CHAPTER TWELVE

The Internet and Public Policy in Comparative Perspective

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Comparison is a fundamental method of science, social and otherwise—so much so that often it does not need to be discussed. It is the logic of comparison that drives the experimenter and moves the historian: even when the comparisons are not explicit, they are crucial—every author of the simplest description of a single case requires us to compare when they suggest that what they have described is either interesting or mundane. "Compared to what you know already," is always the implied suffix. The issue is not *if* a comparison exists in a given piece of research, but where it sits.

In fact, choosing where the comparison rests is one of the hardest tasks of research design, although it rarely called a problem of comparison. This logic of comparison is the pinch in finding a fieldwork site, phrasing a research question, selecting a case study, formulating a sampling plan, choosing a legal precedent, and designing an experimental manipulation. The comparison itself might be the rich to the poor, the women to the men, the workplace to the home, the placebo to the treatment. In Internet research to date it has often been the heavy user to the light user, or those who have access compared to those

who do not. For a variety of reasons, it has *not* often been the Internet in the United Kingdom compared to the Internet in Russia. Indeed it has not often been in matters of law and policy—matters where nation-states like Russia are important—where these research comparisons take place.

In considering research about the Internet to date, the comparative method *does* need to be explicitly discussed. Research has endeavored to develop our base of knowledge about the hopes and fears the provoked by the Internet: it has begun to expand our understanding of potential opportunities and emerging social problems. Much of this has direct relevance to public policy, however, we will argue that the form in which research has engaged with public policy has so far been self-limiting. Implications for policy have often ended at calls for public policy intervention (or occasionally, withdrawal), implying that the Internet is currently largely unregulated and the important decision for the state is whether or not to intervene. We argue that the very framing of "policy research" and the implication of social science research has often reproduced this problematic approach. The state already intervenes, and the Internet is heavily regulated—though perhaps not in the ways with which we are most familiar. The task for researchers is now to understand the finer mechanisms of policy action, and this necessitates greater attention to internationally comparative research.

In this chapter we will begin by arguing that we are now witness to an important time in the Internet's development, a time when scholarly research can have particular relevance to and impact on public policy. We first sketch just how Internet-related research has so far been related to public policy. Second, we will attempt to highlight the areas where the state and other parties have been most active in acting to control the

network. This is the scope of policy that we need to attend to. Third, to understand the choices on offer for policymaking, we will argue that several sorts of comparative question need to be asked, simultaneously: specifically we need comparisons across nations, across history, both vertical and horizontal, macro- and micro-. Finally we will admit that this prescription is inherently challenging and tends to reproduce the assumptions found in the locations where the comparative research is written, but we still see it as the most compelling way forward.

The Internet, Social Problems and Opportunities

While most of the other chapters in this book have presented a review of the research findings to date in a specific academic discipline, comparative policy research is not a discipline, nor should it be. Even if we conceptualize law and policy related to the Internet using a more forgiving phrase such as an "area of research," a summary of this area is very difficult to imagine: much of what has been investigated has some implication for law and policy, but for this area to be considered as a whole the research needs a commonality of assumption that we have no right to ask of it. That is, to be a whole it must share central problems and theoretical foundations—even a world-view. We need not ask it to be whole, as we will explain.

This chapter is then less a review of research and more of a call for it. Each academic discipline approaches the Internet differently: Internet research consists of many strands. We seek to highlight the importance of research that informs public policy across these strands and academic disciplines. From research about the mechanics of policymaking to critiques that force a reconsideration of all existing structure, policy-relevant research is

important in modern society. We have seen that the Internet presents real problems with which we need to contend, and many of these problems have a central public policy dimension or hold out the hope for mitigation through policy action. To name just a few examples, we have before us the possible existence of a "digital divide" or inequalities in access to information (see chapters 2 and 4), the undermining of citizenship and political engagement (chapter 4), the reorganization of private organizations and the public sector to reduce waste and increase responsiveness (chapter 2), and the future pricing, performance (chapter 5) and governance (chapter 9) of the Internet itself. Our concern is the production of policy-relevant research about the Internet across disciplines and across social problems.[1] We wish to ask, "What research comparisons are needed to inform policymaking that are not being made today?" The answer includes more internationally comparative research relevant to public policy, as well as the explicit integration of policy implications into existing social scientific research using other research designs.

The need for policy-relevant Internet research. While ARPANET, the famous Internet precursor, was first operational in 1969, the word "Internet" was not coined as a proper name until 1982 (Carlson et al. 1996; Zakon 2001).[2] At the time this book chapter was written, we stand about twenty years from the development of most of what we commonly call the Internet, but for both the average person and most academic researchers, exposure to the Internet is still younger than that. Social research relevant to the Internet is still in an early stage, as is our exposure to the network. Comparative research on matters of law and policy is presently underdeveloped, even in this context of newness. While it is true that social scientists stereotypically shy away from making bold

conclusions, our point is more than the ritualistic call of, "further research is needed," appended to the conclusion of so many research articles.

Policy-relevant research is needed now because state action in a given sector is not equally receptive to change at all times—communication policy, for example, has often been characterized by periods of intense struggle at the introduction of a new communication technology, such as the debate over the institutional structures and regulations that would govern broadcasting in the US, eventually leading to the Communications Act of 1934 (see McChesney 1993). These initial struggles often end in long periods of stability—it would be 62 years before major changes to the US 1934 act, and even then the institutional structure of broadcasting was little changed (see Aufderheide 1999). In telecommunications policy, by contrast, change has been much more common, but *major* change is rarely possible—policymaking proceeds by what Weare terms "disjointed incrementalism" (Weare 1996).

Is the lesson for one who would influence policy action then: "act quickly!" That is, act during the infancy of a new communication technology? A relatively early flowering of "media effects" research in the UK (Himmelweit, Oppenheim, and Vince 1958) and the US (Schramm, Lyle, and Parker 1961) occurred in the 1950s and 60s, focusing on the consequences of violent television programming for children.[3] Some findings linked televised violence and aggression: the reports of groups like the Media Action Group of US President Johnson's *National Commission on the Causes and Prevention of Violence* and the later *Surgeon General's Scientific Advisory Committee on Television and Social Behavior* were controversial because of this suggestion, but still it was unlikely that they would have effected major policy changes in broadcasting regulation. "Early" research in

the academic community was some thirty years too late: even if the findings of these committees had been uncontroversial, this would not have changed the fact that the economic structures driving the production of television content were cemented in both industrial organization and law as early as the late 1920s.[4] Similarly, a historical turn in academic work on broadcasting in the US in the late 1980s to mid-90s (Streeter The "new historicism" in media studies 1996) has produced a number of damning critiques of the industry's structure that are extremely relevant to public policy toward the industry (e.g., Douglas 1989; Smulyan 1994; Streeter *Selling the air: A critique of the policy of commercial broadcasting in the united states* 1996). This is our paradox: the best hope for understanding communication systems may require decades of research and a historical perspective, yet it seems irresponsible to wait sixty years when this so greatly reduces the chance to contribute meaningfully to policymaking. Past media's moral for the Internet may be that it is just when the least is known about a new communication technology that knowledge is most needed, and most influential.[5] The early years of this century may be for the Internet structurally equivalent to the 1920s for US radio broadcasting: these are the formative years that will produce a lasting structure. We will next attempt to specify what sort of public policy we mean Internet research to address, and what forms of research exist to address policy.

Research Relevant to Public Policy

When speaking about the context of law and policy, we must be clear at the outset that two forms of research are relevant, those where public policy is present either as the *object* of or in the *implications* of a study: the first is research on policy and law itself,

while the second is social scientific research on some other topic that can usefully inform public policy. Any reference to "policy research," tends to invoke the former, which sometimes goes by the name of "policy analysis" or "policy evaluation."

Policy as Object of Research

Policy analysis is often conceptualized using the impoverished definition of *evaluation*; it is associated with hypotheses that take the form, "Is a particular law or policy effective?" Effectiveness is then measured by achievement of a law or regulatory program's stated goals, or an outcome's adherence to a literal reading of a statute.[6] Due to the assumptions hidden within the concept of effectiveness, hypotheses of this form have a tendency to beget the conclusion that, unsurprisingly, the policy in question does not function in the manner that the rhetoric surrounding it suggested that it would, or that actual experience will not fit a literal reading of the law without interpretation. In the worst examples of this tradition, researchers prove these general points over again with each study, never realizing their generality or articulating the underlying structures of rhetoric, symbolism, and interpretation. Policy analysis of this form is not our aim.

A second, richer type of research which treats policy as *object* rather than product is research concerning the mechanisms and processes of policymaking—for example what has been framed as the public policy specialization within political science and economics (e.g. see John 1998), political sociology, as well as the perhaps the very broad area claimed by many disciplines under the banner of political economy (e.g., see Mosco 1996). The analytic tools developed in these traditions can be valuable to understanding law and policy about the Internet: Consider, for a moment, planning a research project in one of these traditions to study the control of the Internet's domain name system—the

system that maps the name of an Internet host (such as "www.uiuc.edu") to an Internet Protocol address for that host.

Using Existing Concepts: The Case of ICANN

The 1997-1998 design of a non-profit private corporation to administer the Internet domain name system (eventually, the Internet Corporation for Assigned Names and Numbers, or ICANN) might be explained by conceptualizing Ira Magaziner, a senior policy advisor to the Clinton administration in the US, in the role of a "policy entrepreneur" who capitalized upon a "window" (after Kingdon 1984). The policy window was the temporary prominence of unforeseen and politically unacceptable profit making by Network Solutions, Inc.—a company earlier granted a monopoly on providing this service by government contract. Magaziner took the opportunity to implement a privatization agenda (for a review of the development of ICANN, see Froomkin 2000). A researcher might also consider the US Department of Commerce or ICANN as "sub-governments," and the relations between actors as a subject for policy network analysis (after Jordan 1990). ICANN's results with the domain name system might be compared to an ideal model of "perfect administration" (Hood 1976). Alternately, the decisions of institutional actors in the system could be analyzed using rational choice theory (imported to political science from economics: see Arrow 1951) or as an ecology of games (Dutton 1992). Similarly, if we wish to pursue the same topic from the domain of law, we could adopt a legal process perspective and evaluate ICANN's procedures using objectivist concepts like institutional competence (after Hart and Sacks 1994) or we can take quite the opposite approach and critique ICANN as a ramshackle compromise, a small extension of thematic commitments to property rights and power relations made by other

elements of the legal system (after Unger 1986). We can see that the applications of existing legal and social scientific theories and concepts are myriad.

There is a broad theoretical toolkit available for reasoning about policymaking within sub-disciplines that have been concerned with how public policy works. Considerable research to date can be classified solidly in the "policy as object" approach, but research on Internet-related policy has often lacked a grounding in any relevant theoretical framework. It is striking that despite the over-prominence of ICANN and Internet governance in the research to date, the above hypothetical gloss on possible research designs pays more attention to these theoretical models than most. Let us next consider policy suggestions arising from the *implications of* research, and then reflect on the practical effect of these two forms of research.

Policy from the Implications of Research

By "from the implications of," we mean research ostensibly about something other than policy (technology, human behavior, market structure) that leads to conclusions—or inferences drawn from these conclusions—that have the potential to influence policy. This describes a great deal of work that never mentions the word policy. While in social research the claim is still heard that the research enterprise is essentially disinterested, creating knowledge for knowledge's sake, this position does not bear much reflection. Research is essentially a positive project—not in the sense Comte might mean but in Dewey's: knowledge is made to be used, and shaping the course of public affairs is one of the most important uses on offer. If research findings bear on matters of public policy and the researcher does not act as a policy advocate, one suspects naïveté at best. As Parker puts it (1973), at the least this feigned neutrality may simply be "giving up the

field to stronger political forces" (p. 595), while at the worst it is itself "a policy advocacy gambit, an attempt to garner greater support for the value-assumptions hidden in the choice of research problem through claims of scientific neutrality" (p. 590).

A third option not considered by Parker is that social researchers are simply ineffective at engaging with public policy, as much as they would like to. Governments are now acting to control the Internet on a number of fronts, from the mundane to the sinister—from fiscal goals for infrastructure investment to secret political surveillance and censorship. It would seem that these policy debates would demand the participation of the scholars who have developed the growing body of Internet-related research detailed in this book. Yet in most cases this has not happened; public debates often proceed without reference to scholarly Internet research. This may be a case of willful ignorance on the part of governments, but it may also indicate a lack in the research scholar's practical skill at engaging with political processes that are foreign to the research enterprise. Of course, situations like these arise whenever academic research intersects with matters of public concern; they are specific to Internet-related research only so far as the nascent Internet is more susceptible public interventions into its structure, as discussed above. The hope for research to facilitate positive regulatory action (or retreat) that might have long-lasting consequences makes Parker's observations, if not specific to the case of Internet-related research, at least more salient for it.

Policy as both object and implication. This division we have been discussing involves an unfortunate separation into separate spheres of "social science" (where policy is often thought to derive from the implications of research) and "policy research" (where policy is often thought the object), which is counterproductive and explains some of the difficulty in integrating public policy into academic research. It appears to be inspired by the strange idea that people who know something about law should not be allowed to think about anything else, and by the related feeling that a social scientist who is found grubbing about with the legal and political practicalities of the present day is tarnishing a noble purity of purpose.

While it is said that policymakers and academics are notoriously prone to speak past each other (or not to speak), the marginalization of the academy in "Internet policy" in most countries is far from inevitable. It is mainly a repetition of socialized role relationships for "academics" and "policymakers." It is not just that social science holds lessons that are ignored, but also that the production of theoretically-informed research on areas relevant to the practical needs of policy requires an engagement that is often missing from Internet research. We will now propose a some suggestions under which this research might proceed.

Research Agendas

One way of formulating a research agenda for the study of the Internet is to seize the Internet as a case study for the application of problems, models and methods that are already well known. This urge drives the creation of Internet inquiry in many established fields, as we have seen in this volume. It is true that useful questions from the past deserve to be asked again in an Internet context if there is a substantive reason for asking.

That is, if there is some chance of an unexpected answer, a socially problematic answer, or a hope of broadening our existing understandings of the world. It may be possible, for instance, that there are systematic biases in content available on the Internet, and that this cultivates a distorted worldview among heavy users, as has been argued in the case of television (Gerbner 1973; Gerbner and Gross 1976). Many of the Internet-related research projects to date are direct applications of earlier questions in this manner. In some studies this awareness is explicit: Turkle's *Life on the Screen* is often cited as a landmark work in the scholarly study of the Internet; it used the Internet's emerging culture of simulation to re-approach and elaborate psychoanalytic theories of a decentered self. This produced a study that contributed to what we know about the Internet, but also about human identity more generally (Turkle 1995). In other work, the questions asked and comparisons posed are identical from the past to today, but the newer Internet research is disconnected from earlier literature and does not build from it. For example, beginning in the late 1990s a number of researchers examined the global diffusion of the Internet. There is a substantial base of existing knowledge about the diffusion of innovations (for a review, see Rogers 1995) and the diffusion of interactive technologies (e.g. Valente 1995) that much work in Internet diffusion made little to no attempt to build upon (Press et al. 1998; Press 1997).[7]

Law and Public Policy Relevant to Research

Just what public policy should Internet-related research aim to understand and affect? When one thinks of media policy—or more commonly, media regulation—the most significant legal and institutional structures that come to mind are those inherited from

television, radio, and telecommunications. This idea of regulation is often *ex ante*: what is prohibited and what is allowed to be said on the television, how the communications regulatory agency controls participation in the market. The Internet turns this upside down, and it is this inversion that is often mistaken by the casual observer for a lack of regulation. One way of interpreting the situation at the opening of the 21st century would be to say that governments are awakening to the need to apply regulation to the Internet. While this is commonly held to be true, it is wrong; it is a misreading of history that is overly focused on content regulation. It is not that the Internet has traditionally been less regulated than other systems of communication, but that it was regulated by different agencies in a different manner. As it is in some ways quite a different technology, this is entirely predictable. It is not the *ex ante* action of the broadcast license or the telephone tariff price control that is the policy instrument of note in Internet space, but the *post hoc* antitrust action and merger approval. Regulation has been quietly establishing the framework and structure for the Internet as a communication system, but this has escaped popular attention (with some notable exceptions like decency and cyberporn) because regulation of the Internet has not looked like the definition of "regulation" we expect, and it often occurs in obscure settings that may not even appear relevant to the Internet.

We hardly need to point out that nominally different policy sectors influence each other: even though categories like "city planning" and "environmental policy" are mostly useful formulations, they do not really represent separate boxes with no overlap between. A box for "Internet policy" is still more confusing: The Internet is a creature of communication policy, while it simultaneously is provoking a reconsideration of policy in many policy sectors ostensibly unrelated to communication. Just consideration of the

Internet in terms of policy must then encompass both the Internet as a creature of law (that is, law about the Internet) but also the Internet as a force for reordering in other areas of law. When the barbed-wire fence was invented, it had dramatic consequences for both society and the law—the new fencing forced a fundamental reconsideration of property rights on the prairies of the American west, among other places. This example is relevant because a small debate in legal circles has concerned itself with whether or not the Internet can be said to have its own law—is the Internet a technology to which one merely applies existing law, or is there in fact a new "law of the Internet," as discussed in chapter 9. This debate is perhaps less relevant for our thesis than it seems: it is possible to consider the intersection of the Internet and law however you trace the roots of the laws considered, and even if the area of law so considered does not map to a discrete area of legal doctrine, it may be of considerable interest. Indeed, there is no area of legal doctrine called "barbed-wire fence law," yet the consequences of the barbed wire fence for both land use and land law were very significant. The Internet as a technology might challenge the law and realms of social action regulated by law even setting aside laws meant to deal with the Internet. For our purposes, it does not matter if there is a discrete "cyberlaw:" the domain of inquiry deserves attention even if it is a fractured one, whether it is explicitly about the Internet or not.

The Role of the State

Considering the Internet as a regulated creature of public policy is a multi-layered position. There are at least four broad domains in which the state is now deeply committed to Internet regulation: the state as customer, conduit regulator, content regulator, and agent of development.

The state as customer. Perhaps the most obvious sense in which the network is controlled by policy is the Internet's often-cited origins in the ARPANET, a product of US defense policy during the cold war. At first blush, it is not unrealistic to consider the idea that the original design goals of a system designed for the US Pentagon might influence its subsequent development (see Edwards 1996). It is tempting to see the Internet as springing directly from the 1966 US Government request for quotations for the ARPANET, but unlike the massive SAGE and Atlas defense projects that were its contemporaries, with the ARPANET, while "military needs can be discerned in the background," the network was more a research tool for advances in computing and communication than a close fit to military need (Hughes 1999, p. 256). This is not to say that early design decisions were not significant, just that they may not have been consciously military.[8] That the workings of the Internet are published and the protocols are non-proprietary is essentially an effect of ARPAs interpretation of its obligation as a state agency dispersing public funds—that is, it required subcontractor Bolt, Beranek & Newman to release the source code for the first Internet switch (Abbate 1999).

More recently, governments of the world are again acting as purchasers of new Internet technologies by mandating the Internet's use in public enterprises: education, so-called electronic government, and so forth. This role of the state retains potential to shape the development of the network in normatively significant ways; the governments are an important market (e.g., the US government is the world's largest purchaser).

The state as conduit regulator. Beyond the idea of the government as procurer of the Internet, the network is also what Hughes has termed a "second-order" system (1998, p.

348 n3). Significant parts of it were (and are) built upon what has already been built—as an experiment in wide area networking, the ARPANET would have been prohibitively expensive unless the Internet took advantage of the existing infrastructure of the telephone system. At first this was through leased lines connecting universities and military facilities, but when with the advent of commercial dialup Internet access and then the current varieties of broadband, almost every existing electronic communication network (cable, satellite, radio, television) now forms part of the Internet. Communication policy (specifically telecommunications policy) heavily regulates the Internet whether this is explicit or not, because much of the Internet lives on top of regulated networks. Indeed, the emergence and structure of Internet service providers (ISPs) in the different countries of the world have been almost entirely dependent on telecommunications policy action—most notably the rules for settlement. For instance, in the UK the "free ISP" model of zero-cost Internet service exists because of the telephone charges transferred to the ISP as a terminating operator (Cave and Mason 2001, p. 192-193), while the emergence of the ISP as a commercial entity in the US may have depended upon the Federal Communications Commission's Enhanced Service Provider (ESP) exemption which absolved ISPs of common carrier obligations. In many developing countries, the rush to telecommunications privatization during the last twenty years precisely legislated the shape of the Internet provision market by government grant—e.g., when Peru sought increased foreign direct investment into its ailing national telecom operator, the government offered the incentive of a limited-term monopoly ISP franchise to multinational investors from the developed world (Telefoníca of Spain).

With these examples in mind, praising the Internet as unregulated or a triumph of "unregulation" is simply dissembling.[9]

The state as content regulator. A third sense of the policy construction of the Internet involves content. It is this sense in which the popular sentiment that the Internet is unregulated (or just recently regulated) is most accurate, as until fairly recently there were no laws about what could be said on the Internet as such. Again, however, this does not mean the Internet was truly unregulated—any communication content is subject to a variety of legal obligations, and the medium of communication is not always relevant to obligation at hand. Today no law expressly prohibits making death threats by chiseling them on stone tablets; the prohibition of death threats is sufficient. The point is that while in some legal contexts the form of communication matters a great deal, this does not mean that the form always matters. Though enforcement and jurisdiction have been seen as problematic (and they remain so), there has been no reasoned expectation that the Internet would be free from law.[10]

So far this has not been a conjectural typology: the conduit/content distinction is an old one in media regulation, and is here borrowed from Pool (Pool 1983). Benkler conducted a survey of all public laws passed in the US that contain the word "Internet." He categorizes these laws into three types that roughly match our categories above (2000).[11] We find one additional category:

The state as an agent of development. After Melody's conclusion (1996), a fourth and important sense in which the government is invested in policy action to regulate the

Internet is as an agent of development. By development, we mean domestic and international, social and economic—usually this translates to development of the Internet itself where the stated aim is developing the network as a critical economic input or instrumental step necessary for broader economic or social development plans.[12] Not just the state acting as procurer to provide Internet technology in the educational system, but rather the government mandating public Internet access centers or global aid projects to encourage international development via communication technologies (such as the G-8's Digital Opportunity Task Force).[13] While it might be said that this category is really a subset of the state acting as conduit regulator, policies involving the Internet in a development context tend to have different goals and methods than what is usually conceived as conduit regulation. It is this form of policy which sees the state as funder of the Internet infrastructure to others (such as "digital divide" policies for access to the Internet among the poor) and promoter of the Internet at home and abroad (e.g., Gore 1994). The state is not alone in its involvement, however.

Substitutes for the State

The entire notion of "regulation" is most simply described by the phrase: delegated legislation—that is, regulatory power occurs when some part of a state's authority is granted to a subsidiary body such as a rulemaking commission. While the four categories above have dealt explicitly with state action, applying the case of the Internet to traditional understandings of regulation has been, in a way, like subjecting them to a powerful centrifuge. Authority usually vested in the state has been flung to an alphabet soup of non-state actors such as nonprofit organizations and standards bodies, some of which effectively hold plenipotentiary powers that they were never explicitly delegated to

them. A few of these global bodies have captivated the attention of public policy scholars (particularly ICANN, mentioned above), the typology above asserts the continuing importance of state action in the context of public policy affecting the Internet. The excitement about global governance of the network has unduly reduced consideration of government action, and inaction by some governments has been mistaken for impotence. In the four categories above, the state is far from impotent, and some states have been active.

It is true that much of what is effectively regulation occurs beyond the boundaries of the state as it has traditionally been described. Recently the case of the Internet has forced legal scholars to grapple with non-legal sources of authority—perhaps more than they are used to (for the seminal Internet-related argument in this vein, see Lessig 1999). Still, modern legal consideration of "soft law and the Internet" or technology "as" law might be seen as an unwitting popularization of ideas developed a decade earlier in the sociology of technology (Bijker, Hughes, and Pinch 1987), or as a continuation of the philosophical debate about the importance of technology, which has an even longer history (see Winner 1980). Whatever the origins of this awareness, nevertheless we must be aware that substitutes for state power are now important to consider. We know that regulation is not absent just because the formal regulators we are used to do not act. In the case of the Internet, this awareness implies a need for greater attention to technological standards development, international nongovernmental or quasi-governmental organizations, and other "regulators" such as norms. Rather than focusing exclusively on unusual Internet-related groups (such as the Internet Engineering Task Force or the World Wide Web Consortium), some understanding of the overall system

using an integrated approach is called for. As we have tried to show by elaborating the domains of state policy affecting the Internet, the rise of unusual fora like the nominally-international ICANN does not imply a cessation of action by the state. Still this should be combined with the understanding that regulation does not operate from formal power alone.

Needs for Comparative Policy Research: The Case of the Digital Divide

A potential social problem related to the Internet that had been addressed in this book is the "digital divide," or unequal access to the Internet and information technology along several dimensions. A variety of inequalities are worrying: these include both dimensions of *inequality* based on race, gender, income, geography, and national citizenship, and dimensions of *access*, including access to equipment, connectivity, software, training, content, and facilities for content production. There has been some research attention to these questions (see chapters 2 and 4), and this research has clear policy implication. Without necessarily agreeing with these research conclusions, we would like to review the policy response to this social problem. If unequal access to information technology tends to exacerbate existing patterns of inequality (creating a new barrier to economic opportunity for those with low incomes, for instance), some collective action to alleviate this problem seems called for.

While the academic research in this area is preliminary, there has been a rare consensus among policymakers in many nations that access to the Internet and related technology is necessary for economic growth (lately, this has been described by the phrase "digital opportunity") and that unequal access is a problem deserving of state attention. Indeed, the term "digital divide" was coined by a government agency, not

university researchers (National Telecommunications and Information Administration 1995). Even with a loose agreement in goals across many nations (roughly: to promote Internet penetration and use) each state has crafted a very different policy response. To mention a few of these for contrast, the US has established subsidies for telecommunications carriers to provide reduced-rate service for schools, libraries, and rural health care providers (the "e-rate"). The Brazilian government is subsidizing the development of an Internet-ready low-cost computer system called the "volkscomputer" targeted at those who cannot afford computer equipment at market prices.[14] In South Korea, a large government training program provides a few hours of free training on how to use the Internet to populations that are thought unlikely to seek out such training on their own: housewives, the elderly, farmers, and prison inmates. In Greece, government price regulation authority has been used to mandate tariff reductions for portions of the telecommunications system thought to be the most directly related to growth in Internet infrastructure, such as leased lines. Portugal has introduced a certification program for second-hand computers to encourage the re-use of less-expensive machines. Germany has developed an Internet-skills certificate program explicitly designed for and offered free to the unemployed.

A few of the strategies mentioned here have been adopted by many countries, others are more unique. It is fairer to say that many countries have implemented a package of policy efforts in the last eight years to address a perceived "digital divide" or "digital opportunity," and while some strategies and policy mechanisms are found across many packages, no two countries have responded with the same package. In the face of this diversity of policy mechanism, the role for academic research is emphatically *not* to stop

at a simple call for policy action. Very little is known about these mechanics of policy, about the value of particular strategies in particular contexts. Policy engagement in academic research is often understood as knowing when to advocate for or against regulation, but we wish to emphasize that useful engagement requires much more attention to what should be done. An essential tool to investigate this question is comparative research across nations.

Policy Choice and Comparative Research

The late political scientist Ithiel de Sola Pool wrote in 1974 that communication policy research could be best understood as "normative research about alternative ways of organizing and structuring society's communication system" (p. 31). Pool thoughtfully observed that the increasing pace of innovation in the technology of communication created the research need we now call "communication policy." To anthropomorphize: countries "choose" between policy options as new technologies emerge. Following Pool's view of communication policy research as the task of imagining and investigating alternative structures (or choices), where is the researcher to find these alternatives? Admittedly, our simple framing of the problem as "policy choice" masks a great deal of complexity; in Gourevitch's words, "[t]he notion of choice implies consciousness, and the notion of policy implies coherence. Frequently in decision making we find neither" (1986, p. 35). Even at the risk of gross reductionism, we find these policy choices—unconscious and incoherent as they may be—by examining other public policies in history and in other nations. It is not that there are no new ideas in communication law

and policy, but that we interpret the plausibility of any new path by comparing and contrasting it with paths already taken. This is the task of comparative research.

Framing Comparative Research Questions

The question may therefore be posed whether comparative Internet policy research represents a different set of theoretical, methodological and epistemological challenges, or whether this kind of analysis must be treated just as another variant of the (comparative) problems already embedded in other forms of research.

A large group of law and media scholars stand firmly in the belief that conducting comparative research across countries is no different from any other kind of research. Other scholars pursue their comparisons without ever giving a thought to the possibility that crossing borders adds to the complexity of interpreting the results of the study. But some researchers are only too well aware of the many problems of doing comparative research in a world of complex interdependencies.[15] Without becoming paralyzed by these challenges, they go ahead, opting for compromises and trying to make existing tools provide new insights (Øyen 1990). We clearly acknowledge these positions but argue that in order to advance our knowledge about comparative media law research it is necessary to raise questions about distinctive characteristics of comparative studies.

One can distinguish two broad methods of comparative research. The exponent of "microcomparison" analyzes law or policy belonging to the same legal family. By observing their differences, the "comparatist" will decide whether they are justified and whether an innovation made in one country would have value if introduced elsewhere. The researcher pledged to "macrocomparison," on the other hand, investigates those systems differing most widely from each other in order to gain insight into institutions

and thought processes that are foreign to him. For the "pure jurist," concerned mainly with legal technicalities, microcomparison holds the greater attraction; whereas macrocomparison is the realm of the political scientist or legal philosopher, who sees law as a social science and is interested in its role in government and the organization of a given society. Microcomparison demands no particular preparation. The specialist in one national system is usually qualified to study those of various other countries of the same general family—the chief need for this is access to bibliographical material. The situation differs greatly in consideration of macrocomparison. Here no comparison is possible without previously identifying and thoroughly mastering the fundamentals of the appropriate legal systems as they differ from place to place. The scholar must, as it were, forget his own background and begin to reason according to new criteria. Within comparative research, both types are often present. In analyzing, for instance, regulatory responses to the changing media, both micro and macrocomparison can be used simultaneously (see Goldberg, Prosser, and Verhulst 1998). Microcomparison then takes first priority when a range of regulatory challenges and problems, such as data protection, competition, content control and others are examined within a specific nation and described by a country expert. Macrocomparison follows when the selected jurisdictions and their detailed descriptions are compared by the research project managers.

The route to the comparison seems in general to be approached in two ways, which can roughly be defined as vertical and horizontal (Ferrari 1990). *Vertical* comparison concerns social and legal contexts showing a very different level of economic and technological development, such as Internet penetration or take-up of digital television. *Horizontal* comparison is concerned with contexts sharing a relatively similar level of

economic and technological development, but largely differing in their organization of production, their political and legal regime and/or other relevant characteristics.

Many comparative media law and policy research projects combine both approaches. For instance, the European Commission launched a research project in 1997 called the European Survey of Information Society (Information Society Promotion Office 1997). Its objective was to compare data concerning new regulatory developments in the field of telecommunications and the Information Society as well as to present a mapping of the actors building infrastructure, services and applications. In the ESIS, regions were compared from a vertical perspective, and within the regions it was obvious that for example Albania and Poland differed substantially in macrocomparative perspective. Tunisia and Morocco however were compared horizontally and using microcomparison.

Internet Research as Inchoate

Next let us reflect on the prospects for such comparative research, given the state of Internet-related research generally. In an essay entitled "The Science on Bibliography" Michael Keresztski argues that new disciplines go through three critical phases (cited in Duff 2000). Phase One, or the "pioneering phase" is determined by the efforts and writings of a few pioneering intellectuals. "The birth of many scientific disciplines," Keresztski writes, "can be traced back to some great thinkers, or a pioneering intellectual who burst upon the scene with original ideas, profound insights, startling propositions, or illuminating new theories." There is often a struggle for attention and recognition, and a desire to win over other scholars within and across disciplines to the emerging doctrine. If successful and a momentum is created, one enters Phase Two or the "elaboration and proliferation stage" where the new ideas pass out of the monopolistic control of a single

institution or discipline, to be developed by a community of scholars of differing organizational and perhaps disciplinary allegiances. Associations and committees are formed, and the bibliographic apparatus is expanded to include an official journal, directories and alike. Within Phase 2, there is also an "excessive preoccupation with methodology" according to Keresztski. Finally, Phase 3 is the "establishment phase" where university departments are created, courses offered and standards formalized.

Applying this framework to Internet-related research, we see Phase Two in full bloom. The Interdisciplinary *Association of Internet Researchers* (or AoIR) held its first conference in 2000, and the *International Society for Ethics and Information Technology* (or INSEIT) was founded the same year.[16] The last eight years have seen a proliferation of new scholarly journals dedicated to Internet research. Among them are *Convergence* (founded 1995), *Journal of Computer-Mediated Communication* (1996), *First Monday* (1996), *Information, Communication & Society* (1998), *Info* (1999), *New Media & Society* (1999), *Ethics and Information Technology* (1999), *Journal of Online Behavior* (2000), and *IT & Society* (2002). In addition, some older specialist publications such as the *Social Science Computer Review* (founded 1982) have effectively modified their niche to subsume Internet-related research.

However, as we have presented Keresztski's trajectory, it assumes completion. As one moves from Phase I to Phase III, it would appear there is an inevitable convergence as scholarship is interchanged, as scholars travel, as disciplines themselves move in closer contact with one another to form an interdiscipline that eventually solidifies. However, a number of these and other new journals do not so much imply the expansive quest for a new discipline but a retrenching of existing disciplinary structures to include a

new specialization. Examples might be the *Journal of Internet Banking and Commerce* (founded 1996), and the *Journal of Medical Internet Research* (1999). This is not to say that Internet-related research should be a field or should not be, but that the prospect of interdisciplinary exchange is an exciting one with positive potential. The idea that the same social problems are currently claimed by multiple fields of academic inquiry is a good sign—e.g., in this book the digital divide is discussed from both sociology and political science—because this suggests that the moment of interdisciplinary reach has not yet passed.

Even the interdisciplinarity we have, however, is grounded in national identity. What Keresztski and others often ignore in the phased approach is precisely the importance and interplay of geographical differences within one field of research and study. Especially because the Internet is both cause and consequence of globalization, discussions about the research on the societal implications of the Internet often assume a global homogeneous body of study. Still, the founding moments of Phase I are vital, and the pioneering intellectuals—those who define the style and nature of research and who establish the paths that others follow—were quite different in Internet research in Europe and in the United States. It is harder to deal, in this essay, with differences in methodology across societies, since there is not enough available material. But it can be hypothesized that differences are the result of a variety of contextual variables beyond the broad label *culture*: a somewhat lazy catchall in this circumstance. These variables may include funding, penetration of the Internet, priorities of research councils, research and academic institutional structures, societal constructs, governmental and industrial policy

priorities and alike. The substantive differences may include terminology, themes or scope, method and discipline.

National Approaches to International Comparison

Among the substantive differences in Internet research to date would be *terminology*. North American research focuses mainly around "the Internet" or "cyberspace" for a variety of reasons (e.g., connotation, tradition, and possibly an emphasis on technologically deterministic explanation). Within Europe and internationally the term "information and communications technologies" (or "ICTs") is often used, and yet the precise meaning varies by country. Both Japan and Europe have embraced the "Information" or "Knowledge Society" as a term of substance, while in the US this connotes pretensions to grandeur.

The scope and method of scholarship also differs. Research themes may largely correspond across regions, yet the approach differs widely. The digital divide is for instance examined universally, yet in the US (where the term was coined) it has been overwhelmingly framed as "the haves vs. the have-nots" and concerns the spread of computers and Internet access through society (National Telecommunications and Information Administration 1995) while European research is more likely to consider a multidimensional view centered on concepts like "social exclusion" (see e.g., Dutton 1996).

The relative weight and involvement of academic disciplines also too differs from state to state, as in the social sciences an academic discipline of the same name cannot be said to be the exactly the same animal once a national border is crossed. Within Europe

the societal implications of the Internet have been more broadly analyzed within the field of Communication Studies and Computer Science, where in the US, Law and Political Science have had a major stake in Internet research so far.

The societal utility and format of Internet research also differs dramatically between nations, even when considering only fairly pragmatic Internet-related research with clear implications. In the US, Internet research is more purely a scholarly activity with a tendency to fragmentation and cyber-hype, while in contrast Europe has seen a large amount of consultancy papers preoccupied with the policy agenda of the European Union and grounded in a certain real-politik.

Some of these differences can be explained by another difference: sources of funding for Internet-related work. Internet research in the United Kingdom is a function, in large part, of strategies and methodologies evolved by the Economic and Social Research Council (ESRC). In the US, while early development of the Internet and antecedent technology was significantly funded by the federal government (see Hughes 1999), today private foundations are at the forefront of understanding the social consequences of the Internet and Internet governance (one example being the Pew *Internet & American Life Project* described in chapter 7). As in other research areas, comparatively well-endowed US universities are also able to sponsor their scholars to take a lead in defining academic directions globally, both by providing greater time for research and by underwriting conferences. Scholarly attention to the Internet in a country is likely to positively correlate with Internet penetration, so that the most developed countries also have an advantage in defining the academic agenda.

Complicating these questions are issues relating to comparative research: research undertaken by several scholars or institutions based in different countries (as opposed to comparative research in the sense of efforts by a single scholar or group at one institution) to study the operation of Internet in a variety of national contexts. One may legitimately ask how the location of the coordinator or initiator of the research changes the focus and method of the work. However, we should conclude by pointing out that all is not so bleak as the above might suggest.

Conclusion: Practical, if Messy

We have argued that at the present moment more attention need be paid to matters of public policy in Internet-related research. Beyond a call for state action or inaction, we need research into the exact legal and political structure and mechanisms that bear on the social problems Internet-related research is investigating; this suggests an important role for international, comparative research. We find that walling-off of policy concerns into sub-disciplines hampers the production of such research, and that even in the best hands comparative research projects are fraught with problems and reproduce national perspectives. A closer coupling of policy concern to academic work is not without danger (for the case of television, see Rowland 1983)—but we are not calling for uncritical work, or asking that social scientists become hegemons. By one view a critical perspective is an obligation of the academy, and this is not a role that should be changed.

Indeed, while advocating internationally comparative work as a cure for a deficiency in research to date, we admit that it is a painful cure. As any anthropologist will tell you, it is impossible to compare two cultures without standing in one. Research into the

Internet has a very different meaning in different nations (see e.g., chapter 11), partly because "research," "into," and "the Internet" have different meanings from state to state. For the record, let us say that we do not advocate comparison between nations because of a grand homogenizing impulse—the point is not to glean all of the "best" practices from countries of the world and analyze them from the standpoint of an imaginary, impossible social science that stands outside (and presumably above) the cases we study. Nor do we claim that the nation-state is a natural unit of analysis, co-terminal with a society, a culture or a community. Instead we admit to advocating rude and vulgar national comparisons for the embarrassing reason that they are instrumentally useful even while they are epistemically messy. The consideration of law and public policy provides advocacy and action a point of entry and the materials with which to work. Furthermore, in the spirit of Geertz (2000), international comparisons that are done well can do more than motivate raids of other social systems for the benefit of our own, as they do more than enabling us to condescend more effectively. If they are done well they provide a capacity for learning about ourselves via the experience of looking at others.

Notes

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1 Though we speak about research across disciplines, of course we cannot claim to have escaped from our own disciplinary perspectives in writing this article.

2 “ARPA” is an acronym for the Advanced Research Projects Agency of the US Department of Defense.

3 For an overview of media effects research relevant to children and television, see Price and Verhulst Price, Monroe E. and Stefaan G. Verhulst. 2002. *Parental control of television broadcasting*. Mahwah, NJ: Lawrence Erlbaum Associates..

4 Indeed, the economic power of the broadcasters fueled the controversy surrounding the research.

5 This paragraph's assessment generally follows Parker's analysis of the role of policy Parker, Edwin B. 1973. New information technology. *Public Opinion Quarterly* 37, no. 4: 590–600.

6 In Internet-related policy, an example of this approach would be Mueller, Milton L. 2001. Rough justice: A statistical assessment of ICANN's uniform dispute resolution policy. *The Information Society* 17, no. 3: 153–163.

7 Some research on Internet diffusion, it should be noted, does attempt to build on this existing literature Hargittai, Eszter. 1999. Weaving the western web: Explaining differences in Internet connectivity among OECD countries. *Telecommunications Policy* 23, no. 10–11: 701–718.

8 For a consideration of initial design priorities, see Clark, David D. 1988. The design philosophy of the DARPA Internet protocols. *Computer Communication Review* 18, no. 4: 106–114.

9 The "unregulation" phrase is taken from Oxman, Jason. 1999. *The FCC and the unregulation of the internet*. Washington, D.C.: Federal Communications Commission, Office of Plans and Policy. OPP Working Paper, 31.

10 Barlow's Declaration of Independence of Cyberspace notwithstanding Barlow, John Perry. 1996. *A cyberspace independence declaration*. Accessed. Available from http://www.eff.org/barlow.

11 In this survey, Benkler does not consider the origin of the network as government action, however.

12 Here we do not mean to endorse the assumptions of these policies, only to categorize them as a type of state action.

13 See <http://www.dotforce.org/>.

14 This is similar to Indian and Japanese initiatives.

15 For a detailed description of the various challenges and problems associated with comparative media law research, see Price & Verhulst Price, Monroe E. and Stefaan G. Verhulst. 1997. A methodological perspective on the use of comparative media law. *Cardozo Journal of International and Comparative Law* 5, no. 2: 423–444.

16 See <http://www.aoir.org/> and <http://csethics.uis.edu/inseit/>, respectively.