

Global Norms in the Twenty-First Century

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CAMBRIDGE SCHOLARS PRESS

CHAPTER 8 INTERNATIONAL STANDARDISATION AND CORPORATE DEMOCRACY

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Introduction

This chapter¹ explores the role of international standards in governing the world economy. There is a growing literature on how norms of behaviour explain rules of collective action. Here, however, my entry point in the debate will be *standards as technical specifications used in production, consumption, and exchange*. Wedged in between domestic voluntary measures and global rules, standards affect virtually every aspect of our daily life. Thousands of standards define the interoperability of computers, credit cards or mobile phones, but also the resistance of plate glass. Few people are familiar, however, with the struggles between consortia of multinational enterprises and state regulators for defining standards that allow economies of scale and market access across borders, or not. Current initiatives to develop international standards for funeral services, personal financial planning, healthcare and education, only highlight the manifold implications.

The proliferation of standards is not so much an issue of (inter-) governmental versus non-state norm-setting practices; these have been found to be largely complementary and much less an area of conflict.² International standardisation rather points towards an emerging model of "corporate democracy". According to Heiskanen, corporate democracy departs from the Enlightenment ideal of popular sovereignty or universal citizenship, and represents a rupture with classical liberalism. Instead, "the participation of individuals in transnational governance is not viewed as a matter of universal, formal right, but as a consequence of an individual's holding of certain context-specific professional interests or concerns".³ Standard-setting bodies are highly influential in this domain but provide only biased participation capabilities in this respect. They operate in the interstices between contractual relations and the mandatory rule of the law, remaining largely outside the purview of democratic institutions and therefore, liable to questions concerning their legitimacy.

Current developments in this area are riddled with conflict. On the one hand, large multinational corporations aggressively lobby to limit the scope of standardisation to specifications conducive to economies of scale; on the other hand, most official standards bodies are rather inclined to expanding the public authority of standards by widening their scope. Rather than a public/private, or state/market divide, we are looking at a rift confronting the advocates of further *socialisation* of international standards (that is, bringing standard-setting bodies into a universal legal domain), and advocates of a *commodification* of technical standards (minimal sector and market-based standards, universally recognised).

Four dimensions can be distinguished here. The first two map out the comprehensive topology of standard-setting organisations: one, on a continuum that runs from a market of private technology to public law; the other, on a continuum from natural and invariable physical measures (e.g., weights and measures), to constructed and historically specific societal values (e.g., health and safety measures). The two other dimensions concern the differentiated processes of standardisation once definition and content have been agreed, and organisational procedures and territorial competences involved in implementation, are at issue.

The Changing Context of Standardisation

Standards refer to voluntary technical specifications explicitly documented and published for use in the organisation of production and exchange and, more broadly, for regulating the domestic and the international economy. Standards codify technical specifications regarding measurement, design, performances, or side effects of products, industrial processes, or services. It is more than two decades now since major developments began to take place in this domain. Previously, technical specifications were mainly confined to state regulations, corporate standards emanating from management decisions, or domestic standard-setting bodies. Today, technical specification has become, to a large extent, the outcome of voluntary standards developed in a set of public and private bodies at the global or regional level.

At the regional level, the European Union is in the forefront of international standardisation.⁴ In 1985, Council Resolution 85/C 136/01 on a "New Approach" to technical harmonisation and standardisation has instigated a completely new regulatory technique and strategy. The resolution was a response to the growing role of the European Court of Justice in solving conflicting regulatory policies in the internal European market. It was also an early move towards the completion of the Single Market by devising procedures to avoid turning technical specifications into a structural impediment to trade. Although member states were wary about seeing regulation in this domain

transferred to the European authorities, they did perceive the threat of a race to the bottom in public purpose standards as integration progressed. The New Approach provides a framework for the harmonisation of EU public law only on the general and essential requirements of goods and services traded on the European market, in particular in the field of health, environment, safety, and consumer protection. Depending on the sectors affected, technical specifications, performance criteria and quality requirements are either based on mutual recognition of national standards, or delegated to European standard-setting bodies such as CEN (*Comité européen de normalisation*), Cenelec (*Comité européen de normalisation électrotechnique*), and Etsi (*European Telecommunications Standards Institute*). In most sectors, the procedure for monitoring standards is a matter of business self-regulation, since products put on the market are granted a presumption of conformity through the sole declaration of the manufacturer (CE marking). Thus, the European New Approach has not only strengthened the importance of voluntary standards in the Single Market. By avoiding costly third party testing and certification, and providing the procedural means for a simultaneous adoption of European standards as international ones (through the so-called Dresden and Vienna Agreements), the EU has also won over third countries to its standardisation system. The (largely unintended) outcome has been a powerful strategic positioning of European standards in the global market.⁵

In contrast, standardisation in the United States hinges upon hundreds of private sectoral bodies, with public agencies involved when societal concerns or defence contracts are at issue. The recognition of standards is still largely made through the costly procedures of third party certification; manufacturers' declarations of conformity are only used in specific sectors.⁶ For decades, the prominent position of the United States in technological innovation granted *de facto* international acceptance for numerous standards developed and tested by these bodies. But for more than a decade, a widening rift has emerged between the United States and Europe on international standardisation. The controversy has erupted in a context of competing industrial policies, opposed legal systems, and disagreements on the respective role of private actors and public authority in standards development and implementation.

No single international organisation encompasses all aspects of standard-setting. The International Organization for Standardization (ISO), the International Electrotechnical Commission (IEC), and the International Telecommunication Union, Section Standardization (ITU-T), are the three organisations that embody the universal potential of international standardisation most emphatically.⁷ ITU-T is a specialised agency of the United Nations system. Unlike other UN bodies, however, its membership not only includes states, but also private operators, manufacturers, regulatory bodies and

other intergovernmental and non-governmental organisations in the field of telecommunication. ISO and IEC on the other hand have a membership of around 140 non-governmental national bodies "most representative of standardisation in their country". Only one body in each country is eligible to membership. Thus there is a mixture of private and public bodies when it comes to official international standard organisations. Mixed private-public bodies have lately claimed a greater degree of autonomy through performance-oriented contractual relations with government ministries and by creating subsidiaries specialising in the most profitable activities. Recent statutory changes of the British Standards Institute (BSI), or the *Association française de normalisation* (Afnor) illustrate this trend.

At the international level, the World Trade Organization (WTO) has given fresh impetus to the standardisation process. The entry into force of the WTO Technical Barriers to Trade (TBT) Agreement and the revision of the Sanitary and Phytosanitary Measures (SPS) Agreement in 1995 marked the formal devolution of power to international standards-setting organisations. Unlike the loose provisions regarding technical regulation of the old GATT, the TBT and SPS Agreements (and the same applies to certain provisions of the General Agreement on Trade and Services, GATS) give international standards a major role in harmonising the technical specifications of goods and services traded in the global market. In the manner of the European New Approach, state regulation in this domain must comply with "legitimate objectives", such as health, safety and environmental concerns. The goal of removing "unnecessary" barriers to trade is to be pursued, where possible, by substituting domestic standards by international ones.⁸

To sum up, the European New Approach and the improved discipline of the WTO have worked to shift a large set of technical specifications hitherto in the domain of production, or covered by domestic public regulatory policies, to voluntary international standards. But who is in charge of defining international standards—and in which areas? Who assesses conformity to an agreed standard? In fact, as a recent World Bank study concludes, a host of private and public bodies decide "what can (or cannot) be exchanged, and outline the procedures under which such exchanges are or are not permissible".⁹ The reason why standards epitomize an emerging model of corporate democracy, I would argue, is because they represent a hybrid form of power and authority in the global political economy, removed from established democratic institutions.

Conceptualising Standards

Today there exists a well-developed literature on standardisation, written by academics and practitioners alike. Even so this literature remains "one-sided, as

it mostly concentrates on standards battles and examples are mainly taken from information and communication technology".¹⁰ From a political economy perspective, the question of standards is closely linked to the relationship between the drive for technical specifications and the institutional framework required to ensure some order in this area at the transnational level. As Mattli points out, "the literature on standards setting generally lacks a sustained theoretical argument to explain or assess *institutional* standards arrangements past or present".¹¹

Some neo-institutional approaches have tried to explain the nature of the relations between private actors involved in standardisation and the institutional environment in which their actions take place. Borrowing the concept of transaction costs from institutional economics, these studies consider how the practices of agents can be defined by their environments to a considerable extent. From this perspective, standardisation provides an institutional guarantee for improving trust in transactions and curbing free riding risks. Mattli and his co-authors are representative of a majority of studies relying on rational choice and game theories to formalise systematic explanations of cooperative games and conflicts of distribution in the institutional framework of standardisation. In this view, the logic of action trumps its content and the understanding of the power relations involved in standardisation is confined to quantifiable and *a priori* defined criteria.¹²

Other studies adopt a more critical perspective on the socially and historically constructed institutional frameworks of standardisation and their diversity across the globe. They provide an account of beliefs underpinning standards, democratic controls of so-called independent regulatory authorities, or conflicts of power in specific negotiations.¹³ Such analyses shed light, for instance, on the debate between the strongly institutionalised ISO and European systems, the more competitive pattern in the United States, and the oligopolistic nature of consortia agreements.¹⁴ Yet, they fail to recognise the structural nature of power relationships in the organisation of a capitalist world economy. The concept of structural power refers to material and discursive structures able to affect (intentionally and unintentionally) the practices of agents; hence those able to wield this power can modify the general environment for their own benefit.¹⁵ The structural power of standardisation epitomises one among several new forms of non-state authority that have evolved over the past decade in the global political economy.

According to a recent OECD study, up to 80 percent of world trade is affected by standards or associated technical regulations.¹⁶ The scope of international standards not only pertains to their potential worldwide reach, but also to the whole range of conflicts emanating from the industrial system.¹⁷ Assessments of the relationship between standard-setting agencies and society

as a whole are therefore bound to be controversial. Workers will look to standards to ensure a safer workplace (e.g., standards on machine safety or maximum noise pollution) or obtain quality guarantees on the wage goods they purchase; industrialists on the other hand will equate standards with market access, technological progress, and strategic competitive behaviour. Let us pursue this from a structural power perspective.

A Comprehensive Topology of Standards

The topology of international standardisation begins with the *subjects* involved in defining standards and the distinction between the *private* and *public* spheres in which they operate. Market mechanisms and policy choices both affect the agents involved in the field, but they do so in various ways, which may be seen as located on an *institutional continuum*. Technical specifications belong to the private sphere of economic activities governed by market constraints, and affect social and technological change from that angle. Yet, they can also be related to the public sphere of political action directed to the general interest of society—for instance by determining a certain level of risk or by setting principles of liability. Hence, even in the circumscribed field of technical specification, norms relate as much to capital accumulation and technical progress as to social improvement or various instruments of the welfare state.

When mandatory, enforceable and general, technical specifications are a matter of public law and enjoy the status of government regulation. Many environment, health and safety measures belong to this class of measures, such as the environmental and sanitary policy of the European Union based on the precautionary principle. Likewise, a whole battery of regulatory requirements in health and safety are part of the labour laws of the United States and other industrialised countries. Issues of labelling food packaging have become part and parcel of market regulation policies focused on consumers' protection. In fact, all these regulations usually include voluntary standards in one way or another, as countries include or refer to them in their national regulatory framework. In such cases, technical specifications bring in standard-setting organisations into the regulatory arena. As we have seen, the institutional mix of public and private bodies involved in the official process of international standardisation varies considerably across the globe. But there is usually a privileged relationship with states.

If we move further in the direction of the private domain, we come across strictly private organisations specialised in setting and providing standards. Here, standards are developed by bodies resembling industry and trade associations seeking to ease the burden associated with expanding the scale of their activities. Yet, many of the standards set by private collective agreement

set the goalposts for government regulation as well. The complex web of private standards agencies in the United States, involving hundreds of sectoral bodies, is a key example. A dozen of these set more than 90 per cent of standards in the oil, automotive, and electro-technical industry and areas of application. Two key players stand out here: the American Society of Mechanical Engineers (ASME) and the American Society for Testing and Materials (ASTM).

Further into the private sphere, *de facto* or consortium standards are market-based to an even greater extent. These standards reflect the convergence towards an agreed technical specification that is openly accessible, yet developed by a restricted number of manufacturers who are the leaders in technological change in their industry. Until recently, they dealt primarily with the compatibility of components required for the development of new products (like CD-Rom or DVD), or with the modes of interoperability in the field of telecommunication and information technology (e.g. the TCP-IP protocol used for connecting computers into a single worldwide network). Of late, however, a range of initiatives have been taken to promote such standards with a much broader scope. Corporate social responsibility benchmarks are a case in point. Consortium standards involve collective action of a distinctly oligopolistic nature, which hence must be situated at the private end of the institutional continuum of standardisation, notwithstanding the tight imbrication with government industrial policy on certain strategic issues.¹⁸

When consortium standards relate to technical choices only, they generally include technological sequences protected by legal intellectual property rights (IPR). However, companies owning patents in this connection do not necessarily make full use of their rights. They may also prefer to ensure the widest diffusion of a key technology within the industry in which they are prime movers. This explains oligopolistic arrangements like the strategic alliances adopting the GSM standard in mobile telephony, or through monopolistic behaviour, as in the case of the algorithms of the Windows operating system owned by Microsoft and applied on most computers around the world. Such an ability to control or subvert the standardisation process and guide technological innovation in an entire sector with a combination of patents, licensing agreements, and IPR protection, engenders profound company rivalries. It epitomizes the extremes of the privatisation of standardisation.¹⁹

The recent developments of private standards consortia, their *de facto* power, and their extending scope, have clearly impacted upon the official institutional framework of international standards. For companies, consortium standards enable a great procedural flexibility and a shorter time-span needed to reach agreement (often less than a year). This is a considerable advantage, given that economies of scale are required to ensure quick returns on the huge investments in prior research and development and product cycles are in the range of 12 to

18 months in new technologies. Accordingly, official institutions such as ISO and CEN have developed new procedures and so-called "new deliverables" for technical specification, which are obligatory and must be published swiftly. This may reduce the degree of consensus necessary for an agreement, whilst the process also is speeded up by electronic voting. Consortia as a result have become more inclusive with more participants involved, including public and NGO participants—a sign of the enhanced respectability of *de facto* standards. Clearly this process of regulation by technical standards for goods and services exchanged across borders, is not so much a matter of a conflict between public laws and standards. It involves the entire institutional continuum along which public and private agents compete for defining how, and to which extent, markets should be integrated.

Objects covered by technical specifications also structure the comprehensive topology of standardisation. Whereas the private/public nexus of the subjects involved in defining standards can be located on an institutional continuum, this second dimension should be situated on a *material continuum* delineating *what* can be standardised. This goes back to the relation between human beings and nature. What we call technical specifications, range from natural and invariable physical measures (with undisputable properties), to constructed and historically bounded societal values, which are always contestable. Here we encounter a range of issues which have been relegated to the margins of the political agenda for perhaps too long.

The stages by which standardisation has moved from one pole of this material continuum to the other, are to some extent historical. The French Revolution invented, *ex nihilo*, the decimal metric system. The increasingly large scale of capitalist industries and rapid technological innovations of the Second Industrial Revolution then led to material product standards defining performance and interoperability, notably in spare parts, iron and steel properties and dimensions for structural material used in railways or shipping, electrical systems and communication. Health and safety concerns linked to the welfare state prompted the development of standards in domains more directly related to consumers rather than producers. More recently, outsourcing in the development of global value chains and increasing concerns about environmental regulations potentially used as non-tariff trade barriers, have contributed to a shift towards quality and environmental management standards in the 1980s and 1990s, and so on to the still largely untouched territory of standards in the service sector.

The image of a continuum on this dimension is to some extent contradicted by the fact that the extremes (nature/history) occasionally overlap. For instance, the invention of the decimal metric system by the French revolutionaries vindicated the Enlightenment belief in the power of Reason and abstraction in

the domain of measurement by defining the metre as one millionth of a quarter of the Earth's meridian. Yet it was also a way to abolish the arbitrary system of "two weights, two measures" used by lords to manipulate the peasants' grain levy. More generally, following the political homogenisation of human beings under the *Declaration of Rights of Man and Citizen* in 1789, French revolutionaries took the planet Earth as the basic standard of all measures: length, surface, volume, mass, taxes, coinage, etc. As Denis Guedj puts it in his history of the invention of the decimal metric system, in their pursuit of a truly universal, invariable and natural standard, Talleyrand, Condorcet and others searched for a concept that was both social and "hard", and which by its inherent natural quality would prove binding to all of humanity.²⁰

So if regulatory policies are closely related to technological change and innovation issues, they also reflect broader social concerns. Against the widely accepted instrumental view of technology as a neutral tool, a critical appreciation of the objects falling within the scope of international standardisation reveals to what extent technology remains an ambivalent process embedded in constellations of power entailing different possibilities. Feenberg characterises technology as a "parliament of things in which civilizational alternatives are debated and decided".²¹ In brief, the object of standardisation inevitably blends the physical and social requirements of a material civilization.

Differentiated Processes of Standardisation

Beyond the stage of agreement reached on definition and content, standardisation can be differentiated depending on the various ways standards are implemented. We need to distinguish here between standardization *per se* and recognition of standards. While international standardisation is driven by the attempt to homogenise specifications across national jurisdictions, processes of standards recognition allow for the acceptance of a plurality of standards or means of assessing conformity with them. In other words, this second analytical grid does not focus on the content of an assumed greater uniformity of standards worldwide, or of the competing bodies involved in this agenda. Its main concern is with the conditions under which a plurality of standards can operate without contradiction and the conformity of their implementation be mutually recognised. Even if the process of unifying standards is continuing, disparities in the method of assessing how firms comply with them can still be a persistent source of trade tensions. A set procedure for testing physical resistance of a product does not mean, for instance, that any laboratory able to do the test will be recognised as a certified tester. Regulation can drastically limit conditions for such recognition. Or, if the process of standardisation runs into difficulty in the attempt to achieve global harmonisation, those seeking integration of world

markets may resort to mutual recognition as an alternative. In Europe, for instance, products not subject to technical harmonisation at the EU level should in principle be exchangeable freely and just conform to domestic specifications and regulations of a member state. The differentiated processes of standards recognition worldwide thus can be understood on two dimensions: the organisational procedures involved in standards recognition on the one hand, and the territorial competence on which the assessment of conformity is predicated, on the other.

The first dimension concerns the *organisational procedures* for recognising conformity to an agreed standard. To comply to a set of technical specifications, market agents follow different procedures, framed in various ways by the institutional bodies in charge of conformity assessment policy. Such procedures can again be located on a continuum with the public and private spheres at each extreme, as in the case of the institutions defining standards. A public system of standards recognition hinges upon established authorities, whereas a private one mostly involves contractual relations and market mechanisms. Of course there are issues of trust and power involved in the choice between public organisational procedures and privately organised market relations. Our willingness to move from one end of the continuum to the other depends how much we trust agents and institutions involved in conformity assessment.

Theoretically, while standards *per se* already signify a transfer of trust from price signals to technical specification, standards recognition implies a further shift in the level of trust. The concept of trust has become widely used in economic sociology to account for the embeddedness of market relations into wider organisational, social and political arrangements. Some authors even consider that the issue of trust may eventually challenge the traditional organisation of capitalism because the centrality of market pressures as the reference for political power is not necessarily an acceptable condition for society at large.²² More broadly, the issue of trust reminds us of Durkheim's argument that the social contract must involve something else than itself, otherwise contractual solidarity would suffer by the reliance on upholding the social contract by the threat or the use of force.²³

In practice, the trust continuum runs across a wide range of organisational procedures. At the extreme of private relations, we find declarations of conformity directly supplied by the manufacturer and generally accepted as such (as most products conforming to the CE mark found on packaging). At the opposite public extreme, we may still find numerous organisations that provide "third party" certification, testing or inspection services, whose competence and integrity is itself assessed by a public accreditation body (accreditation understood as the procedure by which an authority extends formal recognition that a body or person is competent to carry out specific certifying tasks).²⁴ As

Tronel notes, "for a given requirement of conformity, there are an increasing number of possible distinct responses".²⁵ Organisational procedures run from suppliers' autocertification to verifications with tests and controls for each product placed on the market by a public certification body, itself publicly accredited. In between, one can find all sorts of arrangements such as quality insurance systems relying on ISO 9000 standards series certified by publicly accredited private companies (like Inspectorate or SGS), or declaration of conformity based on private "peer assessment schemes" between companies active in the same industry.

The second dimension on which differentiated processes of standards recognition are executed worldwide is *territorial competence*. In order to understand this issue, we need to distinguish between *exogenous* and *endogenous* principles of standards recognition. These opposing mechanisms of recognition have implications in terms of a transfer of authority and legitimacy in contemporary democratic states. As Nicolaïdis and Egan observe, "domestic regulators accept unprecedented transfers of regulatory sovereignty by recognizing non-domestic standards as valid under their jurisdiction, whether they have taken part in their development (standardization) or not (recognition)".²⁶ Indeed, recognition of standards may or may not involve domestic regulatory bodies. It depends on the domestic acceptance of certificates issued in foreign countries. Theoretically, if fully accepted on a worldwide basis, the various ways of assessing conformity to a given standard would ensure market access on a purely exogenous basis. In practice, a supplier would only need one certificate to satisfy the entire market and all governments—as in the motto of the advocates of the system, "one market, one standard, one test, globally accepted". On the other hand, if none of the various ways of assessing conformity to a given standard were recognised on an international basis, the technical specification for market access would come to rely on a strictly endogenous basis. Concretely, this would involve multiple replications of tests and certifications before gaining clearance for entering each domestic market.

Various instruments have been negotiated to define the territorial competence of conformity assessment procedures. In order to increase the confidence of both private and public agents in the market, cross-border cooperation has been developed on a bilateral or plurilateral basis among conformity assessment and accreditation bodies. Under so-called Mutual Recognition Agreements (MRAs), governments agree to recognize the results of each other's testing, inspection, certification or accreditation bodies in specified industries. Platforms such as the Transatlantic Business Dialogue aggressively lobbied for such arrangements in the 1990s, but the difficulties involved in finalising the agreements and the role that continues to be given to third party

certification, have meant that MRAs did not in the end become the avenue to world market integration that had been expected.²⁷

Recent developments appear to point in two directions. On the one hand, there are calls for a greater scope for self-declaration of conformity, in which companies would avoid the costs of third-party assessment by taking their market reputation as a licence to dispense with independent assessment of conformity. On the other hand, there is an attempt to focus on a superior level of territorial competence, the one involving accreditation bodies. As Pierre explains, "This is the last level of control (there is no accreditation for accreditors). Therefore, accreditory bodies should not be competing, neither between themselves, nor with [certification] bodies which are or are expected to be accredited [by them]".²⁸ Indeed after more than a decade of mutual ignorance, the two private bodies in charge of promoting an international acceptance of accreditation of laboratories and certifiers in 2004 established a high-level working group with the ISO.²⁹ Its purpose is to act as a clearinghouse for dealing with issues surrounding conformity assessment policy and extend the scope of mutual recognition across borders. Included in their agenda is the expected status to be given to numerous multilateral agreements negotiated between private parties involved in certification and testing. The world's first truly international system for acceptance of test reports deals with the safety of electrical and electronic products, as developed in the IECEE CB Scheme of the International Electrotechnical Commission (IEC).

For standardisation officials and experts, the territorial competence for recognising conformity assessment procedures, boils down to the extent to which "global relevance" for implementing standards can be reconciled with social acceptance.³⁰ According to Helmut Reihlen, former Executive Officer of the *Deutsches Institut für Normierung (DIN)*, "the bottom line remains the relationship between the process of scientific discovery and democratic control on the use of science".³¹ Ultimately, the debate concerns the autonomy of a society not only to define a standard, but also to control compliance with any given standard. This presumes a capacity to assess science, technology, and democracy in ways that do not lock out others and to provide, as Feenberg puts it, "a coherent civilizational alternative based on a system of mutually supporting transformations of social institutions, culture, and technology".³² Accordingly, each time we recognise an exogenous territorial competence to standards recognition processes we end up giving up an additional fragment of autonomy.