

HOW INFORMATION SHAPES POLITICAL INSTITUTIONS

Bruce Bimber

Editor's Note

Bruce Bimber's essay highlights the crucial role that information transmission plays in structuring politics in democratic societies. He points out how changes in the structure, costs, and accessibility of information alter the political system. The United States has moved through four major communications revolutions in its history, mostly fueled by technological developments. Currently, the Internet and other new media have created an era of information abundance, fracturing the communication monopoly of old-style organizations and allowing many resource-poor new voices to be heard. These developments are changing the political landscape in ways that remain as yet unpredictable.

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Defining "Information" and "Communication"

Knowledge about facts, subjects, or events is inextricably bound to virtually every aspect of democracy. Such knowledge may concern the interests, concerns, preferences, or intentions of citizens as individuals or collectives. It

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may also concern the economic or social state of communities or society, or the actions and intentions of government officials and candidates for office. In what follows, political information constitutes any knowledge relevant to the working of democratic processes.

In his classic *The Nature and Origins of Mass Opinion*, John Zaller observes that the content of elite discourse, such as claims about the state of the world from party leaders and editorial positions of newspapers, contains information, but it is not “just information.” Because political discourse is the product of values and selectivity as much as verifiably “objective” observations, it comprises a mix of information and other factors. For my purposes this definition too narrowly constrains the concept of information by associating it with “truth” and “objectivity.”¹ I assume that when a political actor communicates a personal statement about the world containing a mix of facts and values, that actor is simply communicating a package of information, some of it dealing with “facts” and some of it with his or her values and predispositions. Some “facts” may even be wrong, but they can be communicated nonetheless and they constitute information.²

“Information” need not stand in opposition to opinions, stories, rhetoric, or signals about value structures. Information might be a “fact” about the rate of inflation published by the Bureau of Economic Analysis just as well as a political official’s statement about the need to control inflation. A candidate’s promise on a web site or broadcast advertisement “to protect Social Security” conveys certain political information, just as a Congressional Budget Office report on Social Security fund solvency conveys other information of a different and perhaps more satisfyingly “objective” sort. Information is simply something that can be known or communicated.

. . . [I]t is useful not to bind the definition of information too tightly to the human acts of perception and knowing. I assume that information can exist independently of its perception and understanding by any particular political actor. It is important, however, to observe the intimacy of the connection between “communication” and “information.” . . . I use “communication” to mean simply the transfer or exchange of information. Certainly, different forms of communication may convey different quantities of information in different ways, but I do not attempt to isolate the two concepts.

My definition of information therefore extends well beyond facts, and my definition of communication well beyond a quantitative transmission model. My conception of information is consistent with Inguun Hagen’s interpretation of the process of television news-watching by citizens, which may involve not only becoming informed in a narrow sense, but also diversion, habit or ritual, and fulfillment of a sense of duty or obligation.³ Information defined this way permeates human activity, and in principle the complete range of human meaning can be conveyed by communication.

Defined this broadly, information becomes vital to democracy in myriad ways: in the processes by which citizen preferences are formed and aggregated, in the behaviors of citizens and elites, in formal procedures of representation, in acts of governmental decision making, in the administration of laws and regulations, and in the mechanisms of accountability that freshen democracy and sustain its legitimacy. None of these elements of the democratic process can operate apart from the exchange and flow of information among citizens and their associations and organizations, among citizens and government, and within government itself.

More to the point, the *structure* of information in America at the outset of the twenty-first century is very different from that at the outset of the twentieth century, just as its structure then differed from that in the age of Jefferson. Not only the volume of political information available in society, but also its distribution and cost, have varied from one age to another. . . . How do historically changing properties of political information affect the evolution of democracy? What patterns might exist in the evolving nature of information and its relationship to politics? To what extent can the character of democracy be traced to causes rooted in the informational characteristics of a particular age? To pose these questions is to situate modern technology and applied questions about the contemporary information revolution in the larger sweep of American political development.

Overview of the Theory

. . . How can the relationship between information and political change be approached theoretically? My perspective is based on the observation that many features of social and economic structure were derived from the characteristics of information during the period in which they arose. Throughout most of the twentieth century, for example, the information necessary for economic transactions, education, social interaction, and many other facets of modernity had certain properties. It was hierarchically organized, costly to obtain and difficult to manage, and in most settings asymmetrically distributed. French social theorist Pierre Levy refers to these properties as a “communications ecology,” the basic features of information and communication to which human institutions and organizations are adapted.⁴ Vertically integrated firms, retail stores, administrative organizations, and even universities are in part adaptations to a communications ecology in which information is costly and asymmetric.

From this perspective, the contemporary information revolution involves deep changes in the communications ecology, with potential consequences for institutions and processes whose structures are in substantial ways adapted to older communications arrangements. This revolution is not simply an increase in the volume of information. . . . It is also qualitative, as

information of all kinds becomes cheaper, its structure ever more complex and nonlinear, and its distribution far more symmetric than at any time in the past.

In principle, such developments could have structural consequences that are far-reaching. Indeed, it is already apparent that economic structure is sensitive to such changes, as economic transactions are transformed on a large scale, new methods of retailing visibly overtake the commercial world, and old business relationships and structures give way to new, information-intensive arrangements. Perhaps less abruptly but no less profoundly, other institutions sensitive to features of information and communication may change as well. Education may be altered for better or worse (or both) as printed matter grows less central to the transmission of knowledge, meaningful engagement with others at a distance becomes more readily possible, and the kinds of skills relevant to economic and personal well-being change. The fabrics of social association, cultures, even private lives may be rewoven, insofar as these depend upon the nature and accessibility of information. And so it may be for democracy, to the extent that its structures represent adaptations to particular informational circumstances.

. . . I believe that there are good but underappreciated reasons that scholars have noticed the relevance of information technology at what are arguably the two most important historical turning points in American political development: the rise of party-based majoritarian politics and the evolution of group-based political pluralism. My aim is to explore what integration might be possible between those two developmental milestones and the present, using information as the nexus. I should add that in so doing, it is not my primary aim to predict the *future* of the information revolution and American politics, a risky temptation to which a number of writers have succumbed. I restrict myself instead to analyzing the nature and causes of changes under way in American democracy *at present*. I intend this . . . to be an argument for conceptualizing the evolution of information as an important contributor to political change at the largest scale—not information defined narrowly as the quantifiable messages exchanged by rational agents in signaling games and the like, but as a universally important ingredient in political processes.

Much of my thesis is based on the observation that elites exercise a powerful influence on the organization of democracy, through their capacity to influence public opinion, set agendas, mobilize citizens into collective action, make decisions, and implement policies. The identity and structure of elites is neither fixed across time nor random in its changes. Many factors affect the identity and structure of elites, and the state of information is one of them. Exogenous changes in the accessibility or structure of information cause changes in the structure of elite organizations that dominate political activity, and these in turn affect the broad character of democracy.

Information Regimes and Revolutions

I develop this theoretical claim in two steps, one historical and one contemporary. First, I reinterpret parts of American political history in informational terms. I argue that information regimes exist in American political history as periods of stable relationships among information, organizations, and democratic structure. The features of an information regime are: (1) a set of dominant properties of political information, such as high cost; (2) a set of opportunities and constraints on the management of political information that these properties create; and (3) the appearance of characteristic political organizations and structures adapted to those opportunities and constraints. Information regimes in the United States have been interrupted by information revolutions, which involve changes in the structure or accessibility of information. These revolutions may be initiated by technological developments, institutional change, or economic outcomes. An information revolution disrupts a prior information regime by creating new opportunities for political communication and the organization of collective action. These changes create advantages for some forms of organization and structure and disadvantages for others, leading to adaptations and change in the world of political organizations and intermediaries. This is to say that democratic power tends to be biased toward those with the best command of political information at any particular stage in history.

The first information regime in the United States emerged from an information revolution during the Jacksonian democratization. It was facilitated by the creation of the first national-scale system for communicating political information, namely, the remarkable U.S. Postal Service and the equally remarkable American newspaper industry. . . . National flow of political information was largely impossible in the decades after the founding. Its absence had blocked the development of new parties prior to the 1830s. Those parties that arose in the mid-nineteenth century were the final component of this information regime, an adaptation in part to the opportunities and constraints for the flow of information created by the postal service and newspaper systems. Beneath America's majoritarian politics of the nineteenth century was a distinguishing set of arrangements for the distribution of political information. These arrangements would eventually be superseded by others; but for a half to three-quarters of a century, they defined the majority of possibilities for large-scale political communication and civic engagement in the United States.

The second American information revolution led to an information regime that lasted into the middle of the twentieth century. That revolution was a product of the industrial revolution and the growing American state, which transformed the landscape of political information requisite to politics.

Information became enormously complex and highly differentiated between about 1880 and 1920 because the number of policy issues on the national agenda multiplied, as did the number of private and public actors engaged in the exchange of information. Such complexity favored a new form of organization adapted to the management and flow of specialized and increasingly costly information: the organized interest group. Though this new form of organization would eventually rise to prominence after the New Deal, interest-group politics of the twentieth century reflected and rested upon the new set of informational characteristics that emerged at the turn of the century. Interest groups can be understood as information specialists that prevailed over generalists (the parties) in some of the central communication functions in politics.

The pluralism connected with the second information regime persisted throughout the twentieth century, but was affected by a third, transitional revolution during the period of the 1950s–1970s involving broadcasting. The broadcast information revolution had two distinct phases. In the first, the mass audience for communication tended to weaken party organizations as central players in campaigning and at the same time create new possibilities for mass politics—a trend counter to the group-based politics of the second information regime. However, in the later stage of this information revolution, the rise of cable television and the multiplication of channels began a process of fragmentation and division of communication and information. These developments set the stage for the contemporary information revolution involving the Internet and associated technologies.

It should be clear that an information revolution is not simply an abrupt change in the technology of communication. A set of technological changes becomes revolutionary when new opportunities or constraints associated with political intermediation make possible altered distributions of power. These new capacities and possibilities are a function of the political and social context in which technology evolves. Moreover, an information revolution need not necessarily be driven by communication technology at all. My approach to analyzing political history has not been to draw up a list of technologies—telegraph, steamboat, railroad, telephone, radio, television, and so on—and ask how each affected politics. I have approached the problem orthogonally, by asking when, if ever, the properties of information and communication have changed abruptly, and then inquiring how such changes influenced politics. This approach implicates some technological innovations in abrupt information revolutions but not others. It identifies sources of informational change that would not make most lists of interesting technologies, such as the postal service. It also includes socioeconomic developments involving technologies but which are not, strictly speaking, technologies at all, such as the industrial revolution.

The Current Information Regime

. . . The second large step in my theory of information and democracy deals with contemporary political change, and involves applying lessons from the history of information in American politics to the present situation. The information-regime model of American politics and insights from the study of interest groups and political participation provide the means to investigate how contemporary information technology affects democracy. In the current period, as in the Jacksonian age and era of industrialization, the properties of information are again changing. Technology is increasing the complexity and specialization of information while at the same time decreasing its cost, thereby making abundant political information and communication available to anyone with the motivation to acquire it, provided they have access to information technology. In a general sense, the information regime model predicts that such a large-scale change in the cost of information should lead to political change, through its effects on the identity and structure of political intermediaries.

. . . [A]mong the most important trends predicted from theory are a decreasing association between the distribution of traditional political resources and the capacity to organize political action. . . . This phenomenon involves the substitution of information infrastructure for organizational infrastructure. It suggests the rise of new ad hoc political associations and groups, as well as altered strategies and commitments of resources on the part of traditional organizations. It entails increasing attention in the policy process toward “outside” lobbying and public opinion, as well as increasing orientation toward issues and events, rather than more stable interests and long-term political agendas.

My main thesis about contemporary political developments is that *technological change in the contemporary period should contribute toward information abundance, which in turn contributes toward postbureaucratic forms of politics*. This process involves chiefly private political institutions and organizations such as civic associations, as well as interest groups, rather than formal governmental institutions rooted in law or the Constitution. To the extent that the central functions of these private institutions involve the collection, management, or distribution of information under circumstances where information has been costly and asymmetrically distributed, the contemporary information revolution has the capacity to alter organizational structures. The result is a diminished role on many fronts for traditional organizations in politics. The pluralism of the 1950s and 1960s was a politics of bargaining among institutionalized interests. That changed in the 1970s and 1980s to a pluralism of more atomistic issue groups, less inclined and able at elite bargaining and more tightly focused on so-called single issues.

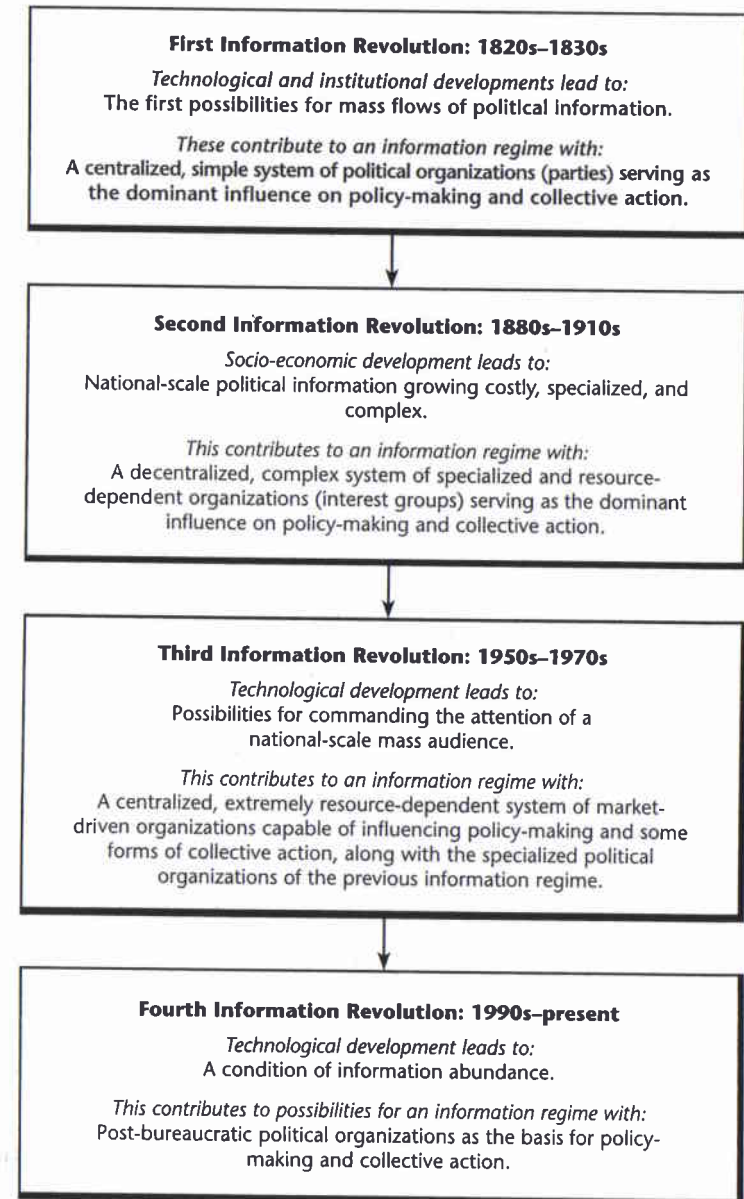
The accelerated pluralism of the 1990s and 2000s increasingly involves situations in which the structure of group politics is organized around not interests or issues, but rather events and the intensive flow of information surrounding them.

This progression from interest groups to issue groups to event groups does not imply that the former organizational form is displaced entirely. It should involve, rather, the loosening of certain organizational boundaries and structures and an increasing heterogeneity of forms working alongside one another. . . . As in previous information regimes, political influence in the fourth regime should remain biased toward those with the best command of political information. The contemporary information revolution should make traditional, bureaucratically structured organizations of all kinds less able to dominate political information—this is the central motor of political change.

In this way, it is possible to array contemporary developments with historical ones. The first information revolution made national-scale political information available for the first time, which contributed to centralized, hierarchical organizations serving as the basis for collective action in politics. In the second information revolution, national-scale political information, grew complex and costly, which led to the rise of decentralized, specialized, and bureaucratized organizations as the basis for collective action. The third information revolution created a modern tension between mass politics and pluralism, but left major, highly institutionalized organizational forms in a position of dominance. In the contemporary revolution, national-scale information is growing abundant, but no less complex than ever. The result should be a weakening of the organizational structures of the previous regimes. This sequence is summarized in Figure 1-1.

One of the major problems facing social scientists concerned with American democracy is the state of citizenship and levels of civic engagement. By many traditional measures, these are in decline, as the literatures on social capital, public opinion, voting participation, and the public sphere indicate. On the other hand, critics of declinist arguments have posited alternative interpretations of the data, based on new forms of engagement and changes in the meaning of citizenship. Many have suggested that participation in affinity groups, youth soccer leagues, support groups, interest organizations, and other novel associations may be replacing memberships in venerable but outdated groups such as Elks Clubs, Rotaries, and Boy Scouts. If so, the research indicating a decline in social capital may be due to a combination of inadequate conceptualization and measurement of the wrong activities.⁵ Likewise, in influencing explicitly political engagement, new forms of “lifestyle” politics, political consumerism, and other novel ways of being “political” may be displacing the traditional political actions that scholars have measured.⁶ Therefore, to the extent that political and civic identity and

Figure 1-1 Summary of the Four Political Information Revolutions in the United States



modes of action are changing, civic engagement may also simply be changing shape rather than decaying.

This debate will benefit substantially from the passage of time, as historical perspective sharpens assessments of stability and change and as new survey evidence differentiates long-term from short-term trends. The debate is relevant here, nonetheless, because of the possible role of information technology in it. One of the most persistent speculations about “the Internet and politics” has been that cheap, ubiquitous information and communication will expand possibilities for engagement and fuel a rise in overall levels of citizen involvement with their communities and political system. It is clear that the contemporary information revolution is making the individual’s political *environment* far more information-rich. It is also clear from research on political behavior and public opinion that political knowledge—information that has been assimilated by individuals—is connected with political action. In other words, more knowledgeable citizens are indeed more engaged. But the link between changes in citizens’ informational environment and changes in their internal political knowledge is far less clear. It seems intuitive that exposure to more information should lead to the internalization of more information and to changes in behavior. Some rational theories of political behavior formalize that link, interpreting the cost of information as an important regulator of its “consumption” and of the action that follows. Decrease the cost of a desired good, such as information, and more will be acquired by citizens, up until the point where marginal costs match marginal value. Empirical verification of this apparently straightforward model has been highly problematic, however, especially when it is framed in terms of longitudinal variation in citizens’ information environments.

It is important that a theoretical account of information and political change take up this problem as a counterpart to organizational-level matters. My approach involves a psychological perspective on political information that stands in contrast to instrumental conceptions of information as a rationally consumed good. Following work in political psychology, I posit that the informed citizen in the age of the Internet is not a rational actor, nor necessarily even one who pursues shortcuts and satisficing strategies in lieu of exhaustive and thorough information-gathering. Instead, informed citizenship involves the information-rich growing even richer as the cost of information falls, while those poor in information remain so. In practice, people should acquire information in so-called biased ways that support existing beliefs rather than reducing uncertainty. Most important, their consumption of information should occur in ways that are highly contingent on context and the stimulus provided by elites and organizations.

This view leads to the hypothesis that in the cycle of information revolutions and regimes, including contemporary developments, changes in the

nature of political information should typically exert little direct influence on levels of citizen engagement. As a force in democracy, therefore, information should work somewhat differently at the level of organizations and the level of individuals. Information revolutions, including the present one, should have profound and direct consequences for organizations and political structure, but only indirect, less tangible consequences for politics at the level of individual political engagement. The effects of changes in information, I argue, are concentrated on *political form* through an increasing independence of political structure from traditional economic and social structures.

Notes

1. John Zaller, *The Nature and Origins of Mass Opinion* (Cambridge, Eng.: Cambridge University Press, 1991), p. 13.
2. That a recipient of communication may have difficulty distinguishing the facts and values in a message or may be unable to verify truth claims does not change the fact that information in a broad sense has been transmitted, perhaps with a high level of uncertainty associated with it. How much “true” information recipients extract from a message is a function of their own sophistication and their knowledge of the person communicating. Imagine, for instance, a situation where a candidate for office broadcasts a factually false message that his opponent is a communist, or an opponent of civil rights, or an adulterer. If a voter, believing the message, abandons her support for the accused candidate and votes instead for the accuser, there can be no doubt that communication has occurred and that information—albeit containing a false claim—has been transmitted. Whether the information in a message is “true” or “objective,” and whether in this case the accuser sincerely believes his propaganda, is a separate question from the existence of information and communication.
3. Inguun Hagen, “Communicating to an Ideal Audience: News and the Notion of an ‘Informed Citizen,’” *Political Communication* 14, no. 4 (1997): 405–419.
4. Pierre Levy, *Collective Intelligence: Mankind’s Emerging World in Cyberspace* (Cambridge, Mass.: Perseus, 1997).
5. Theda Skocpol, “Unravelling from Above,” in Robert Kuttner, ed., *Ticking Time Bombs: The New Conservative Assault on Democracy* (New York: New Press, 1996), pp. 292–301; Michael Schudson, “What If Civic Life Didn’t Die?” in Kuttner, ed., *Ticking Time Bombs*, pp. 286–291; Nicholas Lemann, “Kicking in Groups,” *The Atlantic Monthly* 277, no. 4 (1996): 22–26.
6. For a discussion, see W. Lance Bennett, “The UnCivic Culture: Communication, Identity, and the Rise of Lifestyle Politics,” *PS: Political Science and Politics* 31, no. 4 (1998): 741–761.