Horizons of the State: Information Policy and Power

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Conceptions of the state underlie all information and communication policy, for the state uses policy as tools of power. This is true whether those conceptions are well or poorly formed, understood or not, explicit or implicit—but, as Bell (1995) points out in this issue, failure to understand the state leads to an inability to analyze policy. Historically, however, policy analysis has tended to treat the state generally as a venue, a justification for particular positions, or one institutional player among many. In the area of communication policy, few policy analysts have attended to the state.

In this, the field joined both political science and sociology, which for decades were characterized by "statelessness" as they turned instead towards systems, societies, or classes as their units of analysis. Ironically, attention returned to the state in the mid-1980s, at a time when it was widely believed that the state was losing power.

Understanding information and communication policy as power is particularly important in today's environment because there has been a qualitative shift in the level of dependence upon information technologies and in the degree to which activities are informational (Braman, 1990, 1993). Regulation in this domain has come to dominate political and economic culture. The use of new information technologies permits the state, like other institutions and cultural forms, to evolve; a new form of the state is emerging, specializing in forms of power specific to the environment of the global telecommunications network (the "net").

Information policy plays self-reflexive and constitutive roles for the state, creating the conditions under which future activity (including policy-making) will take place (Braman, 1990). This is critical in an environment oriented towards the two poles of the global and the local and in which boundaries of the state

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1 Information policy is defined here as policy relating to any stage of an information production chain that goes from creation through processing and storage to destruction.

2 Bringing the State Back In, edited by Evans, Rueschemeyer, and Skocpol and published in 1985, is generally considered to have marked the moment of the return of attention to the state.
are no longer dictated by either geographic features or the extension of physical force. There is no natural horizon to the state, nothing to bound it, other than what is created deliberately by the state itself. It is with information policy that the horizon is drawn and the state defined in terms of its structure and its modes of interaction with others beyond and within the state.

Here, I explore what is meant by the state, and by power, in order to understand ways in which communication and information policy are forms of power for the state. Though the literature for the past several decades has talked about three forms of power (instrumental, structural, and symbolic), I argue here that a fourth type of power, transformational power, is emerging as a consequence of the qualitative changes that make this an information society. Though the literature sees two phases of power (potential and actual), I identify here a third (virtual).

This is abstract and general, however, whereas any real exercise of power by the state is concrete and particular, and must be analyzed as such; thus, the importance of the symposium articles, each of which looks at a particular communication or information policy or set of policies as forms of power within specific nation-states: Sussman (1995) looks at the history of the range of communication policy practices in recent history in the Philippines, Barrera (1995) analyzes telecommunications policy in Mexico, and Jakubowicz (1995) reviews relationships between the media and the state in several Eastern European countries. Mody (1995) and McDowell (1995) both look at India, finding differences in the policy-making histories of, respectively, telecommunications and the software industry. And Sparks (1995) and Bell (1995) both analyze the relationship between public service broadcasting and the state, Sparks doing so from the perspective of an imperial power in decline, and Bell from the point of view of a state historically dependent on that same imperial power.

This symposium provides lenses that range in focus from the Sussman (1995) and Jakubowicz (1995) macroviews (for Sussman across media and administrations, for Jakubowicz across states), through studies of policies for specific media within individual states (Barrera, 1995; Bell, 1995; McDowell, 1995; Mody, 1995), to Sparks's (1995) microview of a particular discourse within a specific policy discussion (within an individual state). Almost all of the articles deal with peripheral nation-states; though the Sparks piece is the one exception, the Britain of his article shares with the developing world a concern with movement away from the center.

These articles, as discussed below, provide further elaboration of the framework offered here by illuminating particular features of states in the developing world, the emergence of the network state, and tensions between the nation and the state. Though there has been concern since the 1970s that the use of new information technologies makes states vulnerable, these studies show that that notion is oversimple; rather, the use, as determined by policy, variously strengthens and weakens different types of state power in ways that also vary from state to state. Information policy, then, is a domain in which the state is exercising power in ways that will condition its future power in that and other
domains; that is, the actual exercise of power via information policy establishes the state's future power potential.

The State

Problems in Analysis of the State
Analysis of the state is made difficult by a number of factors, beginning with the multiplicity of definitions (Easton counted over 140 in 1981) and typologies (in the neo-Marxist camp alone, current schools of thought on the nature of the state are variously counted as two [Miliband, 1983], three [Bowles & Gintis, 1982; Gold, Lo, & Wright, 1975; Skocpol, 1980], five [McGowan & Walker, 1981], and six [Jessop, 1977]). Held (1989) claims that the very ubiquity of the state makes it difficult to understand. Discussion of the state tends to mix levels of analysis, as when the state and the international arena are commingled analytically (Bueno de Mesquita, 1985), and modes of analysis, as when normative theories of the state and descriptions are blended. The uniqueness of historical experience makes it difficult to generalize. Appropriate and useful data are difficult to find. Fundamental questions are still genuinely open, such as the actual and normative constitutive roles of the state and its relationship to economic forces, and it may be that answers to those questions most appropriately change over time and from circumstance to circumstance.

The state and the nation have separate histories, though efforts to join the two in the nation-state is a feature of recent history. Though some nations, such as the Kurds, are spread over several states, many states, as Sparks (1995) points out in this issue, have within them more than one nation.

History of the Concept of the Nation
Greenfeld (1992) traces the concept of the nation through five stages:

1. Nation = a group of foreigners. In Rome, the Latin word natio was used to refer to people who came from other parts of the Empire and who generally stayed together socially while in Rome. Thus, at the beginning the concept of the nation referred to the population on the periphery and had some negative connotations.

2. Nation = a community of opinion. In the medieval world, students came from many places to study at universities and similarly stayed together on campus. Because those who came from a particular place tended to share an intellectual perspective, in the university environment the concept of the nation applied not just to a social community, but also to an intellectual perspective. As a result, the concept came to gain more positive connotations.

3. Nation = an elite. In the medieval environment, debates over theological points were extremely important, and people would travel from many universities to participate in disputations at Church councils. Because philosophical dominance translated into political power in this era, members of the nations from the universities came to be representative to varying degrees of the polit-
cal authority of their home regions. The notion of the nation, then, came to refer to a decision-making, or political, elite.

4. Nation = a sovereign people. In the 16th century in England the first nation qua nation was born, in the sense of a political unit based on the concept that power resides in the entire population. The notion that peoplehood is the essence of nationhood was then exported around the world with the British Empire. The formation of the United States was an ultimate manifestation of this trend, for at the time of its nationhood, there was nothing else but the concept of an equation between a sovereign people and nationhood that united the people of the United States.

5. Nation = a unique people. In each case, once a nation came into being it became associated with the particular characteristics of the group of people involved; thus, over time, the concept of the nation came to be associated with the concept of the uniqueness of each sovereign people. Greenfeld (1992) notes that with this last move, the concept of the nation now had two meanings, one particular and one nonparticular. The result is a confusion that is significant because the two types of nation give rise to different types of social behavior, culture, and political institutions.

Nationhood is intimately intertwined with ethnicity, but the relationship is not an identity. Greenfeld (1992), again, is helpful here. She points out that ethnicity is composed of a myriad of characteristics, some of which are salient for each group. No clear line distinguishes existing characteristics from construction of characteristics, however, for "An 'ancestral' territory may be acquired in conquest, 'common' history fabricated, traditions imagined and projected into the past" (p. 13). No single characteristic or group of characteristics is necessarily part of every ethnicity, including such general characteristics as language or religion; that is, whereas diet, for example, may be a distinguishing characteristic for some ethnicities, it might be irrelevant in the definition of other groups.

History of the Concept of the State

The state was distinguished from family and church and made the subject of political analysis by the end of the 16th century, with Niccolò Machiavelli and Jean Bodin leading the way. Thomas Hobbes further distinguished the state from civil society, meaning those areas of social life, from private life to the economy, which are organized outside the control of the state. The concept and practice of civil society opened a space between the polity and the state, and justified putting bounds on the latter. Mercantilist economic theory, which provided a logic for international trade by emphasizing the comparative advantage of each state, also reinforced the notion that each state was unique. By the end of the 16th century, the state existed as a subject. The next couple of centuries were marked by experimentation on the part of the state both domestically and internationally, and by a progressive widening, and then narrowing, of the gap between civil society and the state.

Questions about the nature of the state were also questions about the possibility of effective policy-making and its appropriate information base and
means of changing society. Tests to the range of the state were part of a number of administrative experiments that took place at the end of the 19th century. In the 1890s, for example, path-breaking public opinion survey work was done in Norway and Sweden using methodological techniques not taken up elsewhere for 30 years. Woodrow Wilson's 1887 article, "The Study of Administration," is often cited as the beginning of the academic field of public administration (Wagner, Wittrock, & Whitley, 1991). This period, up until World War I, was the initial phase of the welfare state. A number of European states, along with Australia, New Zealand, and Brazil, launched social spending policies and passed labor laws.

Between the two World Wars, the early welfare states expanded into comprehensive welfare states (Skocpol, 1992). Policy entrepreneurs began to set up institutes and to develop policy scholarship. Keynesian economics became popular during this period, with its stress on basing policy on economic realities rather than idealized constructs, and its encouragement of consumption rather than production as a stimulus to the economy. Although neoclassical economics dominated "legitimate" debate over the nature of the state (Wagner, Wittrock, & Whitley, 1991), this period also saw a discussion over the nature of the state within Marxism that continues to this day.

With such policies came a shrinkage of the gap between civil society and the state. Early versions of corporatism linked labor tightly into the state structure before reaching its first full manifestation in Mussolini's Italy, where the gap diminished. Giddens (1985) claims that, with the formation of the bureaucratic state, civil society "simply disappears. What is 'outside' the scope of the administrative reach of the state apparatus cannot be understood as institutions which remain unabsorbed by the state" (pp. 21-22). Indeed, for Giddens the blurring of the boundary between civil society and the state is the identifying characteristic of the modern state.

The establishment of the global economic system after World War II (including the World Bank, the International Monetary Fund, and the General Agreement on Tariffs and Trade [GATT]) was the extension of the growth and spread of the welfare state into the international arena. While the United States and other countries experimented with bureaucratic practices both domestically and internationally, multinational and transnational corporations were also growing in power. The emergence of these new players, along with shifts in global economic conditions and the growing importance of the developing states lead, by the 1970s, to a sense of the loss of the power of the state.

The Decline of the State
Several forces have been contributing to the decline of the state. The state has lost the ability to control much of what goes on within its borders in a number of domains, including financial, ecological, and cultural. Transnational corporations and regional or global groupings are becoming the sites of much of the decision-making formerly reserved for states—and, as Dezalay (1989, 1990) so brilliantly points out, even the law itself is moving away from the nation-state.
and towards the international and private arenas. Some argue that the locus of constitutional law has moved from the state to the international arena (Jackson, 1988; Petersmann, 1991).

It has been believed since the 1970s that the use of new information technologies has made the state vulnerable, to use a term first used in a report to the Swedish government on the computerization of society, the Tengelin Report (1981), and since become popular. Specific types of vulnerabilities include dependence upon foreign vendors and network and database managers; differences among national laws that can make data of one country vulnerable to things like invasion of privacy by its own standards when processed in or transported through a country with different standards; intrusion into databases and programs; distortion or destruction of programs or data (activities of destructive hackers, called crackers); sensitivity to the electromagnetic pulse (EMP) generated by nuclear weapons; loss of institutional memory that can result from electronic record-keeping; ephemerality of storage media (magnetic memories need refreshing every year or so or they decay); and the mobility offered by a global financial system to transnational corporations as they seek to operate at will, unhampered by constraints placed by nation-states.

Because the net has an inherently globalizing tendency, there are constant struggles between the inclinations of technological development and use and the goals, habits, and desires of the nation-state. The complexity of the telecommunications network and its services is in itself another source of vulnerability. Last, there has been a loss of state autonomy, the ability of the state to operate on its own, without involving other state or nonstate actors. This very interdependence of the state with other institutions—what Keohane and Nye (1977) term complex and Rosenau (1984) calls cascading interdependence—is another source of vulnerability of the state.

All of these problems combined into a sense that the state was through as an economic unit (Murray, 1971) and the concept of sovereignty quaint and on the edge of extinction (Schmitter, 1985). Today there is less smugness; by the mid-1990s, the expectation that the state is in decline has diminished and interest in the state has been well revived. In the area of communication policy, states are stimulated to reassert themselves, for information and communication policy issues go to the heart of cultural, political, economic, and social formations.

As Goldstein (1988) points out, new social formations do not replace existing forms, but, instead, are layered over them; thus, the state continues to play a role even while other types of organizations—most notably transnational corporations (TNCs)—come increasingly to dominate both global and local decision-making processes. The concept of the state remains important to those concerned about human rights and civil liberties, for it is the state that is the organizational form with protection of the individual among its mandates; although

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1 It has been suggested that the United States may be losing money, for example, because Americans have laxer laws regarding data privacy than do the Europeans.
TNCs may stimulate economic activity, they rarely include social or cultural goals among their concerns. Importantly, the state often serves the interests of transnational corporations more than those of the state itself, as Mody (1995), Sparks (1995), and Sussman (1995) discuss in their state-specific studies in this issue.

**Power**

Though the concept of power had come to be acknowledged as central throughout the social sciences by the 1980s (Mann, 1984; Olsen & Marger, 1993), many of those who use the notion treat it as if it referred to something simple and univocal, as if power always came in the same size and flavor. This is not the case, and analyses of information, communication, and power can only be enhanced by a more highly articulated—and valid—conceptualization. Types of power can be distinguished by their phase, form, attributes, units, and direction, in a framework more fully elaborated elsewhere (Braman, in press); the study of these can be problematic.

**Problems in the Analysis of Power**

Problems endemic to the study of power include the following:

1. Immersion in power relations makes them difficult to either perceive or analyze, a problem exacerbated when dealing with power as manifested in communications, in which analysts are also always immersed.
2. Whereas theories of power tend to be abstract and deal in universals, the practice of power is concrete and particular.
3. The potential for power can only be estimated, and actual power only measured post hoc.
4. Though most analyses focus on the exercise of one type of manifestation of power, such as the military or propaganda, various forms of power are interrelated. This multiplies the analytical task, for it adds the problem of figuring out how to convert one form of power into another for comparative analysis (how many slogans equal a gun?), and also requires analysis of the relationships among forms of power.
5. The nature of the power subject is as important as the nature of the power holder to understanding the effects of the exercise of power, but has been little studied. There are issues of the autonomy of the subject (Foucault, 1975/1982, points out that power is only power if exercised against individuals who have free will), the types and degrees of vulnerability of the subject, and perceptions of the subject by the power holder (Foucault distinguishes among discipline, control over a body; sovereignty, control over a territory; and security, control over a population).
6. Notions central to the analysis of power that have generally been treated as univocal and simple are now understood to be multivocal and complex. For example, there are many different aspects of access, including cost, education,
technical expertise, access to equipment, maintenance of equipment, and culture and gender bias.

7. In the history of the study of power, as of media effects (including works within critical traditions), causal relations are treated as if they are linear; often, however, they are not. Theories, concepts, and methodologies are only now developing that deal with nonlinear social processes. (An approach to understanding the state in a nonlinear social and political environment is developed by Braman, 1994.)

There are additional problems in the study of power that derive from contemporary conditions:

1. Many expressions of power are difficult to perceive, because the effects take so long or go so far before they are recognizable, as with genetic mutation; there may be no means evident to the human senses to perceive the exercise of power, as with surveillance; or the transnational character of effects of the exercise of power means they elude nation-state-based reporting mechanisms, as with environmental issues (Beck, 1992).

2. The number of claimants to power is multiplying, because new holders of traditional forms of power are emerging (as when women enter the corporate and political worlds), because previously unacknowledged but old forms of power are coming to be acknowledged (as with the socialization power of mothers), and because new forms of power empower new powerholders (as has happened with hackers and crackers). Conceptual shifts sometimes permit what may be long-standing forms of power to become visible, as in the cases of Virilio’s (1977/1986) notion of speed as power and Foucaultian explorations of biopower.

3. The holders of power are inextricably interdependent. Though this has, of course, to some degree always been true, it is accepted among political scientists that today’s degree of interdependence among power holders is qualitatively new and requires new types of policy responses (Keohane & Ostrom, 1994; Rosenau, 1984).

4. Increasing turbulence in social relations makes it harder to understand the exercise of power and its effects, though the new ability to deal theoretically and mathematically with some types of chaos may be useful in this regard (Grossmann & Mayer-Kress, 1989).

5. The shifting of power relations, emergence of new types of organizational forms, and multiplication of forces at each level of analysis make identity problematic at every level. Power relations are indeterminate (Dacey, 1987; Lyotard, 1988/1991). This “loss of intelligibility” of the state (Leca, 1992; see also Callhoun, 1991) is perhaps best understood within the context of Luhmann’s (1985) notion of the state as a discourse describing itself. The problem of unintelligibility confounds the policy-making process (Enzensberger, 1992).

6. A critical element in the formation of identity is the simultaneous identification of the other. This, too, has become problematic, whether because of theoret-
close of the Cold War,¹ because of the growth of multiculturalism,² or as a result of the transformation of social processes into their opposites.³

7. Many forms of power that have in recent history been held in the public sector are now being returned to the private sector, about which the public and scholars have less knowledge, though current work in organizational sociology (e.g., Deetz, 1992; Mumby, 1988) is filling this lacuna. Foucault’s concept of governmentality provides a theoretical path into this area (Burchell, Gordon, & Miller, 1991).

**Phases of Power**

There are three phases of power: virtual, potential, and actual. Virtual power, those forms of power that might exist,⁴ is the domain of possibilities of power, including power currently held by others; power that may become available because resources, processes, or both have become available; power that becomes available because of significant shifts in internal or external conditions; and power that is generated through growth of knowledge. Potential power, those forms of power that exist and reside in a state in potential form, is evaluated in terms of capacity, including natural resources, financial resources, knowledge of how to use those resources, perceptions of the agent by the other, political will, sovereign integrity, stable administrative control, loyal and skilled officials, infrastructure, and industrial base. Actual power is potential power used, power implemented. Potential power becomes actual only through specific practices (Olsen & Marger, 1993; Wartenberg, 1990). It is one of the problems of analysis of issues of power that power can only be measured in its actual form.

**Forms of Power**

Scholarly analysis has for the last few decades revolved around three “faces,” or forms, of power (Lukes, 1974): instrumental (power over the body), structural (power over behavior, including decisions), and what Lukes calls consensual or symbolic (power over thoughts and perceptions). A fourth face of power has emerged, or become visible, in today’s environment. Transformational power is the power of what Ellul (1954/1964) called technique in and of itself, the power to transform information or materials, what can be called

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¹ The response of those who are involved in the development of what is being called new security theory to the problem of the loss of the other that resulted from the end of the Cold War has been to identify four types of enemies: terrorists (undefined), those involved with drugs, those who harm the United States economically, and those whose behaviors are statistically unpredictable (Sibbet, 1991; Steele, 1990).

² Derrida’s (1993) *The Other Heading* is a meditation on the question of what the loss of the other means, from a multicultural perspective, for Europe.

³ Some theorists are claiming that in today’s environment the speed of social processes is such that they become transformed into, or yield, their opposites (Kroker, 1992; McLuhan & McLuhan, 1989; Taussig, 1992).

⁴ The concept of virtual power was inspired by the concepts of virtual materials and virtual processes in Scazzieri’s *A Theory of Production* (1993).
genetic power. It is transformational power that is both created by and transmitted (exercised) via the net (see, e.g., Antonelli, 1992; Grabher, 1993; Swann & Yates, 1993), and that is key also to the ability to transform potential power into actual. Today, transformational power is dominant. Luhmann (1985) may have been the first to suggest something like the concept of transformational power by implication when he described the state as a medium for transforming information.

Relationships among these forms of power are multiple. Some (e.g., Olsen & Marger, 1993) suggest the forms are cumulative. Foucault (1969/1972) and others stress the need to remember that power is a network of strategies, and that therefore analysis must examine a wide variety of types of interdependencies. Any single actor, act, or process may simultaneously incorporate more than one form of power.

**Attributes of Power**

Power has a number of different attributes by which specific elements or exercises of power may be measured and compared. It can be discussed in terms of its extensiveness (the range of power holders and of power subjects); comprehensiveness (the range of the power subject’s total life activities, or scopes, that come under control of the power holder); and intensity (the range of options available to the power holder within every scope within which it is able to act). Power that is the greatest in comprehensiveness and intensity is likely to be the least extensive, and every increase in power leads to a greater burden on the control center.

Often forms of power are related in compensatory ways, maximizing the use of strengths to offset weaknesses. The use of each form of power affects the environment in which others exist or might exist. In many cases, an increase in the use of one form of power is accompanied by a decrease in the use of other forms of power, as when heavy use of the instrumental power of police force is accompanied by a retreat from the effort to wield consensual force. Sussman (1995), in this issue, does a particularly good job of making clear these types of trade-offs and balances. If power is not used, it becomes deflated, whereas too much use can bring inflation (Luhmann, 1985).

**Units of Power**

There is also a distinction between power relations in which the individual is the subject and those in which groups are treated as a whole. In Foucault’s (1975/1982) analysis, the particularly demonic twist over the last few hundred years has been to combine the two, producing a form of power that is both totalizing and individualizing at the same time.

**A Typology of States by Form of Power**

Although states come in myriad forms and are, in many ways, each unique, they can be grouped into types about which generalizations can usefully be
made. Among the typologies that can be used is one based on the types of power in which different states specialize. During the modern period of the state—and Giddens (1985), Greenfeld (1992), Toulmin (1990), and others all equate the state with modernity—culturally defined nations have been specializing in symbolic power, bureaucratically defined states have been specializing in structural power, and hybrid forms of nation-states have been specializing in various configurations, all of them using instrumental power as and when possible. Today, a new type of state is emerging which specializes in the use of transformational power—the network state.

Of course, these types rarely appear in a pure form; the typology here represents relative emphases in the use of power by each form of the state. Types can be distinguished by their temporal form, organization, the process by which individuals become a part of the whole, the nature of borders, and the means by which the individual participates in the whole.

The Nation
Nations are communities that define themselves or are defined through cultural features (Anderson, 1983; Chatterjee, 1986; Gellner, 1983; Greenfeld, 1992; Hobsbawm & Ranger, 1983). The nation has as its temporal ideal the "eternal return" that is part of the experience of the sacred (Eliade, 1959). It is organized organically, and the key organizational features are cultural. Citizenship in ethnic nations is gained genetically, and in some cases and with some effort by marriage. Pertinent cultural features, such as language, provide boundaries. The individual relates to society through participation in ritual and transmission of cultural practices across generations. Using Carey's (1989) twofold typology of types of communication, within a nation communication fulfills a ritual function. Decision-making is based on heuritic techniques. The nation finds its greatest strength in symbolic power.

Current issues for the nation involving information as symbolic power include the debate over television content in Europe, official language movements in a number of countries (including the United States), and efforts by members of many cultures to retrieve cultural materials from museums. Interest in the cultural aspects of the state is clearly on the rise, as witnessed by a recent spate of books exploring ways in which specific cultural forms such as theater and poetry participate in the creation and sustenance of the nation (see, e.g., Chakravarty, 1993; Helgerson, 1992; Kruger, 1992; Paulin, 1992; Shell, 1993).

The State
Bureaucratically defined states, on the other hand, find their greatest strength in the exercise of structural power (see, e.g., Burns, 1961; Evans et al., 1985; Held, 1989; Olsen & Marger, 1993; Silberman, 1993; Turner, 1992). States as organizations exert their control by developing bureaucracies, rules, and regulations. Often elaborate information collection and processing systems are necessary. Weber (1954) was the first to fully develop this notion of the state, and his
work continues to influence numerous theories of and research on the state including, in addition to Sparks (1995) in this issue, Burns, Gouldner (1976), Greenfeld (1992), and Silberman. Weber defined the state in terms of its ability to wield control over a territory, its monopoly on violence for that purpose, the importance for the state of its role at the intersection of the national and international environments, and its bureaucratic nature.

The temporal vision of the state is of a stable system in equilibrium. Its organization is rational and bureaucracy is the key organizational feature. Individuals enter into the state via contract; political borders or breach of contract through criminal or treasonous activity provide boundaries. The individual relates to the whole by engaging with bureaucratic structures. In Carey's (1989) typology, communication within a state fulfills a transmission function.

Current information policy issues in the United States in this area include struggles over who is to design information systems for federal agencies (including collection from and about and providing information to the public); the survival of antitrust law; and all of the debate over the building, regulation, and use of the national information infrastructure.

Hybrid Forms: Nation-States
The nation-states that have dominated recent global history represent efforts to bring the national and state modes of organizing society together. Greenfeld (1992) articulates in erudite detail differences in the ways nation-states were formed and developed, even among nations in the developed world.

There is a plethora of current information policy issues for the nation-state generated by issues of multiculturalism, such as those discussed by Sparks (1995) in his article on public service broadcasting in Great Britain in this issue, and treatment of foreign nationals, as in the issues raised in many nations by guest workers.

The Network State
The network state is characterized by multiple interdependencies with other state and nonstate entities in ways largely dependent upon use of the global telecommunications network (the net) for information creation, processing, flows, and use. Network states are efforts to carve out areas of influence within the network environment in which autonomy can be exercised in the political, economic, social, and cultural realms—an effort, that is, to produce and reproduce loci of power.

The temporal vision of the network state is eternal change, or morphogenesis (Braman, 1994). Complexity, self-reflexivity, and change are the key organizational features. Individuals enter into the network state via communications that operate through multiple logics and connections. Boundaries are ephemeral, mobile, and permeable. The individual relates to the whole through a variety of autopoietic activities. Although Carey's (1989) typology of types of communication is sufficient for the historic dichotomy between nations and states, today's conditions require adding a third type: communication within
the network state fulfills the autopoietic function, rather than the ritual or transmission functions. Decision-making procedures in the network state are those of complex adaptive systems that incorporate various kinds of learning.

The network state specializes in the use of transformational power. Issues today include the treatment of information flows and processing for purposes of international trade; changes in military and police tactics, particularly in the area of surveillance; and, importantly, the debate over intellectual property rights. Research into the use and effects of transformational power is just beginning.

**Case Studies**

The articles that follow in this journal examine the relationships between information policy, power, and the state in concrete detail. What they offer is discussed here thematically.

*Features of States in the Developing World*

These articles deal with states in the developing world or states the development of which is in decline.

*Loss of autonomy.* Though all states are experiencing increased interdependence today, postcolonial states have often had little to say about how those relationships are structured, nor are their interests taken into account in the process of structuration. This is exactly what was found in the cases of telecommunications in India (see Mody, 1995) and in Mexico (see Barrera, 1995).

*Colonial impact on policy.* There are differences among information policies of developing countries depending on when those policies developed and the directness of their relationship with the colonial experience, as is evident in the studies of two different types of Indian information policy. Telecommunications policy is part of the Indian colonial heritage, for it was the British who established telegraph, post, and telecommunications systems throughout the country; contemporary policy is made in the context of historical relationships (Mody, 1995, in this issue). Indian software policy, however, developed only in the postcolonial environment; for this reason, it has been easier to craft a policy that suits the state's interests as well as those of transnational players (McDowell, 1995, in this issue).

*Role of local elites.* Sussman (1995, in this issue) makes the point that critiques of imperialism fail to acknowledge the role played by the elites of developing states that, drawn to international sources of capital, are responsible for policy-making that weakens the state.

*Emergence of the Network State*

Most of these pieces are about bureaucratic states with varying relationships with the nations of which they are composed. Barrera (1995, in this issue), however, suggests that the nature of the state itself is changing. McDowell (1995, in this issue) goes further, presenting India's software policy as evidence
that the country is beginning to function like a network state. McDowell identifies three aspects of India's approach to software as network characteristics:

1. The bounds of the industry cannot be drawn geographically, for "The geographic location of what is called the Indian software industry is neither coterminous with India's borders, nor with firms identified as Indian firms" (p. 44). Linking bureaucratic state and cultural nation, India drew upon cultural networks built through international education and permanent and temporary migration to enhance foreign direct investment in India's software operations.

2. The decision to stimulate the software industry was a decision to rely heavily upon activity that takes place within the net.

3. The decision to encourage exports through deputation (sending people abroad) is also described as a policy with network state characteristics.

4. The move towards the software industry was a move away from a policy of self-reliance towards a policy reliance upon foreign technologies as necessary to maximize India's strengths. In some cases, this requires working with transnational corporations; in others, with international organizations such as the World Bank, which provided millions of dollars for the training of software professionals in India; and in still others, with other nation-states, as when Indian firms build production plants elsewhere. Just as multiple interdependencies among firms is the characteristic of the network (Antonelli, 1992) or embedded (Grabher, 1993) firm, so this type of interdependence on the part of the state is a characteristic of the network state.

5. McDowell (1995) describes encouraging industries through nonmarket means, such as building infrastructure, rather than through manipulation of the market, as characteristic of the network state.

6. The middle class in India is seen as a repository of technical and managerial skills essential to undertake global high technology activities; as a result, the state is heavily involved in technical (not mass) education.

7. Activity like the Indian software industry could only happen in a post-Fordist environment, for it is global segmentation of activities that permits firms to move activities away from specific geographic areas, giving countries like India more opportunities.

Taken together, the McDowell (1995) and Mody (1995) articles make two additional points. Different ideal types of states are mixed in practice; McDowell does not claim that all Indian policy is of a network state type. And not all policy that deals with information and communication is policy that supports the network state.

**Effects of the Nation upon the State**

These cases provide examples of different types of relationships between the nation and the state. In the Philippines, for example, important moments in communications, such as the opening of an ocean cable, were celebrated publicly in efforts to stir national feelings—though in fact those same events marked the weakening of state power as it is yielded to transnational forces.

Sparks (1995) makes the point that the basic unit of broadcasting organization is the state, and that it has been one of the primary goals of public service
broadcasting from the beginning to represent the nation to a national audience. Although this effort was troubled in Great Britain from the start (because of the multiplicity of nations within the British state, the long history of heavy immigration, and local differences within Great Britain), it is even more problematic today with pressure from more competition globally, the lure of international capital, and the loss of Britain's hegemonic position. Sparks reads the tension between the "culturalist" (nationalist) and the economic discourses about public service broadcasting as a reflection of the conflict between continuing to serve national interests and supporting the insertion of Great Britain into the international arena.

Whereas in Great Britain this conflict is still unresolved, one of the "British nations," Ireland, has taken a different route. In Ireland, too, public service broadcasting from the beginning served the creation of a particular "imagined community" (Anderson, 1983), a matter of great interest as the country sought to distinguish itself from its colonizer, Great Britain. When international capital became available to the Irish in the 1960s, it was seen as offering opportunities to break away from continued dependence on Great Britain, and from then on public service broadcasting served this project. In the Irish case, then, turning towards international capital was also turning towards the state and away from its former colonizer.

Barrera's (1995) article on telecommunications in Mexico explores how the notion of the nation can be used to serve ends of the bureaucratic state when he comments that labor was disempowered through a continuing insistence on national, rather than class, identity. In the Eastern European states that Jakubowicz (1995) talks about, the press are mired in complications resulting from renegotiation of the relationship.

Types of States and of Power
The states discussed in these articles are quite diverse. Sparks (1995) reports on the decline of public service broadcasting as a loss of symbolic power that is occurring as the state itself goes into decline.

Mody's (1995) tale is one of how failures or weaknesses in a state's capacity for power, its power potential—in this case in the areas of administrative ability and the quality of its leadership—makes it easier for elements outside the state to turn the state's policies to their purposes. Although India has recognized the necessity of elements of an information infrastructure in order to attract and support industry, most of the value of the use of that infrastructure currently goes not to Indians but to transnational players—as was also found to be the case in Mexico (see Barrera, 1995) and the Philippines (see Sussman, 1995).

Jakubowicz (1995) makes clear the need to resolve power relations before media policy can effectively be set in his discussion of press freedom in several East European countries. He also describes complex interactions between the use of different types of power; although there are still cases in which instrumental power determines the conditions under which symbolic, structural, and transformational power may be exercised in the countries he discusses, sym-
bolic power is still seen as so important that its institutions are critical sites of struggle.

It appears to be difficult for states to retain control of media content and infrastructure successfully. Sussman (1995) reports on the way in which efforts to control the media backfired on Ferdinand Marcos, whereas Jakubowicz (1995) describes the failed Soviet attempt to maintain complete control not only of media messages but of message reception and interpretation as well.

Though Bell (1995) and McDowell (1995) touch upon it, Sussman (1995) is the most insistent of these authors on analyzing policy across media simultaneously because of the ways in which different policies interact. In the Philippines, for example, Marcos and other politicians consciously used the mass media and popular culture to generate an environment in which their plans in the area of telecommunications could be accomplished. This is also an interaction among different forms of power.

**New Information Technologies and Vulnerabilities of the State**

These authors report both increases and decreases in state power that have resulted from decisions to use new information technologies. Sources of increased strength include the following:

1. The state can use the media as a source of income, as Mexico did with telecommunications (Barrera, 1995).

2. The scale of the telecommunications network means that dependence upon it necessarily also means increased dependence on the state, which historically has been the only entity in most places capable of building and maintaining the infrastructure.

3. Because the net is global, the geographic scope of state power can be increased. The difficulty of locating geographically activity that takes place in the net makes it easier, for example, for those states that like to exercise their law extraterritorially, that is, within the geographic borders of other states (Sussman, 1995).

4. Because of the technical sophistication of information technologies in the second half of the 20th century, populations may be unaware of state use of those technologies. In one example offered by Barrera (1995), Mexicans were generally unaware of the government’s building and use of the microwave network in the 1950s.

5. Both global and local entities are likely to find their interests best met by working in alliance with the state, as Sparks (1995) suggests.

6. The state continues to play an important role, even in the liberalized environment.

7. The need for a regulatory response to the new media creates a demand for increased state activity, as Bell (1995) describes was the case in Ireland.

8. The net offers new types of solutions to state problems. When the United States, for example, needed to lower its profile internationally because of domestic dissent, the net permitted it to do so by centralizing decision-making about activities that were decentralized (Sussman, 1995).
Sources of decreases in state power include the following:

1. The most important source of decline in state power was the shift of much key decision-making for the state from the state itself to transnational corporations, international organizations, or both. Although this same shift is an increase in value of the state's power to regulate local conditions, it is a decrease in many forms of autonomy. As Sussman (1995) puts it, informational relationships between states infiltrate entire economies. Sussman further discusses the effects of this shift on the state, saying that the mass media and telecommunications had become dissociated from social development. As a result of this dissociation, the potential value of these instruments to the state is lost to suprastate interests.

2. The global scale of the net decreases the effectiveness of many forms of local state power.

3. Intervention in internal affairs now comes not just from other countries (as in the colonial situation), but also from corporations (as in the examples offered by Mody, 1995, and Jakubowicz, 1995) and international organizations (as Sussman, 1995, makes clear in his piece on the Philippines).

4. For countries like those of Eastern Europe that are struggling towards press freedom for the first time, technological developments that result from digitization must be coped with in an environment that is already problematic (Jakubowicz, 1995).

Information Policy and Power

Information policy analysis is more sophisticated if it takes into account the fact that the policy-making process, policies themselves, and their implementation are all exercises of power by the state. Analysis of the state is more accurate if the state is understood as an evolving form than as something static. From this perspective, the use of new information technologies is not in reality making the state more vulnerable. Rather, states are experimenting with form and the network state is emerging. Some forms of power are being strengthened and others are being weakened in combinations that—as the studies in this issue describe—vary from state to state. Because transformational power, with its orientation towards information, is the dominant form of power in this era, information policy is the key set of tools used to define the horizons of the state. Thus, again, the value of the articles that follow.

References


In Europe the practice has developed of referring, for policy purposes, not just to the telecommunications network, but to the entire cycle of production that takes place through the network, the filière electronique.


