an be read as an argument that this represents an alarming deparn a great American tradition. Once we understand the media in erms, we have to start caring about what those lobbyists who the corridor outside the Senate Commerce Committee hearing tually do."

-Nicholas Lemann, The New Yorker

arr's masterful study makes plain how deep are the roots of the splendors and miseries alike. It's easy to gesture airily at 'struct Starr fills in the blanks with his thorough account, emphasizing ces between America's communications system and others'. Anythinks entrepreneurs make media all by themselves, indifferent nment policy and culture, will find *The Creation of the Media* esilluminating."

d Gitlin, Professor of Journalism and Sociology at Columbia University and author of *Letters to a Young Activist*

eation of the Media is a book no journalist—and probably no citiould be without."

—David Propson, New York Sun

eation of the Media is first and foremost a sweeping narrative hisamerican media from the Revolution to World War II. And it is such history ever written. . . . This is truly a case where the whole to much more than the sum of its parts."

—David Paul Nord, *The Book*

THE CREATION OF THE MEDIA

Political Origins of Modern Communications

PAUL STARR



A Member of the Perseus Books Group New York the disappointment—or at least ambiguous realization—of democratic ideals. Both books are at least as much about America as they are about either medicine or media. I did not set out to write parallel accounts, and in many ways they are different. There is also far too much historical contingency in each narrative for me to suggest that the developments in either one have followed an inexorable course. Powerful tendencies have been built into the institutions, but the lesson of the past, it seems to me, is that we can still make new choices about them—and politics has been, and continues to be, the primary means of making those choices.

It would have been impossible for me to undertake a project of this scale without the support of family, friends, and colleagues. I owe great thanks to Princeton University, to its Center for Arts and Cultural Policy Studies, and to my colleagues and students in sociology and American studies. I also owe a particular debt to those who have given me the benefit of their knowledge and critical reactions during the work on this project, including Paul Dimaggio, Hendrik Hartog, Richard R. John, Stephen Holmes, and Eszter Hargittai. Research assistants over the years—Jonathan Steinberg, Chuck Auletta, and Lauren Cusick—have helped out on specific factual issues. I also want to thank my agent, Bill Leigh, and Jo Ann Miller and others at Basic Books.

The unpredictable factor in any author's work is the course of life itself. Although personal tragedy interrupted my work on this book, heaven has smiled again—and I thank my wife Ann for her love, support, and, not least of all, knowledge of literature and history.

Paul Starr Princeton, New Jersey

Introduction

The Political Origins of Modern Communications

DURING the past several decades, the "information revolution" has served as a defining conception of our time. Yet, as remarkable as the recent wave of innovation has been, it is only the latest phase of a centurieslong process that has been punctuated by a series of upheavals in communications and information at least as revolutionary as our own. Out of these upheavals have come the modern media—not just the various means of communication, but the array of powerful institutions that everyday references to "the media" imply. Technology and economics cannot alone explain the system of communications we have inherited or the one we are creating. The communications media have so direct a bearing on the exercise of power that their development is impossible to understand without taking politics fully into account, not simply in the use of the media, but in the making of constitutive choices about them.

By constitutive choices I mean those that create the material and institutional framework of fields of human activity. My premise here is that the constraints in the architecture of technical systems and social institutions are rarely so clear and overpowering as to compel a single design. At times of decision—constitutive moments, if you will—ideas and culture come into play, as do constellations of power, preexisting institutional

legacies, and models from other countries. Although the people directly involved in the decisions may not be aware of their long-term implications, institutions and systems once established often either resist change or invite it in a particular direction. Constitutive choices emerge in a cumulative, branching pattern: Early choices bias later ones and may lead institutions along a distinctive path of development, affecting a society's role and position in the world.

From the seventeenth to the mid-twentieth centuries, the constitutive choices about the modern media—chiefly the press, postal and telecommunications networks, cinema, and broadcasting-took place in the context of larger political and economic transformations. As the most powerful nation-states in the world emerged in Europe and North America, the architects of those states took a direct hand in shaping communications for both instrumental and symbolic purposes. Political movements, particularly beginning in the eighteenth century, also began to set limits on state power, including the right to discuss public questions freely. This liberal constitutionalist tendency was more hospitable than earlier absolutist regimes to the flourishing of communications on a wider and more commercial basis. Other factors, such as the international position of a state, its stability and coherence, and the balance of forces at critical moments of decision, also affected national paths of development. As the market for print media and other cultural goods expanded, early institutional differences—notably among continental European countries, Great Britain, and the United States—led to widening divergences in the communications industries and popular media.

It is a particular argument of this book that the United States has followed a distinctive developmental path in communications ever since the American Revolution. The origins of that path lie in the country's founding as a liberal republic and its response to the peculiar challenges of building a nation on a continental scale. The consequences, albeit unintended, have been to endow the United States with a source of economic, political, and even military advantage and to make the American media a formidable power in themselves. America's leading role in the contemporary information revolution may seem simply to reflect its position as the world's dominant economy and most powerful state. But in the early nineteenth century, when the United States was neither a world power nor a primary center of scientific discovery, it was already a leader in communications—in postal service and newspaper publishing, then in devel-

opment of the telegraph and telephone, later in the movies, broadcasting, and the whole repertoire of mass communications. This pattern of early leadership and persistent advantage in communications stems fundamentally from constitutive, political decisions that led the United States from its founding on a course sharply diverging from the patterns in Britain, elsewhere in Europe, and even in Canada.

The American path is not reducible to a simple opposition to government and preference for free markets. While restraining state authority in some respects, American law and policy have also actively used government to promote communications. The constitutional provisions for the press and the Post Office illustrate the apparent polarities of a limited and interventionist state: Although the Bill of Rights denied the federal government any authority to regulate the press, the Constitution made the Post Office the one nationalized industry, and the new government soon set about building a comprehensive postal network. Rather than conflicting with one another, however, the two policies were complementary: The Post Office was used to subsidize the press, and both contributed to the extension of communication—in particular, the distribution of political news beyond earlier boundaries. These policies, like many later ones, were born of supremely political objectives, though they also had important economic consequences. The government's role in the early development of the Internet is only the latest example of policies that have not only restrained the power of the state but also made positive use of it to promote communications—and ended up, albeit without any deliberate plan in this and other instances, generating new economic and social possibilities.

Unintended consequences are usually invoked to explain cases of good intentions gone wrong, but this is a more positive story from the standpoint of economic growth. America's leading role in the information economy is at least partly a case of unexpected payoffs. In a country where politics is richly despised, a legacy of politically based competitive advantage lies at the foundation of new wealth. At the same time, the continuing transformation of communications has created new hierarchies of private power and put at risk some of the political aspirations that originally helped to set the process in motion. The American framework of communications has been a remarkable engine of wealth and power creation, so much so that its influence now extends over not merely a continent, but the world. Yet that very achievement raises uneasy questions about the media's structure, role, and relation to popular self-government.

Revolutions as Constitutive Moments

The rise of modern communications is usually told as a narrative of revolution, from the printing revolution in early modern Europe to the electronics and computer revolutions of the twentieth century. In the usual understanding of the term, a "communications revolution" is a radical change in both communications and society resulting from the introduction of a new medium. The putative social changes stemming from a new technology, however, may be slow in coming, hard to isolate from other contemporary developments, and related less to a medium's intrinsic properties than to constitutive choices about its design and development. Revolutionary shifts in communication may also come from other sources besides technology. The alternative followed here is to conceive of communication, whether precipitated by technology, politics, cultural shifts, or other causes.¹

Constitutive choices are choices about how things are built and how they work—their design and rules of operation. In the case at hand, these are choices about the material and institutional framework of communications and information (for example, the basic structure of networks and legal principles regulating the press). Insofar as such choices emerge from slowly crystallizing cultural practices or gradual economic and political change, there may be no clear moments of decision. But at times constitutive choices come in bursts set off by social and political crises, technological innovation, or other triggering events, and at these pivotal moments the choices may be encoded in law, etched into technologies, or otherwise embedded in the structure of institutions.

A variety of mechanisms—call them mechanisms of *entrenchment*—make it difficult to revoke such decisions. Written constitutions are typically intended to be difficult to change; entrenchment is purposeful. Laws and regulations are often tenacious because bureaucracies and private organizations are built up on the basis of their provisions and develop an interest in their perpetuation. When the telegraph first emerged, the decision about whether to run it as a state or private enterprise was relatively open; change became far less likely after the rise of Western Union in the United States and government telegraph bureaucracies in Europe. What is true of organizations is also true of technologies themselves. Once technological development moves in a particular direction, strong inertial

forces favor continuing down that path. Initial choices in design also develop into more elaborate systems as individuals and firms pursue complementary innovations. Things that work satisfactorily come to be thought of as right: Laws, methods, and systems that appear to be successful become the basis of standards, often gradually appearing to be natural and inevitable, as if they could be no other way. Invention is often the mother of necessity. Network technologies and institutions based upon them develop particularly strong inertial tendencies because of the interconnections and interdependencies they create. As a result, instead of following a single, universal route of progress from tradition to modernity, social and economic development may take a distinctive direction from an early point—in the current phrase, social and economic systems may be "path-dependent," unable to "shake off the effects of past events."

Constitutive choices about communications, in the approach I take in this book, fall into three broad areas: *first*, the general legal and normative rules concerning such issues as free expression, access to information, privacy, and intellectual property; *second*, the specific design of communications media, structure of networks, and organization of industries; and *third*, institutions related to the creation of intangible and human capital—that is, education, research, and innovation. All three of these, especially the first, are relevant to the development of the "public sphere"—the sphere, that is, of public discussion, public knowledge, and public opinion.³

The great political revolutions of the modern world, including the American, the French, and both Russian revolutions (1917 and 1991), all raised the most fundamental questions about communications and knowledge, as they did about politics: Who will have the right to speak and to publish? Who will be subject to surveillance? What access will ordinary people have to information and debate about public issues? What incentives will they have to invest in creating and disseminating knowledge? In each case, revolutionary changes in politics brought about revolutionary changes in communications. Some old-regime structures survived into the new era, but for communications, as for other areas of social life, the ideological beliefs of the revolutionaries mattered a great deal, particularly in constitutive decisions about the public sphere. The restriction or protection of free speech, popular assembly, and private association are only the most obvious examples. Through a variety of decisions about their own practices—the writing down and publishing of constitutions, publication of

laws, opening up of legislative sessions, disclosure of votes, public accounting of taxes and expenditures, dissemination of economic and social data—modern states have also determined the transparency of their operations and the ability of the press and the public to monitor and criticize them.

As a new technology emerges, so do new choices about the purposes and organization that will guide its development—whether, for example, they will primarily be military or civilian, governmental or private, or nonprofit or commercial. At issue may be the technology's architecture—the complex of standards that define the workings of a technological system or a major segment of it—as well as the methods for settling architectural disputes, such as by national or local regulation or international agreement, through private standard-setting organizations, or by competition among private firms for architectural dominance in the market. Different architectures often embody different values. They may make governmental control easy, or they may make it difficult. They may facilitate external monitoring, or they may protect anonymity and privacy. They may enable greater diversity and decentralization in the sources of expression, or they may favor greater uniformity. In the case of computational technologies, the underlying code may be open to scrutiny and revision, or it may be proprietary and closed. A new technology may have particular consequences because of its architecture, not because that is the only way it could be. Architectural choices are often politics by other means, under the cover of technical necessity.4

The advent of a new technology may also create an occasion for a larger restructuring of rules and relationships. At moments of change, a typical question is how, if at all, the state will translate the rules and policies for an old medium into rules and policies for a new one. Will it adopt, with minor revisions, the same legal and regulatory framework and mode of organization, or fundamentally transform them? The development of the telegraph, for example, posed a choice as to whether legal principles previously applied to print and postal communication would apply to telegraphic messages; after the motion pictures developed, the question became whether the legal framework governing the press would apply to the cinema. And, more recently, the rise of the digital media has upset older legal models and posed new questions about whether existing laws and norms should apply to such forms of communication as e-mail.⁵

Wars, economic shocks, and other events may also provoke a generative crisis—one that shakes up older institutions and creates the opening

for new choices about previously settled rules and practices. World War I was a generative crisis for communications in many of the countries drawn into the conflict. International pressures of other kinds may also precipitate internal upheavals. The more a society is tied into the world economy, the more likely constitutive moments will arise from changes in international communication regimes—that is, the norms and policies institutionalized in various kinds of international agreements, such as those governing copyright, telecommunications, and the broadcast spectrum.

As an episodic process, constitutive development reflects the particular conjuncture of forces and ideas at the moment when a political upheaval takes place, a new technology is introduced, or some other event reopens settled institutional patterns. But not all constitutive decisions work out equally well. Institutions created under unusual conditions may not survive; later developments may undo them or create pressure to conform to standard national patterns. International competition, conflict, and coordination also provide an imperfect "discipline" on the range of decisions sustainable in the long run. These are some of the mechanisms that create wider uniformities despite variable influences in particular societies. But, in the exceptional case, a constitutive "mutation"—a new institutional form, technological system, or social practice born of a particular historical conjuncture—may also set a new pattern in a society and even in the world.

Communications and Power

It is one thing to explain why an open public sphere and independent media originate in a particular country. It is another thing to explain why they persist and spread. Social institutions, including forms of government, are the result not only of forces that create them in the first place, but of forces that affect their survival. To be sure, some corrupt governments and other self-aggrandizing institutions may become entrenched despite poor performance and the unhappiness of the people who suffer under them. And, alas, even the highest virtues may not guarantee that institutions endure. But their survival and diffusion may have a lot to do with their relationship to power.

For centuries, the idea of free and open public communication about matters of political importance did not appeal to the great and powerful.

Francis Bacon's equation, "Knowledge is power," may be read not simply as an endorsement of knowledge but also as a warning about its perils. For fear of the power others might acquire against them, ruling elites have often kept knowledge secret, limited public discussion, and controlled religion, education, and science so as to prevent their subjects from acquiring sensitive information and dangerous ideas. Yet in the modern world, notwithstanding that interest, the sphere of public information has grown, independent channels of civil society have increased, and scientific and educational institutions have gained greater autonomy. While hard-won political struggles have been immediately responsible for these developments, a more systematic reason may explain their diffusion and consolidation.

8

Attempts by states to restrict communication and monopolize knowledge suffer from an internal difficulty. Inasmuch as they impair the widespread social capacity to create wealth, restrictions on knowledge and communication undercut the long-term ability of a state to sustain its power internationally and meet a variety of internal demands. As a result, informational and communicative capacities present a dilemma to those who hold power. More highly developed and widely distributed capacities may promise more control over the forces of nature, economic growth, greater military strength, and other advantages. But by enabling people to communicate and organize independently, such expanded capacities may also destabilize and undermine the existing order from within. How states respond to that knowledge-power dilemma holds great consequences. Different responses imply different constitutive choices about communications, and because early choices lead down different developmental paths, the legacy of old responses may affect a society long after it attempts to shed them.

Consider the strategic options and potential aftereffects of a regime that limits communicative capacities in the hope of minimizing internal social and political risks. In the extreme case—a "closed society"—a state afraid of popular participation or subversion may try to seal itself off from the wider world, refuse to invest in literacy and education, and ban independent ownership of the means of communication. Or, without entirely closing itself off, a state may selectively invest in education, communications networks, or other resources while jailing dissidents and demanding ideological conformity from journalists, researchers, and others in exchange for privileges—the typical strategy of an authoritarian state hoping

to modernize. Control may be particularly effective if, instead of exercising direct supervision, a state can rely for enforcement primarily on partnerships with strategic elites, such as a printing guild or the directors of a broadcasting authority, in whom the state vests a communications monopoly. Control and centralization have a long historical connection. From ancient empires that kept scribes close at hand to the absolutist states of early modern Europe that centralized printing in their capitals, regimes seeking to censor communication have often tried to confine it geographically. And even when the regimes change, the imprint on the structure of communications may not disappear. Centralization tends to be highly persistent: France and Russia still display the highly centralized pattern of communications that state policy originally pursued centuries ago.

The development of telecommunications in the Soviet Union provides a twentieth-century example of the influence of state interests in control on decisions about technological systems. After taking power in 1917, the new Soviet rulers could have invested in telephone networks, as other nations were doing at that time, but chose instead to emphasize another emerging communication technology—loudspeakers. Down to its collapse in 1991, the Soviet Union and the countries under its control had markedly fewer telephones than the countries of Western Europe and North America, even allowing for differences in income. The Soviet regime did, however, invest in broadcasting, which it made into a loudspeaker of another kind; the Soviets favored vertical communications technologies that allowed the state to communicate with the people but neglected technologies for horizontal communications that would allow people to communicate with each other. This preference reflected the regime's general effort to repress the spontaneous organization of civil society. The telephone network built by the Soviets also routed long-distance calls through Moscow, a choice that had no economic logic but made it easier for the state to maintain surveillance. Reconstructing telecommunications became a major economic imperative after the Soviet system fell. 6

If the costs of closed or restrictive regimes consisted only of the direct expenditures for surveillance and policing, a mere change of regime might remove them immediately. But deeper malformations—such as neglect of education and communications outside of the metropolitan "core," distorted allocations of investment in technology, and lack of popular trust in the privacy of communications—are likely to have longlasting effects. The immediate costs to growth are clearest in the case of

the closed society that loses access to trade and international scientific exchange. Authoritarian modernization may be more ambiguous in its results because such regimes may succeed in importing technologies and developing technical education, military research, and other informational capacities. But here, too, if the sparse record of authoritarian regimes in technological innovation is any indication, the costs over the long term are substantial. Insofar as these costs become apparent through military defeat, relative economic decline, or other ways, they may induce political change, including efforts to loosen old controls and mimic institutional structures thought to be more successful.

The opening up of restrictive systems of control may proceed either de facto or through law. In the case of a de facto opening, a society may have no strong central state authority, the governing elites may be too divided for the state to act consistently, or the state may lack the means to stop or screen communication from abroad. Examples of such states run from the Netherlands in the seventeenth century to Iran today. A de facto opening may serve as an initial stage before rights to independent communication and association are legally established, but the importance of such a phase is not just transitional. The de facto opening may do the work of "creative destruction," eroding legacies of control or averting their development in the first place.

Opening the public sphere under the protection of law requires more than the state's pledged absence from society. Constitutional and judicial protections of rights to free expression, access to information, privacy, and patent and copyright are as much of a "service" provided by states as welfare benefits or military defense.⁷ Some work on state-building, however, focuses solely on administrative, military, and fiscal capacities and suggests that the formation of modern states primarily involves increases in the scale and scope of state activity.8 But the rise of constitutional government also involves institutionalized limitations on state power and the creation of an independent judiciary. These aspects of state-building are particularly important for knowledge and communications, not only because of such legal guarantees as rights to free speech and intellectual property, but also because of constitutive decisions that limit discretionary political control of activities conducted under state authority. For example, instead of establishing universities and broadcasting networks as organs of the national government, a state may disburse funds to private and public organizations outside of the national government. Such provisions limit executive power, but they do not imply that the state is "weak," since they may increase public trust and thereby promote cooperation and support. The attempt to build in checks and balances may also prevent the state from adopting measures that in the long run would be destructive of its own authority. Just as better brakes on a train or car enable it to travel safely at higher speeds, so may constitutional limitations increase the power potentially available to a state in its hour of crisis.

Constitutive decisions about intellectual property, scientific research, and other issues affecting technological innovation have particular bearing on economic development. There is hardly a better example of constitutive choice than the definition of property rights; even the most basic question of what can be held as property is a matter of political decision. The idea of property rights in the radio spectrum would have mystified our ancestors, while the idea of property rights in people, that is, slavery, is abhorrent to us. Political decisions determine the particular rights that a form of property conveys; in the case of copyright and patents, for example, decisions in the eighteenth century set a limited duration for those rights. The development of intellectual property rights allowed authors and inventors to appropriate at least some of the economic value of their work. And this right of appropriation, not just the right to publish, has helped to enlarge the public sphere by creating incentives to produce and disseminate knowledge and new technology. The medieval guilds used secrecy to appropriate the gains from innovation, thereby keeping discoveries out of wider circulation and inhibiting further advance. The ingenuity of patent and copyright is that in exchange for a temporary monopoly, they encourage inventors and authors to disclose new knowledge, and when the rights finally expire, the property itself tumbles into the public domain. To large corporations, the prospective time limit is an incentive to develop not just isolated innovations but a continuous capacity for innovation so as to stay ahead of competitors. Insofar as antitrust and other policies prevent corporations from achieving gains through predatory tactics, they may encourage them to invest instead in patentable innovation. 9

But intellectual property also suffers from inadequacies as a basis for innovation and even has its dark side. Patent and copyright convey a monopoly, albeit a temporary one. If patents are construed so broadly that they cover potential alternative inventions, they may suppress further innovation, at least for a time. Similarly, copyright can be so extended in scope and time as to inhibit both criticism and further development of

ideas. Insofar as copyright and patent owners shape the law, they may succeed in bending it to their private advantage alone. Like the development of communications monopolies, such efforts illustrate the potential for private interests created under a liberal state to conflict with the wider interests it claims to advance. In addition, scientific research and other forms of inquiry, particularly those aimed at basic principles rather than applications, have such diffuse and long-term social benefits that individual intellectual property rights cannot fully capture returns on investment. Governmental and nonprofit support for education and research can fill the gap between social returns and individual rewards that would be left under a pure market-based regime. As the level of investment required for successful innovation increases, particularly at higher levels of development, an early bias against state support of science and technology can become a barrier to growth.

The demands of long-term economic growth ultimately required, therefore, not simply constitutional limitations on the state, but its active support in developing knowledge and communicative capacities. Restrictive-information regimes had to evolve into more open ones without, however, moving so far toward laissez-faire as to impair the state's ability to meet various developmental and external challenges. No single set of policies was necessarily optimal. But a state that provided positive support to communication, education, and creation of new knowledge and technology, while restricting its own powers of surveillance, censorship, and control, had the potential for developing comparative advantage in communications. Although many states today have adopted institutions and policies that more or less fit this description, the United States had a singular advantage in starting down that path at the point the nation was founded in the late eighteenth century.

The Path of American Development

Four waves of institution-building in American history hold special importance for communications. The American Revolution, the writing of the Constitution, and the development of such institutions as the Post Office, the common school, copyright law, and the popular press in the early republic left a legacy of foundational decisions that were especially important in shaping the legal and normative framework of the public

sphere. New constitutive choices came with the rise of technological networks, beginning with the decision to privatize the telegraph in the 1840s and culminating in the system of regulatory and antitrust policy imposed on telecommunications beginning around 1907. Yet another wave came with the rise of the early mass media—first the mass press, then the motion pictures—when the dynamic tensions created by immigration and industrialization led to both wider diversity and tighter moral regulation, until repression crested just after World War I and a new legal framework for freedom of expression began to take shape in the 1920s. And, finally, though beyond the scope of this volume, the expansion of public investment in science, technology, and higher education during World War II and the early Cold War and the ensuing revolutions in computers, electronics, and telecommunications set off the most recent wave of institutional design and transformation.

As the United States developed internally, so the relationship of American communications to the external world changed. The young republic, like the earlier colonies, belonged to the dependent periphery of an Atlantic communications network centered in London. While standing apart from Europe and developing its own institutions, the United States by 1850 became more of an originator of communications technologies; by this period, it was already a leader in certain aspects of communications without being a center. It had graduated, in effect, from the dependent periphery to the independent semi-periphery in the world economy, while Britain remained the dominant power in communications, in part through its control, during the late nineteenth and early twentieth centuries, of the global submarine cable network. In the decades after World War I, as the United States gained economic and military power, it increasingly became the dominant global center in communications, communications technology, and entertainment for export, and by the late twentieth century, what had been the American exception in communications—private telecommunications and commercial broadcasting, for example—increasingly became the rule. In short, though the differences have by no means been completely eliminated, the divergence in communications that opened up between the United States and Europe in the eighteenth century has increasingly been settled on American terms.

Communications in America did not unfold in a uniform and linear way. Less open in its public life and lagging in every dimension of education and communications, the South both before and after the Civil War