

**New Media, Potential Information, & Democratic Accountability:
A Case Study of Government Access Community Media**

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Democracy requires accountability, and accountability requires well-informed voters. For a democracy to work, citizens must not only be able to control their elected leaders but have the necessary information to be able to do so wisely. A common fallacy, however, is to assume that for democracy to thrive citizens need to be actually well-informed as opposed to merely potentially well-informed. This fallacy leads to a pervasive misunderstanding of the impact of new information technology on the democratic process, for it is quite possible for new information technology to enhance democracy without actually having any impact on what citizens know.

This paper describes three models by which new information technology can enhance democratic accountability: 1) A One Step Information Flow, 2) A Two Step Information Flow, and 3) A Two Step Information Flow with Anticipated Reactions. The first two models require that actual information be transmitted and so fit under the broader category of “Actual Information Flow Models.” The third model only requires that potential information be transmitted and so is a “Potential Information Flow Model.” Depending upon which model is used, the assessment of a new media’s impact on democratic accountability can vary dramatically. This paper uses all three models to assess the impact of local televised public meetings on the democratic process.

The original inspiration for this paper derived from my experience serving on a school board. I observed that a tiny percentage of the community regularly watched televised school board meetings, but that the introduction of TV nevertheless had a major impact on the school board’s actions. Existing mass media models of democratic accountability failed to explain the phenomenon I observed.

Background on Government Access

In 1972 the FCC required cable television systems in the 100 largest markets to set aside one or more channels for what was then commonly called “public access” and is today commonly called “community access” or “PEG access” (Public, Educational, and Government access). In this acronym, “public access” typically refers to non-commercial programs presented on a first-come, first-served, free basis; “educational access” to long-distance learning; and “government access” to C-SPAN-like public affairs programming. (Fuller, 1994; Pool, 1983; Abramson et al, 1988). This study focuses on public meeting TV coverage, a major type of programming on government access cable TV.

At the time of the 1972 FCC ruling, only a handful of community access centers and channels existed in the United States. Although the FCC requirement was overturned in 1979, today some 6,000-8,000 community access channels exist across the country. Government access TV has become an increasing part of

community access. Through government access, an estimated 2,800 municipalities today have regular television coverage of school board and city council meetings. The collective budgets and programming hours of these stations dwarf the \$18 million annual budget and gavel-to-gavel congressional coverage of C-SPAN.

The best available figures on the growth of community access programming are compiled in Table 1. The figures on the growth of government access should be read as a proxy for the growth of televised public meetings. One reason the proxy is imperfect is that the figures are for cable operators, not communities. Many cable operators, especially in rural areas, serve multiple communities. Another reason is that not all access centers that provide government access programming provide public meeting coverage. Some communities choose not to have televised meetings. Usually there is a time lag of at least a year between the establishment of an access center and the provision of televised meeting coverage.

Year	Government Access	Public Access	Educational Access	Local Live	Community Bulletin Board
1968	NA	1	NA	NA	NA
1976	NA	100	NA	NA	NA
1986	791	1,230	1,012	728	1,073
1987	827	1,325	1,049	787	1,160
1988	886	1,420	1,107	848	1,281
1989	953	1,491	1,176	870	1,357
1990	1,020	1,577	1,232	888	1,483
1991	1,142	1,718	1,345	925	1,677
1992	1,244	1,832	1,456	1,017	1,787
1993	1,246	1,855	1,452	1,070	1,784
1994	1,351	1,955	1,549	1,100	1,830
1995	1,411	2,021	1,607	1,159	1,831

Source: Data from 1986 to 1995: Television and Cable Factbook, Volumes 53-63, Warren Publishing; Data for 1968: The Origins of Public Access Cable Television—1966-1972, Association for Education in Journalism and Mass Communication, 1990; Data for 1976: "The Development of Community Television," in Community Television Review, Volume 9, No. 2, 1986.

Two cases, Vermont (population 560,000) and the Northwest Chicago suburbs (population over 1 million), illustrate the growth of community access TV. In 1978 Vermont got its first community access center. That first center folded within a few years, but by 1990 Vermont had six well-established access centers. By January of 1996, after five years of explosive growth, Vermont had 18 centers. Of the 18 centers, 15 broadcast comprehensive PEG channels. The other three, all in Chittenden County, Vermont's largest urban area, were specialized: a public center (started in 1984), a government center (started in 1990), and an educational

center (started in 1994). The government access center covered 5 contiguous communities and the educational access center 9 contiguous communities.

According to the Northwest Municipal Conference, which collects data on 35 communities in the Northwest suburbs of Chicago, Illinois, the number of municipalities in its area that broadcast public meetings increased from 8 in June 1991 to 14 in August 1994.

A major reason for the increase in televised public meeting coverage is the plummeting cost of producing and distributing such programming. Over the last few decades new information technology has revolutionized the economics of public meeting coverage. Forty years ago it was prohibitively expensive to broadcast city councils in even the largest cities in the U.S. In 1955 only 150,000 American households (less than one in five hundred) were passed by cable TV. The systems that did exist were primarily in rural areas and had less than a dozen cable channels. A black and white video recorder with a 16 minute playback time cost approximately \$100,000. In the following years the cost of video technologies dropped dramatically. By 1995, 97% of American homes were passed by cable TV; 64% of Americans subscribed to cable; 95% of cable TV subscribers were on systems with a channel capacity of 30 or greater; 41% of cable TV subscribers were on systems with a channel capacity of 30 or greater (National Cable Television Association, 1995; Nielsen Media Research, 1995); an industrial grade VCR could be purchased for \$1,000; a Super VHS or Hi 8mm camcorder could be purchased for under \$1,000; and the cost of a two hour VHS videotape (in regular mode) had dropped to \$2 (see Table 2).

Table 2
Cable Growth 1975-1994

Year	Cable TV Subscribers (millions)	Cable TV Households (percent)	Cable TV Revenues (billions)	Estimated Franchise Fees (billions)	Average TV Channels Per Household
1975	9	13.2	NA	NA	NA
1976	11	15.1	\$0.9	\$0.0	NA
1977	12	16.6	\$1.2	\$0.1	NA
1978	13	17.9	\$1.5	\$0.1	NA
1979	15	19.4	\$1.9	\$0.1	NA
1980	18	22.6	\$2.5	\$0.1	NA
1981	23	28.3	\$3.7	\$0.2	NA
1982	29	35.0	\$5.0	\$0.3	NA
1983	34	40.5	\$6.4	\$0.3	NA
1984	27	43.7	\$7.8	\$0.4	NA
1985	40	46.2	\$8.9	\$0.4	18.8
1986	42	48.1	\$10.1	\$0.5	NA
1987	45	50.5	\$11.8	\$0.6	NA
1988	49	53.8	\$13.6	\$0.7	NA
1989	53	57.1	\$15.7	\$0.8	NA
1990	55	59.0	\$17.9	\$0.9	33.2
1991	56	60.6	\$19.5	\$1.0	NA
1992	57	61.5	\$21.0	\$1.1	NA
1993	59	62.5	\$22.8	\$1.1	NA
1994	60	63.4	\$23.0	\$1.2	40.4

Sources: Cable Television Developments—Fall 1995; National Cable Television Association; Television Audience 1994, Nielson Media Research. Note: Franchise fees are estimates based on 5% of total cable revenue. With the exception of a handful of states such as Vermont, Massachusetts, and Oregon, most of the franchise fee goes into general city revenue and does not support community access.

Today, cost is no longer a significant barrier to televised meeting coverage. In Vermont, the median population size of a community with televised public meetings is 7,419 (see Table 3). Over the coming decade, new technology promises to drop the hourly cost of televised public meetings to under 10 cents. Many communities already have remote controlled cameras. With this technology, a single person can now efficiently manipulate 3 or 4 cameras. The need for labor costs may soon be eliminated altogether. With voice activated cameras, the camera automatically focuses on the legislator who is talking into his or her microphone. With computerized titling, the character generator can label whoever is talking based on the voice-activated cameras and microphones. All this is but the beginning of a revolution in the production, distribution, and use of public meeting information. The advent of inexpensive digital multimedia technology may soon speed access to public meeting information by orders of magnitude. New forms of interaction with legislators, beginning with the simple call-in during public hearings, are also becoming increasingly practical.

Table 3
Vermont Towns With Televised Public Meetings

Town	Population	Vermont Population	
Barre City	9,552	In towns with televised meetings	239,572
Barre Town	7,419	In all towns	560,000
Bennington	16,192	% with televised meetings	43%
Brandon	4,208		
Brattleboro	12,123		
Burlington	39,435		
Colchester	15,973		
Concord	1,095		
Essex	17,608		
Essex Junction	8,624		
Georgia	3,883		
Lyndon	5,517		
Lyndonville	1,307		
Middlebury	8,397		
Milton	9,112		
Montpelier	8,254		
Newport City	4,573		
Newport Town	1,458		
Norwich	3,199		
Rutland City	17,921		
Rutland Town	3,869		
St. Johnsbury	7,700		
Shaftsbury	3,464		
S. Burlington	13,492		
Williamstown	2,824		
Williston	5,907		
Winooski	6,466		
Total	239,572		
Median	7,419		

Source: Data collected in summer of 1995

Three Models of Democratic Accountability

The contribution of new media (such as televised public meetings) to the democratic process may be described in terms of principal-agent theory (Arrow, 1985; Ferejohn, 1990). Principal-agent theory maps the various processes whereby a principal delegates decision-making authority to an agent, and rewards that agent when the agent acts in the principal's interest. Agency relationships are widespread in our society. Employees serve as agents for employers and professionals as agents for their clients. Elected officials serve as agents for voters.

The task of principals is to get agents to act in their interest. But principals and agents often have differing interests. Agents may want to get their payoff from

principals with as little work as possible, while principals want the agents to work as hard as possible to get the payoff.

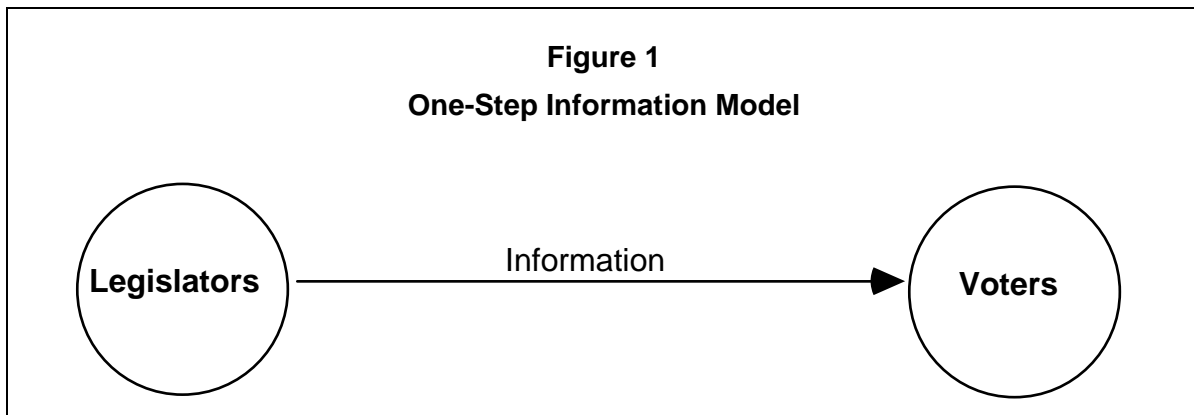
In order to get agents to act in the interest of principals, principals must usually be able to monitor the agents they employ. As the cost of monitoring drops, the agents' incentive to act in the principals' interest usually increases. When monitoring costs are high, there may be a large "agency loss" stemming from the inability of principals to ensure that agents are acting in their interest. When monitoring costs drop to zero, the agency loss is eliminated and agents can be expected to do exactly what principals want or else lose their payoff.

The value of TV coverage is that it should reduce agency loss—that is, it should encourage legislators to act according to the voters' preferences. The mechanism is that TV coverage reduces the costs of monitoring legislators (more people will be able to monitor legislators when they can do so by TV rather than in person). To view a city council meeting, citizens no longer have to hire a babysitter, make a trip in the cold, find a parking space by city hall, and suffer through hours of irrelevant council discussions. Given that legislators want to be re-elected and voters want to re-elect legislators whose actions will conform to the voters' preferences, the more that voters know about legislators, the greater the incentive of legislators to act according to the voters' preferences. If voters are aware of their interests, and if responding to those interests is the prime component of good public policy, the lower the monitoring costs, the more likely legislators will be to enact good public policy.

In this paper I will refer to legislators rather than agents, voters rather than principals, and democratic accountability rather than agency loss. Monitoring costs can be thought of as inversely related to TV coverage of public meetings. As monitoring costs drop through the introduction of TV, the information flow from legislators to voters increases and democratic accountability is enhanced. The three models that capture these information flows are the one-step, the standard two-step, and the two-step with anticipated reactions. In the model with anticipated reactions, what counts is how technology changes potential, not actual, information flows.

1) The One-Step Model

The simplest relationship between legislators, voters, and information flows is what I will call a one-step information model of democratic accountability. In a one-step flow, information travels directly between legislators and voters (see Figure 1). According to this model, what counts in determining the effect on legislators is the size of the direct audience for their actions. The larger the audience size, the larger the presumed effect of new media on accountability.

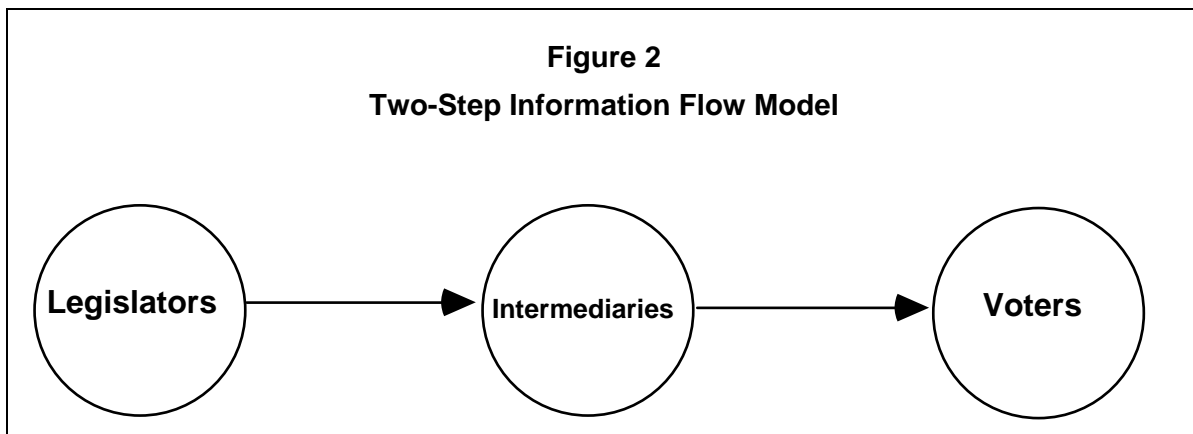


This one-step model of information flow is widely used to measure the effects of mass media. Advertiser-supported media such as commercial TV, newspapers, and magazines are heavily oriented to maximizing audience size because advertising revenues are so closely related to the number of viewers watching. Similarly, mass media and political communication scholars are most concerned with analyzing major media with large and easily measured audiences. This model assumes that the more voters see a message, the more influential that message is likely to be. By extension, these scholars tend to apply this model of democratic accountability to all forms of community access. For example, Abramson et al. cite an estimate that “all public-access channels together across the whole nation account for seven-tenths of 1 percent of all viewing time,” an audience size they characterize as “trivial.” Another source they cite concludes that access to a television station that no one watches is a “benefit not connected to anything of significance;” it is “not the tool... of revitalizing tired democracies” (1988, pp. 180-1).

This one-step model is also pervasive in the government access community. In the more than 30 field interviews I conducted with government access managers, I never heard one propose that audience size might not be the best way to measure the contribution of government access to democracy. Several times access managers apologized for viewership levels below those of prime time TV. Many thought that if viewers weren’t watching public meetings at least once a month, this was an embarrassing failure. Fear of showing low viewership ratings may be a major reason that so many government access audience surveys have been done so poorly, allowing self-selection to inflate viewing rates. Elected officials who controlled the funding for these stations were as focused on audience size as the government access managers. They often saw little reason to fund these stations or be involved with them in any way unless they could demonstrate adequate audience size. Millions of dollars of government access money may be misspent each year because of the overwhelming prevalence of this model of democratic accountability. Inexpensive steps that might significantly improve local democracy are not taken in part because of failure to understand the more effective mechanisms by which the new media enhance democracy.

2) The Two-Step Model

In a two-step model, information flows between legislators and voters via intermediaries. Intermediaries include journalists, opposition candidates, formal interest groups, and self-appointed citizens. Two-step information flows require less effort by voters because voters can delegate monitoring the information flows. Intermediaries filter the flow of information so that only important information is brought to the attention of a greater public. Important information would include controversial information and candidate differences that indicate whether legislators are acting in the voters' interests. The two-step flow is depicted in Figure 2.



The existing literature provides two major two-step information models. The best known, especially among political communications scholars, is what I call the Columbia two-step model. The Columbia two-step was originally used to demonstrate limited media effects. It evolved from a desire to counter the popular “mass society” school of the 1930s and 1940s, which, inspired largely by the success of fascist propaganda in Europe, postulated that media had massive and direct effects on voter behavior. Paul Lazarsfeld (1944) showed that the media works much of their influence through intermediaries and that these intermediaries significantly limit the effect of media. Later prominent advocates of the model include Katz and Lazarsfeld (1955), Katz (1957), Huckfeldt and Sprague (1987), Beck (1991), and Weimann (1994). In the Columbia two-step model, intermediaries exert their influence through a social network, not the media. This excludes intermediaries such as journalists and opposition candidates who typically exert influence through mass media. The major focus of research is identifying the characteristics of community opinion leaders and the way they influence voter decision making. The mechanisms of democratic accountability are not a central concern.

A second type of two-step information model evolved out of Anthony Downs' An Economic Theory of Democracy (1956). In Downs' theory, rational voters who seek to minimize their information costs delegate data gathering and analysis to

intermediaries. These intermediaries then pass on only the most important information to voters. More recently, Samuel Popkin (1991) and Larry Bartels (1996) have described Downs' theory as a two-step information flow. This research tradition focuses on explaining how a relatively uninformed public can act as though it were fully informed. One implication of the Downsian two-step is that measuring direct audience size for a given media would underestimate its effect—a conclusion opposite to the original inspiration of the Columbia two-step. To the extent that voters are able to delegate information costs to intermediaries, we would expect media to have little direct effect but a large indirect effect. The two-step model I propose is a variant of this Downsian two-step, in which rational citizens delegate information costs to intermediaries and the two-step flow serves to enhance democratic accountability.

Although the logic of the Downsian two-step is widespread in the literature on democratic accountability, the specific use of two-step terminology is rare. In a vivid example of a two-step logic, never explicitly stated, Mathew McCubbins and Thomas Schwartz distinguish between police patrols and fire alarms. McCubbins and Schwartz sought to discern the most efficient way for Congress to oversee administrative agencies. What they call "Police-patrol oversight" I would call a "one-step model." In this less efficient model, legislators at their own initiative directly oversee administration compliance with legislative goals through such means as reading documents, conducting field observations, and holding hearings to question officials.

What McCubbins and Schwartz call "Fire-alarm oversight" I call a "two-step model."¹ In this more efficient model, legislators rely on intermediaries to tell them when agencies are not acting in the public interest. Instead of direct oversight, "Congress establishes a system of rules, procedures, and informal practices that enable individual citizens and organized interest groups to examine administrative decisions (sometimes in prospect), to charge executive agencies with violating congressional goals, and to seek remedies from agencies, courts, and Congress itself" (p. 166). McCubbins and Schwartz continue: "Instead of sniffing for fires, Congress places fire-alarm boxes on street corners, builds neighborhood fire houses, and sometimes dispatches its own hook-and-ladder in response to an alarm" (p. 166). The difference between well designed and poorly designed systems of democratic accountability, they argue, can largely be reduced to this question of whether the police patrol or the fire alarm model of oversight guides the institutionalization of that accountability.

¹Although McCubbins and Schwartz imply behavior based on anticipated reactions, they do not develop this point as a central feature of their fire-alarm model.

The Downsian two-step model can be extended far more broadly to encompass legislative accountability as well as address two-step democratic accountability. This provides a new and arguably more realistic way of measuring the impact of televised public meetings. The Sloan Commission report of 1971, which provided the rationale for the FCC's 1972 decision to mandate community access channels on cable TV, undoubtedly had an implicit two-step model in mind when it cautioned:

Audiences for such activities [e.g., city council meetings on cable TV] will at all times be small except perhaps times of municipal crisis. But the importance of such an audience is not measured by its size. Those who listen tend to be the activists within the community, who themselves take a deep interest in the political process and its outcomes, and who possess a deep personal commitment to the process. They are the enthusiasts, whose principal purpose is to make their own enthusiasm contagious.... In a small city or a suburb, a... handful who are interested in their schools, and who have via cable television regular access to information about the management of their schools, can infect the entire community with pride or with concern, and can bring about profound change.

This small section of the Sloan Commission report, however, was not influential. Neither scholars nor government access advocates ever systematically applied the insight. The one-step model of democratic accountability prevailed.

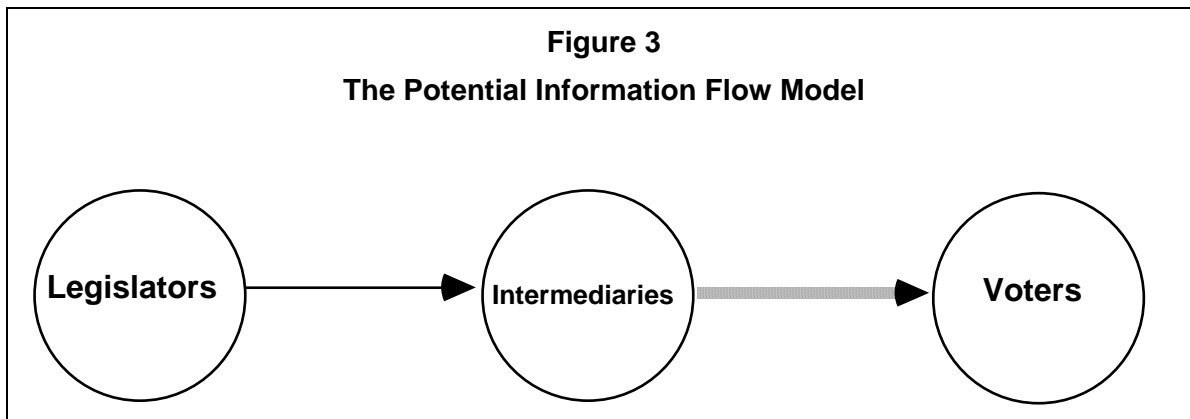
3) The Two-Step Model with Anticipated Reactions²

In a two step model with anticipated reactions, the impact of new media is measured by its potential, not its actual, impact on public opinion. Figure 3 depicts a model in which legislators produce information which intermediaries pick up and may or may not transfer to voters. The intermediary may not pass information on to voters, but legislators anticipate they might and change their behavior. The model depicts the potential information flow anticipated by the legislators with a gray line.

In this model, the media can have zero impact on the level of voter knowledge, yet a big impact on democratic accountability. Each move in a model of

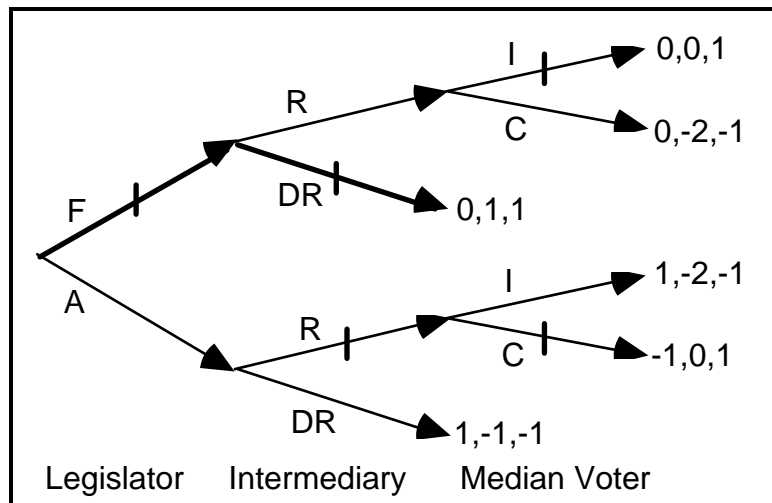
²Although anticipated reactions are theoretically possible in a one-step information flow, they are empirically implausible. A one-step information flow with anticipated reactions would require that a large section of the public might independently and spontaneously decide to watch the tape of a particular meeting years after the meeting had taken place. It is far more plausible to speculate that an intermediary could alert the public to an event years after it had taken place.

democratic accountability—from a one-step, to two-step, to two-step with anticipated reactions—requires progressively less effort from voters to induce legislators to respond to their constituents’ preferences. Insofar as voters are unwilling to expend much effort to become informed, new media that induce potential rather than actual information flows can make a great contribution to democratic accountability.



The two-step model with anticipated reactions can be recast in the game-theoretic format of a decision tree. The advantage of a decision tree is that it visually illustrates the importance of decisions off the equilibrium decision path in order to understand the decisions on the equilibrium decision path. In a simple two-step model, new media affect the cost of monitoring (and thus the payoffs) on the equilibrium path. But in a two-step model with anticipated reactions, new media affect the payoffs of decisions off the equilibrium path. Figure 4 models the relevant strategic interactions of legislative bodies at public meetings.

Figure 4
Extensive Form Representation of the Potential Information Flow Model



The policy process is modeled as a sequential game involving three types of decision makers: legislators, intermediaries, and voters. For simplicity, we can think in terms of a unitary legislature, a unitary intermediary, and a median voter. Each of these players makes a binary choice. The legislature takes an action which is either For (F) or Against (A) the median voter's interest. The intermediary either Reports (R) or Doesn't Report (DR) the action of the legislature. The median voter either votes for the legislative Incumbent (I) or for the Challenger (C). Legislators decide first, intermediaries second, and voters third. The choice made at each decision node is marked by a tick. At each node players choose the path with the highest anticipated payoff. The legislature's payoff is in the first position, the intermediary's in the second, and the median voter's in the third. The game is solved by working backwards from the decision nodes of the median voter to the decision nodes of the intermediary and then to the decision node of the legislature. The equilibrium path is marked off by a bold line.

The preference orderings of the players determine the outcome of the game because players choose outcomes that give them the highest payoff. Legislators' preferences are assumed to differ from voters' preferences. (If legislators' and voters' preferences were identical, there would be no problem of representation and no need for well-informed voters. Legislators could always be trusted to act in the voters' interest.) Legislators rank their preferences as follows: they prefer 1) to sneak an action by the voters (for example, an action favoring a special interest group), over 2) serving voters like a lapdog, over 3) attempting to sneak an action past voters and getting caught. To capture this preference ordering, we assign a payoff of 1, 0, and -1 to each respective outcome. Note that the outcome of the game is determined by the relative order, not the absolute value, of the payoffs.

Voters rank their preferences as follows: they prefer to vote in their self-interest rather than against it. We assign a payoff of 1 when they vote in their self-interest and a payoff of -1 when they vote against their self-interest. All other things being equal, we assume voters reward incumbents with re-election when incumbents vote in accordance with voters' preferences.

The preferences of intermediaries are assumed to be closer to the voters' preferences than the legislators' preferences. Otherwise, the intermediary would have no incentive to report information to the public and thus bring the public into the calculus of power (see Schattschneider 1960). Intermediaries thus rank their preferences in the same order as voters. For simplicity, the benefit that intermediaries and voters receive from legislative actions are assumed to be identical. Intermediaries receive a benefit of 1 when legislators act in the voters' interest and -1 otherwise. Intermediaries, however, face an additional cost of 1 when they report the actions of legislators to voters. The intuition behind pegging the cost between 0 and 2 (note that 2 is the difference between the intermediary's 1 and -1 payoffs described above) is that if the cost were over 2 intermediaries would never bother to report (and there would be no two-step information flow), while if it were below 0 they would report every issue (and place an impossible information burden on voters). The exact value of the cost does not change the outcome of the game so long as it is between 0 and 2; 1 was chosen only for simplicity.

Using backwards induction to solve the game, the equilibrium is (F, DR). Legislators act in the median voter's interest, but voters need to receive no information in order to exert influence through the legislators' anticipation of the voters' possible reactions. All the actual monitoring is done by intermediaries, so the most important effect of new technology is to reduce intermediaries' monitoring costs. The impact of new technology on the monitoring costs of intermediaries is explicitly introduced in the model in Figures 5a and 5b. In this extended model, the intermediaries must first decide whether it is worth their while to monitor (M) or Don't Monitor (DM) a meeting. In the model in Figure 4 it was assumed that the intermediaries' cost of monitoring public meetings was small enough that intermediaries would monitor meetings. In Figure 5a we introduce a small cost (a cost of 1) to monitoring meetings and in Figure 5b a large cost (a cost of 3). We see that a large cost changes the equilibrium from (M, F, DR) to (DM, A). Thus, anticipated reactions enhance democratic accountability only when the technology and corresponding institutions are in place to create low cost monitoring by intermediaries. The power of new technology lies in its effect on voters' potential states, not their actual states.

Figure 5a
The Potential Information Flow Model with Low Monitoring Costs

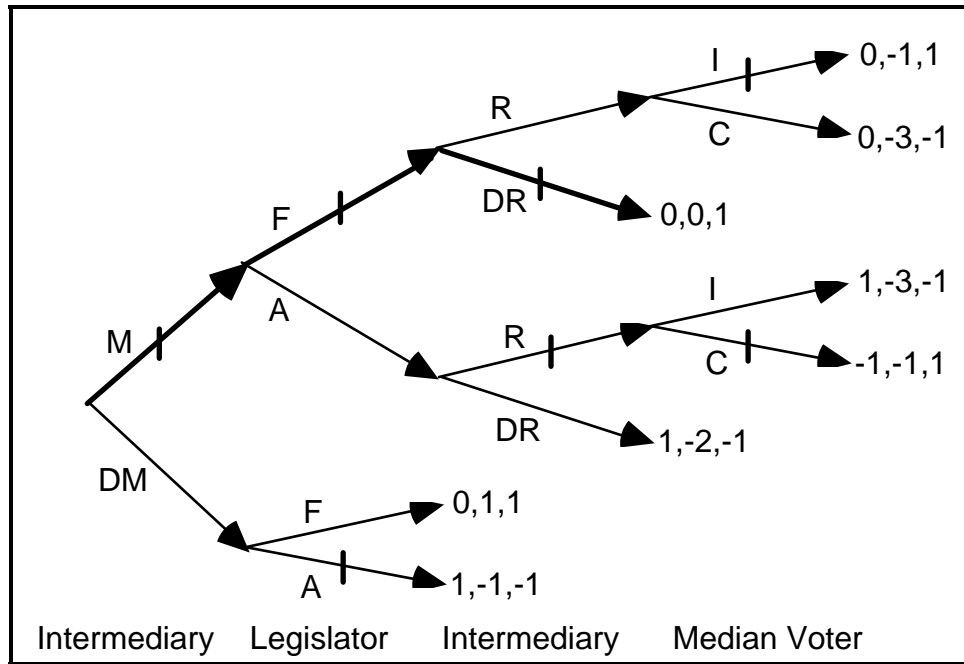
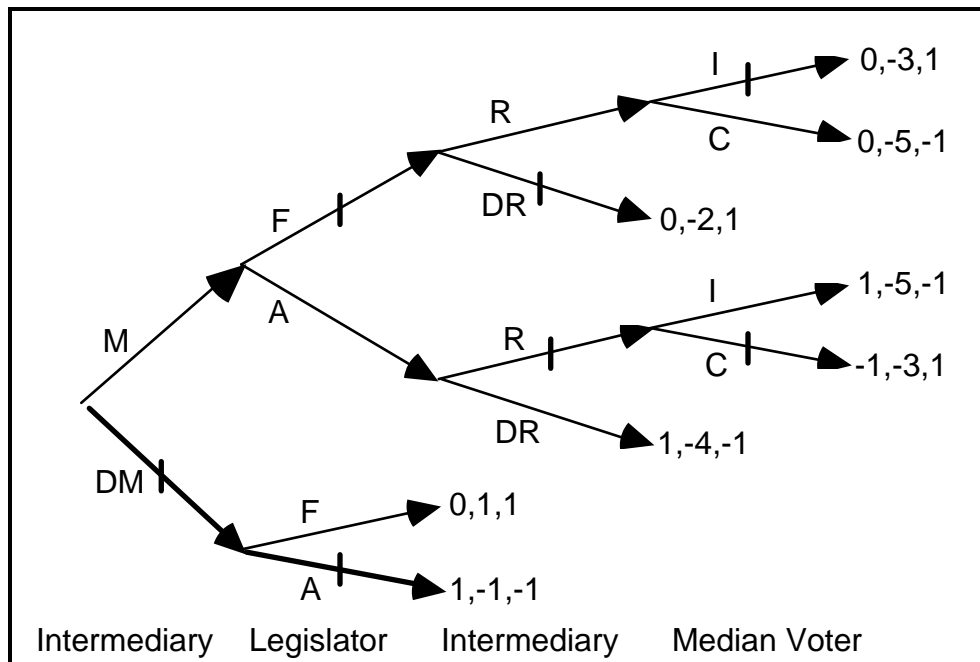


Figure 5b
The Potential Information Flow Model with High Monitoring Costs



A Potential Information Flow Model lies behind the kind of democratic accountability that Douglas Arnold (1990) has advocated. Citizens, in Arnold's view, can be very inattentive to the day-to-day activities of their representatives yet exert a profound influence on their behavior. Legislators care far less about the public's current behavior than its potential behavior; they care less that the public is ill-informed now than that it has the potential to become well-informed in the future. The key assumption behind Arnold's model is that "the system contains activists who have incentives to monitor what legislators are doing in office and to inform citizens when legislators fail in their duties" (1993, 409). Arnold contrasts his more sophisticated model of democratic accountability to the traditional and naive model whereby "citizens who have no opinions about a policy at the time it is being considered cannot possibly have any impact on legislators' decisions" (1990, 11). Among the many potential monitors of a legislator's behavior, Arnold believes that challengers to incumbent legislators "have perhaps the strongest incentives for monitoring legislators' voting records in search of issues that can be used against incumbent legislators." Challengers, he continues, "need to find ways to generate negative publicity about incumbents and favorable publicity about themselves. Scandal aside, challengers have discovered that unpopular roll call votes provide them with the best way to jump-start their campaigns, attract media attention, generate campaign funds, and get voters to notice them" (1990, 410). He cites one congressman as saying: "[Y]our opponent will comb down

through every aspect of your record, every vote you've ever cast, looking for dirt and using it"(1990, 11).

Arnold uses the IRS to exemplify the extraordinary power of occasional audits to influence people's behavior. The IRS wants to influence the behavior of more than 100 million taxpayers. It allows taxpayers to write their own tax bills and pay what they believe they owe the government. The IRS audits only a tiny percentage of the tax bills, but for any given American the threat that they might do so is a powerful incentive to honesty. Like the IRS, Arnold concludes, "citizens can monitor and control elected legislators without knowing much about what legislators are doing day by day" (p. 413). Crucial in this account is the existence of auditable records. For legislatures, these records traditionally have consisted of roll-call votes and written minutes.

Government Access & Democratic Accountability³

All three models of democratic accountability—the one-step, the two-step, and the two-step with anticipated reactions—can be useful in assessing the effects of government access cable TV on the democratic process. But traditional measures of accountability have neglected the two-step and two-step with anticipated reactions.

The practices and philosophies associated with government access channels vary greatly across the thousands of communities in which some version of legislative coverage exists. The government access manager may report to the mayor or to an independent board of directors along the lines of public TV and C-SPAN. The channel may provide comprehensive gavel-to-gavel meeting coverage as C-SPAN tries to do, or, as is often the case, a few selected hours of coverage per month. Televised meetings may be shown repeatedly at convenient times (good for legislators who want to improve their public relations), or shown only once when no one will be watching (good, from the legislator's perspective, for controversial issues with no PR value). Call-ins may or may not be allowed. Records may or

³Data collection for this project included the following: Conversations with more than 40 government access managers spanning 8 states, a survey sent out by the Alliance for Community Media (the trade association of community access managers) to 100 government access managers, a survey sent out by the University of Vermont's Extension School (a public education system responsible for training local public officials) to every city council and school board member in the State of Vermont whose public meetings were televised, a survey sent out by the Illinois chapter of NATOA (the trade association of municipal telecommunications officers and government access managers) to its 49 members, a survey sent to all members of the Vermont Access Network (the organization for Vermont's 18 community access managers), direct experience serving on a televised school board, and conducting a workshop entitled "Developing National Ethical Guidelines for Government Access" for the 1995 annual convention of the Alliance for Community Media.

may not be kept. A town's citizens may be quite interested in local affairs (common in small towns) or have little interest (common in larger communities).

The result is that the specific circumstances existing in a given community determine which model of accountability is most appropriate.

1) One Step Information Flow

The direct viewing audience for televised public meetings is one important indicator of audience impact. The audience differs substantially depending on the issue. A large number of Americans who would otherwise not be heavy watchers of public meetings on TV watched the McCarthy, Watergate, Iran-Contra, and Clarence Thomas hearings. One estimate has it that close to 100 million people worldwide watched the final session of the O.J. Simpson trial (Goldfarb, 1995). Such cases are exceptional. Nevertheless, the government access audience size for special local meetings such as a public hearing on a school budget just before a tax referendum may be unusually large. Unfortunately, data on such exceptional cases at a local level are not available. The available data, however, indicate that as much as 20% to 40% of the public subscribing to cable TV claim to watch city council meetings on a "regular" or "occasional" basis (see Tables 4 to 8).⁴

Table 4: Wilmette, Illinois (October, 1995): Village Board or Zoning Board of Appeals Meetings: Frequency of Resident Reported Viewing on the Government Access Channel	
Once a month or more	7.0
Occasionally	15.1
NET: OFTEN.....	22.1
Rarely	19.3
Never	31.3
Not a cable subscriber	27.0
NET: NOT OFTEN OR NEVER	77.9
Source: "1995 Resident Survey," by Village of Wilmette, Illinois	
Method: Mail survey to all residents. 4,262 responses, slightly over 50% of all households.	
Town Profile: 26,000 population; 6,000 cable subscribers.	
Access Center Type & Budget: Governmental access; \$100,000 annual budget.	

⁴For this project, more than 20 city council viewership surveys were collected. Most of these surveys were designed so poorly (e.g., with self-selected samples, tiny response rates, and vague questions) as to be unusable. The best are included here.

**Table 5: Santa Monica, California (1990 and 1995):
Frequency of Cable Subscribers Who Report Watching
CityTV, the Government Access Channel**

	1990	1995
At least once a week	30.7	18.0
Once a month.....	21.3	22.1
Once every few months.....	9.2	11.0
Less than once every few months.....	2.0	7.6
Never watched.....	36.8	41.3

Source: "Report to the City of Santa Monica" by etrok, Los Angeles, California
 Method: Telephone interviews with a random sample of 366 in 1990 and 384 in 1995.
 Town Profile: 60,000 population; 20,150 cable households.
 Access Center Type & Budget: Government; \$520,000 budget.

**Table 6: Santa Monica, California (1990 and 1995):
Frequency of CityTV Viewers Who Report Watching City Council Meetings**

	1990	1995
Often.....	14.0	3.7
Occasionally	33.0	40.8
Rarely	26.2	31.4
Never	26.7	24.1

Source: "Report to the City of Santa Monica" by etrok, Los Angeles, California
 Method: Telephone interviews with a random sample of 366 in 1990 and 384 in 1995.

**Table 7: Enid, Oklahoma (1995):
Frequency of Cable Subscribers Who Report Watching City Council Meetings**

Three or more times a month.....	11
Two times a month	25
One time a month	33
Never	31

Source: "1995 Enid Community Television Viewership Survey," by Pegasys, Inc., Enid, Oklahoma.
 Method: Telephone interviews with 300 randomly selected cable subscribers. 500 were called, but only 300 were recorded because the others either refused to be interviewed or lacked cable TV service.
 Town Profile: 45,000 population; 14,500 households.
 Access Center Type & Budget: PEG; \$270,000 budget.

**Table 8: Eight Suburbs of Minneapolis, Minnesota (1995):
Frequency of All Subscribers Who Report Watching City Council Meetings**

Frequently.....	7
Occasionally	19
NET: OFTEN.....	26
Rarely	23
Never	51
NET: RARELY OR NEVER.....	74

Source: "Northwest Community Television Viewership Survey," by Decision Resources, LTD.
 Method: Random telephone survey administered in March 1995
 Towns included: Brooklyn Center, Brooklyn Park, Crystal, Golden Valley, Maple Grove/Osseo, Plymouth, Robbinsdale, New Hope

These relatively high rates of viewership for government access may be partly explained by the fact that the viewing pattern for government access differs substantially from that of most TV. A typical viewer of commercial TV tunes in to a favorite program and watches it from beginning to end. In contrast, my survey of Burlington, Vermont residents revealed that fewer than 10% of those who watch a government meeting specifically tune into it.⁵ The rest are "channel surfers;" they "catch" the government channel as a result of scanning up and down the TV dial. My survey also revealed that the average viewer stops to watch government access for 5 to 10 minutes, even though the meetings covered usually take several hours. The surprisingly high viewership may largely be a function of two facts: the 7 hours a day that the typical American household watches TV, and the prevalence of Paul Klein's Least Objectionable Program model of television viewing (1975). In Klein's model, the viewer seldom decides on a particular program. Instead, the viewer goes through the following sequence: he decides to watch television; he turns on the set and spins the dial to find out what is on; and then he watches whatever is least objectionable. A good deal of research supports Klein's model (Neuman, 1991, p. 94).

High viewership does not necessarily translate into high influence. In Wilmette, Illinois, and Ames, Iowa (see Tables 9 and 10), government access cable TV ranked low in the list of people's primary source of information about municipal affairs. These surveys did not ask, however, how important government access was to the viewer in evaluating candidates. In communities too small to have their own commercial television but too large for widespread face-to-face contact between citizens and candidates, government access may be the only place most voters will see their candidates for public office.

⁵In July 1995 I did a random telephone survey of 182 Burlington, Vermont residents to determine their viewership of the government access channel. 145 of the respondents were reached and of these 74 had cable and were willing to be interviewed.

**Table 9: Wilmette, Illinois (October 1995):
The Primary Source of Information Regarding Wilmette Affairs**

Village Quarterly Newsletter (provided by the village government)	55.6
Wilmette Life (a commercial newspaper)	48.2
Friends and neighbors	9.2
Government access cable TV channel.....	3.7
Chicago Tribune/Sun Times (major regional newspapers)	3.3
Village Information Telephone Line	0.7

Source: "1995 Resident Survey," by Village of Wilmette, Illinois
Method: Mail survey to all residents. 4,262 responses, slightly over 50% of all households.

**Table 10: Ames, Iowa (1994):
% Answering "Very Useful" or "Somewhat Useful" to "How useful to you are each of the following in supplying news about Ames municipal government activities?"**

Utility Bill Insert	72
Daily <u>Tribune</u>	55
Radio Stations.....	53
Iowa State <u>Daily</u>	42
Commercial TV stations.....	41
Local Government Access Cable TV Channel.....	25

Source: "1994 Annual Citizen Satisfaction Survey," by city of Ames, Iowa.
Method: Mail survey to 500 randomly selected citizens.
Town Profile: 48,000 population; 8,500 cable subscribers.
Access Center : Public and government type; ; \$140,000 annual budget.

Three primary factors determine the size of the average viewing audience: 1) the issue and candidate differential, 2) viewing convenience, and 3) alternative information sources.

1) The issue and candidate differential. People are most interested in watching government access when these programs present conflict or controversy. Commercial media, keenly attuned to this characteristic of their audiences, seek to present events which maximize these factors. Yet many elected officials dislike public—i.e., televised—controversy. Elected officials generally welcome a large audience because it builds name recognition, but they do not want to take the clear and controversial positions that build such an audience. For this reason, talk shows on government access tend to be more boring than talk shows on commercial TV. Their primary purpose is often to tell constituents all the wonderful things elected officials are doing for them—that is, to serve as a public relations vehicle for the official. Candidate debates and opposition position statements have far greater potential interest, but are absent from many government access channels. All other things being equal, we should expect that to the extent that elected officials control government access, audience size will be minimized because of boring, uninformative, self-promotional programming.

2) Viewing convenience. Promotion, scheduling, and location on the TV dial should affect the audience size for government access. The station manager, city councilors, the cable company, and the local media, among others, play an important role in promoting government access programming. A village manager who wants to promote government access can repeatedly highlight the station in whatever newsletter is periodically sent to all residents. A school superintendent who wants to highlight access can mention informational programs in the newsletters that are regularly sent home with children to their parents. Town newspapers can print detailed listings of government access programming. Some cable companies, at the behest of a local community access manager, annually include with their bills a questionnaire to determine community access viewership, which may or may not be returnable with the bill. These questionnaires serve the purpose not only of evaluating community access programming but also of promoting those programs. Some communities may have a higher viewership for programs such as city council meetings because the citizens are asked every year if they watch these programs.

Scheduling can also play a major role in audience size. A village manager or board president who does not want a meeting viewed but wants to avoid the controversy associated with eliminating TV coverage may simply schedule a meeting to air once on a weekday morning. The more times a meeting is replayed and the more it is shown at prime time, the larger the potential audience. Because most citizens do not go out of their way to watch public meetings, the audience size is likely to be very small unless many TVs are on and people are scanning the dial when a particular meeting is broadcast.

The location of a government access channel on the TV dial can also profoundly influence audience size. One would expect a government access channel with a number less than 10 to have a viewership several times as large as one with a channel number above 50. The recent experience of the government access channel in Arlington, Texas supports this hypothesis. In 1993 government access was switched from channel 47 to channel 5. In response to the question: "Have you ever watched the live or taped broadcasts of the regular Arlington City Council meeting held every Tuesday evening?" viewership more than doubled between 1993 and 1994 (see Table 11).

**Table 11: Arlington, Texas (1991 to 1994):
Impact of Moving the Government Access Channel from Channel 47 to Channel 5
on Frequency of City Council Meeting Viewership Among All Households and
Cable Subscribers**

Population	1991	1992	1993	1994
All Households	15%	15%	13%	30%
Cable Households	27%	27%	22%	48%

Source: "Informal Report to the Mayor and City Council," March 7, 1995, by Teresa Thompson, Assistant to the City Manager/Public Information Officer, City of Arlington, Texas.

Method: Random-digit sampling procedure. 400 heads of households, ages 18 and over.

Town Profile: 29,500 cable subscribers.

3) Alternative information sources. If other information sources do a better job of providing the information that government access provides, then the number of people viewing government access should decline correspondingly. This relationship has two primary implications: First, residents seem most likely to watch government access in communities of between 5,000 and 30,000 people. Such small communities are unlikely to be covered by commercial TV. And although they are likely to have some semblance of a local newspaper, the reporter is likely to be part-time and inexperienced. Rarely does a small town have a reporter at every public meeting from beginning to end. Better and more experienced reporters tend to move to larger communities and more prestigious beats such as an urban area or the statehouse. It is true that small towns offer substantial word of mouth and face-to-face contact between voters and elected officials or candidates. Government access cannot compete, for example, with the face-to-face contact of the Vermont town meeting. But even in Vermont, renowned for its direct democracy, participation in town meeting drops off precipitously as town size increases. Indeed, according to figures gathered by Vermont's Secretary of State in 1992, only 9% of Vermonters attend town meetings. In highly mobile suburbs with populations greater than 5,000, face-to-face democracy tends to break down, yet the commercial media do not find it economical to fill in the information gap. It is in this gap, where a large percentage of suburban America lives, that government access appears to find its niche.

A related gap stems from the disjunction between political districts and media markets. Even large communities of several hundred thousand people may not have their elections and news covered in depth by the major commercial TV media if they abut large urban markets such as New York City. Indeed, in all but the largest cities in the United States the only time a mayor or city councilor will appear on TV to debate an opponent or discuss legislation is on government access cable TV.

A good example may be the government and education access center in New York City, which has the largest broadcasting area and budget of any access center in the U.S.. The government and education center in New York operates 5 channels in an area with 8 million people and 1.6 million cable subscribers. Nevertheless, Mike Miscione, the station manager, believes the audience viewership for New York City council meetings is minuscule. He attributes this primarily to two factors. First, New York City is the media capital of the world; it has very vigorous commercial media. The public is confident that if something important happens the major media will alert them to it. Indeed, in large cities the commercial media cover the same kinds of events that in small communities are limited to government access. For example, in New York City Mayor Guiliani has a weekly radio show on two different commercial radio stations. The government access channel simultaneously videotapes the shows, but its coverage is not exclusive. New Yorkers are much more likely to listen to the show on commercial radio than watch it on government access cable TV. Second, many issues discussed by the New York City council are not likely to interest an average New Yorker. A council proposal to repair a park in Brooklyn probably has no interest to a citizen living in the Bronx; a park in Brooklyn often has as much relevance to the Bronx as a park in Maine has to Alaska. In a community of 15,000, by contrast, the discussion of a new park will interest practically everyone.

The opposite relationship between population size and audience size sometimes applies to public, as opposed to government, access TV. Many organizations interested in appearing on public access TV are located in geographic units much larger than a small town. Although government access is likely to correspond perfectly to local government districts, it is unlikely to correspond well to the geographic scope of various public groups. A non-profit AIDS group or a Hispanic group might find it easier to collect the resources to field a public access show in New York City, with 8 million people, than for Montpelier, Vermont with 8,000—even if the number of AIDS cases or Hispanics in the population were proportionately the same. Thus, one might expect public access to be strongest in big cities with many non-profit organizations.

The finding that the direct effect of government access is largest in relatively small communities is one of the most important and non-intuitive results of this study. Most of the professionals I have spoken to in the business have simply assumed that bigger was better. Indeed, larger government access stations typically produce much more professional looking programming. My informants also assumed that people living in local communities had many more opportunities for face-to-face contact with candidates, personal experience with government policy, and word of mouth with friends and neighbors. They overlooked in their analysis the inferior quality of commercial media in smaller communities. This left open the possibility of an information vacuum in communities too large for effective face-to-face contact and word-of-mouth, but too small for effective commercial

media. It is in this no-man's land that government access finds its natural audience and the one-step information flow model works best.

2) Two-Step Information Flow

One-step information flows are simple and elegant to measure compared to two-step information flows. The task can be simplified by identifying narrow classes of intermediaries and measuring their influence. Such intermediaries might include the local newspaper reporter, opposition candidates in the next election, church leaders, union officials, and members of the chamber of commerce. Identifying all the relevant intermediaries and assessing their influence is a gargantuan task. Scholars such as Beck (1991) and Huckfeldt and Sprague (1987) have used the Columbia two-step model to measure influence, but only by restricting their scope to a few narrow classes of intermediaries.

The nature of intermediaries and the ease of identifying them and measuring their influence may vary by community size. In large communities, influentials tend to have high socio-economic status and belong to easily identified organizations. It is their access to institutional networks that gives them their clout. In small communities, influentials are more likely to be average people who briefly become informal representatives for others. Under the right circumstances, government access can greatly accentuate the formation of such non-hierarchical, bottom-up intermediaries. The following case illustrates this point.

BottomUp* is a white collar suburban town on Long Island, New York with a population of approximately 17,000. In the early 1990s an issue came before the Village trustees of what to do about a fire house that had been condemned. The Village had five fire houses. The Trustees' alternatives were either to close the condemned fire house or spend \$500,000 to repair it. At the time, the three Democrats on the Board of Trustees and the two Republicans all supported closing the firehouse. Both parties considered this a non-issue. The local newspaper published no notice of the agenda of the meeting that included closing down the firehouse. When the meeting started that included the vote on the firehouse, there were only 4 to 5 people in the audience. But at least one of the 500 volunteer firefighters in the community happened to be watching the program as it was being aired live. The volunteer fire department was one of the biggest social activities in the town. The firefighter watching immediately relayed an emergency alert to other firefighters and their families. By the end of the meeting, the meeting room (capacity 100) was packed, and the audience overflowed into the hallways. In the words of the station manager, people were "yelling and screaming and fighting." Discussion had to be suspended and a special meeting called to discuss the meeting in the Village Theater, with a capacity for 350

* The real names of BottomUp and TopDown have been changed.

people. That meeting also overflowed. The Trustees elected to keep the firehouse open. In the next election the Republicans built their campaign completely around this issue, and swept all five seats on the board—all apparently attributable to the actions of a lone and rather happenstance intermediary.

This case is not atypical in small communities with live broadcasts. Government access managers often relayed an anecdote that involved some member of the home audience watching an issue on TV, then running down to Village Hall to comment on it. These “influentials” often have no organizational affiliation, although they may have many contacts in the town. They become influentials because a particular issue grabs their attention and the barriers to influence are slight.

A contrasting example is TopDown, a small city in Northern New England with a population of 40,000. In 1990 the city treasurer publicly accused the school superintendent of lying about the school budget. The superintendent vociferously denied the accusations. An editorial board meeting with the major local newspaper was called, with the two contending parties invited to present their arguments. At first it just appeared to be the city treasurer’s word against the superintendent’s word. But then the city treasurer pulled out a set of videotapes of school board meetings that no one knew he had because he had taped them on his home VCR. The videotapes, cued to the key moments, proved the treasurer’s argument: the superintendent was shown to have lied to the public. Consequently, the editorial board supported the city treasurer and the tax increase request for the school system was defeated. Partly as a result of this incident, several years later when the superintendent’s contract was next up for renewal, the school board decided it was time to find a new superintendent.

What is most striking about this incident is that there is no indication that more than a tiny percentage of residents watched the school board meetings on TV. Yet because the public record was open to any activist to plumb for evidence, the TV coverage had a major influence on the policy and personnel of the school system. Although the same result could have been achieved through audiotapes, the school district only kept its audiotapes for 7 days before reusing them. Until the advent of televised meetings, the school district also never broadcast audio information about meetings.

Middlebury, Vermont, a town of 8,000, illustrates that even in the smallest towns a two-step flow of information can be important. According to Middlebury’s community access manager, on average someone asks to view a videotape of a meeting every two to three weeks. About 75% of the requests come from local newspaper reporters. Newspaper reporters use the tapes either to view a meeting they missed or to make sure they have accurate quotations. With the advent of TV coverage, reporters may be more careful to quote individuals accurately because

there is a public record of the exact words. During the 1995-1996 school year in Middlebury, the station manager recalls the following individuals using a videotape: The president of the teacher's union, who wanted to confirm a comment made by a school board member at a particular meeting; a resident near a site where sludge was spread, wanting to view the selectboard's discussion of the subject; a resident near a section of waterline that the town wanted to shut down, also wanting to see the selectboard's discussion of the subject; and a school board member reviewing a tape to recall how a particular discussion went. The community access manager did not recall the results of such searches appearing in the local paper, but believes they were used at public meetings and passed along privately to other community members.

Sometimes the local newspaper is the conduit for information reaching a broader audience. At least once a year in Middlebury someone writes to the local newspaper citing a public meeting observed on government access TV. Occasionally the selectboard will cite one of these letters at a later televised meeting.

One Middlebury resident, Phyllis Armstrong, has taped every selectboard meeting for several years. In the summer of 1993 she got involved in Middlebury politics when a neighbor, whose property abutted a growing commercial district, wanted to have her property rezoned as commercial property to enhance its sale value. Armstrong, whose roots and family house in Middlebury date back to the late 19th century, strongly opposed the rezoning. More recently, she has opposed the establishment of a special assessment district for commercial improvements. She now records the tapes to give to the attorney preparing a lawsuit against the town.

The Middlebury, Vermont case is atypical in being one of very few communities of any size to keep good public records of meetings. It is typical in that only highly motivated individuals—e.g., those concerned with real estate or the schools—ask to review meeting tapes or bother to record them on their own.

A critical feature of government access is that it makes intermediaries, especially local media, more accountable to the public. If the tapes are kept, government access can replace the newspaper as the medium of record. Without government access, a journalist can relatively easily dispute the memory-based accounts of others present at a meeting. With government access, the journalist's discretion in interpretation is considerably narrowed. George Stoney, one of the founders of the community access movement, says that over the years the mayors of Bloomington, Indiana, Auburn, Michigan, and Madison, Wisconsin all independently told him that one of the major reasons they supported government access was to keep the reporters accountable and honest. In Vermont, one reason city councilors cited for favoring televised meetings is to keep the journalists in check by letting the public see the difference between what the journalists report

and what actually happens at the meetings. The public thus acquires a powerful tool with which to assess the bias of the local reporter.

A well-documented example of using government access to keep the media accountable occurred in Burlington, Vermont. Paul Teetor, the city council reporter for the Burlington Free Press, wrote an article about a public hearing that was hotly disputed by a powerful faction in attendance. The Burlington Free Press fired the reporter on the spot. When a tape of the meeting was later reviewed in court, the reporter was exonerated. The case received national attention, being reported in both the Wall Street Journal and the Boston Globe.⁶

3) Two-Step with Anticipated Reactions

Whereas two-step information flows are possible to measure in theory but difficult to measure in practice, potential information flows are virtually impossible to measure either in theory or in practice, because, by definition, they do not exist. Thus, measuring actual information flows to citizens is not a viable method of measuring this form of democratic accountability. Both Kingdon (1989) and Arnold (1990) deal with this problem by relying on the testimony of members of Congress in explaining the importance of anticipated reactions in a legislative setting. They ask legislators how potential information flows affect their behavior; they do not attempt to track and measure the cause and effect sequence of potential information flows between legislators, intermediaries, and citizens.

My approach is different. I use the strategic interaction model portrayed in figure 5 to predict that legislators, aware of potential information flows and anticipating negative reactions, will want to protect themselves from the possibility that intermediaries will be able to pass on information about the legislators' actions to future voters. In the case of government access, this model predicts that legislators will try to restrict information flows to intermediaries in order to restrict potential information flows to voters. One simple way to do this is to make access to meeting records prohibitively costly.⁷

Evidence for anticipated reactions, then, may be found in the resistance of many local legislative bodies to keeping accessible meeting records. In no state are government access stations required by law to keep comprehensive records of

⁶McGowan, William. "Reporting by the Numbers." Wall Street Journal. March 18, 1996, p. A18; Bandler, James. "New Slant on Discrimination." Boston Globe. July 16, 1995, p. 29.

⁷Audio/video records are often more important in small communities than large communities. In small communities, written minutes tend to be poorly kept, fewer roll-call votes are taken, and meeting audiences may be small or non-existent. Many meetings, for all practical purposes, are private. The written record has no equivalent to the Congressional Record.

public meetings.⁸ In my surveys of more than 50 communities with televised public meetings, only a handful kept tapes for more than the span (two years) of a typical election cycle. Most kept tapes for less than 90 days. The government access manager in the city of Cincinnati, Ohio (350,000 population; \$300,000 budget) reported: "We have a policy which provides for erasure of all meetings after two weeks." The government access manager in the city of Southfield, Michigan (75,000 population; \$628,000 budget) reported: "We don't 'tape' meetings. We cablecast them live. This avoids the use of our video as a public record." The largest community in Chicago's North Shore, Evanston, Illinois (79,000 population) airs meetings live but does not tape them. One of the smallest communities on the North Shore, Deerfield, Illinois (18,000 population) keeps its tapes permanently and stores them in the library for easy access.

Although high cost was the most common reason given for not keeping meeting tapes, I observed no empirical relationship between the resources available to a community access center and its propensity to make meeting records accessible. A typical city council in a town of less than 40,000 meets about 10 hours per month or about 120 hours per year. VHS tape costs about \$1/hour at high quality and 33 cents/hour at low quality, resulting in a yearly cost for tape that would run from \$40 to \$120. A year's worth of tapes can easily be stored on one shelf of a bookcase or about a third the space of a typical sofa cushion. Middlebury, Vermont, with a population of 8,000 and an annual budget of \$55,000 for public, educational, *and* government access, kept tapes of meetings back to 1989, the year televised meetings began. In contrast, Chicago, with a community access budget of \$1.3 million, decided it could not afford to televise city council meetings, let alone tape them (a consultant estimated it would cost \$700,000 just for the equipment necessary to televise the city council). Cities that could not afford to keep good public records could nevertheless spend up to \$40/hour for super betacam tape, \$50,000 for a production van, the wages of a 4 member production crew, and individual monitors built into the desks of legislators so they could see how they looked on camera.

Other common ways of restricting access to tapes included putting them in the control of government officials. One school superintendent, for example, had his secretary keep all tapes under lock and key. Any political opponent seeking a tape

⁸According to a panel discussion at NATOA's annual national conference held in September 1995, Minnesota requires that two tapes of city council meetings must be stored as public records each year. The two tapes are to be selected "randomly" from all those taped in a given year. In 1994 I chaired a task force on Information, Technology, and Democracy for Vermont's Secretary of State. We recommended to the Vermont legislature that they update the public records laws in light of the new meeting technology. No action was taken. A few lawyers have interpreted existing public records laws to include televised public meetings, but this interpretation appears to be uncommon and untested in the courts.

could be immediately identified and precautionary steps taken. Often, the government access manager or town clerk who kept control of tapes was hired by and reported directly to the mayor or city administrator. The Middlebury community access center, by contrast, was run by an independent non-profit entity located in the same building as the library. No officials were notified when requests for tapes were made. The Middlebury access center, unlike most access centers, also keeps meeting agendas. These agendas include meeting topics and the time spent discussing each topic. Using a real-time counter, a desired portion of a meeting can be located in a few minutes. Gathering similar information would take many hours at most other access centers.

Another piece of evidence that legislators are consciously or unconsciously taking account of anticipated reactions involves the way government access is sold to government officials. Government officials most want to hear that access will increase their visibility and name recognition. The appeal of government access to them is electoral advantage (and perhaps vanity), not democratic accountability. A government access manager would never sell a city council on government access by saying that it might increase the chances for defeat of some of the incumbents, thereby increasing democratic accountability. Consequently, in seeking funds for government access from city councils, government access supporters invariably feature audience size and often provide supporting documentation proving large viewership. In reviewing more than two dozen viewership studies, I found not one that suggested access centers could provide a valuable service by keeping records to hold officials accountable.

A related phenomenon is the ban many access centers have on using access television footage for political purposes. Even C-SPAN allows its tapes to be used only for "educational" purposes. Boston's public access station has a policy that tapes of political candidates cannot be rebroadcast by other media. The access station fears correctly that public officials would be less likely to appear on their channel if the resulting tapes could be rebroadcast in this way. The reason for the station's fears was vividly illustrated in 1994. Joe Kennedy was running for re-election to the 8th Congressional district in Massachusetts. Appearing on the public access stations' news show, he was asked by the anchor about his investments in South Africa. He lost his cool, and sharp words passed between him and the anchor. His opponent got the tape under false pretenses by having someone come in to the access station claiming to be a student doing a research assignment. Then, the Saturday evening before the election this opponent ran TV advertising that included a replay of part of Joe Kennedy's spat. This led to a front page story in the Boston Globe about the offending video clip. The access station asked for an injunction to prevent the videotape from airing again, but were denied (interview with Hubert Jessup, Executive Director of the Boston Neighborhood Network, August 17, 1995).

Elected officials object to making tapes available for political purposes primarily because they fear opponents will take what they say out of context (this was also once a common objection against roll call votes). Perhaps a better way to assuage this reasonable fear would be to require that only video segments of a minimal length (e.g., one minute) be used for political purposes. This might strike a fairer balance between the official's need for secrecy and the public's need for information.

The difficulties of measuring two-step information flows with anticipated reactions should not blind us to their substantive importance in the practice of democracy. Just as research on the national legislature is now beginning to focus on the key role of anticipated reactions to democratic accountability (Kingdon 1989, Arnold 1990), so research on all other aspects of democratic accountability needs to be refocused to take anticipated reactions into account. Past discussions of government access TV exemplify this analytic lacuna. Both practitioners and academic analysts have stressed audience size rather than procedures for facilitating access to tapes in thinking about the effect of government access on democratic accountability.

Conclusion

Developing a better theory of democratic accountability requires that we advance beyond one-step models of information flow to two-step models and to two-step models with anticipated reactions. Calculations of strategic rationality embodying anticipated reactions can be fruitfully applied to every area of democratic accountability.

The results here challenge the conventional wisdom that the major impact of new telecommunications technology is to replace representative democracy with direct democracy. Because direct democracy increases voter costs while representation reduces them, advocates of the new technology have been left open to the criticism that they expect too much from voters. This study shows, however, that new information technology can greatly increase the efficiency with which voters can delegate information costs to intermediaries. In the extreme case demonstrated with government access, information technologies enhance democratic accountability by increasing potential information flows and require no direct participation by voters.

The power of government access to increase democratic accountability will be underestimated if only a one-step model of information flows is employed. Through the introduction of a two-step model and a model with anticipated reactions, government access can be seen as a major contributor to democracy even if the viewing audience is tiny and that audience never passes on its observations to a larger audience.

References

- Abramson, Jeffrey, F. Christopher Arterton, and Gary R. Orren. 1988. *The Electronic Commonwealth: The Impact of New Media Technologies on Democratic Politics*. New York: Basic Books.
- Arnold, Douglas R. 1990. *The Logic of Congressional Action*. New Haven: Yale University Press.
- Arnold, Douglas R. 1993. "Can Inattentive Citizens Control Their Elected Representatives?" In Lawrence C. Dodd and Bruce I. Oppenheimer, editors. *Congress Reconsidered*. 4th Edition. Washington DC: Congressional Quarterly Press.
- Arrow, Kenneth. 1985. "Economics of Agency." In *Principals and Agents* ed. Arterton, Christopher. 1987. *Teledemocracy: Can Technology Protect Democracy*. Newbury Park: Sage.
- Beck, Paul Allen, "Voters' Intermediation Environment in the 1988 Presidential Contest," *Public Opinion Quarterly*, 55, 1991, pp. 371-394.
- Bednarczyk, Susan, Summer 1996. "The Way It Was." In *Community Television Review: Tenth Anniversary Issue*. 9(2): 19-58.
- Beecher, Andy. Summer 1996. "The Early Days of Government Access." In *Community Television Review: Tenth Anniversary Issue*. 9(2): 15-18.
- Buske, Sue Miller. Summer 1996. "The Development of Community Television." In *Community Television Review: Tenth Anniversary Issue*. 9(2): 12-13.
- Downs, Anthony. 1957. *An Economic Theory of Democracy*. New York: HarperCollins.
- Engelman, Ralph. October 1990. "The Origins of Public Access Cable Television: 1966-1972." *Journalis Monographs*. Columbia, SC: Association for Education in Journalism and Mass Communication.
- Ferejohn, John. 1990. "Information and the Electoral Process." In John A. Ferejohn and James Kuklinski, eds. *Information and Democratic Processes*. Chicago: University of Illinois Press.
- Fuller, Linda K. 1994. *Community Television in the United States: A Sourcebook on Public, Educational, and Government Access*. Westport, Connecticut: Greenwood Press.
- Gallagher, Joyce. Chicago Cable Coordinator. Telephone interview. March 15, 1996.
- Geller, Henry. 1994. *1995-2005: Regulatory Reform for Principal Electronic Media*. Washington, D.C.: The Annenberg Washington Program in Communications Policy Studies of Northwestern University.
- Gillespie, Gilbert. 1975. *Public Television in the United States and Canada*. New York: Praeger.
- Goldfarb, Ronald. 1995. "The Wrong Villain: The O.J. Simpson media circus pitched its tent far beyond the range of the cameras in the courtroom." *AJR*. December. pp. 17, 49.

- Grossman, Lawrence. 1995. *The Electronic Republic*. New York: Viking.
- Katz, Elihu. 1957. "The Two-Step Flow of Communication: An Up-To-Date Report on an Hypothesis." In *Public Opinion Quarterly* 21: 67-78.
- Katz, Elihu, and Paul Lazarsfeld. 1955. *Personal Influence*. New York: Free Press.
- Kingdon, John W. 1989. *Congressmen's Voting Decisions*. 3rd edition. Ann Arbor: University of Michigan.
- Klein, Paul. 1975. "The Television Audience and Program Mediocrity." In Alan Wells, ed. *Mass Media and Society*. Palo Alto, CA: Mayfield. pp. 74-7.
- Krehbiel, Keith. 1992. *Information and Legislative Organization*. Ann Arbor: University of Michigan Press.
- Lazarsfeld, Paul F., Bernard Berelson, and Hazel Gaudet. 1944. *The People's Choice*. New York: Duell, Sloan, and Pearce.
- McCubbins, Mathew, and Thomas Schwartz. 1984. "Congressional Oversight Overlooked: Police Patrols versus Fire Alarms." *American Journal of Political Science* 28:165-79.
- Neuman, W. Russell. 1991. *The Future of the Mass Audience*. New York: Cambridge University Press.
- Oliver, Suzanne. 1995. "The Porn Mandate." *Forbes*. August 28. pp. 46-47.
- Pateman, Carole. 1970. *Participation and Democratic Theory*. Cambridge, UK: Cambridge University Press.
- Pool, Ithiel de Sola. 1983. *Technologies of Freedom*. Cambridge: Harvard University Press.
- Popkin, Samuel L. 1991. *The Reasoning Voter*. Chicago: University of Chicago Press.
- Riddle, Anthony. U.S. Senate Testimony on S. 2195, "The National Public Telecommunications Infrastructure Act of 1994." June 22, 1994.
- Sappington, D. Spring, 1991. "Incentives in Principal-Agent Relationships Contracts with Imperfect Information." In *Journal of Economic Perspectives* 5: 45-66.
- Schattschneider, E.E. 1960. *The Semisovereign People: A Realist's View of Democracy in America*. New York: Harcourt Brace Jovanovich.
- Slaton, Christa Daryl. 1992. *Televote: Expanding Participation in the Quantum Age*. New York: Praeger.
- Sloan Commission. 1971. *On The Cable: The Television of Abundance*. New York: McGraw-Hill.
- Sniderman, Paul M., Richard A. Brody, and Philip E. Tetlock. 1991. *Reasoning and Choice: Explorations in Political Psychology*. Cambridge, UK: Cambridge University Press.
- Sterba, James, "Let's Go to the Digital Videotape! NBA Teams Byte Into Cyber-Coaching" *Wall Street Journal*. March 22, 1996, p. B7.
- Stoney, George. Summer 1996. "Public Access: A Word About Pioneers." *InCommunity Television Review: Tenth Anniversary Issue*. 9(2): 12-13.

- Suall, Irwin, and Thomas Halpern. 1992. "Electronic Hate: Bigotry Comes to TV." *USA Today*. July. pp. 54-57.
- Weimann, Gabriel. 1994. *The Influentials: People Who Influence People*. Albany, New York: State University of New York Press.