

A Standard Fit for Neoliberalism

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1. INTRODUCTION

Social scientists and historians writing on techniques of contemporary rule, particularly those influenced by post-Marxist paradigms such as governmentality, have become increasingly preoccupied by the expanding role of standardization and the subjection of an ever-expanding array of spheres of activity to inspection (or self-inspection), audit, and certification. In the course of their investigations, the elements of a common narrative are emerging. This links standardization, audit, and certification with neoliberalism and contraction of the state, on one hand, with a reconfiguration of everyday life in business, communication, and social provision on the other (see Power 1997; Brunsson and Jakobsen 2000; Strathern 2000; and Higgins and Lerner 2010).

In this narrative, neoliberalism is differentiated from other forms of government by a rationale of “governing at a distance”: that is, by an invocation of indirect administration of the economic and social sphere via a decentralized network of politically autonomous norm-setting entities. Moreover, “governing at a distance” is depicted as having been by and large successfully and comprehensively institutionalized, especially in more markedly neoliberal social formations such as the United Kingdom, the United States, and Australia. This has occurred as “governmental technologies” such as systems of managerial controls on financial and operational reporting, and methods for auditing their quality, that have been disseminated throughout society by a combination of compulsion, provision of incentives, and imitation. “Governing at a distance” in these forms is said to entail “governing through standards.” In essence, it is a response to perceived economic or, more simply, budgetary problems associated with “governing too much” or too directly, particularly in social provision. However, it is also depicted as entailing wider ideological

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ambitions to re-center government on a specific construction of the “individual” as opposed to the state.

This perspective, in which standardization is seen as a technology that reconfigures the organization of power, has been elaborated in distinction to existing paradigms for understanding the role of standards and the nature of neoliberalism. Earlier paradigms for understanding standards typically consider their role in relation to inter-firm or international trade; the advantage of the new perspective is that it considers their status as a mode of conceptualizing and configuring reality rather than simply as an economic instrument or lubricant.¹ Paradigms for understanding neoliberalism have mostly viewed it as an ideational system—a set of policies, or a coherent political ideology—arising out of particular elite dynamics, or as a more or less functional response to structural changes in the political economies of Western welfare states.² The new perspective identifies neoliberalism with a coherent set of changes in practices that span not only selected state institutions but also a broad swathe of “private” economic and social life (see Larner 2000).

In this paper we broadly follow the governmentality approaches to standards and to neoliberalism. However, our specific engagement is with how to understand the origins of “governing through standards,” particularly standards that refer to managerial controls of different kinds. We examine how this unfolded in the United Kingdom at the end of the 1970s and beginning of the 1980s, a period usually thought of as the dawn of neoliberal political rule. In contrast with most writers who apply the governmentality approach, we argue that “governing through standards” was a political initiative of the period aimed mainly at solving the “problem” of non-competitive UK industry. Furthermore, the specific forms of inspectability, audit, and certification institutionalized in this process reflected a belief amongst its protagonists that such an initiative could only succeed if it was “owned” by industry itself. This meant

¹ Two main paradigms dominate the existing theoretical literature on standards, both of which originated in economics. The first, associated with the U.S. anti-trust tradition within industrial economics, interprets them as barriers proposed by firms or nations to raise costs of entry. In this perspective, their salience increases over time as other regulatory barriers are dismantled (Baldwin 1970; Otsuki, Wilson, and Sewadeh 2001). The main alternative paradigm has been to see them as public goods, that is, as means of overcoming information deficits and thereby stimulating demand (Akerlof 1970). This perspective also underlies the political economy approaches of Cronon (1991) and Daviron (2002), who trace the roles of standards in restructuring trade institutions: by creating futures markets, replacing commission agents with specialist commodity brokers, and providing market access to multitudes of anonymous small-scale producers.

² Neo-institutionalist approaches (e.g., Campbell and Pedersen 2001; Blyth 2002; Amable 2011; Chwiero 2010) have lately gained prominence in analysis of neoliberalism, whereas neo-Marxist or “Gramscian approaches (e.g., Harvey 2005; Overbeek 1993; and to some extent also Mirowski and Plehve 2009) seem to have become increasingly marginalized. Within the neo-institutionalist tradition, the diffusion literature (e.g., Simmons, Dobbin, and Garrett 2006; Chwiero 2007; Levi-Faur 2005) has perhaps taken center stage. This literature, however, deals less with the constitutive history of neoliberalism and more with how neoliberal ideas and principles, such as privatization, have gained global currency.

that its content had to be compatible with industry's spontaneous doctrine of managerial prerogative, and be modeled on standards that recognized this.

This perspective reflects our wider view that the histories of specific "governmental" technologies must recognize that the problems they come to be seen as, or later claim to be, addressing are not necessarily those that originally provoked their appearance. Moreover, we will argue that one can learn more about the nature of these technologies, and about the wider political rationalities they relate to, not by investing in them strategic functions that cannot be supported empirically, but rather by studying their differences from their contemporary, practical rivals or alternatives.

What follows consists of two main segments. Section II discusses governmentality approaches to neoliberalism and standards and points out some significant lacunae. Sections III–VI present a history of quality management and how it played out in the UK context of Thatcherite reforms. Finally, Section VII concludes the paper's theoretical and empirical contributions and considers the implications of our interpretations for understanding the history of Thatcherite neoliberalism.

II. GOVERNMENTALITY, NEOLIBERALISM, AND THE HISTORY OF TECHNOLOGIES

Foucault distinguished between rationalities or programs of government (normative discourses providing accounts of classes of persons, objects, and behaviors to be governed), and technologies of government (strategies, techniques, and procedures through which rationalities become operable). Liberalism's distinctive feature as a governmental rationality is that governing human behavior occurs "on behalf of society" rather than as simply an expression of sovereign power, and that it balances all substantive objectives against the defense of the autonomy of the individual and civil society. Thus liberal government always "suspects that [it] govern[s] too much" and always asks "why there has to be a government ... to what extent it can be done without and in which cases it is needless or harmless..." (1994: 74–75).

While Foucault's thoughts on liberal rationality were fairly consistent, his account of the history of liberalism did change during the 1970s. This occurred against the background of an ongoing conviction that unveiling the history of the effective dispersion of liberal government required a history not so much of its ideas but rather of the mundane techniques through which these ideas materialized, and thereby recalibrated the cognitive and material practices of modern Western subjectivity.

In *Discipline and Punish* (Foucault 1991), originally published in 1975, he explored in detail the history of the prison and what he at that point thought of as the dominant liberal technology of government: discipline. Disciplinary power in its essence involves analyzing, breaking down, and rearranging the population in order to "generate forces, making them grow and ordering

them...” (Foucault 1998: 136), thus minimizing the need for more extensive governmental intervention. “Generating forces” entails supervision, correction, and training. Expert knowledge of the population is mobilized and applied to increase human aptitudes, thus allowing “government at a distance,” a practice that characterized classical liberal formations as much as more recent ones.

We now know from recently published lectures Foucault gave at the Collège de France, *Security, Territory, Population* (2007), that by the late 1970s he became aware of a set of technologies distinct from those of discipline, which he thought even better characterized liberal government: technologies of security. Unlike discipline, technologies of security govern through rendering intelligible the empirical regularities of objects, for example by drawing on mathematical-scientific models of reality rather than legal or pedagogical ones. “So within the disciplinary space a complementary sphere of prescriptions and obligations is constituted that is all the more artificial and constraining as the nature of reality is tenacious and difficult to overcome. Finally security, unlike the law that works in the imaginary and discipline that works in a sphere complementary to reality, tries to work *within reality*, by getting the components of reality to work in relation to each other, thanks to a series of analyses and specific arrangements” (ibid.: 47, our emphasis).

What Foucault describes here is a new set of technologies that work through different mechanisms of normalization (or standardization) than do disciplinary ones. Disciplinary normalization works prescriptively to get the objects of government to conform to an “optimal model” of how things ought to be (ibid.: 57). By implication, the normal is not the state of current affairs, but rather something normatively to be obtained. By contrast, the logic of security starts from the normal—what is physically given here and now—and acts in “the interplay of reality with itself” in order to “bring the most unfavorable in line with the more favorable” (ibid.: 63). Security thus finds “support in the reality of the phenomenon, and instead of trying to prevent it, [makes] other elements of reality function in relation to it, in such a way that the phenomenon is cancelled out...” (ibid.: 59). Foucault gives prominence to the example of the statistical idea of a normal distribution and its influence on the governance of epidemics in populations.

This way of thinking and practicing government, Foucault argued, emerged through a strategic coupling of the framing of a generalized “problem of security” (involving, for instance, food scarcity and epidemics), with an increasing recognition of cognitive schemas invented by modern academic disciplines such as epidemiology, statistics, biology, and political economy. It is this new logic of security—and its relation to sovereignty and discipline—that Foucault sees as critical for the emergence of liberal government in the eighteenth and nineteenth centuries, and which he was later to term “governmentality.”

Foucault's terminology here can sometimes be confusing. But rather than seeking to distinguish precisely whether a given governmental technology is primarily one of security, discipline, or sovereignty, we want to demonstrate two other points: First, though Foucault's understanding of liberal technologies was sophisticated and complex, it was incomplete. Second, despite this incompleteness, contemporary students of neoliberal governmentality can still employ his approach to studying the history of technologies as a model. In his first three lectures at the Collège de France, when his main objective was still to write a history of liberal technologies, he contrasted such a history with narrower histories of techniques, and in the process sketched out a potential research program:

So, you could study the history of [the] cell technique (that is to say, [of] its shifts, [of] its utilisation), and you would see at what point the cell technique, cellular discipline, is employed in the common penal system, what conflicts it gives rise to, and how it receded... But there is another history, which would be the history of technologies, that is to say the much more general, but of course much more fuzzy history of the correlations and systems of the dominant feature which determine that ... a technology ... will be set up, taking up again and sometimes even multiplying juridical and disciplinary elements and redeploying them within its specific tactic (2007: 8–9).

The suggested object of this program of analysis was thus not particular technical devices,³ but rather the “dominant strategic function” (Foucault 1977: 63), or general “economy of power” (2007: 11), across a multiplicity of more or less distinct practices, forms of knowledge, institutions, and techniques. When he used this concept, Foucault was, as indicated, primarily concerned with the nature of technologies of security that he believed were at the core of modern government, and reconfigured the role of sovereignty and discipline by indicating the limits of their overall “economies of power.”

A second key feature of the analytic program concerns the methodology Foucault proposes for tracing the history of technologies: looking at the relationship between given historical problematizations and the shape they subsequently take. In other words, the emergence and proliferation of technologies are linked to “monumental” historical problematics, and for this reason they offer a vantage point for studying social change. Social change here is not conceived as “a series

³ In this part of the lectures, Foucault used interchangeably *dispositif* and *technology*, which has often been translated as apparatus or device in the Anglophone literature; the meaning however remains the same. Elsewhere, in an interview with the French psychoanalytic journal *Ornicar*, however, he provided a more distinct definition of the concept as a “heterogeneous ensemble consisting of discourses, institutions, architectural forms, regulatory decisions, laws, administrative measures, scientific statements, philosophical and moral propositions—in short the said as much as the unsaid” (1980: 194). This specific definition has influenced work by scholars such as Gilles Deleuze (1992), Giorgio Agamben (2009), and Michel Callon (e.g., Callon, Mollo, and Muniesa 2007), who have attracted much attention to its conceptual potential. Since the main purpose of this paper is historical revision and not conceptual discussion per se, we will not go further into these distinctions.

of successive elements, the appearance of new causing the earlier ones to disappear” (ibid.: 8). That is because although technologies evolve on an overarching level, this happens through a process of assemblage—a selection of concrete older elements and their combination with new ones. Such a perspective implicitly relates to a science and technology studies (STS) approach in its emphases on the distributed or networked nature of technologies, and on the role played by concrete actors, rather than solely by consistent rationalities, in their shaping and *translation* (Callon 1986; see also Berg 1997; 1998; Timmermans and Berg 1997; 2003; and Lampland and Star 2009).⁴ Yet while the STS approach tends to look at cases of translation in relation to concrete applications at the organizational level, translation may also be considered to take place at the constitutive level (be it global, regional, or national) where technologies are selected in specific social and organizational contexts, thus making their wider deployment likely. What is therefore at stake in a history of technology is not an analysis that captures the multiplicity of practices that technologies help to generate,⁵ but rather one that traces the monumental events and translations through which a technology’s more generalized proliferation occurs.⁶

Sadly, the program Foucault suggested never fully materialized, at least if measured against the ambition and level of empirical detail evident in *Discipline and Punish*. This is due in part to his move, in the course of the lectures, away “from the analytics of power to the ethics of the subject” (Sennelart in Foucault 2007: 369ff), and in part to the fact that he became more interested in the governmentalization of the modern state after his famous “governmentality lecture” (ibid.: 87ff).

The History of Neoliberalism

Returning to neoliberalism, it may be argued that Foucault and most authors within the governmentality literature distinguish it from liberal rule in terms of a modification in governmental rationality. Neoliberalism’s normative discourse and the use of new forms of expertise are said to prescribe the reconstruction of the state and the wider socio-political environment in terms of an image of the market. When Foucault himself turned to contemporary liberal government it was in the context of its intellectual history and in particular the ambitions of some neoliberal thinkers to radically expand the intellectual

⁴ Callon’s (1986) account of the translation process is heavily inspired by this conception of change—chains of translation start with a problematization voiced by a specific actor or group of actors.

⁵ A prominent example of such a study of “the multiplicity of practices” provoked by neoliberal reform processes is Andrea Mennicken’s (2010) paper on neoliberalism, inspection, and auditing in post-Soviet Russia. See also Elizabeth Dunn’s work, “Standards and Person-Making in East Central Europe” (2005).

⁶ Some Actor Network Theory scholars have also attempted this form of history writing, although often with a more microsociological foundation (e.g., Latour 1988).

application of economics (2008). In Foucault's account, less change is evident in terms of the governmental technologies applied, although some new ones emerge and existing ones become more or less important.

Foucault may have suggested this interpretation in his rudimentary account of neoliberalism, but it has been neo-Foucauldians, most notably Rose (1993; 1996; 1999), who have tried to formalize it and spell out what it has entailed. For Rose (1996: 50; 1999: 137; and see Dean 1999: 240ff.), two elements are crucial in explaining the rise of neoliberalism in the late 1970s and 1980s.⁷ First, intellectual criticisms of the welfare state arose from both ends of the political spectrum, although with different aims and arguments. These questioned the logic of a state apparatus divided into a series of separate bureaucratic structures with related expert specialties, each delivering distinct "substantive rationalities of rule," largely insulated from external control (1996: 52–54). Such an apparatus was said to be inefficient, expensive, and unaccountable.

This political criticism became effectively "governmental" when it was joined with a second element: technologies of marketization (Rose and Miller 1992; Rose 1993; 1996; 1999; Dean 1999; see also Larner 2000: 13). Not just the economy, but all areas of life were to be reconstituted in market terms. Expertise was deployed that facilitated a construction of markets in relation to public services, either through outsourcing of management and service tasks formerly performed publicly, or by transforming public agencies into quasi-commercial entities operating according to principles of financial profitability, price and quality competitiveness, and accountability.

The technologies of marketization put into play are said to have focused on governing through standardized performance measures, mobilizing the professional disciplines of auditing, accounting, and quality and risk management as fields of expertise. Their propagators translated these existing disciplines into new settings and generated standardized forms of calculation and monitoring that evaluated existing arrangements by invoking comparisons with idealized private firms (Rose 1996: 54; Dean 1999: 267; Rose, O'Malley, and Valverde 2006).⁸ One goal was to create new structures of competition ("markets") between public and private entities, and this was accomplished using standardized measurement and control systems. The highly mobile technology of auditing, in particular, proved an effective means of rendering complex locales and contexts manageable and comparable for government "at a distance." It did so by generating newly "responsibilized," calculative and result-oriented subjects and organizations, and by promoting "new distantiated relations of control

⁷ Rose prefers the term "advanced liberalism."

⁸ In many cases, the use of these technologies in the public sector, while justified by reference to the practices of private firms, was to run far ahead of their incidence in the private sector.

between political centers of decision and the ‘non-political’ procedures, devices and apparatuses” (Rose 1996: 55).

Similarly, in identifying the origins of “the audit explosion” and the rise of new public management doctrines and practices, Power (1997) points to the problematization of social welfare systems and the history of financial auditing. He argues that the assertion of a need for “fiscal restraint,” “ideological commitment to reduction of state service provision,” and the success of political discourses on improvement of accountability were all constitutive drivers of neoliberalism.⁹ Power also mentions “quality” as having been a major theme, but does not explore its historical constitution in any detail.

Within this literature, Higgins and Tamm Hallström (2007) are alone in sketching histories of national and international standards bodies, and quality management standards. They see quality management standards (and certification mechanisms) as having emerged at the end of the 1970s. These appear, they say, through a “culturalist” amalgamation-cum-transformation of both “mainstream management discourses” about optimal organizational controls and “hard engineering” quality control practices linked to inspection of military hardware using statistical techniques. They depict this as having occurred initially “in response to Japanese inroads into the markets of major western consumer durable industries” (ibid.: 694). Later, they say, it responded to a need to achieve arm’s-length coordination of international out-sourcing. They provide little detail to substantiate these arguments.

While these analyses of neoliberal governmentality impressively combine theoretical sophistication and historical references, they leave unanswered several questions. The most important concerns the histories of the principal governmental technologies through which neoliberalism materialized. Despite Foucault’s (2007: 8–9) injunction that these should form the basis of a research program, this has been done only patchily. Even Power’s (1997; 2007) writings on audit and risk management technologies are mainly surveys of applications rather than histories. This can lead analysts to confuse the problematizations that technologies were originally designed to address and those (such as welfare criticism) to which they later became attached (see Rose, O’Malley, and Valverde 2006).

Even though technologies of standardization and auditing predate the intellectual discourses of welfare criticism, no one has yet analyzed their constitution—the contexts from which they emerged, their subsequent proliferation, and their entanglement with neoliberal political programs. This is not to say that “governing through quality standards” is the single most important technology of neoliberalism. But it certainly came to occupy a key role, and it defined the specific ways in which neoliberalism unfolded in the UK

⁹ Elsewhere, Power includes growing distrust in technocratic orders and a generalized public consciousness of human-made risk (1994: 16).

context—a point that becomes clear when one follows the politico-technical origins of neoliberalism, and not solely its intellectual ones.

A parallel question concerns the relation between the neoliberal rationality of government, as depicted in the governmentality literature, and neoliberal political programs. In the United Kingdom, at least, besides remaking the social sector, these programs included freeing capital from political controls in the markets for labor and for goods, one example being the abolition of policies on prices and incomes. They also included reducing public expenditure through channels other than the introduction of markets, such as by rationalizing public functions or freezing recruitment of public employees. These programs were complementary and may have had important implications for how “marketization” itself played out when it came to the fore. To what extent might they also have shaped the ways in which the technologies then associated with marketization traveled and became implemented?

In the rest of the paper we rectify some of the shortcomings just raised, through four historical sections. Section III introduces the content of the first Thatcher government’s initiative on standards, outlined in a White Paper of 1982 and implemented through a series of measures listed and examined in detail in a 1990 National Audit Office report. This understudied initiative, we argue, is critical for understanding how “governing through standards” became such an “effective” strategy by which change of control and power structures in public and private institutions could be achieved. We start here because this is the point in history where governmentality scholars assume that neoliberal rationality (which prevailed already in the 1970s in the form of welfare criticism) amalgamated with the “marketization” technologies that diffused it into everyday reality. However, the politics concerning this constitutive amalgamation have never been critically interrogated.

Sections IV, V, and VI successively trace three specific circumstances that formed the background to the initiative and determined its form and content. The first was the redefinition of the long-standing problematization of British industrial performance in terms of deficits in quality and standards. This began in the late 1960s but became widespread in the second half of the 1970s. The second was a redefinition of military quality standards—the only systematic standards of industrial quality available at the time—in a way that allowed private contractors to define how they would be implemented. This dates from the “translation” of a new generation of U.S. military standards by the UK Ministry of Defence in the early 1970s. The third circumstance was the public authorization of a voluntary body, the British Standards Institute, rather than a widely advocated statutory one, as the focal point for propagating auditable and certifiable quality standards within the wider economy. Though this occurred in 1980, it followed intergovernmental struggles that began in the mid-1970s. These supplied, respectively, the problematization underlying “governing through standards,” the technology (including its

privileged role for private power) that came to define it, and the initial medium (again privileging private power) through which it was diffused.

III. THE THATCHER GOVERNMENT INITIATIVE ON STANDARDS

In July 1982, the UK Department of Trade published a White Paper on *Standards, Quality and International Competitiveness* (UK Government 1982). Its content was almost identical to a report submitted by the Central Policy Review Staff more than two years earlier, and to a Cabinet Office report of a few weeks before (UK Cabinet Office 1982). An intervention in this area had been in the making since 1977–1978, when the government's Inter-Departmental Committee on Quality Assurance and Standards sought to combine into a single strategy document proposals on several distinct, previously unrelated issues concerning standards and quality.

The White Paper reflected one of two narratives on issues of quality and standards that formed the sides of a more or less explicit debate, and related political maneuvers, amongst UK government officials and their external allies between 1977 and 1981. This debate and these maneuvers will be traced later. Its wider context was the industrial policy preoccupations and preferences of incoming Conservative ministers, most of which were widely shared across the political spectrum.

The shared concerns, dating back at least to the 1960s, were that the United Kingdom was in industrial decline, and that this reflected deficits in productivity, price, and non-price competitiveness. Also shared was the idea that solutions might include supporting UK firms to carry out more and better research and development, and facilitating their access to “modern” technologies, management methods, and producer services. The more specifically Thatcherite preference reflected in the White Paper was that public support to industry be organized through “horizontal” forms that targeted all firms, rather than through selective or strategic support distributed according to firm size or location.¹⁰

The White Paper's main argument was that British industry's efficiency and international competitiveness would be strengthened if standards and quality assurance (QA) occupied a more central role in British economic life. Success in world markets depended on non-price as well as price factors and, it was argued, “quality is often the first consideration in purchasing decisions” (UK Government 1982: 2). Recognized standards that reflected the requirements of world markets could “help firms design, make and sell products with the quality features that the customer wants and using sound and

¹⁰ The Thatcher government defined its industrial policy, at least rhetorically, in opposition to the promotion of “national champions,” which was seen to distort markets and suppress competition. It was said that industrial support, if undertaken at all, should only take the form of providing all firms with the same level of resources. During the 1980s, out of political expediency, large selective commitments were nonetheless made to a handful of large-scale firms, albeit after some agonizing. For an introduction to theories of selective versus horizontal industrial support, see Cimoli et al. 2006.

up-to-date technologies. Consistent compliance with these ... can be ensured through the use of QA systems” (ibid.). Industrial efficiency would be further promoted by using QA standards to reduce both the multiplicity of procurement specifications that were said to abound and production waste (defective parts, rejects). The main policy proposed by the White Paper was therefore more widespread adoption of standards, particularly QA standards, and their referencing by purchasing managers. Amongst QA standards, British Standard (henceforth BS) 5750 was cited as paradigmatic (ibid.: 12–13).

Three further themes of the White Paper were the desirability of referencing product and QA standards in government purchasing decisions and in legislation; the related need to overhaul many BSs, “so that they are sufficiently clear and specific for regulatory use”; and promoting BSs internationally so that they might “hold sway in world markets” (ibid.: 3). It was further proposed that cooperation between government and the British Standards Institution (BSI) be strengthened, including by increased funding to the BSI; that product and QA certification schemes be promoted sectorally, with unified arrangements for accreditation; and that the government publish a centralized list of BS 5750-approved firms. A Memorandum of Understanding between the government and the BSI was appended, under which the BSI was charged with reforming UK standards-making “in ways which will strengthen its contribution to industrial and trade policy goals [by] ... including suitability for regulatory purposes, purchasing contracts, certification and QA procedures in their design and updating” (ibid.: 4).

In the years that followed, the UK government set up a consultancy service to assist firms to achieve conformity with BS 5750. It provided financial support to firms covering up to 25 percent of the costs of conformity with BS 5750, to sector organizations to introduce voluntary QA certification schemes, and to several certification bodies. It also established a government agency to accredit certification bodies and hired consultants to integrate references to standards into public purchasing. The government spent a total of £68 million under these headings between 1982 and 1989 (National Audit Office 1990). In all, 6,227 firms were certified to BS 5750 by 1986 (compared with 270 in 1982), and by that year most government departments with large purchasing budgets and most large state-owned enterprises had contract qualification clauses that required firms to be certified. References to BSs in UK government regulations increased from 300 to 450 between 1980 and 1988. Finally, with government encouragement, the BSI in 1987 persuaded the International Organization for Standardisation (ISO) to recognize BS 5750 as the first international QA standard—ISO 9000 (National Audit Office 1990).

IV. THE CONSTITUTION OF A BRITISH “QUALITY-STANDARDS PROBLEM” AS A CENTRAL ECONOMIC POLICY CONCERN, 1963–1980

As Tomlinson (1990; 2001), Pemberton (2004), and others argue, from at least the middle of the twentieth century a wide swathe of British intellectuals,

politicians, and government officials shared the view that the UK economy was experiencing secular decline. Perceptions of its main dimensions and causes differed between periods and between political-intellectual groupings, but decline itself remained a fundamental concern for UK economic policy makers until the new millennium.

In the period from the early 1960s to the end of the 1970s, during which Labour governments were in power for all but four years, two main views circulated about the causes of decline. The first, identified with the left of the Labour party, saw the main cause to be industrial under-investment, which was ascribed to the supposedly dominant role of the financial sector (“the City”) in the UK economy. This line of analysis was linked to policy prescriptions—widespread internationally at the time—for large-scale, state-led and financed industrial reorganization, organized through institutions such as the National Enterprise Board (see Pollard 1962).

The second view located the causes in Britain’s insularity, and was identified with the rest of the Labour party, elements of the other main parties, sections of the civil service, and critical voices within industry itself. A variety of phenomena were said to demonstrate this, including the low status accorded to engineers and their technical qualifications, outdated industrial product designs, obsolete or backward technologies, low levels of corporate research and development, the low salience of standards, export over-dependence on sheltered (ex-)colonial markets, and the toleration of “restrictive practices”¹¹ by trade unions (see Snow 1959; Shanks 1961; and Sampson 1962; and for a Marxist version of the argument, Nairn 1964).

This second view was linked to more piecemeal policy prescriptions, which were often ventilated in the National Economic Development Commission (NEDC) or by its secretariat, the National Economic Development Office (NEDO), both set up under the Conservatives in 1961. They were intended to provide a forum for business associations, unions, ministers, and a few independent experts to formulate policies aimed at increasing UK economic growth (Ringe and Rollings 2000). In 1974–1975, the NEDC was reorganized by the establishment of thirty-nine Sector Working Parties. These were mandated to set sectoral objectives in terms of foreign trade productivity, employment, and performance (e.g., reduction of import penetration); to identify obstacles to reaching those objectives; and to propose policies to overcome them. The government promised sectoral assistance schemes for targets and policies the parties could agree upon.¹² In practice, reaching agreement usually involved avoiding sensitive questions, such as rationalization of output, and focusing instead on areas where conflict was likely to be minimal and improvements

¹¹ That is, resisting change to plant-level divisions of labor and pay structures.

¹² Fourteen sectoral assistance schemes were established between 1974 and 1980 (Grant 1982; Sawyer 1991).

might follow from analysis and enhanced information (Grant 1982: 62–63). This observation applied equally to the NEDC itself. It was in this context that a somewhat incoherent and internally contradictory narrative emerged in the 1970s, embracing a problematization of UK quality and standards, and their absence.

Just as with analyses of British decline, interpretations of decline in terms of the “quality-standards problem” fell into two schools. The first, identified with the “standards” component of this narrative, argued that the problem was not intrinsic quality problems, but rather that British industry was unaware of the importance of adequately representing and promoting quality attributes. This school asserted that this could and should be remedied by certification to standards.

This view was initially articulated by a number of industry figures who volunteered to participate in a succession of public consultations and enquiries on “the quality-standards problem.” Even after other actors took up this component of the narrative, these figures continued to be mobilized at key moments to legitimate the approach: Sir Eric Mensforth of the Sheffield-based defense contractor John Brown & Co.; G.B.R. Fielden of Davy-Ashmore Ltd. (specialist contract engineers, also based in Sheffield); Sir Frederick Warner, a consulting chemical engineer; Sir Monty Finniston of British Steel Corporation; Ken Peplow, director of the British Industrial Fasteners Federation; and George Ward and S. Dickenson of the Oil Companies Materials Association. All were trained as engineers and occupied leading roles in professional associations and in engineering education. Fielden, Warner, and Dickenson were active in the BSI as officers, executives, or both. While these men diverged on wider political issues¹³ and certain practical questions, all argued for policies to promote the use of British standards domestically and internationally.

This “standards” component of the narrative was first aired in 1968, when the then Department of Trade and Industry commissioned an enquiry with terms of reference “to consider and make proposals for the surveillance of quality control, inspection, testing and certification of engineering products to declared standards ... directed at improving industrial efficiency and taking particular account of the export market” (Hansard 1968). This enquiry, henceforth known as the Mensforth Committee, was co-sponsored by government and the main UK industry organization, the Confederation of British Industry (CBI). It emphasized the urgency of its subject matter through repeated claims of increases in international legislation requiring assurance that health, safety, and environmental standards would be followed.

¹³ Mensforth was active in conservative business associations in Sheffield, and served as “Master Cutler,” the ceremonial head of the organization grouping employers in the steel, engineering, and cutlery trades (<http://www.thelet.org/about/libarc/archives/biographies/mensforth.cfm> [accessed 27 Apr. 2010]), while Warner had a lengthy engagement in left-wing politics and worked in the Soviet Union (<http://www.archiveshub.ac.uk/news/0609warner.html> [accessed 10 Nov. 2009]).

Outsiders to industry articulated the other, “quality” component of this narrative. In a key contribution, Stout (1977)—referring to four official reports dating from 1963 onward that bemoaned the quality of British products—asked why UK trade performance had not responded to classic interventions in the macro-economy, particularly the devaluations of 1967, 1972–1973, and 1975–1976. Stout’s argument was that the UK industry was trapped in low-value exporting, particularly within engineering. He supported this with a demonstration that unit values of West German (and in most cases French) exports in thirty-five categories of manufactured products were systematically higher than UK ones. Comparable import data showed further, “The UK is an importer of goods with a better bundle of characteristics than the goods it exports.” Hence there existed limits to demand for UK products regardless of their price competitiveness (*ibid.*: 13).

When Stout’s report was published he was NEDO’s chief economist, yet its influence was felt more in the Inter-Departmental Committee on Quality Assurance and Standards. This committee was established in 1971 to coordinate government policy on quality, QA, and standards, and on it sat officials from the main government departments interacting with UK industry either in procurement or sponsorship roles: the Department of Industry, the Board of Trade, the Ministry of Defence (MoD), and the Department of Health and Social Security. The immediate background to the committee’s creation was the incoming Heath government’s pursuit of British membership of the European Economic Community (EEC, later the European Union), implemented finally in 1973, and a recognition that amongst its implications was a need to address the relation between British national standards and standards under development in regional bodies working within the EEC framework such as the European Committee for Standardization.¹⁴ The Inter-Departmental Committee’s secretary and the author of most of its papers was Stephen Frankiss, an official in the Department of Prices and Consumer Affairs.¹⁵

While the Mensforth Committee was mainly concerned with how best to promulgate use of standards, one of its other concerns had been to secure consistency in how firm-level certification to standards took place. In this connection, it had proposed wider use of third-party certification on the basis of a common QA standard. It also recommended establishment of a central authority to advise on the content of QA standards and accredit certification bodies, which it provisionally titled the “British Quality Board.” This latter

¹⁴ The committee was established in 1961 and was from an early stage the body recognized by the European Economic Community and its forerunners for setting regional standards.

¹⁵ National Archives FV 9/14. Subsequent references to files in the UK National Archives give only the file number and numbers of papers within the given file. See a list of the documents at the beginning of our references. Frankiss later moved to the Department of Transport, where he was conferred with membership of the Order of the British Empire.

proposal did not appear in Mensforth's final report due to opposition from the CBI (UK Government 1971a). The reasons for this will be discussed presently.

In 1977–1978, the Inter-Departmental Committee revived the proposal for a British Quality Board, after it was asked to implement the recommendations of a new report submitted to the NEDC on “Standards and Specifications in the Engineering Industry,” by Sir Frederick Warner.¹⁶ Warner's report was in fact silent on the need for a statutory board, but the committee nevertheless gave it pride of place in its first three drafts of a White Paper on quality policy.¹⁷ These drafts claimed (without providing sources) that costs of UK industry's “quality failure” were extremely high—£10 billion per year, or almost 7 percent of total industrial output. Having underscored the seriousness of the problem, they went on to propose that it be addressed via a major initiative covering domestic quality promotion and wide-ranging supplier assessment. Elaboration, implementation, coordination, and monitoring of this initiative should, they said, be undertaken by an institutionalized “national focus for quality assurance” in the form of a statutory British Quality Board, and they provided a draft constitution and outline budget. Warner's own principal proposals were incorporated within this grander scheme: to more extensively reference standards in UK legislation; to establish a common list of firms whose quality systems had been approved by government departments, thus reducing the need for multiple assessments by procurement agencies; and to participate more actively in the writing of European product standards in the European Committee for Standardization and a sister organization, CENELEC.¹⁸

By 1978, then, distinct components of a narrative on the “British quality problem and how to resolve it” could be identified within industry and government. The main vehicle for the standards component of this narrative was what Murphy and Yates (2011) call “a social movement of engineers.” The main vehicle for the “quality deficit” component was the Inter-Departmental Committee, although this borrowed selectively from other sources including the work of Stout that originated in the NEDO.

A curious aspect of this train of events was that few or none of its participants sought to promulgate or gain agreement for a clear understanding of what quality or QA consisted in. Stout's recapitulation of earlier UK reports shows them defining quality variously as referring to design appeal, technical efficiency, product defect rates, and technological advancement. All parties to the discussion tolerated this ambiguity, and the implicit inflation of claims that it was associated with, since both bolstered their own arguments. At the

¹⁶ *Ibid.*

¹⁷ IQS(78)7; IQS(78)14; and “A National Strategy for Quality: Consultative Document” (Nov. 1978), all in FV 9/14.

¹⁸ In 1972–1973, CENELEC was established to set regional electro-technical standards, with the European Economic Community's recognition.

same time, the ambiguity led to the unchallenged de facto domination of *practice* around quality by whoever could demonstrate recognition of their claims to exemplify quality (or expertise in it) by bodies that were regarded as authoritative by the “social movement of engineers” who figure-headed discussion of the issue.

The “whoever” fell into three categories: The first were large UK engineering firms that had become approved MoD suppliers on the basis of having provided auditable plans for describing their arrangements for managing quality. The second were individual managers or consultants who wrote and/or implemented these plans. The third were institutions that established a role for themselves in verifying these plans. We turn now to how this constellation of parties evolved.

V. FROM QUALITY STANDARDS FOR MILITARY EQUIPMENT TO A GENERALIZED STANDARD FOR CORPORATE ORGANIZATION¹⁹

From Standardized Inspection to Quality Programs, 1940–1964

While standardization of military equipment dates from the mid-nineteenth century (Hounshell 1984), efforts to standardize procedures for verifying the conformity of military equipment to specification started only around 1940. This occurred with the conversion of large segments of civil production to mass production of machinery for warfare. Promulgation and enforcement of standardized procedures for physical inspection of output originated in the United States at this time, and was copied in the United Kingdom. These standards involved the military and contractors agreeing upon an “Acceptable Quality Level” in terms of a percentage of predefined defects in lots of given sizes. End-of-line inspection with measuring instruments such as gauges was then performed for lots or batches according to laid-down sampling plans, and lots with defect levels exceeding “acceptable levels” were rejected. Where production runs were long, requirements were usually also made for application of “statistical control,” using time-series data and probability assumptions to interpret results from inspected samples (Rees 1980; Klein 2000).²⁰ Initially, most inspectors working in civil plants in both countries were employed by the military rather than the contractors, and reported to a chief resident government inspector.

From the second half of the 1950s, U.S. military standards for the quality of equipment changed in three important ways. First, their breadth of coverage was expanded from physical production to include design and development of

¹⁹ This section summarizes a more detailed description presented in Gibbon and Henriksen 2011.

²⁰ See U.S. War Standard Z1.1-3 (1941); and later MIL-STD-105D, “Inspection by Attributes.” For the source of this and other U.S. and NASA standards see the note on Standards in the References.

military hardware. Standards for design and development were applied most frequently to electronic components or assemblies, whose defects could not be detected using inspection or conventional measuring devices. Later in the 1950s, U.S. military quality standards were extended to cover the full product cycle from design to delivery, so that rules were laid down governing product development, purchasing including the assurance of the quality of suppliers' output, fabrication, processing, maintenance, packaging, storage, and installation. Larger contractors had to develop, implement, and document plans that would demonstrate an "unbroken chain of control" for each contract.²¹

A second change in this period was that U.S. military standards also became more prescriptive. For certain of the new stages covered (notably, design and development) there was a shift from negotiated to fixed levels of tolerated component failure.²² Rules for design included following a prescribed methodology for quantitative estimation of component reliability. Rules for the relation between inspection staff and other employees were also elaborated. Henceforth, to prevent conflicts of interest, a firewall was required between production workers and managers, and between inspection staff and managers.

Finally, methods for assessing quality became more exacting. Rather than resident government inspectors conducting on-the-spot assessment of whether or not corporate controls were adequate, larger contractors became subject to comprehensive external audits designed to assess the overall integrity of a firm's control procedures.

Adaptation and Dilution in the United Kingdom, 1965–1980

The United Kingdom followed the United States in modifying its military standards architecture to cover the broader product cycle, including design and development, and to verify the quality performance of larger contractors through external audits of corporate quality plans.²³ Although this required less frequent auditing,²⁴ it was to place greater weight on external audits than was the case in the United States. On the other hand, it did not follow the United States very far along the track of greater prescription, nor was its interpretation of the "product cycle" quite so demanding. Finally, the UK military was to be more flexible on the content of corporate Quality Programs.

Chronologically, the first of these differences between U.S. and UK standards emerged in relation to standards for design and development of electronic

²¹ See MIL-Q-9858 (1959); MIL-STD-9858A (1963); and NASA 2002-2 (1962).

²² See MIL-STD-790 (1964). For contemporary accounts of "Failure Modes and Effects Analysis" and "Reliability" standards, see also Coutinho 1964; Blanks 1973; and Coppola 1984.

²³ DEF standards 05-21 to 05-32 (1972–1973), in DEFE 72/8.

²⁴ Rather than contract-by-contract audits, the UK military required a single plant audit, which was valid for all contracts performed at the plant over a two-year period. See G. Bentley, presentation to Defence Quality Assurance Board (DQAB) 1975 Annual Conference, DEFE 72/87.

components, where from 1965 the United Kingdom issued its own joint military-civilian standard.²⁵ This standard replaced U.S. requirements that designs be continuously revised until a specified reliability “score” could be mathematically demonstrated with one to simply keep records of the results of a prescribed series of physical tests.

When UK Quality Program standards were issued in the early 1970s, these omitted requirements to assure the quality systems of sub-contractors, in favor of a greater emphasis on acceptance inspection of incoming parts.²⁶ There were also fewer requirements for record keeping than in the U.S. standards, apart from those related to demonstrating the reliability of electronic components.²⁷ In terms of content, there was no obligation to demonstrate a firewall between inspection and production. Inspectors were allowed to report to heads of production as well as to a resident government inspector, and in some cases firm programs were approved in which there was no provision for dedicated inspection staff (i.e., production workers were to perform their own inspections).²⁸ Finally, from 1980, resident government inspectors were withdrawn completely from most large UK contractors.²⁹

When, in 1979, the BSI published UK military quality standards as the civilian BS 5750 standard, its wording was much the same as U.S. standards, but the context was radically different: there was an unwritten understanding that UK firms were free to interpret the standard as they pleased, so long as they could supply an auditable and reasonably coherent plan of internal controls.

Drivers of Escalation and Dilution

The main impetus behind the changes in the focus of quality standards for military equipment—from mainly post-production, sample-based inspection to contractor responsibility for programs reflecting the broader product cycle—is usually said to have been the emergence of more complex weapons and “weapons systems” in both the United States and Europe in the 1950s (Lamprecht 2000; Sapolsky 1972). However, although both militaries at that time began to use the term “weapons systems” and derive prescriptions from it (see Kast and Rosenzweig 1962; UK Government 1955), inspection-related standards remained key in the United Kingdom for between one and two decades after that. A more proximate and possibly complementary cause of

²⁵ BS 9000 (1965).

²⁶ Presentation by G. Bentley to Defence Quality Assurance Board (DQAB) 1975 Annual Conference, DEFE 72/87.

²⁷ H. Drew, “Quality Requirements for Defence Procurement” (May 1971), DQAB/P (71) 14, in DEFE 72/9.

²⁸ See *ibid.*; and A. Bowling, “Quality in the Market Place,” 1973 DQAB Annual Conference, DEFE 72/85.

²⁹ “Review of the Work of the QA Directorates” (1979–1980), in AIR 20/12692.

the transition in both cases was escalating costs of inspection and efforts to reduce them by transferring more responsibilities to contractors. This is particularly clear in the United Kingdom, where in 1967 the government employed no fewer than 21,700 military inspectors at an annual cost of around £25 million.³⁰

The sharp reduction in size of U.S. government inspectorates took place in the early 1950s in the context of the U.S. Defense Department's use of "cost plus fixed fee" contracts, which allowed inspectors to be absorbed almost invisibly on contractors' payrolls. In the United Kingdom, however, the late-1960s reduction coincided with the MoD's adoption of "incentive contracts," in which contractors were rewarded for cost reductions with higher margins. Also at this time there was widespread acceptance of the idea that industrial productivity in Britain was lower than in competing countries and that this was partly the result of allegedly large numbers of non-productive workers, or "indirects," on UK industrial payrolls (see Nicholls 1986). UK contractors strongly resisted absorbing former government inspectors.

In the United States, elaboration and escalation of standards also occurred against a background of essentially arm's-length relations between the military and its leading contractors. There was political pressure to spread contracts between geographical areas and suppliers of different sizes, and much of the military propounded a so-called "arsenal concept," under which responsibilities for design, development, project management, and even "system integration" were retained in-house (Kast and Rozenzweig 1962: 62, 102–4).

In the United Kingdom, by contrast, there were well-established traditions, especially in respect of aircraft and army equipment, for large contractors to be responsible for all of the above functions while the military's role was confined to writing specifications, letting contracts, and overseeing quality control arrangements. Further, the UK military was almost certainly dependent on a smaller number of large contractors than was the United States military. Smith (1990) observes that in 1980 there was only one UK producer each for several strategic types of equipment including airframes, missiles, ordnance and small arms, tanks, torpedoes, large aero and marine turbine engines, nuclear propulsion units, and helicopters. Six years later, even after the Thatcher government adopted more competitive tendering for contracts, five companies alone accounted for almost half of UK military procurement expenditures.

Beginning in 1970, relations between the MoD and UK civil industry were formalized in terms of "a concept of partnership" (UK Government 1971b: 22). Throughout the decade this concept lay at the heart of how the MoD implemented and monitored its version of Quality Program requirements. The chief executive of the MoD body set up for this purpose, the UK

³⁰ "Defence Dept. Review of Equipment Inspection Policy" (Raby Committee), 1967–1969, T225/4792.

Defence Quality Assurance Board, presented a paper to its first meeting which argued that if contractors rather than the MoD were to be responsible for quality, then “quality requirements will have to rest on mutual agreement between purchaser and supplier.”³¹

The Board made provisions for the formal expression of UK contractors’ views on standards and, in practice, conceded to virtually all of their demands for a revision to U.S. standards. In this they were consistently backed by successive UK governments, often against the advice of the MoD and the UK military itself.³² Thus, while the U.S. quality standards were disseminated in the UK military world through a process of successful “responsibilization” of civil industry (which enabled its “government at a distance” and brought substantial short-term savings for both the government and contractors), the process replaced one rather novel standards regime with another that was equally novel and, as it turned out, more durable. Between the 1940s and the mid-1960s in the United States, military standards were amended to cover the entire product cycle, in uniformly prescriptive detail, verified through multiple forms of external surveillance (i.e., out-stationed inspectors and independent auditors). Relative to other standards regimes, the greatest novelty of this one lay in its breadth of coverage³³ and double layer of external surveillance. By contrast, from the mid-1960s to 1980 in the United Kingdom less of the product cycle was covered, in less detail, and the double layer of external verification was replaced by a single one aimed at verifying, not a prescribed system of controls, but rather a plan devised by contractors for implementing a control system that they themselves designed. A regime of external escalation gave way to one mediated by corporate and managerial prerogative.

VI. THE RISE OF THE BRITISH STANDARDS INSTITUTION AND BRITISH STANDARD 5750

Industry Stances on the “Quality-Standards Problem”

As noted earlier, British industry withdrew its support for the 1971 Mensforth report after it proposed a British Quality Board. This followed pressure from some of the CBI’s constituent trade associations, including The Society of Motor Manufacturers, which otherwise was a leading proponent of greater use of standards.³⁴ The CBI’s argument was that such a board would likely

³¹ H. Drew in DQAB/P (70)6, 28 Sept. 1970, in DEFE 72/8.

³² See, in particular, the hostile responses of all branches of the military to the withdrawal of Resident Government Inspectors from large contractors in 1980, in AIR 20/12692.

³³ German national standards for electrical equipment had already, in the 1930s, covered some aspects of design as well as product conformity, although they were less detailed than U.S. military standards were to become, and did not cover other stages of the product cycle (International Electrotechnical Commission n.d.).

³⁴ The Society was one of the main voices in BSI in the early 1970s for the writing of civil QA standards.

be “dictatorial or monolithic and ... government dominated” (UK Government 1971a: 33). This reflected a long-standing hostility to public intervention on the part of UK manufacturing industry, except where it was directed at restricting imports or rescuing bankrupt firms.

After the proposal for a British Quality Board was revived in 1978 in the Inter-Departmental Committee’s draft “Strategy for Quality,” the same reservations resurfaced. When fifteen hundred copies were distributed to individual firms, trade associations, and other organizations with invitations to comment, only between fifty and sixty responded favorably.³⁵ A much larger number specifically opposed such a board. Trade associations were again “notably hostile to the suggestion ... which was seen as potentially interventionist and subject to political interference...”³⁶

In some quarters a second and more fundamental reservation regarding the “quality” component of narratives on the “quality-standards problem” was that *any* concerted campaign on quality, even if directed through private organizations such as the BSI, the CBI, or individual trade associations, implied an admission that British manufactures were of inferior quality. This would “damage exports and heighten internal criticism” of British industry.³⁷ That line of argument was reiterated by trade associations in another public consultation, in late 1979, for a NEDC-sponsored QA scheme in the instrumentation sector, which we address below.³⁸

While prominent individuals and firms within industry supported wider use of third-party-certified QA standards in the 1970s, others strongly opposed it. They raised two main objections. The first concerned costs; when second-party auditing of manufacturing firms was undertaken by the MoD, state-owned enterprises, or private firms, the procuring organization carried out the assessment at its own expense. From the second half of the 1970s on, third-party certification was advocated on the grounds that it would reduce the downtime caused by multiple assessments. But, as these firms pointed out, third-party certification implied that the audited firm would pay the costs itself.³⁹

A second criticism concerned relevance. In the instrumentation sector, when NEDO officials proposed a QA scheme, some users observed that a *product* certification scheme would make more sense. The officials described

³⁵ “Progress Report on the Consultation,” IQS(79)13, July 1979, in FV 9/16.

³⁶ “Analysis of Replies to Consultation,” IQS(79)21, 15 Oct. 1979, in FV 9/17.

³⁷ *Ibid.*

³⁸ The responses are in FG 5/89.

³⁹ At the beginning of the 1980s, for certification to a QA standard, these costs were being estimated at around £2,000–4,000 per annum (see EDC/ELEC(80)AUTOQA 21, 12 Nov. 1980, in FG 5/89). Some large firms, including Marconi, argued that proponents of third-party certification exaggerated the extent of the problem of “multiple assessments” (see comments during the NEDC Sector Working Party public consultation, in FG 5/89).

this reaction as “defensive and negative,” and failed to consider the argument that manufacturers in the sector had been required by the MoD to produce with an eye to the inspection system rather than to Quality Program requirements.⁴⁰

The Inter-Departmental Committee, the National Economic Development Office, and the British Standards Institution

The Inter-Departmental Committee on Quality Assurance and Standards, rather than the NEDO, was charged with following up Fred Warner’s first report on standards to the NEDC in 1977. The NEDO did not become involved in the process again until early 1979. This followed comments from the CBI during the committee’s public consultation on its draft “Strategy for Quality” to the effect that rather than establishing a British Quality Board, “policy in this field should ... make full use of existing organizations and take account of different sectoral requirements, with separate sectoral approvals schemes if necessary.”⁴¹ The NEDC Sector Working Parties were considered obvious “existing organizations” where “sectoral requirements” might be taken into account in distinct QA-approved supplier schemes.

Within a few weeks of these comments, NEDO staff identified the Automation and Instrumentation Sector Working Party as a likely forum for pioneering a sectoral standards scheme. This was because in 1974 such a scheme had been discussed at length in that sector and almost agreed upon. The NEDO launched an Automation and Instrumentation Sector QA sub-group, consisting mainly of QA managers from very large “user” companies. Instrument manufacturers’ trade associations were invited to attend, but their involvement proved intermittent and passive. NEDO officials prepared a draft scheme that referenced the recently published BS 5750 and provided for a three-grade system for rating manufacturers, described a governance structure, and included provisional costings. Warner was mobilized to introduce the scheme at a public consultation meeting held at the NEDO in November 1979, and he made the same arguments as he had in addressing the NEDC in 1977.⁴²

The consultation found little support for the scheme. The main manufacturers’ trade association said they would only implement it if auditing costs were shared by the users, and if all the big users formally committed in advance to contract exclusively with approved firms. They also objected strongly to the idea of a three-grade rating system. The users, initially enthusiastic, now refused to be bound to contracting only approved manufacturers.⁴³

At the same time, in January 1980, the British Standards Institution wrote to the NEDO requesting a “top level meeting” to discuss the possibility of

⁴⁰ See Lacey to Homan, 23 Sept. 1980, in FG 5/89.

⁴¹ “Analysis of Replies to Consultation,” IQS(79)21, 15 Oct. 1979, in FV 9/17.

⁴² FG 5/89.

⁴³ Ibid.

taking over the running of this and any further sectoral schemes.⁴⁴ After years of silence, the BSI early in 1978 had started to actively profile itself in relation to the “quality-standards problem” by re-designating its “Marks” committee as a QA Council. It had invited the CBI, the British Retail Consortium, the MoD, the Electrical Engineering Users Association, all large state-owned industrial enterprises, and the Departments of Industry and Trade to send representatives.⁴⁵ Then, in 1979, it issued BS 5750 as a QA standard. This replaced BS 5179 of 1974, which had duplicated MoD QA standards word for word, except that it was titled a “Guide” rather than a “Standard.” This change was forced on the BSI by some trade associations who argued that BS 5179 could not be considered a civilian standard because its language assumed written specifications and procurement agency-contractor relations, and referred throughout to “Resident Inspectors.” BS 5750 differed mainly in removing these references in favor of terms such as “management,” “evaluator,” and the like.⁴⁶

Warner gave another speech to the NEDC in April 1980 in response to a request to review what progress had been made in implementing his 1977 proposals. He referred to the BSI as the “existing organization” best fitted to take the lead in solving the “quality standards problem” because of its expertise in standards and its impartiality between government and industry. Furthermore, he said, BS 5750 was a state-of-the-art QA standard that could form the basis of all future schemes of supplier assessment. Warner went on to call for the BSI to be granted greater government funding and responsibility and for “a programme to encourage manufacturers to adopt soundly based quality systems on the basis of BS 5750, to encourage public procurement agencies to adopt the standard [in] their own assessments, and to develop further structures to coordinate them.”⁴⁷ He also recommended the NEDC (rather than the Inter-Departmental Committee) as the most suitable institution through which government could monitor progress in the area, since it “brought together all the largest buyers and suppliers.”⁴⁸ Finally, he called for responsibility for the BSI within government to be transferred from the Department of Trade to the Department of Industry.⁴⁹

The Inter-Departmental Committee fought rearguard actions against its displacement by seeking to undermine the BSI, BS 5750, and NEDO. Starting in 1977, its documents complained of the imprecise, undemanding, and

⁴⁴ Gaddes to NEDO, 10 Jan. 1980, in FG 5/89.

⁴⁵ The Department of Prices and Consumer Protection and the British Overseas Trade Board were already represented.

⁴⁶ See the forewords to BS 5179, and BS 5750, for details, in FV 9/14–19.

⁴⁷ Verbatim quotes from Warner, in a paper signed by John Nott (Minister of Trade) to NEDC, Nov. 1980, in FV 9/19.

⁴⁸ *Ibid.*

⁴⁹ When the Conservatives came to power in May 1979, the Department of Prices and Consumer Affairs (which had sponsored BSI since 1974) was absorbed within the Department of Trade.

out-of-date nature of many BSs, which, they claimed, were normally based on product descriptions submitted by single manufacturers.⁵⁰ The BSI, stated another document, “lay to some extent at the periphery of QA in the field of trade and commerce.” It was said to be an unsuitable vehicle for coordinating policy on quality since government had no control over it and would therefore be unwilling to delegate it any authority.⁵¹ “Consumers distrusted its Kitemark scheme,” this document stated, while its committee dealing with QA was “rather insignificant.”⁵² And active efforts were made to deter the BSI from upgrading this committee into a QA Council. The Inter-Departmental Committee secretariat orchestrated a barrage of criticism from the Department of Prices and Consumer Protection, the MoD, and even the CBI, on the grounds that the committee so upgraded would neglect its role of managing the writing of national standards.⁵³ After the publication of BS 5750, and an announcement in the BSI’s Five-Year Strategy in early 1980, which stated that “assessed QA ... schemes based on BS 5750 will be (our) important growth area,” the Inter-Departmental Committee’s secretariat coordinated a further salvo of criticism, including attacks on the “poor quality” of BSI’s staff. All this was aimed, again, at deterring it from “over-reaching itself.”⁵⁴

The committee employed this same method also against the NEDO in response to its efforts to set up the sectoral scheme for instrumentation manufacturers and users. In November 1979, representatives of different government departments on the committee submitted critical comments on the NEDO’s efforts during its public consultation on the scheme, which emphasized that it lacked support from users and even charged that it breached UK and European Community competition laws.⁵⁵

All this was to little avail. A month after Warner’s April 1980 speech to the NEDC, the Central Policy Review Staff wrote a report for the cabinet that reproduced his proposals to make the BSI and BS 5750 the core institution and instrument, respectively, of a national policy to forefront quality and (British) quality standards in manufacturing industry and in international standards forums, including the European Economic Community. The report recommended the BSI receive greater government support to adjust BSs more to users’ needs and to promote them in the European Committee for Standardization and the International Organization for Standardisation.⁵⁶ It also advised

⁵⁰ “The Use of Standards in Legislation,” IQS/3/D, 20 Apr. 1977, in FV 9/14.

⁵¹ “Government Policy on QA,” IQS(78)7, 1978, in FV 9/14.

⁵² “Quality Assurance in the UK,” IQS(78)6, Feb. 1978, in FV 9/14.

⁵³ Letters from P. Corner, O. Etoe, and T. Eden to BSI, May 1978, in FV 9/15.

⁵⁴ Letters from P. Corner and B. Strong to BSI, May 1980, in FV 9/19.

⁵⁵ Letters from P. Corner, S. Frankiss, and J. Major, Jan. 1980, in FG 5/89.

⁵⁶ The International Organization for Standardisation was founded in 1947, but until the early 1970s confined itself to issuing “recommendations” to national standards bodies. During the second half of the 1970s it was issuing its own standards and these were becoming defined as references by national standards bodies (see Higgins and Tamm Hallström 2007).

that a three-year program be established to incorporate references to BSs into all UK health and safety and consumer protection legislation.⁵⁷ This report expressed not only Warner's recommendations but also the political preferences of Secretary of State for Industry Sir Keith Joseph, who was interested in "horizontal" industrial policies, in new tools to promote UK exports, and in anchoring public initiatives in existing civil institutions rather than in his *bête noire*, quasi-government agencies ("quangos").⁵⁸

Defining the Comparative Advantage of Quality Assurance Standards

Following the Central Policy Review Staff report, the Inter-Departmental Committee permanently lost control over the standards agenda, which now passed to the NEDO, despite the palpable failure of its sectoral efforts. A scheme for approving suppliers in the Automation and Instrumentation sector did eventually emerge, but its content diverged completely from NEDO proposals and it did not involve the BSI or make any reference to BS 5750.⁵⁹

Nonetheless, the period of April through May of 1980 was instructive for BSI and NEDO officials, as was the publication of the White Paper over two years later. From its unsuccessful attempts to involve itself in a sectoral scheme, the BSI learned that if manufacturers or users were to be interested in any certification scheme it would have to be based on a pass/fail system and infrequent audits. Other options involved judgments that were impractically precise and too costly.⁶⁰ NEDO officials, for their part, learned that it was impossible to sell QA schemes to manufacturers on grounds that they would improve product quality. This was partly because this was considered unnecessary and partly because, even where problems of quality were admitted, manufacturers considered the solution to lay in improved technologies and more systematic inspections. It is curious that throughout the discussion of promoting QA standards almost no one asked what needs the military had designed them to fulfill, or whether these same needs were found to any great extent in civilian industry or among its customers.

If it was not possible to sell QA schemes for their practical benefits, then how could they be promoted? NEDO officials formulated no coherent response

⁵⁷ No copy of the report is in UKNA files released to date, but summaries of it for meetings of the Inter-Departmental Committee and NEDC can be found in FV 9/18, and FG 5/89, respectively.

⁵⁸ Joseph's views differed little from that of Department of Industry civil servants, who were critical of the Inter-Departmental Committee efforts from an early stage. See the Chairman's brief for the inaugural meeting of the NEDC Automation and Instrumentation Sector Working Party QA Sub-group, of 8 Mar. 1979, in FG 5/89. According to James (1986), the Central Policy Review Staff—set up in 1971 as a policy research unit conducting strategic analysis of long-term issues for the prime minister, independent of party views and government departments—was transformed in the early months of the Thatcher government into "an industrial research unit of a partisan kind."

⁵⁹ Marr to Chandler, 15 Oct. 1981, in FG 5/89.

⁶⁰ See, for example, the discussion on the NEDC Sector Working Party sub-group on 11 June 1980, in FG 5/89.

to this question before early 1981. Their eventual answer was that BS 5750 was “more about marketing than technical excellence.”⁶¹ In particular, it was about import substitution (“Buy British”) and—if BS 5750 could gain international recognition—overseas marketing. From this time, they stopped explaining lack of interest in BS 5750 schemes in terms of the “negativity” or “backwardness” of certain trade associations, and now blamed it on their members’ lack of export-market orientation. A target audience for BS 5750 promotion was discovered among larger exporting firms.

VII. CONCLUSION

Here we will briefly summarize our theoretical and empirical arguments, then conclude by noting some broader issues raised by our analysis. Empirically, we have demonstrated that a standards-quality narrative emerged in Britain in the 1970s as a new phase in the long-standing problematization of UK industrial competitiveness. Standards in general and quality standards in particular were presented, at least initially, as technologies that could rectify deficits in industrial design, industrial efficiency, and much else. By 1982, this narrative, in a modified form, crystallized into a political program to propagate the use of standards within government and more especially within the UK private sector, with the British Standards Institute and its quality management standard BS 5750 as focal points.

The standards-quality narrative was institutionally anchored in two rival government bodies. One was the secretariat of the corporatist National Economic Development Council, set up by the Conservatives in 1961 and revamped by Labour as an instrument for formulating sector-level strategies guiding public assistance programs. The other was the Inter-Departmental Committee on Quality Assurance and Standards, a forum of civil servants from government departments dealing with public procurement and consumer affairs, set up in 1971 in anticipation of British entry into the European Economic Community. Both bodies relied for their wider credibility on a small number of professional engineers who pontificated on standards in the public arena.

The standards-quality narrative rarely referred to the concrete content of quality standards. The only contemporary reference point in this regard was recent Ministry of Defence standards for private contractors, which the professional engineers also regarded as authoritative. “Military standards” had emerged in the early 1940s in the United States, but more recently they had undergone two important transformations. The first occurred in the United States in the 1960s when larger contractors working on complex contracts became required to follow audited “quality program requirements.” These requirements specified in great detail procedures for every stage of the

⁶¹ Memo by K. Crinean to NEDC Sector Working Party sub-group meeting, 3 Feb. 1981, in FG 5/89.

product cycle, and were subject to a double instance of external verification—one internalized in contracting firms and one in which military officials audited program documents. The second transformation occurred in the United Kingdom when a version of these standards was adopted in the 1970s. In these MoD standards, emphasis shifted to requiring contractors to design and implement their own auditable plans of internal controls, with minimal external interference. This, in turn, reflected the official UK view, also dating from 1971, of the MoD-contractor relationship as a “partnership,” where all requirements were defined by mutual agreement.

A parallel voluntaristic transition occurred when, within the UK government, the NEDC’s approach to propagating standards triumphed over that of the Inter-Departmental Committee. The latter advocated a statutory British Quality Board that would coordinate all activity in the area, including proselytizing in government and the private sector for the adoption of standards and directly controlling certification to these standards. The NEDC, in the process of unsuccessfully trying to set up a quality standards scheme in the instrumentation sector, came to recognize that an initiative centered on the formally independent BSI would attract less hostility. Meanwhile, the BSI had just republished the MoD’s quality standards as BS 5750, strengthening its claims to be a player in this arena. Thus the Thatcher government’s political program to “govern through standards,” when it eventually emerged, focused on propagating standards that industry directly shaped, through an institution that industry found acceptably neutral and non-intrusive.

In this process of corporate enrolment, the standards-quality narrative underwent a subtle modification. References to the lack of competitiveness of UK industry were gradually displaced by justifications of standards, especially quality standards, as tools for marketing British goods and organizations in more effective ways. That is, it was said that quality standards allowed British organizations to demonstrate their quality to others, rather than rectifying deficits in it. Civil servants deliberately encouraged this modification, with support from professional engineers, as a means to overcome industry fears that a heightened emphasis on “quality” might communicate to outsiders that it suffered a deficit of it.⁶²

Theoretically, our analysis has involved partially rewriting the history of neoliberalism as a history of a specific technology. This addresses a lacuna in the Foucauldian literature on neoliberalism, which conceptually stresses the importance of understanding governmental technologies and their histories, but generally fails to do justice to this ambition empirically. Thus, the dominant account in this literature remains that the transition to neoliberalism essentially

⁶² See the arguments of Kate Crinian, secretary of the NEDC Sector Working Party sub-group, in a series of memoranda to other NEDC officials during December 1980 and January 1981, in FG 5/89.

entailed a rupture in political rationality triggered by an intellectual problematization of the welfare state. This rationalization subsequently materialized through the application of certain existing technologies in a program of marketization. This program is typically treated in terms of its applications to diverse areas and entities, and we learn little about the political dynamics of how the technologies through which the program was carried out originated or were translated, including what actors and strategies helped promote them.

Our analysis of the history of the governmental technology of quality standards finds that the trigger for new neoliberal political programs in Britain was, at least initially, a problematization of UK industrial competitiveness rather than of the welfare state (although these were not necessarily contradictory). Historically, the comprehensive problematization of the welfare state that was so crucial to the Thatcherite version of neoliberalism occurred some years after the problematization of UK industrial competitiveness. Our interpretation, including its chronology, is roughly compatible with neo-Marxist accounts of transformations in welfare (and production) regimes from 1979, but we have avoided reducing neoliberalism to an ideational “response” to new needs for ensuring capital accumulation.

Moreover, the account presented here of the technology that emerged in response to the problematization of UK industrial competitiveness may provide clues as to why it became possible for the Thatcher government to propagate the much more deeply divisive problematization of the welfare state in a politically sustainable way. We cannot yet support with empirical evidence the suggestions that follow. But we hope that, as government papers for the remainder of the 1980s become accessible, we will be able to refine these suggestions by examining, among other things, career shifts and interactions toward, and in relation, to the “social sector,” on the part of public servants in government economic departments and defense industry managers.

We suggest, first, that the broad-based support for a program of “governing through standards,” which derived from its relation to equally diffuse critiques of British underperformance, perhaps meant that use of standards (including quality standards) to reform public institutions could be presented, in the first instance at least, as a project supporting rather than undermining the general principle of public welfare provision. In other words, an attack on the welfare state could be prepared that focused on its institutional ineffectiveness rather than its abrogation of individual responsibility.

Second, the internal reconstruction of the “standards-quality” narrative that took place in the process of its gaining corporate consent may also have made its wider application attractive to the managers of the welfare state institutions who were to be its carriers. This internal reconstruction, as we have noted, gave a strong profile to managerial prerogative in definitions of how quality standards should be translated and implemented in local situations. For this reason, managers of welfare state institutions may have perceived

the wider unrolling of these standards as a means for their own empowerment. This contradicts the widely held view that the standards represented a fundamental attack on their professionalism. The reconstruction's emphasis on standards as a marketing instrument, meanwhile, allowed the translation process itself to be seamlessly linked to "marketing" the reformed institutions within newly competitivized environments. Thatcherism thus perhaps owed much of its effectiveness to its ability to mobilize managers as "owners" of a reform process that also increased their power and promoted their careers. A role for standards that explicitly recognized and reproduced managerial prerogative was critical to this process.

Overall, the analysis we have advanced in this paper confirms the prominence that governmentality scholars have given to standardization in their histories of neoliberalism, but it questions the empirical rigor of their dominant explanation of how this came about. By emphasizing hitherto unpublished empirical material on the standards-quality narrative and its historical transformation in the UK context—how quality management was made "fit" for neoliberalism—we have added to the formative history of neoliberal technologies of government and have highlighted the widespread implications that the detailed unfolding of specific technologies can have for power and control structures across time and space. We have also demonstrated how rigorous analysis of such "details" can reveal the highly political nature of these technologies. This can support an already existing conceptual awareness among neo-Foucauldians—not consistently followed up by rigorous analysis—that actual histories of technologies may bring our attention to empirical details that more fully explain the depths of neoliberalism's constitutive lineages and the breadth of its social effects.

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