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Audit Culture Revisited

Rankings, Ratings, and the Reassembling of Society

by Cris Shore and Susan Wright

The spread of the principles and techniques of financial accounting into new systems for measuring, ranking, and auditing performance represents one of the most important and defining features of contemporary governance. Audit procedures are redefining accountability, transparency, and good governance and reshaping the way organizations and individuals have to operate. They also undermine professional autonomy and have unanticipated and dysfunctional consequences. Taking up the concept of audit culture as an analytical framework, we examine the origins, spread, and rationality driving these new financialized techniques of governance, not least through the work of the Big Four accountancy firms, and trace their impact across a number of fields, from administration and the military to business corporations and universities. We ask, what new kinds of ethics of accountability does audit produce? Building on Mitchell (1999), Strathern (2000a), Trouillot (2001), and Merry (2011), we identify how the techniques and logics of financial accountancy have five audit effects. These are “domaining,” “classificatory,” “individualizing and totalizing,” “governance,” and “perverse” effects. We conclude by reflecting on the problems of audit culture and suggest ways to reclaim the professional values and democratic spaces that are being eroded by these new systems of governing by numbers.

Rankings are part of a global movement that is redefining accountability, transparency, and good governance in terms of quantitative measures . . . they diminish the salience of local knowledge and professional autonomy, they absorb vast resources, and they insinuate and extend market logic. (Sauder and Espeland 2009:80)

Ever since anthropologists started to engage with the ideas of Michel Foucault, the discipline has recognized that seemingly mundane routines often have the most profound impact on the manner in which people are governed. Whether it is awarding smileys for customer satisfaction with the cleanliness of airport toilets, collecting points to win the Walmart Employee of the Month certificate, or competing for the Best Student Experience Award and counting academic publications to brand one's college as a “center of world excellence,” enumeration and classification lie at the heart of such everyday forms of management. These mundane practices also provide critical insights into regimes of governance and the operation of power. The use of indicators, measurements, and

rankings have become increasingly pervasive, both as instruments in the internal management of organizations and in the external representations of their quality, efficiency, and accountability to the wider public. As Sally Merry (2011) notes, “indicators are rapidly multiplying as tools for measuring and promoting reform strategies around the world” (S52). They are also increasingly used to assess performance and encourage people to think of themselves as calculating, responsible, self-managing subjects. But it is not just the use of numerical indicators and rankings that has become a key element of contemporary regimes of governance: increasingly, the principles and practices of modern accounting and financial control are being applied to contexts far removed from the world of bookkeeping and corporate management. It is the widespread proliferation of these calculative rationalities of modern financial accounting and their effects on individuals and organizations that we term “audit culture.”

In this paper, we trace how the principles and technologies of grading and ranking have traveled from education to the military and industry and, despite appalling failures, have further been translated into the public sector during the 1980s and beyond. As Rose and Miller (1992) observed, these “calculative practices . . . should be analyzed as ‘technologies of government’” (183). While these mechanisms make government reforms operable, they also recast political programs as mundane administrative and technical matters to be dealt with by experts, thereby masking their ideological content and removing them from the realm of contestable politics (Burchell 1993; Miller 2001; Shore and Wright 1997). Since the 1990s,

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such political technologies have been expanded as vehicles for assessing the quality, efficiency, and, increasingly, the organizational *effectiveness* of municipal services, hospitals, schools, NGOs, and businesses. Today, the creditworthiness of charities, utility companies, airlines, universities, and even entire countries is measured and rated. All have been reduced to numbers and competitively ranked in league tables. These technologies have intensified as governments and other organizations have sought to mobilize their assets to compete more successfully in the global knowledge economy. As a result, a new industry of profitable activities in measuring, accounting, ranking, and benchmarking has emerged across numerous professional fields (Olds 2010; Robertson et al. 2012). Equally importantly, a new language of accountability has come to dominate organizations. Audits and performance indicators have been combined with new clusters of words such as “quality,” “efficiency,” “effectiveness,” “value for money,” and “transparency” and within new ideologies (Bruneau and Savage 2002:12). As Strathern (2000a) noted, audits have come to embody a new form of ethics: they are where “the financial and the moral meet” (1).

To analyze these developments, we address four related sets of questions:

1. What can be learned about these practices by examining their origins and spread? How should we analyze and theorize their effects?

2. Who are the “rankers” today, and how do they operate? Who are the main actors that make up this new industry, and what role do the Big Four international auditing and accountancy firms and other ranking bodies play in shaping its development?

3. Why have governments and managers adopted these auditing practices? What are the rationales—explicit as well implicit—that are driving change, and how are they legitimized by managers and policy makers? We argue that measurement and ranking have become central components of a “total accountability” governance system based on competition between nations, institutions, and individuals. Actors, whether organizations or individuals, are constructed as “accountable selves” and free agents, who succeed by mobilizing their resources and managing their behavior to optimize “what counts.”

4. Finally, we ask, Where is this trajectory leading, and is its relentless expansion inevitable? Just as Weber (2002 [1904]) wrote about the iron cage of bureaucracy and its inevitable onslaught as both a cause and effect of rationalization and modernity, is audit an unstoppable “glass cage” of coercive transparency? How can we reclaim the professional autonomy and trust that audit practices appear to strip out of the workplace? Is it possible to sustain critical practice when what counts in modern rankings no longer reflects the central role and purpose of a professional and public institution?

We argue that the interaction of these contemporary processes of enumeration, ranking, and governance; the financialized relationships they create; and the new forms of per-

formance and accountability these give rise to can be usefully framed and analyzed using the concept of audit culture. As we have argued elsewhere (Shore 2008; Shore and Wright 1999, 2000; Wright 2012), audit culture refers to contexts where the principles, techniques, and rationale of financial accounting have become central organizing principles in all aspects of society, from the provision of safe nurseries and the transformation of government to the execution of war. In stating this, we are not proposing audit as a metatype of society alongside alternatives such as feudal society, capitalist society, or postindustrial society. Rather, we see audit culture as a rationality of governance and a corresponding set of dispositions and practices. It therefore refers to a *condition* or constellation of processes. This is similar to what Foucault (1980) called a formation, or *dispositif*. Put simply, audit culture refers to contexts where auditing has become a central organizing principle of society.

As many anthropological concepts do, audit culture combines both emic and etic elements: it is both an experiential phenomenon and an analytical model that helps identify and theorize key processes and trends that are reshaping everyday social relations and cultural practices. In saying this, we are not suggesting that audit culture is something monolithic or uniform. Indeed, audit practices work in diverse ways and have different meanings and ramifications in different contexts. Nor are we trying to map or label a range of audit *cultures*, as if each context constituted a discrete or bounded entity. Instead, we use the concept of audit culture to refer to a family of resemblances in Wittgenstein’s (1953) sense of the term, that is, where each incidence entails some forms of financializing logic and some instrumental techniques of enumeration and commensuration. When combined, these form an individualizing and totalizing system of accountability, but the precise constellation of features and the ways they work together vary, as do the politics of their adoption and resistance. The expansion of auditing into new domains of practice is more than simply policy transfer: it has brought about a wholesale transformation in the ways in which individuals, organizations, and even countries are now managed and governed. We illustrate below how this “domaining” process often results in unanticipated and even perverse effects on individual and organizational behavior when people are incentivized to compete and perform according to the new norms of accounting. As Albert Einstein famously remarked, “Not everything that is countable counts, and not everything that counts is countable.” The important issue to probe here is what audits and rankings bring into focus and what they render invisible or unsayable. This is where auditing and ranking also become questions of governance and power.

Toward a Theory and Genealogy of Audit

One of the first scholars to identify and analyze the rise of auditing and its effects on society was professor of account-

ing and philosopher Michael Power. Writing in Britain in the early 1990s and reflecting on a decade of radical Conservative governments under Margaret Thatcher and John Major, Power noted the extraordinary proliferation of formal auditing and monitoring systems. As well as financial audits, there were now “environmental audits,” “public spending audits,” “waste management” audits, “democracy audits,” “technology and computing audits,” “teaching audits,” “academic audits,” “value for money” audits, “land and water resource audits, media audits, medical audits—even stress audits” and “audits of auditing systems” (Power 1994:1). These trends continued under Britain’s 1997 New Labour government and spread to many other countries, particularly those that embraced neoliberal agendas. Power further developed this analysis in *The Audit Society* (1997), which aptly described audits as “rituals of verification” and noted their often perverse effects. Paradoxically, these included increasing levels of mistrust, as trust and professional judgments came to be replaced by formal systems of auditing and inspection (O’Neil 2002). Since 2000, systems for turning everyday life into measurements and competitive rankings have expanded to include all kinds of new phenomena, from hospital waiting times, ambulance response rates, traffic safety, and household carbon footprints to crime, corruption, air pollution, risk, and even “fear,” which is now measured as a proxy for falls in the value of stocks and shares. The appetite for rating systems and league table comparisons seems to have become a populist project. Examples of recently coined measures include the global sports television channel ESPN’s Ultimate Degree of Difficulty Grid; the Global Innovation Index (GII), sponsored by the United Nations’ Intellectual Property Organization; the Global Creativity Index (GCI), produced by the Martin Prosperity Institute; *Fortune Magazine’s* ranking of the Most Admired Companies for their human resources practices; the Bhutan government-sponsored Global Gross National Happiness Index; and the Happy Planet Index, which measures sustainable well-being for Friends of the Earth and the Soil Association. Condom manufacturer Durex now conducts an annual 26-country “sexual well-being survey,” which purports to measure how many people have weekly sex and with what level of satisfaction. Its 2011 online survey, for example, revealed that Russians had the most sex (80%) but that only 42% were satisfied, whereas 53% of Americans had weekly sex and 48% were satisfied, and 34% of Japanese had weekly sex but only 15% were satisfied (Durex 2011).

There is nothing new about the use of quantitative indicators and performance measurements. However, what is distinctive about performance indicators and audits today is the scale of their diffusion and the extraordinary extent to which society has embraced and endorsed them (Strathern 2000a). As Michael Power (1994) observed, “we have lost the ability to be publicly skeptical about the fashion for audit and quality assurance” (41) to the extent that they have come to appear as natural and benign solutions to the problems of performance, management, and governance. Power’s analysis

suggests that audits and indicators may be part of the problem rather than the solution: their aim may be organizational transparency, but they end up being opaque; indicators become targets as institutions are reshaped according to the criteria and methods used to measure them; and organizations and people are transformed into “auditable” entities that focus their energies on doing “what counts.” How did this situation arise, and where did these calculative technologies for measuring and enhancing performance stem from? Significantly, universities and academies were themselves early pioneers in turning complex social processes into numbers.

Ranking: From Education and the Military to the Corporation and Back

In 1817, the new principal of the West Point Military Academy, Sylvanus Thayer, instituted an educational system, which he borrowed from the *École Polytechnique* in France, based on arithmetic grading. Thayer established a hierarchical structure at the Academy, down which rules and regulations passed to the students and up which flowed regular and systematized reports including students’ grades. The authors of this study explain: “This is a total accountability system, where all aspects of performance, academic and behavioural, are constantly measured, evaluated and recorded in a joint numerical-linguistic language which is also a currency” (Hoskin and Macve 1988:49).

According to Hoskin and Macve, every student’s subject knowledge was tested daily, weekly, and half-yearly and marked according to a standardized, seven-point numerical scale. Students’ aptitude, study habits, and whether their conduct was sufficiently “military” were also recorded in weekly, monthly, and half-yearly reports and given a grade on a seven-point descriptive scale from “excellent” to “indifferent.” Both sets of reports went up the hierarchy. The marks were used to divide each year into four graded classes. Each student knew his place and what he had to do to move up the ranking. This was “an exhaustive hierarchical reflexive system of command and communication, . . . which (ideally) made every individual in the institution constantly visible and accountable for his behaviour” (Hoskin and Macve 1988:59).

The West Point students were made into calculative, self-disciplined selves. They learned the norms against which they were marked, and they knew what they had to do to improve their grades. Their final mark determined how prestigious their first appointment would be, and their record accompanied them throughout their military career and beyond.

This system produced the best civil engineers in the country. It also produced some of the best managers of the armories, the railroads, and the newly forming industrial corporations. They imported into these organizations a hierarchy down which passed meticulous regulations and up which passed written reports with number-based, normalizing judgments. These reports graded each employee’s pro-

ductivity and were the currency for comparing units, so that every employee “felt and often remarked that the eyes of the company were always on them through the books” (Chandler 1997:267–268, quoted in Hoskin and Macve 1988:67). In short, the organization of corporate America relied heavily on the West Point graduates’ reflexive knowledge about how to create a system of organization and discipline that turned managers and workers into calculative, accountable selves.

This method of accounting was further refined by Frederick Taylor’s (1913) scientific management, which analyzed work flows in order to improve labor productivity. Taylor’s ideas were influential in the organization of domestic industries during the First World War and were taken up in the 1920s as part of the Scientific Management Movement. Although Taylor visited Henry Ford’s automobile factory in Michigan shortly before he died in 1915, Ford was developing his own principles of modern mass production and automation that paralleled Taylorism. Initially, Ford’s success derived from dividing the car manufacturing process into standardized small elements, then costing and measuring every aspect of production to achieve efficiencies while carefully maintaining oversight of the assembly line’s coherence and flow. But fragmenting the production process also had negative consequences. During the 1940s, Henry Ford II employed 10 “whiz kids” from the army air force’s statistical team to create further productive efficiencies. One of these, Robert McNamara, became president of the Ford Motor Company in the 1950s. As president, he used the new IBM computers to feed numbers into spreadsheets to turn what had been a family company into “an omniscient operating system,” albeit one that, he later admitted, “I would go out of my way to discourage my son from working in” (Starkey and McKinlay 1994:980, quoted in Martin 2010:16). The manager of each section was given targets, and their performance was measured by a higher bureaucracy. This created a task-driven, fiercely competitive culture, in which each section competed with every other and managers gamed the system to advance their own institutional position. This system became counterproductive and dysfunctional when concern for internal competition and intrigue far outweighed any overall vision of the quality of the car or the satisfaction of the customer. Situations arose in which, as one manager confessed, supervisors were only concerned with “meeting output targets . . . even if it meant subverting Ford’s quality control systems” (Martin 2010:16–17). As Tom Peters, co-author of the famous management book *In Search of Excellence* (Peters and Waterman 1982), complained, “Start with Taylorism, add . . . a dose of McNamaraism, and by the late 1970s you had the great American corporation that was being run by bean counters” (Peters 2001:88, cited in Martin 2010:18).

When he was appointed US secretary of defense under President Kennedy, McNamara transferred this system to the running of the Vietnam War. But he later admitted that, apart from counting body bags, there was very little numer-

ical data available on which to conduct the war, and reliance on number crunching proved a disastrous substitute for “our profound ignorance of the history, culture and politics [of Vietnam]” (McNamara, quoted in Martin 2010:16).

If McNamara’s handling of the Vietnam War is an international example of the immorality of governing by numbers, another example from the automobile industry highlights the “banality of evil” that may result from the marriage of cost accounting with the single-minded pursuit of profit that is the driving force and legal mandate behind the modern corporation. Joel Bakan (2005) describes the story of the liability case *Anderson v. General Motors Corporation*, where the jury awarded Patricia Anderson a \$4.9 billion verdict. On Christmas Day 1993, Anderson, her four children, and a family friend were driving home from Christmas Mass when the back of her car, a Chevrolet Malibu, was struck by a drunk driver. The Malibu’s gas tank exploded on impact. The adults were able to escape, but the four children were trapped in the backseat and suffered terrible second- and third-degree burns. The plaintiffs filed their lawsuit on the grounds that the fuel tank was dangerously positioned, just 11 inches from the back bumper, to save costs, with no metal brace to separate the fuel tank from the rear of the car. A company directive had recommended that fuel tanks be at least 17 inches from the rear bumper, and during the trial the plaintiffs’ lawyers obtained GM internal memos that the company had blocked in previous lawsuits. These revealed a damning 1973 report, written by GM engineer Edward Ivey, which concluded that it would be cheaper to maintain the current fuel tank than design a tank that did not explode in a crash. Ivey’s report estimated that there would be 500 fatalities related to accidents with fuel-fed fires and that each fatality would cost \$200,000 in compensation. He then calculated that since there were 41 million General Motors automobiles on the road, the cost per car to GM would be \$2.40. On the other hand, the cost of designing a nonexploding fuel tank would be \$8.59 per car. Hence, the company stood to “save \$6.19 . . . per automobile if it allowed people to die in fuel-fed fires rather than alter the design” (Bakan 2005:63). Although it is not clear whether anyone in senior management had seen Ivey’s report, the judge described GM’s behavior as “morally reprehensible and against applicable laws because it had put profits above public safety” (Bakan 2005: 63). The court awarded Armstrong and her children compensatory damages of \$107 million and unprecedented punitive damages of \$4.9 billion. A Los Angeles Superior Court later reduced this to \$1.09 billion. Even so, the US Chamber of Commerce called this an “illegitimate result” on the grounds that manufacturers’ use of cost-benefit analyses in the design of products is “a hallmark of corporate good behavior” and the “logic underlying it is unimpeachable” (Bakan 2005:64).

Regardless of these failures in both industry and the military, the idea of financializing the operations and performance of complex organizations and turning their activities

into numbers was transposed to the public sector in the 1980s as a core feature of “new public management.” As we have documented elsewhere (Shore and Wright 1999, 2000), the work of schools, hospitals, municipal government, provision for the elderly, and most other public services was reduced to numerical score sheets and ranked in competitive league tables. These new regimes of accountability were justified in the name of efficiency and transparency. The performance of players at the top of the league were distilled and decontextualized as “best practice” to be spread to the others, notably those “named and shamed” at the bottom of the league. Key performance indicators (KPIs) were devised as measures of the quality, efficiency, and value for money of virtually all public services. Typically, performance was expressed in financial figures, and while claims were made that these numerical indicators were only proxies for quality or effectiveness, in reality, monetary value became the dominant measure. In this way, quantification and scientific management were married to a project of financialization and a new ethics of accountability.

A new period in the evolution of this system of governing through numbers was its reintroduction into universities. Britain, Australia, and New Zealand were early pioneers in the 1980s (Wright et al. 2014). First, Britain developed a national evaluation of university research called the Research Assessment Exercise (RAE). The research output of each department was read by a committee of peers from the relevant discipline and, reminiscent of the West Point system, was graded on a seven-point marking scale. While initially each institution received a standardized amount of funding per researcher, in the course of successive RAEs, governments used these grades to concentrate funding on those at the top of the league table and to progressively withdraw funding from those at the bottom. By 2001, 75% of research resources were concentrated on the top tier of departments. This method of “rewarding success” and “punishing failure” ensured that those universities lower down the scale were denied the resources that might enable them to pull themselves up. The same punitive model was applied to the national school system, with similar effects. Such systems of grading and ranking have “skewing effects” (Wright 2009), as academics also know from the literature on “teaching to the test” and the “washback effect” of any examination system (Cheng, Watanabe, and Curtis 2004). The skewing effects of systems of measuring and grading universities’ research output are now so familiar that they have acquired their own terminology, such as “salami slicing” (cutting research results into small chunks, each published as a separate journal article), “rushing to press” (publishing partial results as soon as they are available rather than making a mature and considered analysis), and the “star player” syndrome (hiring high-profile researchers just before a research assessment exercise; Shore and McLauchlan 2012:282; Wright 2009). The UK House of Commons Science and Technology Committee (2004) called the RAE a “morass of fiddling, finagling and horse trading”

that was “starting to lack credibility” (21). Similarly, a British Academy Policy Centre report warned of the perverse effects of using aggregated measures and rankings punitively to name and shame rather than developmentally to internally diagnose and remedy problems (Foley and Goldstein 2012).

With the multiple borrowings of these ranking systems—from the French *École Polytechnique* to West Point Academy to the management of private corporations and from there to the public sector, including universities—important shifts occurred both in the assessment technologies and their effects (Wright 2012). These “omniscient operating systems” became ever more “individualizing and totalizing” (Foucault 1977) in that they simultaneously worked across scales to order a whole population or sector while also rendering military cadets, factory workers, and university students as calculating and “calculable” subjects. At the same time, these ranking technologies also radically reshaped institutions in their own image, for as is well known, when a feature of an organization is measured, that measure becomes a target. This is often referred to as Goodhart’s Law, after the advisor who warned Britain’s Conservative government in the 1970s against trying to conduct monetary policy on the basis of targets (Goodhart 1981). A recent illustration of this tendency to turn measures into targets was the aborted Australian system for grading the quality of research publications according to ranked lists of journals. At the last minute, the then minister for higher education canceled the system following evidence that university research managers were setting academics targets for publications in top-ranked journals. He condemned this conversion of the measure into a target as “ill-informed and undesirable behavior in the management of research” (Carr 2011; Wright 2012). Michael Power (1997) has noted that audit procedures “transform the environments to which they are applied,” effectively colonizing and “permeating the auditee organization totally” (90, 97). The effect is that organizations reshape their operations and values around that which is measured. Equally importantly, individuals are interpellated as “auditees,” whose behavior is expected to align with the rationality of audit (Power 2007:335).

The examples above highlight wider theoretical points that, building on Merry (2011), we call “audit effects.” We identify five of these that are of particular importance: “domaining effects,” “classificatory effects,” “individualizing and totalizing effects,” “governance effects,” and “perverse effects.” We elaborate briefly on each of these in turn.

Domaining effects illustrate how the introduction of audit and ranking into a new organizational context radically reshapes that environment in ways that mirror the values and priorities embedded within the audit technologies themselves. The application of audit to environments for which it was never originally designed can produce a “runaway effect” as the newly created systems and modes of operating gather their own momentum, as illustrated above where McNamara’s competitive accounting model at Ford spiraled out of control.

Classificatory effects highlight the fact that indicators and statistics are never neutral. Just as other systems of measurement do, an audit produces knowledge by “announcing what it measures, such as ‘rule of law’ or ‘poverty’” (Merry 2011:884) and hailing into existence the subjects that it categorizes and labels. The way that institutional systems classify and order populations has been amply documented by Foucault (1980) and others. However, audit changes the values, priorities, and practices of organizational subjects in subtle and often unnoticed ways such that their subject positions are transformed. This is what Ian Hacking (2004) has elsewhere termed “dynamic nominalism” or the “looping effect.” Hacking (2006) elsewhere exemplifies this with reference to the invention of medical categories such as “multiple personality disorder,” “IQ,” and “obesity,” but it is equally evident in the classification of “failing schools,” “lowest-ranking cadet” (e.g., the “West Point goat”), and *Fortune*’s “most admired” human resources department.

The way these classifications and rankings tend to simultaneously order both whole populations and individuals is captured by the individualizing and totalizing effects. Key to the success of this process is the neat, simple, and efficient way in which it achieves its effectiveness—at minimal cost and effort to the organization. For example, when the international standing of universities is turned into a performance indicator and that indicator is used to allocate funding, this simple mechanism has effects across three scales: the whole sector is reorganized in pursuit of competitive advantage, each organization is repurposed around the targets and incentives, and every individual is impelled to concentrate on “what counts” (Wright 2014). It was to avoid such a pervasive effect that Australia’s higher education minister intervened to cancel the Excellence in Research for Australia initiative. However, US law school deans have been unable to contest their version of individualizing and totalizing effects as their ranking determines their position in the market and ability to attract income from student fees (Sauder and Espeland 2009). Governance through numbers, as these examples show, creates ranking regimes that operate across multiple scales, producing a “total accountability system” (Hoskin and Macve 1988).

Governance effects are a corollary of these individualizing and totalizing mechanisms. Setting performance indicators and assessing against benchmarks and best practice are instruments designed to make organizations more “accountable” to funders, government, stakeholders, consumers, and the public. While they render individuals and organizations more “legible” to external experts, there is a coercive dimension to that accountability: organizations must represent themselves in terms of the narrow, predetermined script of expert assessors, in what Strathern (2000*b*) calls the “tyranny of transparency.” These ways of opening up organizations for scrutiny and inspection also provide a vehicle for enacting and extending the presence of the state, or what Mitchell (1999) has termed the “state effect” (see also Trouillot 2001).

Finally, perverse effects draw attention to the ways in which governing by numbers, when taken to extremes or misapplied—such as in the Vietnam War—fails to deliver what it promises and, whether one counts beans or bodies, may result in decision making that is amoral or outcomes that are immoral. One dimension of this is the increasing stress and anxiety that rankings produce among individuals who are driven to overperform (King and Moutsou 2010; Wright 2011). As a BBC “Panorama” investigation into the employment conditions at one of Amazon’s UK warehouses found, intensified time-and-motion techniques have been taken to new levels. Amazon gives its “pickers” handsets that tell them what to collect from the shelves. It allots 33 seconds to find a product, and then a timer counts down until the next product is retrieved. A manager oversees this electronic data flow to ensure that all the pickers keep up to speed throughout 10-and-a-half-hour shifts that involve up to 11 miles of walking. Professor Michael Marmot, a leading expert on stress at work, argues that these conditions greatly increase the risk of mental and physical illness (BBC News 2013). This is the kind of omniscient operating system McNamara sought to achieve, and the “efficiencies” it delivers are ones to which many other corporations aspire.

A New Industry of Measuring and Ranking

The rise of systems of auditing and ranking has been accompanied and fueled by the growth of international firms specializing in accountancy and statistical ratings. These include, at one extreme, the various credit rating agencies that have now consolidated into the Big Three firms of Moody’s, Standard and Poor’s, and Fitch. These agencies measure the creditworthiness of countries and organizations (including universities), and their letter grades, ranging from AAA to D, communicate the agencies’ view of the level of credit risk. These opinions affect the rates of interest at which a country can borrow money, sometimes with seriously deleterious consequences, as, for example, in February 2012, when Fitch downgraded Greece from CCC to C, or “junk” status, thereby massively increasing the country’s already unsustainable level of national debt (Paphitis 2012). At a more microlevel, credit reference agencies and bureaus with Dickensian names such as Paydex, Experian Intelliscore, Dunn and Bradstreet, Equifax, and Call-Credit score the creditworthiness of *individuals* to determine a person’s eligibility for a mortgage, personal loan, or credit card.

In the field of international accounting, four large commercial firms dominate the market: Deloitte, PricewaterhouseCoopers, Ernst and Young, and KPMG. Significantly, in 2011–2012, a period of continuing financial crisis in Europe and the United States, the revenues of these companies grew by an astonishing 6%, netting a record \$110 billion, thanks to their expansion into emerging economies (Big4 2013). Each of these firms now operates in more than 140 countries and employs a professional staff of between 140,000 and 200,000

people. The largest of them, Deloitte, represents itself as “the brand under which nearly 200,000 professionals in independent firms throughout the world collaborate to provide audit, consulting, financial advisory, risk management, and tax services to selected clients” (Deloitte 2013a).

The Big Four owe their global success in large measure to the privatization policies of the 1980s and 1990s, when neoliberal-inspired governments outsourced and privatized state services but required them to be audited by a commercial accounting firm. In the early 2000s in the United Kingdom alone, more than 600,000 limited companies, plus schools, hospitals, charities, local authorities, pension funds, and trade unions, were required by law to undertake annual financial audits conducted by professional accounting firms. The Big Four gained the largest share of this work. However, another key development during the 1990s was the expansion of the remit of these accounting firms and their shift from financial accounting into other professional domains.

Promotional material produced by the Big Four illustrates just how far their business has extended beyond financial accounting. PricewaterhouseCoopers (PwC) now offers services and expertise in 22 industry sectors that range from aerospace and defense, asset management, and capital projects and expenditure to entertainment and media, government/public services, health care, pharmaceuticals, and life sciences. PwC even offers services in anticorruption and whistle-blowing. These global accounting firms often sell their services on the basis of being “integrity warriors,” whose mission is to ensure financial probity and “good governance,” but their own financial practices are anything but best practice. As Cousins, Mitchell, and Sikka (2004) point out, all four “are headquartered in secretive tax havens without information sharing treaties with other countries” (4). Each of the Big Four has been criticized for its own illegal activities. A study by Her Majesty’s Revenue and Customs (HMRC) in the United Kingdom estimated that the Big Four “were behind almost half of all known [tax] avoidance schemes” (Sikka 2012), although, paradoxically, HMRC has itself been criticized by the British House of Commons Public Accounts Committee for its cozy relationship with the Big Four (Sikka 2011). Investigations by the House of Commons Public Accounts Committee have put some of their predatory practices on the public record. KPMG was fined \$456 million (£284 million) for facilitating tax evasion, and some of its former personnel were sent to prison. Ernst and Young devised a scheme for the Iliffe News and Media group to turn their profits into royalties and then claim tax relief on those royalty payments. The company board’s minutes stated that Ernst and Young, who also audited the company’s financial accounts, confirmed that the use of this scheme would “significantly lessen the transparency of reported results” (Sikka 2012). KPMG has also been in trouble for cold-calling companies to offer them tax-avoidance schemes. One scheme enabled a company with 127 amusement arcades in the United Kingdom to avoid paying value-added tax (VAT). It improved the company’s prof-

its by £4.2 million, and KPMG charged its client £75,000 and a fee of 25% of the avoided VAT in the first year, 15% in the second year, and 5% thereafter (Sikka 2012). Even though KPMG knew the UK tax authorities would regard the scheme as “unacceptable tax avoidance,” when they lost their case in the UK’s High Court, they pursued it in the European Court of Justice, which also declared the scheme unacceptable.

In 2012, PwC was also fined (this time £1.4 million) for 7 years of false reporting to the UK’s Financial Services Authority about J. P. Morgan, one of the banks it audited. PwC was found to have not carried out its work “with due skill, care and diligence and with proper regard for the applicable technical and professional standards expected of it” (Pratley 2012). Taking up the mantra of turning risk into business opportunity, another of the Big Four has recently launched an online “anti-corruption and anti-fraud tool” called Deloitte Diligence, which “helps organizations address regulatory and reputational risk by streamlining the management of third-party investigations and analysis” (Deloitte 2013b). “Diligence” in this context not only means conducting due diligence on behalf of clients but also carefully screening information to avoid the “new risks” of adverse media and the attention of watchdog and regulatory bodies.

The Big Four have expanded their operations not only into new sectors but also into developing internal audits. Whereas the traditional auditor’s role was to offer impartial and detached scrutiny of an organization’s accounts, “internal audit” is a consulting activity based on detailed knowledge of a sector and its market niches. By monitoring and analyzing organizational risk and by “data harvesting,” it aims to add value and improve an organization’s operations while ensuring compliance with procedures and laws. For example, Ernst and Young (2013) claims that its “clean technology” experts will make a “sustainability assessment” by “look[ing] across your business to understand what will work for you from carbon credits, green IT, to green real estate transactions.” However, internal audit also entails “working in partnership with management” to mitigate risks and ensure “that the organization’s corporate governance is strong and effective” (Cornell University Audit Office 2013). As Ernst and Young (2012) advertise, “In addition to internal audit knowledge, stakeholders expect internal auditors to have the ability to team with management and business units on relevant business issues. They also expect internal audit resources to have deep sector knowledge and business acumen.”

The problem here is that there are bound to be conflicts of interest where the same firm that provides an external, impartial audit is also “working in partnership” with the company’s senior management to improve its business performance and is closely involved in its internal operations. For example, in Denmark, PwC advises the Ministry of Education and acts as external auditor for several universities, where it is also consultant and “sparring partner” for the senior management. In this case, PwC claims deep experience in dealing with complex relationships. In other instances, such

entanglements may help explain the growth in cases of tax evasion and collusion between audit firms and companies.

During this period, other organizations have also emerged to audit and rank specific sectors. The OECD is notable as the international agency that produces *Education at a Glance* and the PISA ranking of public education systems, which governments take extremely seriously and use to shape their policies. Some publishing firms have developed business plans based on producing university rankings at national and global scales, such as the *Times Higher Education's* World University Ranking and the *US News and World Report's* Best College Guide. For QS university rankings, a second income stream is generated by universities commissioning detailed analyses of their performance and consultancy services on how to improve it. Further companies provide citation data for the ranking organizations, notably Thomson Reuters (2013), which describes itself as “the world’s leading source of intelligent information for businesses and professionals.” The citation indexes focus on the leading journals in each field, which have been acquired by the larger publishing companies. They extract profit from “free” academic labor (i.e., in writing, peer reviewing, and editing journal articles) and then sell the products back to university libraries at high cost (Ciancanelli 2007). The competitive game of universities struggling for “world class” status is thus a mechanism of audit culture second to none, which provides new revenue streams for the industries that have mushroomed from the imperatives of measuring and ranking.

Why Managers and Governments Adopt Auditing Technologies

University leaders today are confronted with a bewildering array of measurements that rank different aspects of a university, everything from its creditworthiness and success in attracting competitive funding to its environmental sustainability, its standing in the world, and its score for “student experience.” Many of these numerical systems measure things that academics do not regard as important to teaching and research, and some academics have used their expertise to show how these rankings are arbitrary, unreliable, and flawed. Given such critiques (Gladwell 2011), why do university leaders accredit these rankings with such importance? This is an empirical question that we address by drawing on three ethnographic examples.

Our first case study shows why university leaders criticize the rankings yet still treat them with a seriousness bordering on obsession. Regardless of the measures used, six university “global superbrands” top all global rankings and occupy “a special zone beyond ordinary competition” (Baty 2012). The grades in the middle ranks are then so similar to each other that the slightest change in the definition or weighting of one measure can move universities up and down the list quite substantially. University leaders have to follow these changes assiduously as they are aware that parents and students use

rankings as proxies for quality and status. When *US News and World Report* began making an annual ranking of US law schools, the dean at Yale called it an “idiot poll” and Harvard’s dean described it as “Mickey Mouse, just plain wacky and totally bonkers” (Sauder and Espeland 2009:68). Despite this repudiation, all of the deans in Sauder and Espeland’s study of law schools admitted to devoting vast resources to playing the ranking game. A “good dean” knows in intimate detail how the variables in each of the rankings are constructed and will check that they are registering all the positive figures (about students, staff, income, publications, exam performance, graduate employment, etc.) in precisely the right way for the ranking companies to pick them up in their questionnaires and surveys. The deans explained that the rankings are “omnipresent”—that academic decisions about the curriculum, evaluation of subordinates, faculty publication strategies, admissions policies, and budget allocations are all shaped by their likely effect on the school’s numbers and ranking. Whether making budget allocations or keeping meticulous records of inconsequential details, administrators resent the all-consuming attentiveness to the presumed requirements of the for-profit ranking companies. But there are serious punishments for not doing so. If they get it wrong, their school could slip down the scale, with dire consequences for their ability to attract students, maintain fee income, and hence sustain academic employment. The rankings thus elicit an involuntary “reactivity” (Espeland and Sauder 2007). The deans’ unwilling endorsement “makes these shaky measures pervasive and generative of the organisation itself” (Sauder and Espeland 2009:68). This account shows how such measurements are simultaneously individualizing and totalizing and illustrates their coerciveness—and why they are so impervious to criticism.

Our second case concerns the attempts by the management of the University of Auckland to transform the institution into a more “entrepreneurial university.” Whereas in the previous case, the object of measurement was the department or school, in this case, the focus was on the individual academic. The vice chancellor (as the “employer”) sought to change unilaterally the criteria for academic standards and promotion in order to incentivize academics to increase their outputs and engage in commercial and income-generating activities. He replaced the traditional promotion system, whereby peers assessed the teaching, research, and service of colleagues and judged them using the qualitative categories of “satisfactory,” “merit,” and “excellent.” In its place, he employed a new “academic standards” policy based on numerical measures and quantifiable output targets for each grade, claiming that this would enable promotions to be based on “transparent” and “objective” evidence of “sustained performance.” The academic standard expected for promotion to the rank of professor in a social science discipline was now at least 50 publications in high-quality journals; research with “a demonstrable quality and impact”; no less than six honors, six masters, and eight PhD students supervised to completion; and “three major external grants,”

each yielding in excess of \$100,000 (UoA 2013:4). These criteria discriminate heavily in favor of the STEM subjects (science, technology, engineering, and medicine) and present obstacles for New Zealand's social scientists as there is only one major source of fundamental research funding, the Royal Society of New Zealand's Marsden Fund, which awards only 10–12 social science projects per year and has a success rate of approximately 8%. As several academics were quick to point out, by these standards, virtually none of New Zealand's existing social science or humanities professors would qualify for promotion to senior lecturer, let alone professor. The task of quantifying these outputs for each candidate falls to human resources (HR), whose personnel now plays a greater role in the new promotions committees, exemplifying the wider trend, noted earlier, of technocratic criteria overriding qualitative and professional judgments.

The employer argued that the promotion criteria needed greater "clarity and transparency" because academics were confused by the multiple potential meanings of terms like "merit" and "satisfactory," even though heads of department and members of the university's own staffing committee said they rarely experienced problems working with the old criteria. When challenged about the alleged benefits of these new yardsticks, the employer claimed they were based on best practice among Australia's leading Group of Eight universities. Members of the university senate found that this "benchmarking" exercise consisted of little more than a brief e-mail exchange between the former director of HR and her counterparts at these Australian universities. Many academics, led by their union, responded to the employer's "consultation process" by highlighting the numerous flaws in the new system of academic standards. In addition, they noted that the process was being driven by the university's cost-cutting goals and its ambitious revenue targets in the "strategic plan." It seems that the new quantified and financialized performance targets for promotion were being aligned with the vice chancellor's own key performance indicators. However, this speculation could not be confirmed because in New Zealand the key performance indicators that affect university vice chancellors' pay, like those of many company CEOs, are treated as confidential. This example highlights one of the striking features of audit culture and how it achieves its governance effects. Demands for transparency and accountability are characteristically one-directional and top-down, as those in positions of power seek to make legible the performance of those below them without being accountable to those they govern. In this case, however, the Tertiary Education Union did manage to successfully contest the vice chancellor. They took the case to mediation at the Employment Relations Authority, which ruled that the employer had breached his statutory obligations to involve academics in this area of shared university governance (TEU 2013). When the vice chancellor continued his efforts to impose his new academic standards policy, the union took the case back to the Employment Relations Authority and won again (Shore and Davidson 2014).

Whereas in the US example, rankings reshaped the organization of schools, and in the New Zealand case, measures aimed to reshape the conduct of individual academics, in our third ethnographic example, from Denmark, one numerical instrument was designed to act simultaneously on three scales: those of the sector, the institution, and the individual. The Danish government's reforms of 2003 explicitly sought to make universities the drivers of Denmark's competitiveness in the global knowledge economy. New management structures were implemented so that government could trust universities to use an increased allocation of public funding strategically to benefit industry and "surrounding society." Money was to be allocated competitively between the universities, and this necessitated creating a new funding formula that was initially to have three elements—teaching, research, and knowledge exchange. The research element was partly based on a "bibliometric points system" that required all academics to enter their publications into a national database each year. In 2007, 68 disciplinary committees involving 360 academics were set up to make an authorized list of all journals and publishers in each discipline and to distinguish the top 20% "level 2" outlets. This work took 2 years to complete, not least because the ministry attempted to rationalize the lists and 58 of the 68 chairs signed a petition stating that the consolidated lists were not an appropriate tool for allocating funding. The ministry withdrew its lists, and the committees began their work again. The ministry now uses the authorized lists each year to allocate numerical scores for each publication (e.g., three points for each level 2 journal article and one for each "level 1" article). It then calculates the overall scores for each individual, department, and university. Despite the time-consuming complexity of this method, the eventual funding formula gives only a very small weighting to these bibliometric points. However, the attempt to create a metrics for "knowledge exchange with surrounding society" collapsed. This has resulted in an even heavier reliance on research scores than originally intended. Whereas the government's main aim was to make universities more outward facing, it has ended up with a system that privileges publications in elite academic journals that have a notoriously small public readership. This competitive funding formula has been very successful in differentiating the sector with the aim of promoting the international rankings of three of the eight universities. At the same time, this formula has been used by university management to make faculties and departments compete with each other for funding and reorganize their institutions around a financial calculus and competitive ethos. This, in turn, has reshaped the subjectivities of some academics who now value and narrate themselves in terms of how many points they earn for their department. However, academics in some faculties have organized successful collective opposition to what many termed an "existential threat" to academic identity and values (Wright 2014). These three empirical examples exemplify why governments and managers have so eagerly embraced audit culture: its techniques provide indispensable tools

of contemporary management that are extremely effective insofar as they align individuals, institutions, and whole sectors within a space of governance.

Conclusion: Audits, Ranking, and the (Re)ordering of Society

The institutionalized processes of measuring and ranking described above and their spread into many domains of organizational and social life reveal the emergence of a new type of governmentality based on a financial calculus—an instrumental, results- and target-driven normative order that governs by numbers and, more importantly, *through* numbers. While not confined to neoliberal polities, the characteristics of this new order include all of neoliberalism's key ingredients—including “governing at a distance”; a relentless pursuit of economic efficiency; deregulation, outsourcing, and privatization; marketization and the privileging of competition over cooperation; increasing separation between an empowered managerial elite and a deprofessionalized workforce; the objectification of human labor—combined with increasing emphasis on calculative practices aimed at promoting individualization and responsabilization. In this way, the political technologies of financial cost accounting wedded to the project of management have been highly effective in producing accountable and transparent subjects that are simultaneously docile yet self-managed.

Our study shows the diversity of forms that audit culture can take in different settings but also the similarities of its effects. Its governance effect is seen most notably in the example from New Zealand, where the logic and instruments of financial accounting were used to incentivize academic performance. Measurement and rankings serve a variety of political purposes. First, they appear to provide a more rational way of controlling institutions through new configurations of knowledge and power. Second, they are extremely effective at opening up for external scrutiny the inner worlds of organizations, and they render commensurable and controllable all kinds of disparate individuals, institutions, and objects with diverse and incommensurate features. Third, numbers exert a curiously seductive power (Porter 1996). Indicators are assumed to be objective and unambiguous because of their association with science and the “pure and constant rules of mathematics” (Merry 2011:590). As Strathern (2000a) puts it, “an aura has come to surround numbers, and despite the caveats of professional auditors, it is those unfamiliar with financial auditing who tend to sanctify them” (8). Significantly, the people who are enamored by numerical rankings “tend to be those most distant from their production” (Sauder and Espeland 2009:72).

The introduction of audit and accounting changes the nature of the organizations so that their activities become increasingly focused on the measures by which their performance is judged. Indeed, this belief that organizational behavior can be engineered and improved through targets

and elaborate procedures of internal audit is central to the advertising claims of the Big Four accountancy firms. They see this domaining effect as a positive outcome that delivers efficiency, commensurability, and accountability, but critics might ask for whom and to whom. The study by Sauder and Espeland shows the powerful domaining effect of numerical measures as they provide transposable templates for managerial control and make possible new forms of remote surveillance: “They are abstract, concise, easily portable; because they decontextualize so thoroughly they travel widely and are easy to insert into new places and for new uses” (Sauder and Espeland 2009:71).

These regimes of audit also create the categories into which people are invited to rethink themselves. This classificatory effect is viewed as delivering positive outcomes by those who sell and operate these systems, but again critics might point to the other outcomes (individualizing and totalizing, governance, and perverse effects) and draw different conclusions. All three case studies show the classificatory effects of rankings and the way they shift power away from professionals and onto managers and administrators. The use of numerical performance indicators has been highly instrumental in distinguishing a new class of technocrats (managers, accountants, administrators, HR officers, executive leaders). They are tasked with controlling the organization and ensuring that it meets its targets, and they are separated from the professionals and workers who deliver the services and create value in the organization. Quantitative indicators provide hard evidence for the claim that managers are improving quality or achieving measurable yardsticks of progress.

When professionals contend that these regimes of accountability have perverse effects and do not improve quality—or may even damage their institutions and services—they are often cut out of the conversation between the policy makers and the public. Indeed, according to “agency theory,” professionals must be excluded from direct involvement in the management of an organization to protect it from “institutional capture” (Olssen and Peters 2005).

Our examples suggest that audit culture and its effects are having a number of negative consequences. Building on Power (2007:333–334), the following can be highlighted:

1. loss of organizational trust (O'Neill 2002; Power 1994);
2. elaborate and wasteful gaming strategies (House of Commons 2004; Shore and Wright 2000; Wright 2009);
3. a culture of compliance and large compliance costs, including the appointment of new specialists preoccupied with creating positive (mis)representations of performance (Miller 2001);
4. defensive strategies and blamism that stifle innovation and focus on short-term objectives over long-term needs (Hood 2002);
5. deprofessionalization, a disconnect between motivation and incentives, lower employee morale, and increased stress and anxiety (Bovbjerg 2011; Brenneis, Shore, and Wright 2005; Wright 2014);

6. “tunnel vision” and performing to the measure, with a focus solely on what is counted, to the exclusion of anything else (Townley and Doyle 2007);

7. and the undermining of welfare and educational activities that cannot be easily measured (King and Moutsou 2010).

Given these combined effects, it seems imperative to find ways to reclaim the space for academic professionalism that is placed at risk by the spread of audit culture. Evidence from New Zealand and Denmark shows that some people are developing strategies for resistance. Sauder and Espeland (2009) explain how selective reporting on performance and control over the representation and legibility of activities is used to preserve space for the exercise of academic professional values. They call these tactics “buffering,” but such strategies also carry risks of organizational schizophrenia (Shore and Wright 1999). Another potential strategy is to take back control over the measures used to evaluate professional performance by creating alternative experts and systems of evaluation and insisting that organizations be evaluated in their own terms. Again, the risk here is one of co-optation of professional values and their conversion into managerial indicators and instruments. After all, accountability, responsibility, quality, self-management, and transparency are all values that professionals would normally espouse. This is another reason why it is so difficult to criticize or challenge audit, as it often hinges on a redefinition of the words and ideas that auditees themselves hold dear (Shore 2008; Wright 2005). A further strategy would be to accept that numerical indicators are here to stay but to change the focus of what counts. Instead of efficiency, economy, and outputs, one could develop other measures of success, for example, well-being, happiness, and quality of life rather than GDP, as argued in the recently published report by Stiglitz, Sen, and Fitoussi (2009). However, given the individualizing and totalizing nature of governing by numbers, as the New Zealand and Danish case studies show, the most successful antidote probably lies in collective action and a reassertion of academic and professional values. If there is power in numbers, there is also strength in numbers.

Comments

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This essay provides a very useful overview of the development and international dissemination of audit culture. Cris Shore and Susan Wright outline the incubation of this regime of accountability in educational institutions, its export to industrial and military contexts, and then its reincorpor-

ation back into the public sector, including universities. Universities, therefore, provide a particularly interesting vantage point from which to observe the proliferation, persistence of, and potential resistance to audit culture since they have been so thoroughly implicated in its creation and proliferation.

As Shore and Wright demonstrate, this proliferation has occurred in spite of the repeated failures of this regime of accountability to actually deliver on its promised efficiencies and transparencies. Nor does it appear that its proliferation has been much impeded by critiques that have drawn attention to the limitations of auditing measures. In other words, the dissemination of audit culture has drawn on assertions of high standards of rigor and documentation that have appeared impervious to evidence of shortfalls in these claims.

This imperviousness to refutation is of particular relevance to one of the four sets of questions posed by Shore and Wright: “Is audit an unstoppable ‘glass cage’ of coercive transparency?” This article trains attention on the domain-ing effect of audit culture, in which organizations are transformed to mirror the logic of these technologies. The more thorough this transformation, the harder it may be for organizations to separate themselves from the rationality of this form of governance. But as Shore and Wright have also noted, the dissemination of audit culture has been neither “monolithic [n]or uniform,” in turn raising questions around both the unevenness of the spread of audit culture as well as the variability of resistance to its various instantiations.

The three cases examined by Shore and Wright offer some potentially telling insights into the elements that are more likely to elicit resistance to the imposition of audit culture. Among these three cases, it was the effort by the vice chancellor of the University of Auckland to change the basis of evaluation for promotion to full professor that appears to have drawn the most united and effective resistance. As opposed to the qualitative categories that had been used in judging eligibility for promotion, the vice chancellor now sought to introduce numerical measures that were so onerous that they would have excluded virtually all of the existing professors in the social sciences and the humanities. Supported by many of its members, the Tertiary Education Union was able to successfully contest this measure. It is not difficult to see why there was so much concerted opposition to this among faculty members. After all, there would be few faculty members who stood to gain from these new measures, especially among the social sciences and the humanities. Those employees who could meet these new numerical standards would have been equally successful in the old qualitative system of evaluation. There were, therefore, few employees, if any, who stood to improve their standing through this new ranking system and a great many (a majority in non-STEM disciplines) who stood to lose from the introduction of these measures.

Audit culture is based on a zero-sum game: to succeed in this game, someone has to lose. This is the basis of the most corrosive effects of this form of governance, one that lies at

the heart of the intense and dysfunctional competition that Robert McNamara oversaw at the Ford Motor Company during the 1950s. But, however dysfunctional, this system seems most likely to gain compliance when at least some of the people being subjected to it think they might have the chance of improving their standing under new auditing measures, while others think that if they do not comply, their standing might suffer. It is this kind of interpretation applied to global rankings of universities that seems to underlie the compliance of law school deans in another case examined by Shore and Wright. Tellingly, in spite of the denunciations of these rankings by the deans of the Harvard and Yale law schools cited in this article, it is the institutions in the middle rather than the top ranks that are most likely to be affected by even slight changes in indicators.

As long as a significant number of individuals or organizations believe that they might be able to improve, or at least protect, their standing by complying with the indicators adopted in an auditing regime, there is less likely to be much resistance and even less likely to be a united—and, hence, effective—opposition to its installation. Ironically, what may be most likely to convince more actors that it is not worth trying to accommodate to the rules of these regimes is the kind of administrative overreach that characterized the effort to change the standards of promotion at the University of Auckland.

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Problematizing Audit Culture

As an academic accountant with a long-standing interest in the politics of accounting, I welcome Shore and Wright's critical analysis of audit culture. Given space limitations, I will focus here on (i) the logics underpinning accounting practices and their links with neoliberal politics and (ii) possibilities for developing accountings based on alternative logics.

As the authors emphasize, accounting is not the apolitical, neutral technology it is often portrayed to be. In stark contrast to the image of accounting as "harmless bookkeeping" in popular culture, accounting plays a significant role in (re)producing social realities through the *governmentalities* it helps to operationalize and the selected visibility it lends to organizational activities. Through the ideas and actions they help to normalize, accounting technologies impact the culture and priorities of governments, societies, and organizations in subtle and not-so-subtle ways.

Accounting has played a major part in enacting neoliberal political agendas. Accountants helped introduce neoliberal logics—based on competition, individualism, financialization,

managerialism, and instrumental rationality—into the public sector as a core aspect of new public management reforms in the 1980s. In the corporate sector, the rise of neoliberalism has seen an intensified focus on shareholder wealth maximization, with social and environmental accountings limited to those for which a "business case" can be made. In the name of good governance, international funding agencies such as the World Bank have imposed neoliberal reforms on developing countries. In these various contexts, accountability and transparency have been conceptualized in market-like terms, with the negative impacts of neoliberalism and audit regimes (e.g., work intensification, growing inequalities, antidemocratic practices) treated as externalities outside accounting's scope.

Neoliberal reforms have been portrayed by their advocates as not only beneficial but as though there were no alternatives. As neoliberal logic has become increasingly sedimented (e.g., within governance structures, in actors' self-understandings, through business school education), it is perhaps unsurprising that many people cannot see how things could be different, re(order) themselves, and/or feel powerless to resist change. People also understandably hesitate to look as though they are *against* accountability, efficiency, and good governance, albeit that the real issue is arguably the need to contest the meanings ascribed to these concepts under neoliberalism and the related marginalization of other values (e.g., social justice, democratic participation, ecological sustainability).

So how should those dissatisfied with audit culture respond? How might the neoliberal logics embedded in accounting technologies be challenged most effectively? While fully supporting Shore and Wright's closing call for collective action, I would argue this needs to go well beyond "a reassertion of academic and professional values." In the case of accounting and economics, mainstream academic and professional values (e.g., the privileging of profit maximization, efficiency, economic growth, positivism) are a major part of the problem. Similarly, the idea of "insisting that organizations be evaluated in their own terms" is problematic. Mainstream accountants argue that they are doing that in appraising corporate performance in terms of shareholder wealth maximization, giving them license to ignore those who seek to challenge shareholder primacy norms (e.g., in corporate law) and highlight their negative impacts on others. Relatedly, under the influence of neoliberalism, many actors increasingly view universities instrumentally as corporate-like entities that *should* serve business and the economy.

In line with contemporary scholarship on decentered governance in political theory and critical policy studies (Griggs, Norval, and Wagenaar 2014), another approach to contesting audit culture would be to develop "the counter-logics of a plural and democratic community" (Glynos and Howarth 2007:199) so that neoliberal logics and business rationalities can be made more visible and counterposed (e.g., by highlighting competing discourses and their implications). A use-

ful way of thinking about this—which also draws on the insights of Foucault—is in terms of Tully’s (2008) calls for public philosophy in a new key, through critical engagement with a multiplicity of governance practices and associated practices of freedom.

Here I draw attention to accounting research aimed at developing pluralistic accountings that enable contestation of neoliberal logics and forms of accountability that privilege finance capital (Brown 2009; Brown and Dillard 2013, 2014, forthcoming; Cooper and Morgan 2013; Gray, Brennan, and Malpas 2014). This literature—with its roots in social and critical accounting scholarship dating back to the 1970s—aims to encourage critique of conventional accounting practices and the values, assumptions, and politics underpinning them, as well as to open up possibilities for alternative accountings/accountabilities that foster socially just and ecologically sustainable societies.

One set of proposals is for critical dialogic accountings—codeloped by alliances of cross-disciplinary academics and civil society groups—aimed at enabling dialogue and debate concerning *what* is accounted for, *how* it is accounted for, and on *whose* terms (see Brown and Dillard, forthcoming, for discussion in a policy context). The aspiration, in line with that of heterodox economics (Söderbaum and Brown 2010), is to develop ideologically open accountings that contribute to democratizing projects across a range of arenas. Rather than construct new accountings to be handed to others as solutions or focus on consensus-oriented processes that mask political differences, this approach favors the pluralizing ethos advocated by agonistic political theorists “oriented towards working on ourselves by working on the practices and problematizations in which we find ourselves” (Tully 2008:16). The aim is to think about how alternative accountings—drawing on, *inter alia*, numbers, narratives, and visual methods—might be developed as practices of freedom to contest neoliberal ideas of who and what counts.

There is considerable scope for synergies between social anthropologists, critical accountants, and others interested in challenging audit culture. In addition to critiques such as that provided by Shore and Wright, ethnographic studies could provide valuable insights into the self-understandings of different groups in relation to neoliberal/alternative logics (e.g., to help specify the parameters of contestation), as well as contextual studies aimed at identifying the most effective forms of resistance and counteraccounts.

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“Audit Culture Revisited” is a tour de force through the state of audit affairs. Focusing on audit as an encompassing regime of governance (cf. Power 1997), the paper discusses a plethora of initiatives from private and public organizations.

The general aim is to provide a global diagnosis of audit’s ailments. Certainly, these negative effects should not be disregarded. Yet, I would suggest that, due to their very significance, the critical issues demand more nuanced treatment.

On the one hand, the authors note that “audit practices work in diverse ways.” On the other hand, in the aggregate, audit “form[s] an individualizing and totalizing system.” In the paper, illustrations from the Big Four to quality measurement in higher education are deployed to similar, if not identical, effect. Taking a page from the sociologists Wendy Espeland and Michael Sauder (2007), audit instances neoliberal governance through numbers; quantification rides roughshod over quality, and professional values suffer across the board. This paints audit as a purely disruptive and repressive phenomenon, with a one-sidedness that would not be accepted in most other cases. (Just consider the idea of characterizing kinship or rituals *in general* in exclusively negative terms). Whereas one might occasionally complain about not being able to see the cultural forest for the ethnographic trees, here the individual trees are largely invisible. Audit takes on the grim spectacle of a Mirkwood extending globally.

It is worth noting that Michael Power (1994) himself thought of the audit explosion as a “passing phase,” advising researchers to look out for “the seeds of a change” (32). Encouraging attentiveness to the microphysics of audit practices, this recommendation helps to defuse the sense of encompassing power produced by the authors’ image of global audit culture. It stimulates ethnographic curiosity about audit’s variable manifestations, aims, and consequences.

A rich set of anthropological analyses of audit, not cited in the paper, moves in this direction (e.g., Hetherington 2011; Hull 2012; Riles 2006). Rachel Douglas-Jones’s (2012) study of medical ethics committees in Southeast Asia exhibits people committed to audit for distinctly nonreductive reasons, such as the achievement of integrity and trust. “Even the most utilitarian of objects can be charged with emotional value, whereas the most seemingly pure ‘pulsional’ forces can serve as utilitarian tools” (Kaufman 2001:116, citing Klossowski 1970). Even audit.

My work with Brit Ross Winthereik (2013) has identified the coexistence of numerous audit agendas, none of which are totalizing, even when their promoters aspired them to be—by no means always the case. Indeed, like Douglas-Jones, we found some of the most ardent proponents of audits to be people lower in the organizational hierarchies, experimenting with the optimization of practices in order to leverage, rather than undermine, their own expertise.

But is this emphasis on specificity and variability not simply a manner of throwing one’s hands up in despair when confronted with the totalizing audit system? On the contrary, I believe that imposing upon audit a coherence and power it does not seem to have when examined ethnographically itself *strengthens audit* (for a detailed discussion of one of the authors’ examples, see Jensen 2011). Once audit has been constructed as a juggernaut, the only feasible response ap-

appears to be an equally macroscopic critique. Its natural idiom will be *resistance*. The general characteristics of this oppositional figure is well captured by Barbara Herrnstein Smith (1988):

The force of the opposition . . . is most evident, perhaps, in the recurrent struggles between two kinds of calculation . . . : on the one hand, the kind, so named, that frames its objective as the efficient arrival at a specific and readily specifiable . . . “bottom-line” . . . and on the other hand, and typically in antagonistic relation to the first kind, *another* calculation, *not named as such*, that characteristically foregrounds and promoted exactly what was ignored by the first. (133)

Exemplifying the latter, “Audit Culture Revisited” aims to resist the bottom line of audit. Thus, “it seems imperative to find ways to reclaim the space for professionalism that is placed at risk by the spread of audit culture” and “the most successful antidote probably lies in collective action and a reassertion of academic and professional values.”

These are rather vague recommendations, but they raise specific questions: Who makes up the collective. And what is collective action going to be *for*? Moreover, to the extent that whatever it *is* for is adamantly opposed to *any* logic of measurement, what kind of real promise does it hold? Or, more generally, “If regimes of truth are inevitably totalitarian, what remains of emancipatory claims about the best way to order and govern human beings? How even to endeavor to transform the present, whatever totalitarian elements it might harbor, without tapping this danger?” (Brown 2005:101). Perhaps that danger is best avoided by the ethnographic observation that not even audit is wholly totalitarian.

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New Questions of Evidence

In 2012, an Irish magazine introduced the Dublin-based director of “government services” at one of the Big Four auditing firms. The executive spoke from expertise in organizational change: transparency and efficiency would inevitably flow, he explained, from reengineering state institutions to be measurably customer focused according to best practice. The magazine provided another update on the quiet revolution that Shore and Wright have tracked for more than a decade—the relentless rise of audit culture. But, in this instance, the ideological language was exposed by broader circumstances. In 2012, the same firm was sued by the Irish Bank Resolution Corporation (IBRC) over its role in auditing Anglo Irish Bank, the collapse of which cost the state

approximately \$40 billion, or 20% of GDP. Nine days before the bank was nationalized, Merrill Lynch gave it a clean bill of health in a report costing approximately \$11 million (incidentally, the IBRC appointed another Big Four firm as its auditor). Business as usual.

The recent financial crisis called attention to the opaque world of global actors who audit, produce rankings, indicators, and transparency. When accused of negligence or sharp practice, they defend themselves with the nineteenth-century mantra, “We are watchdogs, not bloodhounds.” Yet, as Shore and Wright note, they overproduce quasiempirical language and sign their activities as evidence based. As I reflect on recent history, questions about evidence spring to mind. The official inquiry into Irish banking was a toothless process—as in the blinding of Polyphemus, “Nobody” was to blame—but it was revealing. The sector was accused of diverting masses of risk analysis professionals to deal with international Basel II standards. Evidence of actual risk became secondary to mimetic self-regulation indicators derived from abstract quantitative models. Anthropology is certainly equipped to study mimesis, rituals of evidence gathering, and “the magic of numbers” (Merry 2011:S84). Anthropology must reengage with questions of evidence and harness some of its most intellectually rewarding concepts as it does so.

Shore and Wright’s article aims to cut to the heart of the rationales driving and legitimizing so-called audit culture. Similarly, Sally Engle Merry’s recent *Current Anthropology* article “Measuring the World” (2011) examines the contemporary plague of indicators and rankings. These articles should be read together, because the authors provide different genealogies of audits and indicators that might be productively brought into dialogue. Shore and Wright begin with the calculative styles of reasoning born in grading and ranking at West Point and École Polytechnique before tracking the rise of scientific management and new public management. They show the remarkable resilience of these styles of reasoning in the face of numerous failures. But Merry’s genealogy of indicators offers to them interesting challenges. She draws on historian Mary Poovey (1998) to explore the rise of “the modern fact,” the ostensibly neutral and systematic basis of statistical and governmental reasoning by experts. The nineteenth-century shift from moral knowledge to statistical-governmental knowledge may have provoked merciless sarcasm from Charles Dickens, but it also provoked important scientific debates. “Statistics,” William Robertson argued, “is not even a department of human knowledge; it is merely a form of knowledge—a mode of arranging and stating facts” (quoted in Poovey 1998:316; see also Poovey 1993). But the problem here exceeds the questionable evidential basis of governmental knowledge. We must attend also to the magic and necromancy inherent in rendering into numbers the characteristics of populations. Many nineteenth-century statisticians eschewed “causes” yet found mesmerizing patterns in data. William Cook Taylor stared at lists of murders in France until he saw “a certain sympathy or principle of imi-

tation" (1835:113). What is at stake in these early examples is the potential power of data qua data.

Today, as nurseries and even mortuaries face audits, rankings, and indicators, questions about evidence are foregrounded. Similarly, in my own field of security research, one may note the rise and resilience of scenarios and foresighting by experts. Quasiempirical yet ostensibly evidence-based, quasicorporate yet rampant across society, these forms of knowledge demand anthropological attention. Shore and Wright have provided an important service here by revisiting audit culture and its (perverse) effects. One may, however, add to their ongoing work by highlighting a broader genealogy and what that makes possible. For instance, they note the Amazon UK warehouses in which stressed workers are controlled by omniscient time-and-motion technology. But today, data qua data is taking on new forms scarcely imaginable in the past. Today, such workers are controlled, measured, and ranked as coded data that must respond to algorithms scraping "big data" for magical insights into consumer behaviors. It was a broader genealogy that provoked Gilles Deleuze to picture "transmutable or transformable coded configurations of a single business where the only people left are administrators" (1995:181).

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In this article, Chris Shore and Susan Wright offer an insightful analysis of a new mode of power that is reshaping governance: the reliance on numbers and audits. The power of quantification has become the subject of analysis in a variety of domains, from global governance, economic development, and nongovernmental organizations to local campaigns against violence against women or environmental destruction. Shore and Wright, prominent theorists in this field, provide a historical perspective on the formation of audit culture and its use in several domains, particularly higher education. They focus on the effects of rankings and audits on higher education systems in the United States, United Kingdom, Australia, Denmark, and New Zealand, but the effects and problems of audits and testing are found in K-12 schools in the United States as well. At both educational levels, the expansion of audit practices has generated resistance.

One of the significant contributions of this article is its effort to grapple with the meaning of the term culture in the widely used phrase "audit culture." I have written about "indicator culture," a closely related term that refers to the use of measurement systems as taken-for-granted ways of assessing truth and making decisions (Merry and Coutin 2014), but this raises similar questions about the status of the culture concept. As the authors helpfully point out, they are not

using the term to describe a type of society such as "feudal society" but instead a set of dispositions and practices and a rationality of governance. Audit culture refers to situations where "auditing has become a central organizing principle of society." The challenge is to see audit as both a set of techniques and practices used in certain situations for purposes of governance and as a mode of thinking and analysis that makes particular political actions seem reasonable and justified. The capacity of these techniques to render acts of power rational and without question is the core characteristic of their power. Thus, it is the cultural dimension of quantification that is of particular importance in understanding how it works as a form of power. This article makes a significant contribution to unpacking the role of culture, but it warrants even more attention.

I have approached the cultural dimension of quantification through an analysis of two key effects that numbers produce: a knowledge effect and a governance effect. In other words, numbers make the world knowable in particular ways, and this form of knowledge contributes to governance by providing the evidence that underlines political decisions. Both effects have cultural dimensions: knowledge itself is shaped through cultural assumptions, and there are cultural understandings of the way political decisions are made.

It is this process that Shore and Wright are discussing with relationship to audits in higher education. The audit systems they describe endeavor to make scholarly accomplishment visible through counting in order to allocate resources and positions. Shore and Wright's analysis provides valuable insight into the way individuals and organizations react to, manipulate, and resist audits. While this perspective is clearly critical, it is also useful to examine how audit systems are produced in the first place, what interests they serve, and how issues are rendered countable. As they suggest, political and economic concerns such as government desires to save money or auditing firms' interest in business shape audits. Focusing on production as well as effects also means asking how the designers decide what to count, what models they adopt, how they cope with limited or missing data, and what underlying theories of social change shape their choice of what to measure. All of these decisions affect what kinds of knowledge are produced. For example, Summer Wood and I studied the pilot test of an indicator system for measuring children's rights in Tanzania that had been developed by international experts. We found significant differences in the measurability of dimensions of children's rights depending on what had previously been measured and how aligned the categories were with local understandings of children's lives (Merry and Wood 2015).

These studies raise the issue of the tension between global and local forms of classification and counting. Even in the measurement of higher education, when governments use audits to measure their own educational systems, they impose uniform categories on a varied set of institutions. The problem is exacerbated in global university ranking schemes. How

does the need to render categories and counts commensurable across classes and regions flatten difference and ignore context? Do categories of enumeration make sense in local contexts? Do forms of global measurement created in the global North generally reinforce the power differentials between rich and poor countries, as they do in the global ranking of universities or comparative educational tests such as PISA? Shore and Wright have given us the tools to examine these critical questions.

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On the Audit Trail

Should we be surprised that ISIS publishes an annual report? Or that *al-Neba* (The Report) contains more than 400 pages of performance metrics assembled by area, type of attack (e.g., apostates run over, IEDs delivered by motorcycle, assassinations), and month of operations?¹ Whether to demonstrate strength, secure funding, or to assert its legitimacy as a centralized institution, that ISIS invests the resources to produce such a document suggests the power and penetration of the audit as a pervasive cultural form. The power and proliferation of audits is the theme of Shore and Wright's valuable and timely article. Few today are immune to the scrutiny delivered by audits, and Shore and Wright offer a valuable range of examples, orienting questions and classifications of consequences to develop a framework for theorizing audit culture. We briefly outline a few ideas about how future work might use this framework to improve our understanding of the rise, diffusion, and differentiation of accountability measures.

Shore and Wright suggest that a key question in analyzing audits is why and under what conditions individuals, organizations, and governments adopt audit practices. As they rightly argue, their spread is far more complicated and consequential than "policy transfer." Teasing out the motives and mechanisms that propel audit practices is challenging. The Gates Foundation's famous formula of "no metrics, no money" has propelled the spread of auditing practices in philanthropy and research around the globe. But this type of direct coercion is only part of the story. Certainly demand is produced and manipulated by strategic players. As Shore and Wright suggest, the new industries of measurement that produce and disseminate technologies of auditing and ranking deserve far more attention than they are receiving from scholars. Aside from the seminal work of some scholars of

accounting or the history of science, few have explained their growing influence. The Big Four accounting firms offer a dazzling array of professional services to clients in nearly every nation and are among the most enthusiastic producers of indicators. But their formal role as auditors in the conventional sense is now eclipsed by their other consulting services, which incorporate finance, law, and management, and their almost 800,000 employees are key players in the globalizing of audit culture.

And yet the demand for auditing as the hallmark of rationality and accountability is not only about selling new products. Their proliferation takes many forms, including the repurposing of established auditing practices. For example, much has been written about the role of credit rating agencies in the recent financial crisis, but the long history of credit ratings (an "old industry" of accountability metrics) reveals a complicated trajectory of diffusion. Dun and Bradstreet began evaluating the creditworthiness of small businesses in the mid-nineteenth century. Moody's first rated bonds in 1909. These rating services were paid for by lenders and investors who wanted to identify trustworthy borrowers. Credit ratings were first given regulatory standing during the Great Depression by bank regulators desperate to save insolvent banks. In the 1970s, photocopy machines, by making it easy to share credit reports, helped undermine intellectual property rights and so facilitated a new business model. Instead of having users pay, now it was the borrowers who paid for their own bond ratings, ushering in all the predictable conflict of interests. With the invention of over-the-counter derivatives in the 1990s, contract writers needed to include some measure of counterparty risk. Once again, credit ratings offered an easy, defensible solution. As the uses of credit ratings grew, as they were written into regulations and contracts, as they defined derivatives and evaluated governments, they became the global infrastructure through which risk was apprehended and manufactured. Hardly anyone is untouched by their influence. As Shore and Wright urge, careful and close-to-the-ground studies of organizations and sectors such as these can provide new insights into the role that producers play in the creation and reproduction of audit culture.

Shore and Wright make the important point that measures and rankings can render the political mundane. Part of the particular authority of numbers, part of what distinguishes them from other symbols, is their long associations with objectivity and rigor and our assumptions about their universality. In addition to the important dimensions of audit culture that Shore and Wright highlight, the distinctive properties of numbers warrant further theorizing. The capacity of numbers to simplify so radically; simultaneously integrate and distinguish disparate objects, people, or practices; organize comparisons; subvert established categorization; travel so easily—all of these qualities—makes them specialized forms of knowing and constituting.

As is the mark of stimulating work, Shore and Wright leave us wanting more. What is the nature of the coherence

1. We thank Emmanuel Didier for sharing this article (Bilger 2014).

or convergence that permits us to speak of a global audit culture? How might we better develop and apply Wittgenstein's intriguing idea of family resemblances to these measures? Does Foucault's conception of governmentality require substantial revision in order to account for the dominance of audit culture? Most important of all, perhaps, is the difficult question, can the expanding influence of audit culture be resisted?

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This article is an incisive gathering together of the vital work that Shore and Wright have been doing on, and for, the academic community over the past few years. In what follows, I want to take the critical spirit of their work and extend it. They argue that the ways in which people are obliged to comply with the gathering of data ostensibly so that better information will lead to a better-functioning society are in fact forms of regulation, which they term "audit culture."

I am uneasy with the cultural determinism that results. Rather than asking whether audit culture "has become a central organizing principle of society," I wonder whether it is not a symptom of another, more fundamental organizing principle of capitalism that has been so modified as to oblige us to rethink how the securing of surpluses occurs and thence how this logic pervades governance.

Emergent from an earlier era of government and church patronage, the secular university was shaped as an institution coeval with the rise of liberal democracy, industrial capitalism, and the rationalization of empire. As each of these projects became overlain on the other, so they overdetermined the academic enterprise, giving a certain authoritative autonomy to something called the "university." Understood in this way, the question arises as to how changes in these three elements might reconstitute the academy and education more broadly. I will confine myself to one element of the dominance of finance in the reproduction of capital that relates to audit.

This results from the demands made on companies engaged in production and its ancillaries to prioritize high returns to shareholders over the channeling of surpluses toward reinvestment and, hence, increased relative surplus value. One result is a shift in the form information takes in different spheres of capital: from planning for *the future* of industrial capital relying on the use of statistics and the like to finance that garners profits by trading among *possible futures* (Almore 2013; Cooper 2010). An oxymoron, "risk management" is a mystification that produces an actuality. It seeks to *secure* profits by eliminating or reducing the contingency of risk, while subscribing to the Hayekian myth of competition, in which the contingency of risk is the basis of entrepreneurial advantage and, hence, profit. As Ouroussoff (2010) puts it, "systematic

elimination of contingency has taken the place of risk as the vital force underlying capital accumulation and expansion" (44). In the *War on Wall Street*, she describes audit as the prime weapon of engagement.

What is the form information takes so as to be passed through this audit channel? Phenomena in the real world are broken down, disaggregating one element from what appears to be an entirely embedded set—one department from the rest of a company, let us say, its financing department; one individual from a household family, let us say, a student with a loan—and so on. Each of these, taken on its own, can be given a risk assessment—the probability of success or failure. But the tradable value lies in reaggregating what are now apparently entirely distinct risk phenomena so as to produce a packaged security. What matters is not any one feature—a successful financing department or a failed loan repayment—but the relations among them, and "what can be done for loans can be done for many facets of . . . social life" (Bryan and Rafferty 2006:203).

It is not that the uncertainties we face today are greater than before, it is that we now have instruments that appear to turn incalculable uncertainty into calculable and, hence, tradable risk (Knight 1921). What is being sought here is not security as such but to make movement and volatility tradable through a ratio of risk to security for enhancing profit. The use of financial instruments to manage risks in the market (rather than social or political rules) *are* a form of regulation, not its absence (Bryan and Rafferty 2006), and as such, they are extended into society as a whole via, among other things, audit culture. As I note elsewhere, "Dealing in the present with a variety of expectations for possibilities in the future through financial instruments like derivatives (forwards, futures, options, etc.) means hedging in terms of risk, rather than envisioning some of the interconnected elements of a controllable space as predictable and hence susceptible to planning. *And this in turn changes the way in which the social is envisaged*" (Smith 2014:195, *emphasis added*).

Shore and Wright have provided us with an array of instances in which audit culture provides the lens for such a vision. In doing so, they have performed an invaluable service by providing us with some of the elements we will need to generate a cohesive program to resist both the discursive (cultural) and the institutional (social) manifestations of such regulation.

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One of the things I really like about this contribution by Cris Shore and Susan Wright is its generative quality. Each sec-

tion of the article offers thought-provoking insights into the governing technologies that have become pervasive within universities and opens up further lines of inquiry that promise both scholarly and strategic insights into the operation and effects of these practices. For example, the authors usefully draw our attention to how university managers' engagement with audit culture is mediated through their relationship to governments. We see this in their account of the Australian minister for higher education's rejection of a system for using journal rankings to grade research publications when it became apparent to him that the measure was being transformed (in his view, inappropriately) into a target by university administrators. Here, and in the Danish case example, there is evidence of government's capacity to set and change the rules of the game in ways that are generally not open to managers within university settings, however senior they may be and whatever hopes they may harbor about shaping policy decisions. Developments like these invite critical reflection on the relationship between senior university management and policy makers and bureaucrats within government, as well as further consideration of the mechanisms through which those located toward the top of organizational hierarchies are governed, even as they govern others.

Shore and Wright nod to the value of such analysis in their discussion of the likely role played by the vice chancellor's own key performance indicators in the struggles at the University of Auckland outlined in their article. Their point about the potential benefits of greater transparency with regard to the incentives to which senior management within universities orient their activities is well taken. Such transparency would facilitate critical analysis by social scientists of the specific mechanisms through which the governing technologies associated with audit culture enter university settings and—crucially—could usefully inform practical action by the academic staff organizations to which they belong. Indeed, as underlined by the authors' discussion of the pathways traveled by practices of measurement and ranking in other instances and eras, there is much to be learned through an analysis of precisely how contemporary practices of measurement, ranking, and audit travel into and within universities and how these practices—and their effects—are modified as they are translated into different organizational and political contexts.

A related point, implicit in the authors' juxtaposition of their three case examples, is that "managers" within university settings make up a heterogeneous group differentiated by whether their appointment is primarily academic (e.g., department leaders and deans) or administrative (e.g., managers in human resources or finance departments) and by their position within the organizational hierarchy. There may thus be analytic mileage to be gained in unpacking the various ways in which different groups of managers are situated relative to each other, to academic staff, and to those to whom they report or are accountable. In reflecting on how

the authors' analysis of the governing technologies adopted by these diversely located managers might be developed further, I also wondered about the effects of claiming that ranking practices generate a "shift [in] power away from professionals and onto managers and administrators." Arguably, this characterization risks occluding the mechanisms through which the practices of managers and administrators are themselves governed, as well as the potential for those who are managed to push back nevertheless.

The authors do offer instructive examples of challenges to the governing practices that make up audit culture, and the article is replete with examples of the inefficiencies and other problematic effects that these have generated, both within universities and elsewhere. At the same time, these important insights sit in a sometimes awkward tension with other elements of the discussion that tend to constitute audit culture as a secure accomplishment, successful in its "totalizing" ambitions and alignments. This tension may well reflect the unevenness of the effects of the practices being scrutinized, but the puzzle of the faithfulness of governments and managers to these in the face of their many manifest failures remains to be solved. In fact, "perverse effects" appear to be so pervasive that it may be worth reconsidering their inclusion as a separate category within the authors' fivefold typology and to insist, instead, that they routinely arise within and are integral to the other four categories of effects. In any event, one lesson that can be drawn from the empirical examples presented is the efficacy of *collective* responses to the claims of audit culture. Since both scholarly research and informal observation suggest that many transgressions manifest, instead, in and through individual(ized) practices of refusal, it may be productive to assess whether and how these can be "scaled up" and mobilized along existing or to-be-constituted pathways connecting different locales, just as the practices of audit culture have been.

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Cris Shore and Susan Wright's contribution to the audit culture debate raises some important issues, including a theoretical framework for understanding audit culture today. The topic of audit culture is well worth revisiting since it is not diminishing as a phenomenon but rather accelerating. In fact, auditing, in many ways, guides behavior and thinking even more now than when in its infancy since it has become such a totalizing governance system in many places across the globe. The expansion of auditing as a practice has emerged in response to new control systems, in which organizational performance has become understood in need of scrutiny,

evaluation, and verification in the form of numbers and indicators. Virtually all organizations utilize and rely on audits to articulate the use of financial and human resources. In this world of audits, it makes sense to discuss in terms of audit culture (Shore and Wright 2000) rather than audit cultures (Strathern 2000c) in the plural—not denying local differences to this phenomenon but nonetheless highlighting the uniformity in the system. In their article, Shore and Wright present a thought-provoking framework for understanding the general effects that auditing has on the governance of society and the organization of people and their activities.

Shore and Wright build on Sally Engle Merry's (2011) work on indicators producing knowledge effects and governance effects and develop five "audit effects." The "dominating effect" pertains to the fact that audit reshape its environment. There are numerous studies within the field of accounting, for example, that show how performance auditing influences the behavior of organizations and their employees (Butterfield, Edwards, and Woodall 2004; Diefenbach 2009; Hood and Peters 2004). Shore and Wright give the example of the Danish university system for evaluating research performance and how audit technologies give rise to changes in academics' publication strategies. This is also the standard within the Swedish university system, which has pushed researchers' publication habits toward monographs and journal articles at the expense of edited volumes. This practice is also visible in the US academia but maybe for other reasons.

The "classificatory effect" pertains to the fact that statistical classifications shape our ideas and mold our lives, transforming subjects' and organizations' positions (Hacking 1986; Porter 1995). They determine who and what is included and excluded, exercising power. I might add, from my own work, the awareness of the classificatory effects among the producers of indicators. I have examined the production of indicators in the context of the European Union, where member states negotiated what indicators to use when measuring quality in work (Thedvall 2012). The EU member states' representatives, the bureaucrats, were governed by the bureaucratic logic of political neutrality and objectivity. At the same time, the members were representatives of their respective states and tried to argue for indicators to measure quality in work that would make their states look good in the EU comparisons of member states. This spoke of a logic of cultural intimacy, to borrow Michael Herzfeld's (1997) term, whereby member states kept culturally intimate certain results of nation-state policy that were not in their best interest to have displayed in the context of the EU.

A third effect is the "individualizing and totalizing effect." Building on Foucault's (1979) notion of biopower/biopolitics, Shore and Wright explain how auditing techniques discipline across three scales: individual, organizational, and sectorial. The use of performance indicators to measure, for example, the international standing of universities not only disciplines individual academics in focusing on what counts, but the

whole university sector is restructured around indicators and university rankings. A fourth effect is the "governance effect," which Shore and Wright stress as the increased use of indicators and numbers to make individuals and organizations accountable to governments, the public, funders, and so forth. In audit culture, indicators are often treated as representing reality objectively. In other words, performance indicators are understood as making activities transparent, enabling politicians, bureaucrats, and other citizens to observe and evaluate the effectiveness of organizations. The results are therefore widely used as bases for decisions.

This brings us the final effect, the "perverse effect." Shore and Wright give plenty of arguments for the perverse effects of the audit model, including the body counts during the Vietnam War and the indicators used to measure the performance of Amazon's "pickers" and Danish academics alike that drive individuals to overperform. If I may add, another perverse effect of audit culture is the integrated distrust built into the system. Rather than building trust, which was the original motivation, auditing often leads to more auditing (Power 1999). Djelic and Sahlin-Andersson (2006) discuss in terms of "distrust spirals." Paradoxically, then, the prevalence of auditing techniques and rankings often result in lingering uncertainty. I fully agree with Shore's and Wright's final words that we need to reassert academic and professional judgments and strive for action.

Reply

We welcome these thoughtful and constructive comments and are particularly pleased to engage in conversation with people from such a wide range of disciplines, including sociology, accounting, information and media studies, and political science, as well as anthropology. We identify three main points arising from their comments. The first concerns a series of questions about the nature, spread, and societal implications of audit culture. *Why* has audit continued to advance despite its widely documented failures? *How* do the logics and practices of audit spread, and why do people continue to adopt and promote them? And *what* can be done to challenge and resist its seemingly unstoppable expansion? The second main point addresses questions of theory and how we should conceptualize or analyze audit culture. The third point concerns issues of methodology and perspective and can be summed up in the question, what does anthropology bring to the study of audit?

On a more reflexive note, we acknowledge that representing audit culture as a force with expansionary dynamics runs the risk of reifying an otherwise complex set of political and social tendencies. That is contrary to our intention, and

Sally Merry captures our aim superbly when she states that “the challenge is to see audit as both a set of techniques and practices . . . and as a mode of thinking and analysis that makes particular political actions seem reasonable and justified.” To do that, we need to identify and name audit as a social and cultural phenomenon. This is the first step toward understanding how audit rationalities and techniques exert power by normalizing and naturalizing particular dispositions and ways of governing and being. As most of the commentators suggest, audit culture is becoming increasingly prevalent and intrusive in people’s lives, and it merits serious anthropological investigation.

Nature, Spread, and Societal Implications of Audit Culture

Our commentators provide three examples of why audit culture continues to colonize new social domains. These range from acts of coercion to boasting and concealment. Sauder and Espeland illustrate the coercive mechanism employed by the Gates Foundation with their mantra, “no metrics, no money.” This compels recipients of their philanthropy to frame their case in decontextualized numbers. The same authors provide a second example of how audit has expanded as a means for an organization to vaunt its achievements. The terrorist organization ISIS now uses the format of a for-profit corporation’s annual report to brag about its “performance” in the territories it occupies. “Bombings,” “knife murders,” “cities taken over,” “apostates run over,” and other atrocities are all clinically enumerated in statistical tables of “operations” per geographical district (Bilger 2014:10). The third example, by Mark Maguire, illustrates the opposite tendency. When the Anglo Irish Bank collapsed in March 2008 (at a cost of \$40 billion, equivalent to 20% of Ireland’s GDP), an official inquiry into the auditing carried out by the Irish Bank Resolution Corporation, Merrill Lynch, and one of the Big Four auditing firms found that “nobody” was to blame. This is a vivid case of a wider tendency in the aftermath of the banking crisis—and the subsequent Libor rate-fixing scandal—in which bank CEOs were exonerated from blame on the grounds that they were unaware of their employees’ activities (*Economist* 2009).

The answer to the second question—how audit advances and why people engage with these auditing processes—is more complex. Vered Amit argues that it is largely self-interest that drives people’s engagement with audit and suggests that new auditing regimes are most likely to gain compliance when at least some of those subject to it believe it will improve their (social or material) standing. This implies that individuals are able to exercise choice over whether to comply with the mandates of audit and accountability. By contrast, Judy Brown emphasizes the systemic logic at work and the way in which audit practices become sedimented in governance structures to the point where people cannot see how things could ever be different. Even if they do perceive what is at stake, they are often reluctant to challenge authority for fear

of being labeled as opposed to “accountability,” “efficiency,” and “good governance.” Both of these viewpoints are valid, and our quest is to find ways of combining them.

This raises our third question: what is the space for resistance against audit? Vered Amit’s concept of “administrative overreach” may have some utility, but in many cases (including the University of Auckland example) senior managers made proposals and offers that sought to divide the workforce. In this case, academics who accepted Individual Employment Agreements were given a pay raise. Although the union was ultimately successful, these were very difficult conditions in which to mobilize collective opposition to the new employment contracts. An alternative way of thinking about resistance comes from Sally Merry’s observation that there is often a tension between global and local forms of classification and counting. We try to develop that gap into a space for potential resistance by arguing for a reassertion of professional values and for evaluating organizations in their own terms. However, we accept Judy Brown’s criticism that some professional values (e.g., those of neoclassical economists, HR managers, and much of the accounting industry) are often part of the problem and that when for-profit organizations are evaluated in their own terms, it is for maximization of value to shareholders. Brown points the way to alternative forms of accounting that are pluralistic, contested, and inherently more democratic. We applaud this suggestion and would welcome its introduction into universities and other public institutions as a way to create more equitable, sustainable, dialogic, and trustworthy organizations.

Theorizing and Explaining Audit Culture

Gavin Smith makes the important point, with which we concur, that audit culture is not a determining principle of society but rather a symptom of contemporary capitalism. As we argued, the core of audit culture lies in the application of the methods and principles of financial control to ever-wider areas of culture and society, in what might be termed the “financialization” of everyday life. Smith provides an exemplary demonstration of how numbers and indicators are used to disaggregate and disembodify phenomena (such as happened with student loans and subprime mortgages) and reassemble them in packages that are tradeable in new forms of capitalism. Audit culture is both an instrument *of* and instrumental *in* this process. This point is nicely illustrated by Mark Maguire, who shows how the fetishization of numbers and associated “rituals of verification” (Power 1997) blind capitalist institutions (banks, insurance companies, accountancy firms, etc.) to the actual risks of their operations. In other words, the focus on data qua data has become increasingly detached from the material world. It is not only consumers who are, as Maguire elegantly puts it, increasingly “controlled, measured, and ranked as coded data that must respond to algorithms scraping ‘big data’ for magical insights,” but also the workforce.

Another important theoretical point is raised by Judy Brown, who asks what is marginalized by audit. Drawing on insights from private-sector accounting, she points out that “market-like” models of accountability and transparency create externalities that, as in all capitalist enterprises, lie outside the scope and concern of the organization. To her list of social justice, ecological sustainability, work intensification, increased inequality, and antidemocratic practices, we would add increased “responsibilization” of the company’s workforce.

Both Maguire and Merry raise important questions about the genealogy of audit. We welcome Maguire’s suggestion to bring into dialogue different histories of the rise of audit and accounting technologies. The advance of audit culture and calculative styles of reasoning have many possible genealogies, most of which can be traced to the eighteenth and nineteenth centuries (or earlier) and the rise of science, Enlightenment rationalism, and the new world order created by mercantile and industrial capitalism. Merry argues that, while numbers and “facts” have both knowledge effects and governance effects, it is also important to consider how these are produced, who designs them, what underlying assumptions about society shape the choice of what to measure, how they deal with missing data, and what interests they serve. We cannot follow these lines of inquiry here, but they certainly provide a useful agenda for future research in this field.

Methodology and Perspectives

What can anthropology bring to this field of inquiry? Our paper was an attempt to open up some avenues of inquiry and probe the underlying rationalities and practices of audit and accounting and the way these have become increasingly dominant features of contemporary organizations and governance. As Thedvall summarizes clearly, we did this by identifying and analyzing five of the main effects of audit on individuals, institutions, and society. Katherine Teghtsoonian makes the interesting observation that our empirical examples show that our fifth, the “perverse effect,” is evident in each of the other categories and therefore should probably be integrated as a component of all the other four effects. This is a useful point as it illustrates both the unpredictability of auditing but also its intransigence and imperviousness to criticism—even from its own “masters.” Like the genie released from the bottle, audit is a force that is hard to contain or control. We have elsewhere explored this kind of “runaway effect” of policy in new regimes of governance (Shore and Wright 2011). However, as both Maguire and Merry suggest, anthropology can also use its core concepts of magic and ritual to analyze this phenomenon.

While some might argue that to turn audit into an object of study is to reify it and present it as something uniform and monolithic, our ethnographic examples and those offered by the commentators clearly show that this is not the case. Our project is not to reduce audit to a simple set of

structures or principles; rather, we aim to identify the common rationalities of audit, the diversity—and perversity—of its processes and outcomes, and the complexities of its “dominating effects.” In short, we are exploring both the conditions that promote audit and the worlds that audits create. Casper Bruun Jensen chastises our critique for being negative and one-sided and for portraying audit culture as uniformly repressive and totalizing. As the remarks of other commentators suggest, this is far from an accurate depiction. To observe that audit has *totalizing* effects is not to argue that there is a monolithic “global audit culture.” Jensen both misunderstands our Foucauldian use of the term “totalizing” as well as our anthropological use of the word “culture” as a process and space of continual negotiation and contestation. Audit technologies have simultaneous totalizing and individualizing effects and work by interpellating individuals as political subjects. He himself exemplifies our argument when he refers to people lower in organizational hierarchies becoming the ardent proponents of audits in order to leverage their own expertise. Vered Amit also observes that differently positioned people with different vested interests respond to audit technologies in different ways. As Teghtsoonian notes, different kinds of managers and government officials are also governed and made accountable by these technologies of accountability.

Conclusion

It is clearly a challenge to develop an anthropological analysis that encompasses both the systematic and individual dynamics of such a large-scale process of transformation as the spread of audit culture. We thank our commentators for their constructive observations and suggestions, which are enormously helpful in elaborating this field of inquiry.

—Cris Shore and Susan Wright

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