

## **The United States and the Global Information Infrastructure: Orchestrator, Functionary, or Mediator?**

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**ABSTRACT** *This article examines the position of the American state in contemporary information and communication sector globalisation activities. Through an assessment of the role played by the United States in Uruguay Round GATT services and intellectual property rights provisions and related global information infrastructure developments, the author argues that advancements in analytical precision and subsequent strategic opportunity can be attained by conceptualising the American state as a complex mediator of emerging national and transnational corporate-based interests.*

**Keywords:** General Agreement on Tariffs and Trade (GATT), global information infrastructure (GII), globalisation, International Telecommunications Union (ITU), state theory, United States.

### **Introduction**

At the end of the 20th century it is difficult to escape what has become a popular and academic obsession with 'the global'. This fixation on international developments and transnational forces has coincided, perhaps not coincidentally, with some rather simplistic and ahistorical assumptions regarding the demise of the nation state. However unfashionable this may sound, I think it is again time to take the state seriously. Certainly in the past 20 years or more no entity has been as influential (if not essential) in facilitating (if not itself stimulating) globalisation developments in general and the construction of a so-called global information infrastructure in particular as the United States.<sup>1</sup> As the country whose hegemonic fortunes are most dependent on the development and institutionalisation of what can be termed a neo-liberal world order, the American state has acted as the most significant agent at this juncture in history. Having said this, however, the task of identifying the role and specifying the nature of the state remains unfinished. In pursuing this in the context of contemporary international communication and information economy developments, I believe that the process of globalisation itself will become more comprehensible. More importantly, a careful assessment of the American state will sharpen our collective ability to better manage this extraordinarily complex process, helping us redress its negative implications while accentuating its positive effects.

In this article I concentrate on developments shaping American state activities leading up to the signing of the unprecedented General Agreement on Tariffs and Trade

(GATT) on services and intellectual property rights. Through this focus, I hope to stimulate efforts to better understand the precise nature of the state and its relationship with globalisation. To this end, the following question is addressed: has the American state acted as an orchestrator, functionary, or mediator in contemporary global information infrastructure developments?

### The State in Contemporary Context

In assessing the role of any state in shaping domestic and international developments, a tendency persists among social scientists to define it in relation to 'society' and/or 'capital' even though such an approach has repeatedly produced empirical inaccuracies and theoretical dead-ends. There are two general reasons for this.

First, defining or even 'locating' the state is in itself a somewhat illusory project. While most states function as core institutions in capitalist-based political economies, and all operate in the context of a predominantly capitalist world order, this constitutes perhaps their only common denominator.<sup>2</sup> Varying histories, cultures, geographies and vulnerabilities continue to influence the construction and maintenance of different state structures in different countries. Moreover, these histories, cultures, geographies, and vulnerabilities themselves undergo constant modifications and these modifications themselves prescribe further structural change. As such, the institutional capacities of states undergo ongoing alterations. Not only are no two states structurally identical, no one state remains entirely stagnant in terms of its institutional capacities. The state, therefore, is a dynamic institution and its definition in relation to society and/or capital is empirically nonsensical without conceptualising it in the context of more complex historical processes.

A second problem in the task of defining the contemporary state is the difficulty (if not impossibility) of formally separating it from society or capitalism. This dilemma—both empirical and theoretical in nature—in recent years has resulted in attempts to remove the state from historical analyses altogether or, contrariwise, in the movement to reassert the state as some kind of relatively autonomous agent.<sup>3</sup>

Such efforts to define the state divert attention away from the very nature of its historical role and ongoing *raison d'être*: the state remains *the core institution through which predominant forces and processes in capitalist history unfold*. It is my belief that the key to understanding the very real yet ever-changing role of the state is its institutional position amidst complex intra- and extra-state conflicts *and* the structural capacities it provides (or does not provide) agents in these struggles.<sup>4</sup> In line with this conceptualisation, it is necessary to identify the predominant forces shaping contemporary history. This task can be advanced by addressing two questions: why have domestic and international information-based infrastructural developments become prominent features in the closing years of this century *and* why have relatively developed countries, led by the United States, acted as core agents of their promotion?

Large-scale studies on international service sector activities were first promoted by US-based agents in the 1970s. This interest in part was a response to what has been called the crisis of the Fordist regime of accumulation, the pursuit of a more flexible regime of accumulation, and the related crisis of US hegemony. The OPEC cartel, the Vietnam war, the relative strength and subsequent wage demands of unionised workers, and the emergence of mostly Asian-based economic competitors all contributed to a burgeoning demand for technological innovation and lower production costs among Western corporations. Organisational and production-based innovations involving lower costs in communication and information-related activities were achieved through on-

going research and development investments (particularly those provided by the American state), the disciplining of labour (zealously pursued through Reaganomics and Thatcherism), and the promotion of competition in the telecommunications and computer industries.<sup>5</sup> New communication and information technologies lowered production costs and stimulated the development of new services useful in the promotion of more innovative, flexible and efficient production processes. Moreover, information-based services facilitated the rapid turnover of capital investments; corporate abilities to respond to consumer and market demands were enhanced; globalised and instantaneous personal credit facilitated market expansion efforts; and through the more comprehensive and accurate monitoring of lifestyles and price system activities, potential consumers were approached in ever more enticing ways.

The opportunities provided to service sector-based corporations as a result of these complex developments, coupled with the ongoing crisis in the US economy (particularly in relation to the decline or stagnation of real incomes and the disintegration of secure middle-class employment opportunities)—and the collapse of the Soviet Union as a counterweight to capitalist models—have facilitated the radical reform of international communication and information regimes dating from the late 1980s. These changes have involved mostly neo-liberal reforms in a range of international organisations, including the International Telecommunications Union (ITU) and, most importantly, the GATT. In its institutionalisation of a trade in services deal and its requisite intellectual property rights arrangements, the relatively new World Trade Organisation (WTO)—when viewed in conjunction with ongoing technological innovations and applications—constitutes a significant step forward in efforts to open world markets to producers and distributors of information-based commodities.

The legal-structural conditions through which a new global marketplace for information-based commodities can be forged have thus been dramatically advanced over the past 20 years. The context of (or trigger for) this development was the crisis of Western capitalism in the 1970s. What remains to be accomplished, however, is the construction of a relatively seamless international infrastructure that can be used to fully exploit growth opportunities. For this to take place, a stable international regime in which long-term investments can be made with little fear of 'political' interference must be constructed. As discussed below, the American state has been, and remains, the core agent of these developments.

### **The American State as Orchestrator**

By the word 'orchestrator', I mean to characterise the American state as the primary coordinator and conductor of contemporary global communication and information developments. In recent years, there has been a growing number of American public sector officials who have come to recognise that future US hegemonic capacities depend on the globalisation of liberal ideals and consumerist practices. This understanding has evolved in the context of a more general recognition that US-based corporations hold dominant positions in most international information-based commodity activities. These industries—those primarily engaged in the production and dissemination of copyrighted materials, including newspapers, periodicals, book publishing, broadcasting, cable television, audio recordings, motion pictures, advertising, computer software, and data processing—have for several years collectively constituted the fastest growing sector in the US economy.<sup>6</sup> More generally, not only is the United States the largest services exporter, it holds the world's largest services trade surplus.<sup>7</sup>

Reflecting this dominance, studies and reports prepared by American state officials,

beginning in the early 1980s, convey the impression that they have been the primary orchestrators of free trade in services and intellectual property rights agreements. More recent US government publications reflect the continuation of this apparent role. In 1994, for example, representatives from over 100 countries endorsed a set of general principles—the Buenos Aires Declaration on Global Telecommunication Development for the 21st Century—supporting the construction of what the Clinton administration calls a Global Information Infrastructure (GII).<sup>8</sup> This agreement, negotiated through the ITU, was publicly promoted by the US Vice President as the international extension of his 1993 National Information Infrastructure initiative.

Such public representations are deceiving. The political leadership provided by American state officials does not necessarily mean that the American state has been the orchestrator (the coordinator *and* conductor) of such activities. Historically, the very structural capacity held by US officials to act as orchestrators of contemporary global information infrastructure reforms has been virtually non-existent. Moreover, relatively sophisticated state policy models problematise how the institutional and organisational capabilities of a particular policy environment relate to perspectives, decisions and their implementation. Theda Skocpol, for example, has listed a number of significant variables that can be applied when examining the role of particular state agents in the formulation of policy.

Particularly in periods of social-economic crisis, Skocpol believes that 'distinctive state strategies' may be developed most readily by 'organizationally coherent collectivities of state officials, especially collectivities of career officials relatively insulated from ties to currently dominant socioeconomic interests'.<sup>9</sup> These conditions are most often held by officials in charge of 'domestic order-keeping functions' and those involved in 'the international orientations of states'.<sup>10</sup> In the United States, however, even among agents responsible for these functions, instances of apparent policy-making autonomy are rare. As such, Skocpol calls the American state a 'weak' state:

The United States did *not* inherit a centralized bureaucratic state from preindustrial and predemocratic times. Moreover, the dispersion of authority through the federal system, the division of sovereignty among branches of the national government, and the close symbiosis between segments of the federal administration and Congressional committees all help to ensure that state power in the twentieth-century ... is fragmented, dispersed, and everywhere permeated by organized societal interests. The national government, moreover, lacks such possible underpinnings of strong state power as a prestigious and status-conscious career civil service with predictable access to key executive posts; authoritative planning agencies; direct executive control over a national central bank; and public ownership of strategic parts of the economy.<sup>11</sup>

In policy involving global information infrastructure developments, American state officials not only have been situated in different agencies, they have directly or indirectly been involved in domestic policy issues. To some extent, this has been the result of such factors as the limited availability of frequencies in the radio spectrum and the competing demands of US private sector and defence-based interests for these resources; the export and overseas aspirations of some domestic corporations involved in the production and distribution of information-based commodities; and the complex relationship between military and intelligence-based research monies and the export interests of domestic companies. In recent years, the complexity of this domestic policy-foreign policy relationship has deepened as a result of the emerging significance of US-based corpora-

tions directly involved in international information and entertainment activities rather than simply exporting hardware and software to foreign markets.

While officials working for the President and the Secretary of State (those civil servants 'officially' responsible for foreign communication policy) have enjoyed relative degrees of insulation from legislative interference, the Office of the United States Trade Representative (USTR) emerged in the 1980s, largely due to its foreign trade responsibilities and the diversity of interests it represents, as America's lead foreign communication policy agency. Early in this decade, the urgent need to forge a global free flow of information—America's long-established quest for an international regime in which the right to move information into and out of nation states would, under most circumstances, trump the right of governments to exercise national sovereignty—was becoming a core issue for more and more US and foreign-based corporations. They sought the reform of national and international institutions and regulatory regimes in ways that would facilitate their use of transnational services through information and communication technology applications. To some extent, in response to the growing importance and complexity of foreign communication policy, the trade "solution" to overcoming international resistance to the free flow of information served to centralise American efforts in this area.<sup>12</sup>

This recent trade-based intra-state centralisation of power in no way conveys the ascendancy of relatively autonomous state officials in relation to predominant or emerging private sector interests or, more abstractly, to capitalism writ large. Certainly from the early 1980s, a more striking development has been the emergence of high levels of policy consensus among disparate and usually competitive US-based corporate interests. This extraordinary private sector communication policy coordination took shape in the context of the free flow of information policy being recast under a more general neo-liberal free trade strategy. It was this development that provided long-standing proponents of the free flow of information with the much needed leadership of the USTR. While banks and computer companies led this reform effort, a broad range of interests also became active in supporting American bilateral and multilateral trade-based reforms. In sum, efforts to advance free flow aspirations through free trade in a period of apparent hegemonic decline reflected a remarkable conjunction of various US-based corporate interests around their growing reliance on a secure international communication infrastructure and the belief that this infrastructure would become an increasingly central component in securing their competitive positions in the future world economy.

The American state as a structurally 'weak' state and the peculiarly disparate character of public sector domestic and foreign communication policy activities has negated the development of a genuine leadership role of US officials (let alone their orchestration) in global information infrastructure developments. This structural weakness ironically facilitated the recent ascendancy of the USTR precisely because the personnel in this office took on the free flow of information issue both at the beset of a rare private sector consensus and because its emerging role could not readily be construed as some kind of intra-state power grab. Indeed, in the early 1980s, an effort by State Department officials under Secretary George Shultz to assert a leadership position in foreign communication policy failed. To some degree, this was due to the suspicions of other state agents (and related private sector interests) holding established responsibilities in this field.<sup>13</sup> In contrast, the emerging role of the USTR in trade matters enabled it to concretise a new trade-based strategy while established state agents continued to perform their mandated, disparate and often overlapping roles. The ascendancy of the USTR in part has taken place precisely because the new trade-based

policy was new. USTR free trade activities generally were accepted as complements (rather than challenges) to pre-existing state structures.

### **The American State as Functionary**

Given what historically has been a largely leaderless policy field—to some extent a reflection of the structural nature of the American state and the complexity of US communication and information activities—it may be assumed that non-state agents have directly driven global information infrastructure developments. Perhaps an argument can be made that the American state is best characterised as the instrumental functionary of mostly private sector interests.

Beyond the free flow of information and its legal barriers and enforcement problems, the free trade of information-based commodities and its intellectual property rights provisions have emerged to serve the pressing needs of US and foreign-based transnational corporations (TNCs). But rather than a straightforward development, private sector interests, despite the apparent policy consensus among corporate executives, have faced several barriers in translating their interests into the active policies of American state officials. In the early 1980s, for example, in response to an emerging discrepancy between international legal-political communication superstructures and emerging domestic service sector capacities, US-based TNCs orchestrated a global elite-targeted 'consciousness raising' campaign. Led by financial services corporations, several American executives recognised that the United States was unlikely to change foreign attitudes toward information-based services through a unilateral attempt to reform existing international institutions. American Express Vice President Joan Edelman Spero, for instance, wrote that to be successful, Americans had to convince foreign governments that a free flow of information regime was in their long-term economic interests also. This, she believed, would be possible only through a concerted effort to promote the righteousness of neo-liberal trade ideals concerning information-based activities.<sup>14</sup>

Spero's concerns and recommendations reflected a significant disjuncture. At the very time that an increasing number of US-based corporations needed a stable international free flow of information regime, it was apparent that the US public sector lacked the means to redress what had become an international legal impasse. Decades of ultimately unresolvable conflict between American and foreign officials on free flow *vs* prior consent issues stymied the aspirations of dominant US corporations to establish unrestricted international market access and remuneration rights. Faced with the reality of its relative economic decline, and unable to modify the legal authority of nation states to control information flows within their borders, US officials faced a foreign communication policy crisis in the mid-1980s. A secure and comprehensive transnational communication regime was needed but appeared structurally unobtainable.

European, Japanese and Canadian-based TNC executives became the primary targets of American corporate efforts to modify the perspectives of foreign governments. As service providers, some of these foreign corporations presumably would be opposed to US competition in their domestic markets. To counter this, US-based TNCs promoted the realisation that foreign corporations also are service *consumers* and emphasised the potential benefits available once their access to US advertising, consultancy, financial and other relatively advanced services are established.<sup>15</sup> US private sector interests thus pushed ahead of American state officials in efforts to modify how foreigners perceived both free flow and free trade. In this project, US-based TNCs forged a strategic network of elite relations through which their interests could be identified, formulated and

promoted.<sup>16</sup> American state officials followed this lead and began the process of reconceptualising the free flow of information to involve free trade issues.<sup>17</sup>

By the mid-1980s, just prior to the start of US–Canada free trade negotiations, a complex overlapping of US trade policy with foreign communication policy had emerged. It is likely that efforts by the Reagan administration to discipline less developed countries (LDCs) through its withdrawal from UNESCO (and US threats to replace the ITU with a private sector-based organisation), while fuelled by neo-conservative zealotry, was driven more fundamentally by the economic and policy crisis at hand. As mentioned earlier, the relative decline of the US economy, the recognition that its information-based service corporations constituted its most competitive international sector, and an understanding that the long-standing international law-based free flow of information effort had run its strategic course all converged on Washington where a policy vacuum enabled the free trade “solution” to take root.

To characterise the American state as the instrumental functionary of capital thus is inaccurate when assessed in light of historical disjunctures between private sector demands and state structural capacities. Even in cases of remarkable private sector solidarity, existing state structures are slow to change and may even appear to be unchangeable. While the Clinton administration’s current championing of a GII may well reflect the post-free trade interests of mostly US-based corporations, such instrumentalist activities are exceptional. Not only is it rare to have a private sector united in its push for an international effort of this scale, the use of the office of the Vice President as the political headquarters of the GII constitutes an atypical moment of general private sector consensus and surface-level public sector leadership.

### **The American State As Mediator**

Rather than characterising the American state as the orchestrator of global information infrastructure developments or the direct functionary of dominant or emerging capitalist interests, a more accurate and analytically useful alternative remains—the state as mediator.

The recent history of GATT/WTO and GII developments reveal the American state to be a complex structure that can be reformed, usually incrementally, when confronted by a private sector consensus. In this obviously simplified formulation I mean to portray the state as dialectically responsive to internal and external forces (however categorised) *in ways that often are largely determined by pre-existing structures*. While, for instance, the changes in intra-state structures affecting foreign communication policy that began in the 1980s were directly influenced by corporate forces seeking a stable international free flow/free trade regime, the capacity of the American state to modify itself in order to then reform international institutions was limited. The particulars of this history were very much shaped by the peculiarities of existing state structures. It is from this analytical position that an elaboration of American state capacities can be achieved by conceptualising the state as a mediator of the private and public sector agents underlying policy developments. Because the structural conditions in which the state undertakes these mediations are historically determined, these structures both affect what can be done here and now and, over time, can themselves become the subjects of reform. As such, the structural conditions through which states mediate capitalist history, because of the disjuncture between *what is* and *what is desired*, are out of the *direct* control of any particular agent or bloc of interests at any particular moment in time.

Conceptualising the American state, or any state, to be responsive and structurally biased in this way requires an understanding of the historical underpinnings of such

biases. Because they are ongoing institutional constructions, necessarily incorporating past ways of organising, understanding and doing, elements of state agent practices are to some degree 'fixed'. In other words, the complex ways of doing state business, while historically determined, are characterised by structural rigidities. These capacities in turn directly influence the intellectual capacities of state agents (i.e. their views of what is feasible), while their ways of seeing and doing may serve to reinforce or revise state structures. States thus can be viewed as core media through which public sector agents conceptualise and carry out policy. The biases of US foreign communication policy officials, at any particular time, are directly shaped by the peculiarities of established structures—structures which themselves have been shaped by the material and intellectual capacities and interests of a usually complex array of private and public sector agents.

The mediating role of the American state was crucial in the success of a trade-based foreign communication policy strategy as represented by the Uruguay Round GATT. Now its ongoing role in the WTO can be viewed as essential in the implementation of a global information infrastructure. For example, in 1989, ITU Secretary-General Butler came to believe that the survival of the Union required it to cooperate with the GATT process. The context in which this realisation emerged directly involved suggestions by American state officials that if the ITU failed to actively promote a free trade agenda some kind of wholesale alternative to the Union should be considered. In light of the American withdrawal from UNESCO in 1984, a High-Level Committee was established by Butler to review the ITU's mandate and activities. It subsequently recommended that the Union itself undertake extensive structural reforms. These have included the direct appointment of officials representing TNCs to act as advisors on LDC development and investment strategies. Jonathan Solomon, speaking as the Director of Corporate Business Development at British-based Cable & Wireless, called these recommendations and the ITU's institutional 'corporate restructuring' the beginning of its new role as 'the world telecommunication system's integrator'.<sup>18</sup>

These essential global reforms, while based on TNC interests and more general efforts to forge a flexible worldwide regime of accumulation, have been mediated by American state officials. As representatives of the nation state—virtually the only institution directly capable of forging, sustaining and eliminating international agreements and institutional arrangements—such officials typically are the structurally biased mediators of a complex of mostly private sector interests.

As Skocpol would argue, different states and different officials within each state act with varying degrees of relative autonomy in relation to both external and intra-state forces. Political economist Robert W. Cox elaborates on this:

Each state has evolved, through its own institutions and practices, certain consistent notions of interest and modes of conduct that can be termed its particular *raison d'état*. This autonomy is, however, conditioned by both internal and external constraints. State autonomy, in other words, is exercised within a structure created by the state's own history.<sup>19</sup>

What remains to be elaborated is the nature of both these internal and external constraints at any particular time, in any particular nation state, and on any particular issue or policy question. Of course these internal and external constraints are dialectically related. For example, the hegemonic crisis facing the United States from the 1970s and the subsequent response of American public and private sector agents to it involved the disassembling of Fordist development models. But rather than portraying this crisis and its response as the manipulation of states on behalf of a national and international ruling



class (somehow forging and then imposing an agenda on state officials to reform domestic and global institutions), the actions of both dominant private sector interests and state actors have been directly influenced by their historically based structural capacities.

Rather than simply characterising the American state as a dominant agent modifying the global political economy or as itself the direct respondent to changing international conditions, it is more accurate and useful to say that the state has acted (and continues to act) as a complex mediator. While the United States public sector very much reflects the needs and conflicts of private sector interests, the American state also is a complex institution in and of itself. In this context, the American state has been *both* a facilitator and, in some instances, a barrier to late 20th-century forces seeking the rapid development of a global information infrastructure.

### **Implications and Conclusions**

The American state, since the mid-1980s, has been restructured in ways that have prioritised international free flow of information developments through mostly trade-related agencies. The complex forces at work have involved and reflected a realignment of dominant class relationships and the state has mediated this transition. State structures have been used to legitimise the neo-liberal reordering of domestic and international relations and, more explicitly, state officials have championed TNC interests seeking a stable international regime in which to exploit communication and information technologies and expand market opportunities.

In response to a foreign communication policy crisis in the 1980s, components of the American state were reformed in order to facilitate its mediation of comprehensive global restructuring activities. The American state—through the ascendancy of trade—underwent reforms enabling it to service the political and legal needs of mostly transnational corporations and international business consumers directly involved in information economy developments. These modifications, in turn, altered aspects of American state relations with domestic and transnational capital. Rather than viewing this in terms of an either/or nation state/global-capital dichotomy, an emphasis on structures and mediations compel a more nuanced conceptualisation. This is not to say that the American state, by ‘freeing-up’ US-based and other private sector interests to become increasingly transnational actors, has not set in motion problematic developments involving, for instance, the capacity of US-based corporations to become geographically decentralised and mobile in relation to the American polity. Instead, an analytical focus on historical structures and mediations suggest that core contradictions will involve the form in which the US relates to capital rather than some kind of absolute decline in the power of America (and other states) in relation to capitalism.

In the absence of a theoretical and empirical assessment of the nature and role of the state, it is tempting to conclude that late 20th-century communication and information developments reflect the ascendancy of global forces over national. However, as I have suggested above, the American state has acted and continues to act as a complex mediator in these domestic and global developments. At this stage it appears prudent to conduct further research on how American and other state agents have mediated the intercorporate and intra-state conflicts that have emerged in conjunction with global information infrastructure activities. Informed by what has been discussed above, I believe that an analysis of US micro/domestic processes in the context of macro (national and international) developments will reveal significant opportunities to shape global information infrastructure developments. Given that the American state has acted as the complex mediator among and on behalf of US-based and other corporate interests in

restructuring the contemporary world order, more attention to American structures and struggles not only remains analytically relevant, it is strategically essential.

The state plays a crucial role in shaping and reshaping the social-economic conditions through which capitalism continues to evolve, dynamically and problematically. Contemporary developments towards a regime of flexible accumulation can be seen as the context in which the American state has been restructured and has, in turn, been used to reform the global political economy. The state is not a static entity—it is a living institution, painfully reinventing itself in response to changing historical contexts and dominant social-economic interests. In relation to global information infrastructure developments, the American state has acted simultaneously as a respondent *and* facilitator. Its response at any given time is directly shaped by pre-existing structural capacities that, as a result of coordinated and sustained efforts, subsequently may be reformed.

### Notes and References

1. By 'global information infrastructure', I refer to the general technological and complementary regulatory framework through which information-based commodity activities are accommodated domestically and internationally.
2. Weber's much cited definition in which the state is the monopoly holder of legitimate violence within a given territory certainly constitutes a common denominator but it is not a useful base-point from which to conceptualise the state's role in the structural and policy developments addressed in this article.
3. For a thoughtful and critical discussion of these and other problems in defining the state, see Timothy Mitchell, 'The limits of the state: beyond statist approaches and their critics', *American Political Science Review*, 1991, 85, pp. 77–96.
4. As Mitchell has argued, "The power to regulate and control is not simply a capacity stored within the state. The apparent boundary of the state does not mark the limit of the processes of regulation. It is itself a product of those processes"—*Ibid.*, p. 90.
5. David Harvey, *The Condition of Postmodernity*, Basil Blackwell, Oxford, 1990, pp. 121–197.
6. For a summary of empirical evidence, see S.E. Siwek & H. Furchtgott-Roth, *Copyright Industries in the US Economy, 1993 Perspective*, International Intellectual Property Alliance, Washington, DC, 1993, pp. 8–10.
7. While from 1987 to 1992 the US trade surplus in services increased almost four-fold, reaching US\$60.6 billion in 1992, the US trade deficit in goods was reduced from –\$159.5 billion in 1987 to –\$96.2 billion in 1992. As a result of the services surplus, in 1987 the US trade deficit was lowered by 8%, and in 1990 services exports reduced this by 36%. In 1992, the US trade deficit was reduced by 63% as a result of America's relative strength in services. See *ibid.*, p. 13.
8. Al Gore & Ronald H. Brown, *Global Information Infrastructure: Agenda for Cooperation*, US Government Printing Office, Washington, DC, 1995.
9. Theda Skocpol, 'Bringing the state back in: strategies of analysis in current research', in P.B. Evans, D. Rueschmeyer & T. Skocpol (eds), *Bringing the State Back In*, Cambridge University Press, Cambridge, p. 9.
10. *Ibid.*, p. 11.
11. *Ibid.*, p. 12.
12. Had the free flow of information become universally accepted in relation to the sovereign right of nation states to control domestic communications, the problems associated with its application remain manifold. Trade treaties, on the other hand, provide nation states with the capacity to employ potentially effective trade sanctions as means of enforcement.
13. Edward A. Comor, *Communication, Commerce and Power*, Macmillan and St Martin's Press, London and New York, 1998.
14. Joan Edelman Spero, 'Information: the policy void', *Foreign Policy*, 48, 1982, p. 155.
15. William J. Drake & K. Nicolaidis, 'Ideas, interests, and institutionalization: "Trade in Services" and the Uruguay Round', *International Organization*, 46, 1992, p. 49.

16. Karl P. Sauvant, *International Transactions in Services: The Politics of Transborder Data Flows*. Westview, Boulder, CO, 1986, p. 199.
17. United States Department of Commerce, *Long-Range Goals in International Telecommunications and Information*, National Telecommunications and Information Administration, Washington, DC, 1983; Jane Bortnick, 'International telecommunications and information policy: selected issues for the 1980s', report prepared for the United States Senate, Committee on Foreign Affairs, 1983.
18. Jonathan Solomon, 'The ITU in a time of change', *Telecommunications Policy*, 15, 1991, p. 375. Butler's successor, Pekka Tarjanne, carried forward these reforms, expressing a belief that technological and transnational corporate pressures compel the ITU to reform itself so as not to be a barrier to the changes taking place in the international economy. Telecommunications, according to Tarjanne, are as 'tools for trade'. Quoted in R.B. Woodrow, 'Tilting towards a trade regime', *Telecommunications Policy*, 15, 1991, p. 333.
19. Robert W. Cox, *Production, Power, and World Order, Social Forces in the Making of History*. Columbia University Press, New York, 1987, pp. 399–400.