recommendations, in contrast to the previous voluntary system of kitemarking in the ONS.

Interviewees from the UKSA clearly felt the new legislative framework gave them more power to pursue coercive governance strategies:

The first thing to say is that it is a statutory framework, so whereas the Statistics Commission flew by the seat of its pants . . . There is the greater formality and the counterpart to that is the greater authority. Because it is recognised in law that there will be this process of producing reports to Parliament (UKSA official).

Another UKSA official commented on the new power under the legislative framework:

One of the things that is different with legislation compared to a non-statutory environment, certainly in my experience in the civil service in this country, is that once it's in the law they don't argue. They will argue endlessly if they don't have to comply, but once compliance is put into legislation they stop (UKSA official).

In addition to legal requirements, the new UKSA board was in a powerful position to demand compliance. One interviewee reflected on the personal authority of the first Chair of the UKSA:

Sir Michael Scholar is an extremely distinguished ex-civil servant. He is looked up to by people like Gus O'Donnell [Cabinet Secretary] as an elder statesman and someone who was Margret Thatcher's Private Secretary and so on, as well as having been the head of several departments. And if he approaches the top of the Cabinet Office and says this department is being unreasonable, they will probably get a note from the Cabinet Secretary asking them to co-operate. That's a fairly nuclear option, but I can see it being used. I mean he wouldn't hesitate to use that channel (UKSA official).

Thus the United Kingdom has hardened its statistical governance in several important respects. The introduction of legislation and development of the autonomous compulsory

assessment function has elevated central statistical agencies and watchdogs in the bureaucratic hierarchy, and given them stronger powers to criticize and compel.

Yet, the central statistical agencies in the UK have not chosen to rely exclusively on these hierarchical and command-based mechanisms. Despite their new powers, most interviewees suggested soft governance techniques are essential to achieving their mandate. For instance, UKSA officials spoke of the need to tone down and carefully consider the impact of criticisms and recommendations:

. . . well there is one sense that they just might be a toned down, which is that in draft form we invite the relevant producer organizations to look at the emerging findings and to give us formal feedback that we will include in the final report. Or persuade us that we are wrong. It is a typical approach for auditors. And it is something that our National Audit office does. And it may be that the do-ability of our recommendations, the practicality of our recommendations will feature big in the discussion of that stage. So that recommendations that are very aspirational and rather unworldly may not really survive in this model, whereas in the Statistics Commission model there was nothing really to hold them back in going for some extremely open ended, very expensive, very aspirational recommendation (UKSA official).

A UKSA official suggested preemptive, informal discussions would be favored over public confrontations, using the latter as a back-up when the former have not worked:

. . . we try to find ways of dealing with problematic issues before we get to the report writing stage. But we will publicly tackle ONS and have done. We don't like a lot of their statistical releases. We think they are not well crafted and not very helpful. We regularly say so. It comes up every week (UKSA official).

Another UKSA official suggested the UKSA Chair would exercise his power carefully:

From what I know it would be done in a discreet way, rather than in a big public showboating, but it would be little words in the right ear. Yes. In a sense we've been talking steadily about the formal position. Informally there will be a lot of chat going on between all the parties about how to make this work, *be credible*. That's not to suggest there is anything underhand about that, but there is quite a lot you can do by just saying, "Look, we're not going to give up on this we will keep pressing on this issue and it would be simpler if you just co-operated" (UKSA official, emphasis added).

Here is a similar observation from another UKSA staff member:

[We] very often just convey a message through unofficial channels, and it's not necessarily even in writing that a certain Minister needs to be rather careful about his public statements because we are watching him and we're not very, we're not happy that these are such as to be a useful contribution to public information (UKSA official).

Thus senior people at the UKSA did not feel the stronger framework of requirements and powers meant Authority members could do away with horizontal governance mechanisms. Instead, the new powers of compulsion were kept in reserve, and would normally only be used as a last resort if informal mechanisms and relationships failed to achieve the desired outcomes.

In addition to the care taken constructing and conveying criticisms and recommendations, the UKSA also emphasized the value and benefit of its work to other government statisticians, to try to increase acceptance of its reviews. UKSA's officers spoke of the imperative to demonstrate value:

. . . fundamental to this whole approach is that some good will come of this. That there will be more than just making comment about the work. That there would be some driving up of standards. So it is the nature of our role and I think - perhaps this has become clearer as time has gone on - it combines both a checking that standards are being observed and a conscious effort to find proposals that can be made to these organizations that will actually improve the value, or if you like the value for money of the statistical work that they are doing (UKSA official).

Acceptance of the review process has shifted over time:

Acceptance of the process is probably better than it was, but it's a strange curve. Because when it is completely new and backed by legislation they are actually quite accepting of it. As the mundane reality of the review process becomes familiar, they become more dismissive of it; it wasn't what they thought it was going to be. It's not as searching on methodology, it's not as searching on quality as perhaps they thought it was going to be. It's not as helpful as perhaps they thought it was going to be. And then you get into another stage where they say well yes but it is actually pretty

useful . . . It's not, I couldn't claim that everybody thought it was a wonderful process that we are involved with here. But there is a big measure of acceptance (UKSA official).

This 2010 quote suggests that the introduction of new coercive statistical governance mechanisms in the UK was initially well received, but over time statistical producers grew skeptical of the value of the processes. Concerted efforts to ensure the reviews delivered and were seen to deliver valuable recommendations revived acceptance. The credibility and legitimacy of the UKSA's work was not guaranteed in the formal structures, but was renewed and maintained through building relationships, changing perceptions and persuading people.

6. Conclusion

This paper explored how central statistical authorities in two countries have tried to govern statistical producers in other parts of the state. The research is the first empirical attempt to gauge the dispersion of statistical production in the contemporary state, albeit using qualitative methods. According to senior statistical officials in Australia, this dispersion is occurring apace and challenging the established role of the central statistical bureau. Meanwhile, senior statisticians in the historically dispersed British system confront new political and administrative imperatives to centralize aspects of the governance of official statistics. The interview findings suggest two important implications for contemporary work on horizontal governance in the shadow of hierarchy. Firstly, in practice horizontality and hierarchy do not need to represent discrete dimensions of governance undertaken by separate actors at different stages of the governance process, as suggested in the framework and back-up theses. Secondly, the inclusion of actors with high levels of hierarchical authority within a governance context may actually encourage parties to use softer governance mechanisms, in contrast to the notion that hierarchy necessarily 'overshadows' or 'trumps' horizontality.

It must be conceded that no effort has been made to independently or objectively verify interviewees' claims about the effectiveness of various hierarchical and horizontal tools in the context of contemporary statistical governance. The conclusions necessarily reflect the perceptions of key decision makers concerning which practices facilitated centralized governance of dispersed statistics, and what aspects of centralized governance

did not work. This limitation is especially apparent in the finding that insufficient seniority in Australia's interagency forum led to fears of authoritarianism; we rely only on the perceptions of senior ABS staff for this observation. In accordance with the paper's interpretivist methodological position, such perspectives can be said to matter because the interviewees are powerful agents and are likely to reflexively take their own professional theories of horizontal governance into account when embarking on future governance endeavours. More broadly, the finding has significant general importance for the design of horizontal governance initiatives, where debates continue about whether "bottom up" or "top down" approaches are most effective for building networks and collaboration (Sorensen 2012). Further research using multiple methods is required to establish the underlying relationship (if any) between hierarchical seniority and the softness of tools employed.

The U.K. case exposed an intriguing counterintuitive development whereby actors received greater legislative backing, parliamentary support and the creation of a powerful governing authority, yet stressed the increasing importance of managing the horizontal dimension. There are three broader inferences that might be drawn from these observations. Firstly, the power of the United Kingdom Statistics Authority is ultimately still only to name and shame, though that shaming happens in official reports to parliament and is carried out by very senior officials who have access to the top echelons of the civil service. Thus the central authority still relies on persuading other powerful actors. The UKSA's new position of power largely reflects its privileged access to the powerful and the formalization of its 'voice' in auditing and reporting routines. The second point is that legislated autonomy is a double-edged sword: the autonomous centralized statistical authority cannot be interfered with on a daily basis, yet they also have no direct ministerial champion (UNSO 1980). Thus autonomous agencies overseeing dispersed networks of producers should feel a heightened need to campaign horizontally and build alliances with other government departments, despite their formal powers (Holt 2007). Finally, great power brings with it great responsibility, and interviews revealed caution and humility amongst the newly empowered U.K. officials. The stress on adding value and ensuring practicality was not only about building good relations and avoiding conflict, but also reflected an effort to help official statistics

contribute to the public good. Here we reach the limits of horizontal governance conceived in instrumental terms as a tool of influence. Sometimes horizontal governance strategies are used in the shadow of hierarchy because they represent important ends in their own right.

7. References

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