



innovations, such as the railroad and electricity, stimulated legal developments, as have social trends such as urbanization, demographic shifts, alterations in political mood, economic developments, the appearance of new political ideas, and experience with laws and regulations already in place. The legal environment for information and communication has thus been under constant reconsideration ever since it was recognized as fundamental to the new forms of democratic governance of the late eighteenth century; both medium and message were repeatedly reproblematicized beginning with the introduction of the telegraph in the mid-nineteenth century.

The duration and constancy of stress in the area of information policy is reflected in the ways we have talked about our use of information and communication technologies. The word “new” was first used in this context in the nineteenth century to refer to changes in journalism practices made possible because of technological innovation. The word “media” was coined in the 1920s to talk about the growing number of entries in this category. Only in the 1930s were separate broadcasting and telecommunications regulatory systems developed to deal with then-new, and then-distinct, electronic media. The first Supreme Court case using the phrase “new media” dealt with a bullhorn carried through streets on a truck in the early 1940s. The first scholarly article using that phrase appeared in 1948 in a discussion of the regulation of television, FM radio, and facsimile. And by 1954—only two decades after the Communications Act of 1934—the Federal Communications Commission (FCC) was forced to confront the need to break down the barriers between the two regulatory systems it managed. By the 1970s, Congress was dealing with issues raised by new information and communication technologies regularly.

Many of today’s information policy problems are enduring in nature, but others are not. Traditional issues continue to appear in traditional forms, such as direct censorship of reporting from a battlefield during wartime. In some cases traditional issues appear in new forms, as when privacy is invaded via technologies that can be used at a distance in ways imperceptible to the surveillance subject. There are areas in which long-standing policy principles need reinterpretation in order to be applied in a qualitatively changed environment; the question of how to think about a public forum on the Internet falls into this category. And some completely new types of information policy issues are emerging because of technological capacities never before available, as with the question of liability for processes launched by intelligent agent software.

The ways in which we think about policy have also changed. New theories develop as thinkers elaborate on ideas, respond to critique, incorporate new information, or achieve original conceptualizations. Empirical change yields new policy subjects, such as the Internet. Traditional policy subjects (e.g., television) and constituencies (e.g., communities and ethnic groups) exhibit new behaviors in the electronic environment. New specializations appear, such as geographic information systems. Interest in familiar topics, such as archives and data structures, revives because of their functions in the exercise of informational power. Previously unconnected lines of thinking come together into new fields, as has happened with the economics of information.

Changes in the law, in the subject of the law, and in how we think about the law can result in a change in the very nature of the state itself because the institutions, processes, and policies of any given political form are but a moment of stability within a much wider, more diffuse, and constantly shifting policy field. The broad field within which particular legal systems appear, change, and disappear includes ethical and behavioral norms, discourse habits, cultural practices, knowledge structures, organizational forms, private sector and individual decision-making, and technologies themselves as well as the formal laws and regulations of officially recognized governments. The information policy field therefore includes

- *government* (formal institutions of the law);
- *governance* (decision-making with constitutive [structural] effect whether it takes place within the public or private sectors, and formally or informally; and
- *governmentality* (cultural predispositions and practices that produce and reproduce the conditions that make particular forms of governance and government possible).

The common saying that “the law is a moving target” captures only a part of the processes by which legal systems change; with a longer and wider view it is possible to see a specific law developing out cultural practice, becoming a form of discourse, and ultimately being translated into a technology. Laws and regulations left behind can take on new functions—what architects call “spandrels” when they are talking about building elements that are no longer needed for their original purpose but remain in use, stimulating new ways of using space. Whether deliberate or accidental, intended or not, the law thus triggers social change as well as responds to it. As a result, the very ways in which we conceptualize information policy is itself a form of agency.

In complex adaptive systems theory, and in its cousins such as theories of chaos, punctuated equilibrium, and second-order cybernetics, a system emerges when it has characteristics as a whole that cannot be predicted by any of its parts or the relationships among those parts. Systems differ from each other in kind, even though they share some constituent parts and relationships, when their emergent properties are qualitatively distinct. It is this that has happened with the appearance of the informational state: Many of the structures of U.S. law with which we are long familiar remain in place, and traditional processes such as elections and the passage of legislation continue. Because informational power has altered the materials, rules, institutions, ideas, and symbols that are the means by which other forms of power are exercised, a new type of system, the informational state, has emerged. Information policy is thus key both to understanding just how this change of state has come about and to analyzing how the informational state exercises power domestically and around the world. Information policy is the proprioceptive organ of the nation-state, the means by which it senses itself and, therefore, the medium through which all other decision-making, public or private, takes place. As Laurence Tribe comments, all such legal questions are of constitutional stature because they define social categories and the processes to be permitted within and between them, while other areas of the law deal with existing categories and processes.

Just as has happened with the many streams of economic thought that have now come together in the economics of information, so laws and regulations from diverse areas of the law are now understood to commonly populate the domain of information policy. Examining together all policy dealing with information creation, processing, flows, and use makes it possible to see relationships between policies not historically related, bringing to light lacunae, contradictions, and conflicts. Doing so also addresses an even larger problem: There is plenty of grand theory and broad-brush discussion of macrolevel social trends regarding the nature of the information society, and a seemingly infinite amount of detailed analysis of the specific laws and regulations dealing with information creation, processing, flows, and use that need tinkering. The first of these is useful as a frame but despite endless refutation of the notion of technological determinism (the idea that technologies inevitably affect society in specific ways), the macrolevel analysis on its own generates a sense that we are the subjects of history rather than its agents. The second of these certainly involves agency, but while adapting, reinterpreting, or replacing specific laws or regulations at the microlevel “makes

something happen,” it is difficult to link just what that is back to the larger picture. The study of information policy as a coherent body of law and regulation introduces the meso-level and lets us answer the real question: What are we doing to ourselves?

For the purposes of this book, U.S. law is taken as the case. To make the argument, and the analysis, it is necessary to focus on one government in the first instance. Both argument and analysis, however, are valuable for studying other political systems, whether at the state level or supra or infra to it. The U.S. case has value to those in other political systems, and for those seeking to understand international and global decision-making, because in some areas (not all) it is an innovator and because U.S. regulatory approaches have been doing relatively well in the global market for the law. Both of these features, of course, also mark the limits of the case. And while the focus of this book is on policy at the national level, it must also be emphasized that it was often *not* the United States that led the way among countries in policy innovations designed to adapt to changes in the information environment, and international and private sector decision-making have also been important.

It is a classical analytical error, however, to believe that it is possible to understand what is happening to society via the use of information policy to exercise power by looking at only laws and regulations. Rather, three types of knowledge must necessarily be brought together. Research on the empirical world provides evidence about the policy subject, the world for which information policy is made. Social theory provides a context within which to understand the empirical detail. Knowledge of current law and of its history provides a necessary foundation for those who seek to adapt, extend, reinterpret, or replace that law for the contemporary world. Historically, these diverse domains of knowledge were pursued within different disciplines that only rarely interacted, and unfortunately a number of barriers make it difficult to ensure that policy-makers are fully informed by what is known about the empirical environment for which they are making law. Still, failure to bring these different types of knowledge together cripples policy-making, creating the risk that legacy law and what develops from it will be inadequate at best or dysfunctional at worst.

Bringing these types of knowledge together, however, makes visible trends in U.S. society as they are manifested in the identities of the state and of its citizens, structures internal to society, the borders that determine relationships with other societies, and the very rules by which transformation—change—takes place. Since information policy also appears

at the intersection of informational, technological, and social structures, these distinctions provide another analytical axis.

What do we see, when we address the question of what we are doing to ourselves, in this way? In very broad brushstroke:

- *Identity* In the area of identity, the mutual transparency between the individual and the state has been destroyed, with the state knowing ever more about the individual and the individual knowing ever less about the state. The identity relation between the individual and the state via citizenship, historically determined by relatively clear rules, has become a political tool with shifting, ambiguous, and at times hidden criteria for whether one is in or out.
- *Structure* The period of turbulence in social, technological, and informational structure has resolved into a new orientation that is more centralized and rigid than was the case in the past. The story isn't completely over: Some experimentation continues, particularly in the area of information architectures. It is not yet known just which regulatory tools will be feasible, effective, and constitutionally acceptable. And there is still a great deal of resistance to many aspects of the informational state as it is being experienced in the first decade of the twenty-first century.
- *Borders* While the notion of the borders of the state seems clear, in historical reality this has never quite so simple. In the U.S. case, for example, relaxation of border parameters in order to assert cultural identity and ease the lives of those who manage the technological infrastructure have long histories. Today, however, geopolitical borders retain only a rhetorical function used to justify a much more expansive sense of U.S. political territory globally. Within the United States, various means are being used to define the border as a condition as likely to be experienced internally as at the geopolitical edge, allowing exceptions to mainstream U.S. law justified by border conditions to be applied much more broadly.
- *Change* In the area of change, U.S. policy is currently somewhat confused and often self-contradictory. Despite an announced goal of remaining a global leader in the development of scientific and technical knowledge, many current policies dealing with information and information technology not only will make that unlikely, but may well reverse advances already accomplished. The same can be said regarding democratic processes of social change.

It is at the next level of detail that the contributions of specific information policies to these large-scale social trends become clear. The obscurity,

unfamiliarity, and technical nature of many types of information policy, however, have kept many of these developments out of public view. In some of these areas the trends not only are devastating but may be very difficult to reverse, while in others conditions of turbulence, recency, and tentativeness of a change in direction, or outright resistance, mean that the future may not look like today.

The next three chapters build the theoretical foundations for understanding just what is going on. Chapter 2 unpacks the concepts of information, power, and the state as they provide the theoretical grounding for this work. Chapter 3 provides a brief history of information policy and explains just what is included in the domain of information policy. Chapter 4 examines the twenty information policy principles found in the U.S. Constitution and its amendments and the social spaces they create. Chapters 5–8 examine in turn the impact of U.S. information policy on identity, structure, borders, and change. Each of these four chapters opens with a theoretical introduction to the orienting social concept before going on to explore a sampling of pertinent information policy issues. Discussion of each issue is introduced by a brief look at the background and history of current law and a concise description of the current state of the law. These contextual elements make it possible to look at trends in the development of these laws and regulations and in their effects on U.S. society. The concluding chapter explores the implications of these trends when viewed together as a whole. Extensive bibliographic essays follow that provide much more depth regarding the development of the theories applied as well as the empirical sources upon which the legal analysis is based.

Several guidelines helped choose which information policy issues would be discussed as exemplars in this book. Familiar and widely discussed issues such as intellectual property rights, privacy, and trade in services are included because it is hoped that the additional frame and conceptualization offered here will enrich those conversations. In some areas, such as the use of propaganda in support of military power, changes wrought by the use of new information technologies are fairly straightforward and adequately explored in the existing literature, and so they are not included here. The same cannot be said for such things as the incorporation of information policy tools in arms control agreements, the appearance of the category of hybrid citizenship, or the collapse of physical network structures into sheer conceptual effort. In most cases, then, the principal driving the selection of one information policy issue over another has been “lookin’ where the light don’t shine,”

the desire to draw attention to areas of information policy that are extremely influential but which are receiving relatively little attention—the “dark matter” of the law. The final factor taken into consideration was the degree to which trends in a particular area illuminate the macrolevel social trends that are the central thrust of this book’s argument regarding the implications of the transformation to an informational state; the expanding use of “functionally equivalent borders,” for example, falls into this category.

There are things that this book is not: More detailed discussion of changes in the world for which policy is made, both technological and social, is found elsewhere. The same is true of analysis of developments in the economics of information that underlies policy-making. Internationalization (with other states) and globalization (with both states and non-state actors) of the law affect each of the areas of information policy here but are not included in this book’s discussion. The use of information and information technologies as policy tools to effect other political goals is another important trend that is outside the bounds of this book. So, too, are discussions of changes in the nature of information policy-making processes, and in the overall relationships between the law and society.

*Change of State* is an introduction to information policy in two senses. Closest to the ground, it provides an entrée into many of the most important information policy issues with which we will be struggling during the twenty-first century. At the most abstract level, it explores interactions between social theory and policy. It is between the two, however, that it is hoped the book will have the most impact, by providing a way of seeing the role of information policy in effecting the fundamental social changes wrought by the transition to an informational state.