
Facing Out: Researchers and Policy-makers

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Relationships between social scientists and the state are affected by three things: prevailing paradigms of the relationship between social science knowledge and public policy, the career activities of social scientists as they try to create a market for their work, and changes in the functions and needs of the state that create the demand for social science research in the policy process.¹ Though scholarly writing has never been considered an official source of law in the western legal tradition, it has played a decisive role in framing legal rules, disseminating legal knowledge throughout the world, and training those who become policy-makers.² Beyond the world of scholarship, researchers may have a variety of relationships with government, including the roles researchers may play as staffers, consultants, advocates, or facilitators both within and outside of government who bring the two sides together. Teaching is also a path to policy influence, for some of the most valuable facilitators are active politicians whose education engrained in them a habit of relying upon research and the skills to critically evaluate it.³

The only systematic research into academic participation in communication policy-making was a 1973 study⁴ that looked only at individuals from the Association for Education in Journalism and Mass Communication (AEJMC) who were involved with teaching broadcasting which found only a very small percentage of faculty members had made any attempt at all to offer input to policy-makers. Those who had done so were more likely to have advanced degrees from elite institutions, and to have spent more years in teaching and research than those who had not. The greatest successes occurred at the local level, where personal relationships of trust reinforced the impact of any scholarly

expertise. Because input was generally offered via letters never read by the politicians to whom they were sent, most information offered by academics never reached those to whom it had been sent. While the population examined in this study was small, a broader study that looked across the social sciences similarly found that researchers involved were largely working at the “handicraft, informal, self-help level”⁵ on borrowed or contributed time.

Formal relationships with the government may be direct and publicized, as when research organizations such as the Congressional Research Service (CRS) or the Office of Technology Assessment (OTA) are set up specifically for the purpose of providing input into policy-making, or they may not be public, as when researchers become involved in classified defense-related work or work at the level of “invitation only” communications. Informal but direct relationships develop via conferences, through the influence of foundations, via lobbying, and as a result of ad hoc interactions. Influence can also be indirect, whether intended (as through the work of public intellectuals) or unintended (as when the results of research reported upon by the mass media have an impact on the thinking of decision-makers).

Formal Relationships: Working for the Government

The degree to which the relationship between researchers and policy-makers is formalized is among the important ways in which the policy-making processes of nation-states differ. In France, for example, an elite educational institution prepares researchers specifically for permanent government service, while in the United States relationships form via multiple routes and may be sporadic. In the abstract formal and enduring positions within government might seem ideal, but in practice—at least in the U.S. context—the experience has been so fraught with political complications that it has led to a great deal of frustration on at least the part of many researchers. Schools of policy and public administration in the United States do provide training for government service, largely preparing those who go into middle management rather than leadership positions, and most often for individuals who will go into service at the state rather than the federal level. Research grants are

another way scholars can work directly for the government. Such grants are usually, but not always, provided quite publicly, most often today from the National Science Foundation (NSF) but also from the Department of Commerce (in communication, often via the National Telecommunications and Information Administration, or NTIA), the National Institute of Health (NIH), and other sources.

Public Relationships

There have been several attempts to institutionalize the incorporation of research into communication policy-making processes, though it is striking that even presidents who depend heavily upon research in other contexts have often failed to do so when it came to information technologies and their uses. President Hoover, on whose watch the FCC was formed, is a premiere example—while he relied heavily upon research in other areas of policy-making, when it came to the communications industry he turned almost exclusively to the corporate world.⁶ The Congressional Research Service regularly issues reports on communication policy matters, but these are often merely compilations of proposed legislation or of the range of policy alternatives on the table.⁷ The Federal Communications Commission (FCC) conducts research on its own⁸ and solicits input from scholars regarding policy options, but too often relies almost exclusively upon data provided by corporations in the industries being regulated in a form of industry capture through control over information and upon economics for the analytical tools to be used.⁹

There was a short period during which a communication policy function was brought within the White House via the Office of Telecommunications Policy (OTP),¹⁰ but this group often actually tried to reduce the impact of research on policy-making. In 1971, for example, then-director of the OTP Clay Whitehead attacked the use of audience research by those in public broadcasting as inappropriately giving in to commercialism during the Administration's general campaign against the media.¹¹ The fact that research undertaken within the OTP produced outcomes that did not always agree with what the White House wanted¹² may have also had an influence on the entity's ultimate abandonment, though policy analysis that cannot be critical is much diminished in

value. Overall, the researchers who held positions in the OTP had to balance their expertise with service to the president's political needs.¹³ Ultimately, the OTP morphed into the National Telecommunications and Information Administration (NTIA), which for a number of years continued to commission research on the use of new information technologies, particularly via evaluations of experimental uses of such technologies for purposes of community development. The Clinton White House paid a great deal of attention to information technology through advisors to the president, but while the shell for this type of input remains in place, it is hollow under George W. Bush.

The Office of Technology Assessment (OTA), established in 1972 to respond to congressional requests for background reports on science and technology problems,¹⁴ led the way for a number of years in identifying emergent policy issues raised by the use of new information technologies. The relationship between the OTA and Congress went through a series of stages,¹⁵ falling apart completely just at the point that making policy for the information infrastructure had risen to the top of the national agenda. A variety of factors accounted for this failure, including perceptions of staff overpoliticization, the need to serve multiple constituencies simultaneously, and the lack of a direct link with an outside client in whose interests it was to ensure OTA's survival. Many believe that the tension between the short-term interests of legislators and the long-term nature of policy problems examined by the OTA was another factor that may have undermined its support.¹⁶ Legislators' lack of familiarity with the processes of technology assessment combined with the importance of the choices to be made also contributed to discomfort with the OTA for its reports brought into public view congressional inadequacies. All of these factors combined to make the agency an easy target for those looking for items to cut out of the federal budget.¹⁷ The OTA remains on the books, however, and if funds are appropriated could be brought back to life. Suggestions to do so have reappeared in the first years of the twenty-first century though they do not yet seem politically likely to succeed.

While the federal government has spent huge sums of money on research grants dealing with new information technologies, very little of it has gone to social scientists. The vast majority of funding in the area

of communications by the NSF has gone to support the development of hardware and software, not research into the uses and effects of the technologies. Even when social science research questions are designed into a research proposal, they are often sidelined once funds arrive at an institution.¹⁸ Only in the late 1990s did the NSF launch some research programs seeking analysis of digital technologies by those in the social sciences. Access to these funds, however, is limited to those social scientists who can design their projects into a collaboration with colleagues involved in the most advanced and large-scale of hardware and software projects. In addition, many of those funds have been redirected since 9-11 to development of new surveillance technologies or to cover non-research activities otherwise being cut from the federal budget. Support for the Smithsonian Institution, for example, is now supposed to be an NSF matter rather than a separate line item, drawing further funds away from research. Massive sums are also directed to R&D in the area of information technologies by the Department of Defense, but again the goal is to develop technologies rather than to evaluate them. While there was an assumption for a long time that innovations generated in response to defense needs would “trickle down” into society-wide use, historical analysis shows that this actually is very rarely the case.¹⁹ Those competing for the research funds available are most likely to succeed if they can demonstrate the kind of sustained and in-depth focus that builds genuine expertise in a specific substantive area.²⁰

Becoming involved with lobbying is another public way in which researchers can attempt to bring the results of their work into the policy-making process. Individuals may choose to become lobbyists themselves—which in the United States requires registering with the government and reporting annually on income and expenses, the general and specific issues upon which one lobbies and the specific bill numbers involved, and the names of clients (though *not* the names of legislators or executive branch officials individually lobbied). A significant percentage of those who work full-time for advocacy groups promoting the public interest in the area of information and communication policy have advanced degrees, including among the leadership. These nonprofit organizations—which must also register as lobbyists with the government—often undertake and publish research of their own,

sometimes presenting their work within scholarly contexts as well as via the mass media and in genres aimed directly at policy-makers. Many also use their websites to provide portals to pertinent academic research of which they are aware. Even more academics provide support functions to lobbyists and lobbying groups in areas on issues about which they particularly care, helping to create analytical materials, providing background information, and participating in public events.

Non-public Relationships

The military has been an important influence on communication regulation since the beginning.²¹ Secret relationships between researchers and the government develop when social scientists are commissioned in support of national security goals, whether during wartime or peace. Christopher Simpson,²² an investigative journalist turned scholar with a penchant for archival research, has examined such secret relationships in the field of communication. Much of the information on which his history of communication research is based was classified and only became accessible once declassified and made available through use of the Freedom of Information Act (FOIA). The work has been controversial; many institutions about whom he reports, such as the Institute of Communications Research at the University of Illinois, prefer not to acknowledge the relationships uncovered in their own versions of their histories. There is of course the possibility that unacknowledged support may bias the work that results, as Rowland²³ suggests was the case with Ithiel de Sola Pool's analyses of international communication that were secretly funded by the NSF.

Informal Relationships: Working with the Government

Informal relationships between communication researchers, though they may be ad hoc, may have more enduring impact than those that are formal. This can happen when they shape the perceptions and modes of thought of policy-makers in addition to or instead of providing specific policy suggestions; such impact derives from personal relationships of trust between decision makers and researchers. Informal relationships can also have widespread impact when those involved play leadership

roles in the field, for their activities and ideas will provide direction and structure for what many other researchers do and how the field of communications is taught. Think tanks, foundations, and conferences provide informal means through which such relationships can be built.

Think Tanks and Foundations

Foundations and think tanks, a U.S. policy innovation that has by now been exported for use in both the developed and developing worlds,²⁴ have been among the most successful institutional responses to the problem of systematically bringing the results of research into policy-making processes. They play important roles in the development of communications policy by directing both researchers and policy-makers to specific questions and by funding research and institutional and technological experimentation useful for the examination of policy alternatives. The Rockefeller Foundation led the way, concerned with communication issues first because of the United States' need to integrate immigrants into society in the 1930s and then because of the need to build support for American entry into World War II.

Shaping public and governmental discourses on policy matters has been a key function of think tanks and foundations.²⁵ The Ford Foundation gets credit, for example, for bringing the phrase "behavioral sciences" into play to describe what many social scientists do, having chosen the term for its own purposes at a time when there was debate within Congress over how to describe the activities of the National Science Foundation at its creation.²⁶ In communication, the "Lasswellian formula" for modeling the process of communication—who says what to whom in what channel with what effect—developed in the course of Rockefeller Foundation conversations that intended to and succeeded in establishing a research agenda for the field of communication.²⁷

Examples of foundation influence upon the field of communication are rife: The Ford Foundation's support for diffusion research in the 1940s was key to the emergence of development communications and, later, to the establishment of public television in the United States.²⁸ Rand's work with operations research and the application of game theory to problems of warfare provided a model for the type of projects appropriate for the

National Science Foundation (NSF) once it was established. In a more recent example, Ford supported experimentation with information technologies for peace-making and peace-keeping purposes via incorporation of their use into arms control agreements.²⁹ Think tanks such as the American Enterprise Institute, Heritage Foundation, and the Hoover Institution promoted deregulation of communications, as well as the incorporation of trade in services (international information flows) within international trade agreements.³⁰ One of the extremely powerful but indirect means by which foundations influence policy is in serving as agenda-setters for government funding agencies such as the NSF.

Up until the late 1960s, foundations could devote their resources directly to the promotion of specific policies—Ford support for public television was a particularly successful example of such efforts. A change in the law, however, now makes it illegal for foundations to directly engage in advocacy work if they want to retain their nonprofit status. It is still possible, however, for such organizations to fund the research necessary for development of policy alternatives or that can provide evaluations of existing policies. They can also still support venues in which multiple voices both within and outside of government can be brought into a common discourse on policy problems.

Policy historian Frank Fischer³¹ believes that without access to foundations as a medium of discourse, no interest group can today effectively participate in the policy process. At the time of writing, a number of think tanks and foundations are active in the area of communication policy. The Markle and Benton foundations support efforts to represent the public interest in communication policy-making. Each is involved in several issue areas, but as examples of their foci the Benton Foundation is devoting much of its resources in the early twenty-first century to problems raised by the digital divide, and the Markle Foundation has taken the lead in providing support for public debate over the civil liberties implications of the often radical changes in pertinent policy put in place since the attack on the World Trade Center. The Ford Foundation is promoting closer relationships between researchers and policy-makers, trying to broaden the community of communication researchers involved in the policy process, and building an evidentiary record to strengthen the ability of those concerned about the public interest in communica-

tion policy to build strong arguments. The Rockefeller Foundation is interested in the Internet as both a site of political activity and of community development, and in the relationship of the arts to both of those. The Carnegie Endowment for International Peace is pursuing questions that arise out of the impact of new information technologies on foreign policy.

While much of the work that think tanks and foundations undertake is publicly announced, many of their most influential forms of influence are not a matter of public knowledge because they are conducted in "invitation only" settings. One of the most powerful ways in which a group such as the Rockefeller Foundation can assert influence is through shaping the research agenda for a governmental entity such as the National Science Foundation, a form of power that occurs not only via published reports but also through interpersonal connections based on long-standing institutional and personal relationships. The Social Science Research Council (SSRC) is another example of an entity that is described as "independent" and "not for profit" that plays a powerful role in shaping government policy in the area of communication, information, and culture through a combination of commissioned reports the importance of which is communicated in private settings to government officials who expect to have an open ear to this particular source of input. These are highly influential ways of bringing the results of communication research to the attention of policy-makers—but they are available only to those who have achieved entry into an "inner circle" of scholars whose work has been deemed acceptable, most often scholars from a small number of elite institutions.³²

Conferences

Conferences are a means through which policy-makers, policy analysts who serve as consultants, and academics can come to get to know each other both through formal presentations of relevant work and through informal networking. General conferences in the field, such as those of the International Communication Association (ICA) and the International Association for Media and Communication Research (IAMCR), are often attended by those involved in policy analysis just for this purpose. One annual conference specific to this purpose was set up in

the early 1970s as an offshoot of the OTP, the Telecommunications Policy Research Conference (TPRC). Owen,³³ long an insider, reports on TPRC at the 25-year mark. One of the functions since the beginning has been serving as a venue for explicit examination of problems that have been arising from the convergence of broadcasting and telecommunications technologies. Park's analysis of the impact of cable research at the first TPRC in 1972, for example, was one of the first to appear. Part of TPRC's impact has come from publication of a series of volumes of a small proportion of the papers presented each year.

While TPRC has remained at arm's-length from the government, under the leadership of former government employee Brian Kahin, the Department of Commerce and other governmental agencies have organized a conference on a new type of issue, the policy implications of the outsourcing of governmental functions, in the fall of 2002. Kahin, who previously ran a successful and important series of conferences out of the JFK School at Harvard and is now on the faculty of the University of Maryland, provides a model of the value of the broker function between academic research and policy-making.

Another model of the utility of convening policy-makers and academics for focused attention on specific issues is provided by Eli Noam's Columbia Institute for Tele-Information (CITI). For years Noam has run a series of day-long seminars on a wide range of issues raised by telecommunications policy. Not as full-blown as conferences, these seminars have the advantage that it is much easier to attract a high-powered set of participants to an event that requires only a day rather than a longer time period. Noam's events often present the first public conversation about cutting edge issues and ideas; early twenty-first-century seminars have looked, for example, at the topics of nano-regulation of the global information infrastructure and at the effect of the stock market and innovative investment instruments on the impact of the implementation of telecommunications policy. CITI serves an additional discourse-shaping function by running longer training seminars, often with attendees from around the world, in technical matters such as the accounting systems used by telecommunications regulatory agencies.

One of the ways that the organizers of conferences effectively extend their impact to audiences far larger than those of attendees is through

publication of books that result from conference presentations and discussion. TPRC has not done this every year, but has produced some volumes of this kind. Kahin's series of conferences that constituted the Harvard Information Infrastructure Project produced a number of highly influential books.³⁴ Many of Noam's seminars also have produced books for wider dissemination of the ideas presented.³⁵

Indirect Relationships: Serving the Polity

In a democracy, everyone participates in the policy process to the extent that they take part in discourse in the public sphere, express opinion, and vote. Thus ways in which communication researchers can attempt to influence decisions by policy-makers include those efforts directed at the polity as a whole and at discourse within the public sphere. It is for this reason that Habermasian notions are increasingly important to policy analysts.³⁶ Some of this activity takes place when researchers deliberately take on the role of public intellectual in an effort to shape policy-related discourse, some comes about in the course of research on how to design content that contributes to that discourse, and some occurs simply as a by-product of reports on the results of research in the mass media. There are genre implications for researchers who seek to communicate with lay audiences; the effectiveness of policy arguments can be vastly increased when the results of research and their implications are translated into terms accessible to the press.³⁷

The Public Intellectual

During the 1990s, a number of those within the field began to call for a larger presence of communication researchers among public intellectuals—that is, as individuals who present their scholarly ideas in public forums such as the mass media with the intention of contributing to policy-related public discourse. This is a particularly important time for those who know something about the effects of the use of information and communication technologies to step forward.³⁸

Ellen Wartella³⁹ points to the failure of academics to enter public conversations as among the reasons that research into the effects of media violence on children has had so little impact in the policy world.⁴⁰ Each

new medium has stimulated research into its effects on children; with television, this became one of the most-researched topics in the field.⁴¹ Though the word "policy" is not usually attached to decision making in the private sector, research on children and television is also pertinent to content producers as part of their self-regulatory efforts to improve the quality of television, as in the formative work that led to the prosocial children's programming of *Sesame Street*.⁴² Since such private sector decision making is not susceptible to the types of formal input opportunities found in public sector decision making, the role of public intellectuals is even more important as one of the few ways of reaching the decision-making audience. The broader implication is that with the growing privatization of formerly public government functions, therefore, public intellectuals become even more important.

Research for the Polity

Questions such as universal access to the Internet, the degree to which voices heard through the mass media express diverse viewpoints, and programming choices by government-supported media all raise research questions regarding the nature of the public sphere on behalf of the polity itself.⁴³ The relationship between the shaping of funding sources through regulation and content diversity has received some research attention,⁴⁴ but other topics involving the polity have not. With a few notable exceptions,⁴⁵ research on the actual experience of attempts at universal service, for example, have been driven by telephone company concerns about quantitatively measurable service levels and penetration rather than the needs and desires of individual users.

In a dramatic manifestation of the disappearance of the individual and the household from consideration in analysis of telecommunications policy, the term "users" now actually refers to large corporations such as Citibank and American Express rather than human beings. Just as in the late 1970s and early 1980s the naivete of policy-makers regarding the concept of "standards" when applied to technical matters made it possible for AT&T to gain a certain amount of policy-making support for what was believed to be its standards for quality of service rather than specific technological features, so the shift in the definition of "user" enabled policy-makers to misread some portions of the Telecommunica-

tions Act of 1996: The universal access provisions of the Act are actually references to mandated forms of interconnection among corporations that are service providers, not another facet of universal access to service by individuals and households.

Stavitsky⁴⁶ has explored the reluctance of those involved with public radio to use research to determine the actual needs, interests, and responses of the audience. (Public broadcasting is a policy issue both because of the public support involved and because of the purposes it is intended to serve in society.) It is a revealing analysis: Much of the resistance to the use of audience ratings in public broadcasting stems from the fear that analyzing the audience would in itself transform nonprofit content into something driven by the profit motive. Though ratings data and related types of quantitative analysis have been used by the British public radio service, the BBC, since the 1930s and began to receive attention in the United States in the 1970s,⁴⁷ it was long resisted in the United States because it was perceived to be only of commercial rather than public interest concern. This yielded one more contradiction—denial of the importance of the public in programming for the public.⁴⁸ Communication research and policy can interact in many ways in the area of public broadcasting: as in any type of organization, research can be used both to justify a budgetary commitment and to destroy a budget; or to identify a community as defined through its preferences and to destroy a community as defined by a shared commitment to public radio production.⁴⁹ Still, resistance to its use has remained so great that as part of its public interest advocacy program the Benton Foundation commissioned a report encouraging more independent research devoted to improving the quality of public broadcasting.⁵⁰

Research on the Public Sphere

Research reports need not be directly aimed at policy-makers in order to have an impact. Mass media reports of research results of interest to journalists also provide inputs into policy-making. It is for this reason that the National Communications Association (NCA) has inserted itself into the gatekeeping process for journalists seeking sources on communication-related matters, trying to direct queries to scholars whose expertise the association deems pertinent. Increasing numbers of

individual scholars, too, have realized that keeping their campus media relations people informed about their research can lead to public exposure to their work that in turn can reach the ears and eyes of policymakers. General publication of the results of public opinion surveys can also fill this function. Gaziano⁵¹ analyzed the correlation between shifts in public opinion on First Amendment-related issues and Supreme Court decisions in the same area as one example of how this can happen; while the relationship she describes is only correlational, not causal, it makes clear the role that survey results can play as decision-making support.

The impact of public opinion research on other types of decision-makers has been more thoroughly studied.⁵² The political impact of public opinion suggests that another important topic of study for researchers is the construction of surveys themselves. It is well known that differences in wording can significantly affect survey results; a study of all public opinion surveys on First Amendment-type issues through the mid-1980s at the national and State of Minnesota levels (over three hundred fifty surveys), for example, found that support for free speech was much higher when questions were phrased in the abstract rather than including details of specific problem situations.⁵³ Shifts in wording in surveys dealing with political matters over time serve as indicators of changes in public discourse.⁵⁴ Both substantive information and environmental cues may affect responses to policy-relevant survey questions.⁵⁵ The results of survey research will be more easily accepted if the questions asked are in terms comprehensible to the audience intended for the results.⁵⁶ As sociologist David Riesman⁵⁷ commented in a notable piece that today reads poignantly for what it tells us about our loss of research innocence, the mode of presentation of surveys and the identity of those conducting surveys, too, can influence whether or not respondents will in fact reveal their policy preferences.

Discussion

There is a wide range of roles that researchers can play if they want the results of their work to be taken into account in the course of policy-making. At the most common end of the spectrum, individuals within

academia produce work for publication in typical scholarly venues that they then distribute to pertinent policy-makers in hopes the work—despite the peculiarities of the peer-reviewed journal article genre, the length and density of the texts that result, and the opacity of academic jargon—will be both read and its implications understood. At the other extreme, researchers can of course enter public office themselves, though the personality traits that characterize researchers means that they are rarely tempted by the lifestyle of politicians. In between come roles such as contract researcher, government employee, advocate, and public intellectual. Other roles less typically viewed as policy relevant, such as that of the teacher, also have significant potential for influence in the long run. The more enduring impacts of social scientists specializing in communications on government have not always come from those relationships that are public and/or direct. This is at least in part due to the fact that such efforts are often piecemeal, while less public and/or indirect relationships may underlie massive ongoing programs that have field-shaping consequences.

Academic socialization does not always prepare individuals for success in the policy world. Intellectual life is highly competitive and often combative, while the work of policy-makers is most successful when it builds strong personal relationships and trust. Academics make their careers by promoting ideas that differ from those of others, but policy-makers seek consensus. While the slow rhythms of academic life are precisely what is needed to do the research and thinking needed to come up with new policy ideas and substantive critiques, they also leave many researchers unprepared or unable to respond in a sufficiently timely way to the deadline-oriented needs of policy-makers. The need to cope with these tensions leads to the kinds of negotiations discussed in the section of this book on relationships with academia. They leave behind the messages, though, that developing a focused research agenda and building personal relationships with policy-makers are key. The sustained and focused efforts by Eli Noam and Brian Kahin provide models of the value of combining individual research with activities that bring policy-makers and academics together in the course of building a discourse and epistemic community around cutting-edge issues.

Notes

1. Alain-G. Gagnon, The influence of social scientists on public policy, in Brooks & Gagnon, 1990, *op cit.*, pp. 1-18.
2. Ugo Mattei, *Comparative Law and Economics*, University of Michigan Press, Ann Arbor, 1998.
3. Thomas J. Martin, Information and communication policy research in the United States: The researcher as advocate, facilitator, and staff member, in Brenda Dervin and Melvin J. Voigt, eds, *Progress in Communication Sciences, Vol. IV*, Ablex, Norwood, N.J., 1984, pp. 23-41.
4. Donald P. Mullally and Gerald M. Gillmore, Academic participation in communication policy-making, *Journalism Quarterly* 50, no. 2 (1973): 353-357.
5. Alex Inkeles, Intellectual consequences of federal support, in Samuel Z. Klausner and Victor M. Lidz, eds, *The Nationalization of the Social Sciences*, University of Pennsylvania Press, Philadelphia, 1986, pp. 237-246.
6. Karl, 1969, *op cit.*
7. Recent examples of Congressional Research Service reports on communication policy issues include Bernard Gelb, *Telecommunications Services Trade and the WTO Agreement*, Congressional Research Service, Washington, D.C., RS20319, 2001, which discusses the fact that there was no legislation currently on the table to express congressional concern over contemporary international trade law as it affects the telecommunications network; Angele Gilroy, *The Telecommunications Discounts for Schools and Libraries*, Congressional Research Service, Washington, D.C., IB98040, 2000, which describes FCC efforts to implement the Telecommunications Act of 1996 mandate to ensure access to the internet in schools and libraries; Charles Doyle, *Wireless Communication and Public Safety Act of 1999*, Congressional Research Service, Washington, D.C., RS20359, 1999, which compares House and Senate versions of a bill dealing with wireless communications; and Leonard G. Kruger & Angele A. Gilroy, *Broadband Internet Access: Background and Issues*, Congressional Research Service, Washington, D.C., IB10045, 2001, which provides details of one proposal dealing with broadband access to the Internet. All of these studies, produced by government employees, merely summarize existing or proposed legislation.
8. Recent publications by the FCC's Office of Plans and Policy (OPP) include: Jay M. Atkinson and Christopher C. Barnekov, *A Competitively Neutral Approach to Network Interconnection*, FCC, OPP Working Paper no. 34, Washington, D.C., 2000, which describes an approach to network interconnection that is allegedly competitively neutral; Patricia DeGraba, *Bill and Keep at the Central Office as the Efficient Interconnection Regime*, FCC, Washington, D.C., OPP Working Paper no. 33, 2000, which details the pricing scheme associated with the approach to interconnection described in the previous paper; and Michael Kende, *The Digital Handshake: Connecting Internet Backbones*, FCC,

Washington, D.C., OPP Working Paper no. 32, 2000, which provides an explanation of the context within which Internet backbone interconnection decisions must be made. All of these rely upon economic analysis alone to justify FCC policy positions and none explore alternative approaches, even within the realm of economic explanation.

9. No one has yet systematically analyzed the informational inputs the FCC uses to make its decisions.

10. James Miller, Policy planning and technocratic power: The significance of OTP, *Journal of Communication*, 32, no. 1 (1982): 53-60; James Miller, The president's advocate: OTP and broadcast issues, *Journal of Broadcasting*, 26, no. 3 (1982): 625-639.

11. Alan G. Stavitsky, Counting the house in public television: A history of ratings use, 1953-1980, *Journal of Broadcasting & Electronic Media*, 42, no. 4 (1998): 520-534.

12. Political economist Vincent Mosco, one of the most articulate critics of U.S. and Canadian communication policy, was working in the OTP as a postdoctoral fellow when he encountered the outspoken work of Herbert Schiller. Vincent Mosco, Living on in the number one country: The legacy of Herbert I. Schiller, *Journal of Broadcasting & Electronic Media*, 45, no. 1 (2001): 191-198.

13. Francis E. Rourke and Roger E. Brown, Presidents, professionals, and telecommunications policy making in the White House, *Presidential Studies Quarterly*, 26, no. 2 (1996): 539-550.

14. Rhoda Walters, The Office of Technology Assessment of the United States Congress: A model for the future? *Government and Opposition*, 27, no. 1 (1992): 89-109.

15. Fred M. Weingarten, Obituary for an agency, *Communications of the ACM*, 38, no. 9 (1995): 29-33.

16. Linda Garcia, Presentation to Pre-Conference Workshop on Communication Research and Policy, International Communication Association, Washington, D.C., May, 2001; Fred Weingarten, The politicizing of science policy, *Communications of the ACM*, 37, no. 6 (1994): 13-16.

17. Bruce Bimber, *The Politics of Expertise in Congress: The Rise and Fall of the Office of Technology Assessment*, State University of New York Press, Albany, 1996; Bruce Bimber, The death of an agency: OTA and trophy hunting in US budget policy, *Policy Studies Review*, 15, nos. 2-3 (1998): 202-226.

18. Schön & Rein, 1994, *op cit*.

19. Arthur L. Norberger, with Judy E. O'Neill and Kerry J. Freedman, *Transforming Computer Technology: Information Processing for the Pentagon, 1962-1986*, Johns Hopkins University Press Baltimore.

20. Ellen Wartella, Presentation to the Workshop on Communication Research and Policy, International Communication Association, Washington, D.C., May, 2001.

21. e.g., Susan J. Douglas, *Inventing American Broadcasting, 1899–1922*, The Johns Hopkins University Press, Baltimore, 1987; Gertrude J. Robinson, "Here be dragons": Problems in charting the U.S. history of communication studies, *Communication*, 10, no. 2 (1988): 97–119; Bruce Lannes Smith, Trends in research on international communication and opinion, 1945–55, 20, no. 1 (1956): 182–195.
22. Simpson, 1994, *op cit*.
23. Rowland, 1986, *op cit*.
24. For a discussion of the influence of such organizations on television programming in Brazil, for example, see Michele Mattelart & Armand Mattelart, *Carnival of Images*, Bergin & Garvey, New York, 1990. In a second example, foundations and think tanks helped develop audiovisual policy for Europe; see Philip Schlesinger, From cultural defence to political culture: Media, politics and collective identity in the European Union, *Media, Culture & Society*, 19, no. 3 (1997): 369–391.
25. Frank Fischer, Policy discourse and the politics of Washington think tanks, in Fischer and Forester, *op cit.*, pp. 21–42.
26. David Easton, *A Framework for Political Analysis*, University of Chicago Press, Chicago, 1979.
27. William Buxton, From radio research to communications intelligence: Rockefeller philanthropy, communications specialists, and the American policy community, in Stephen Brooks & Alain-G. Gagnon, eds, *Political Influence of Ideas: Policy Communities and the Social Sciences*, Praeger, Westport, Conn., 1994, pp. 187–209. 1994; Brett Gary, Communication research, the Rockefeller Foundation, and mobilization for the war on words, 1938–1944, *Journal of Communication*, 46, no. 3 (1966): 124–148.
28. Marilyn A. Lashner, The role of foundations in public broadcasting, Part I: Development and trends, *Journal of Broadcasting*, 20, no. 4 (1976): 529–547; Marilyn A. Lashner, The role of foundations in public broadcasting, Part II: The Ford Foundation, *Journal of Broadcasting*, 21, no. 2 (1977): 235–254.
29. Lewis A. Dunn, *On-site Inspection for Arms Control Verification: Pitfalls and Promise*, Center for National Security Negotiations, McLean, Va., 1989.
30. Stephen McDowell, Policy research institutes and liberalized international services exchange, in Brooks and Gagnon, 1994, *op cit.*, pp. 107–134.
31. Fischer, 1993, *op cit*.
32. The Social Science Research Council currently has programs in the areas of culture, information technology, and globalization that are producing numerous reports pertinent to information policy.
33. Owen, 1998, *op cit*.
34. A partial listing of the work this research agenda has produced includes: Erik Brynjolfsson and Brian Kahin, eds, *Understanding the Digital Economy: Data, Tools & Research*, The MIT Press, Cambridge, 2000; Brian Kahin and

Janet Abbate, eds, *Standards Policy for Information Infrastructure*, Harvard Information Infrastructure Project, Cambridge, 1995; Brian Kahin and James Keller, eds, *Coordinating the Internet*, The MIT Press, Cambridge, 1997; Brian Kahin and Charles Nesson, *Borders in Cyberspace: Information Policy and the Global Information Infrastructure*, The MIT Press, Cambridge, 1996; Brian Kahin and Hal Varian, eds, *Internet Publishing and Beyond: The Economics of Digital Information and Intellectual Property*, The MIT Press, Cambridge, 2000; Brian Kahin and Ernest Wilson, eds, *National Information Infrastructure Initiatives: Vision and Policy Design*, The MIT Press, Cambridge, 1996.

35. A partial listing of these books includes Eli M. Noam and James Alleman, eds, *The New Investment Theory of Real Options and its Implication for Telecommunication Economics*, Kluwer Academic Publishers, Amsterdam, 1999; Eli M. Noam and Aine Nishuilleabhain, eds, *Private Networks, Public Objectives*, Elsevier Science, Amsterdam, 1996; Eli M. Noam and Gerard Pogorel, eds, *Asymmetric Deregulation: The Dynamics of Telecommunications Policy in Europe*, Greenwood Publishing Group, Boulder, Colo., 1994; Eli M. Noam and Alex J. Wolfson, eds, *Globalism and Localism in Telecommunications*, Elsevier Science, Amsterdam, 1997.

36. See, e.g., John Forester, Toward a critical sociology of public policy: Probing policy-shaped contradictions in the communicative infrastructure of society, in *Critical Theory, Public Policy, and Planning Practice: Toward a Critical Pragmatism*, SUNY Press, Albany, 1993, pp. 135-178.

37. Katherine Montgomery, Presentation to Pre-Conference Workshop on Communication Research and Policy, International Communication Association, Washington, D.C., May, 2001.

38. David Docherty, David Morrison, and Michael Tracey, Scholarship as silence, *Journal of Communication*, 43, no. 3 (1993): 230-238; Jay Rosen, Making things more public: On the political responsibility of the media intellectual, *Critical Studies in Mass Communication*, 11, no. 4 (1994): 363-388.

39. Ellen Wartella, Communication research on children and public policy, in Philip Gaunt, ed, *Beyond Agendas: New Directions in Communication Research*, Greenwood Press, Westport, Conn., 1993, pp. 137-148; Ellen Wartella, Presentation to Pre-Conference Workshop on Communication Research and Policy, International Communication Association, Washington, D.C., May, 2001.

40. See, e.g., George Gerbner, Science or ritual dance? A revisionist view of television violence effects research, *Journal of Communication*, 34, no. 3 (1984): 164-173; Dale Kunkel, The role of research in the regulation of U.S. children's television advertising, *Knowledge: Creation, Diffusion, Utilization*, 12, no. 1 (1990): 101-109; Michael A. McGregor, Assessing FCC response to report of Children's Television Task Force, *Journalism Quarterly*, 63, no. 3 (1986): 481-487, 502.

41. Ellen Wartella and Byron Reeves, Historical trends in research on children and the media: 1900-1960, *Journal of Communication*, 35, no. 2 (1985): 118-133.

42. George Comstock, The role of social and behavioral science in policy-making for television, *Journal of Social Issues*, 32, no. 4 (1976): 157-178.
43. Warren Bareiss, Public space, private face: Audience construction at a non-commercial radio station, *Critical Studies in Mass Communication*, 15, no. 4 (1998): 405-422; John F. Long and Paul J. Traudt, Discriminating audience donor factors for public radio: A tale of two cities, *Journal of Media Economics*, 12, no. 1 (1999): 51-66.
44. Petros Iositides, Diversity vs. concentration in the deregulated mass media domain, *Journalism and Mass Communication Quarterly*, 76, no. 1 (1999): 152-162; Dominic L. Lasorsa, Effects of newspaper competition on public opinion diversity, *Journalism Quarterly*, 68, nos. 1-2 (1991): 38-47; Maxwell McCombs, effect of monopoly in Cleveland on diversity of newspaper content, *Journalism Quarterly* 64, no. 4 (1987): 740-744, 792; Michael H. McGregor, Importance of diversity in controversy over financial interest and syndication, *Journalism Quarterly*, 61, no. 4 (1984): 831-834; Susan Dente Ross, Doors to diversity: The First Amendment implications of telephone video options under the Telecommunications Act of 1996, *Journal of Broadcasting and Electronic Media*, 43, no. 2 (1999): 254-270.
45. e.g., Kenneth Lipartito, Systems in conflict: Bell confronts the American South, Presented to the International Communications Association, Chicago, May, 1991; Milton Mueller and Jorge Reina Schement, Universal service from the bottom up: A study of telephone penetration in Camden, New Jersey, *The Information Society*, 12 (1996): 273-292; Lana F. Rakow, Technology and social change: The telephone in the history of a community, Presented to the International Communications Association, Chicago, May, 1991.
46. Alan G. Stavitsky, "Guys in suits with charts": Audience research in U.S. public radio, *Journal of Broadcasting and Electronic Media*, 39, no. 2 (1995): 177-189.
47. Wenmouth Williams, Jr., Two approaches to the identification and measurement of public radio audiences, *Journal of Broadcasting*, 25, no. 1 (1977): 61-69; Wenmouth Williams and David L. LeRoy, Alternate methods of measuring public radio audiences: A pilot project, *Journalism Quarterly*, 53, no. 3 (1976): 516-521.
48. Stavitsky, 1995, *op cit.*; Alan G. Stavitsky, Counting the house in public television: A history of ratings use, 1953-1980, *Journal of Broadcasting & Electronic Media*, 42, no. 4 (1998): 520-534.
49. Alan G. Stavitsky, Theory into practice: By the numbers—The use of ratings data in academic research, *Journal of Broadcasting & Electronic Media*, 44: 3 (2000): 535-539.
50. S. C. Ivers, *How Independent Research Can Strengthen Public Broadcasting* Benton Foundation, Washington, D.C.: 1993.
51. Cecilie Gaziano, Relationship between public opinion and Supreme Court decisions: Was Mr. Dooley right? *Communication Research*, 5, no. 2 (1978): 131-149.

52. See, e.g., Philip J. Powlick, The sources of public opinion for American foreign policy officials, *International Studies Quarterly*, 39, no. 4 (1995): 427-452.
53. Sandra Braman, *Public Opinion Surveys on First Amendment Issues, 1936-1985*, Report to the Minneapolis Star & Tribune Company, Minneapolis, Minnesota, 1986.
54. Jacob Shamir, Neta Ziskind, and Shoshana Blum-Kulka, What's in a question? A content analysis of survey questions, *Communication Review*, 3, no. 4 (1999): 1-25.
55. Jeffrey Mondak, Question wording and mass policy preferences: The comparative impact of substantive information and peripheral cues, *Political Communication*, 11, no. 2 (1994): 165-183.
56. Carl Botan, Presentation to Pre-Conference Workshop on Communication Research and Policy, International Communication Association, Washington, D.C., May, 2001.
57. David Riesman, Orbits of tolerance, interviewers, and elites, *Public Opinion Quarterly*, 20, no. 1 (1956): 49-73.