Participatory democracy in its purest form, the town hall meeting, has been lost in modern mass society. The sheer number of citizens prevent effective interaction between themselves and their leaders. The aim of this study is to explore the various means available to correct that loss, which until the advent of this McLuhanesque era, was considered irretrievable. Using cable television and telephone conference circuits in a large urban high rise apartment complex, the researchers were able to evaluate the overall citizen participation in the project, which was relatively high, and to acquire additional data for further program design. Centered on community problems, security, and the legalization of heroin, the electronic meetings stimulated dialog and interaction and also familiarized the citizens with the rules of television access. The study was particularly sensitive to citizen critique and was basically designed with interaction analysis in mind. In the future the project will be expanded to involve groups varying in size from 600 to 40,000 persons. (MC)
PRELIMINARY FINDINGS OF ELECTRONIC TOWN HALL PROJECT
(MINERVA)
When given a chance to participate in an electronic town hall meeting, many of the residents of "High Rise Village" welcomed the opportunity. In fact, over one-half of the participants preferred it to regular, face-to-face meetings, by 52% to 31%. (17% had no preference.) 803 households participated in the study.*

The electronic meetings use a combination of cable television and/or radio for broadcasting the meetings. Telephones as well as roving television camera crews are used to obtain citizen "feedback" to the meetings.

Citizens preferred the electronic meeting for a number of reasons. First, they liked being able to take part in the meeting without leaving their homes. This was "very" or "somewhat" important to 84% of the participants and "not at all" important to 16%. As one participant added, "No baby-sitter problem -- avoid the noise and smoke of meeting places."

Another virtue of electronic meetings is that, because they are very easy to reconvene, they can be broken up into segments, with one part aired at the beginning of a week and the remainder, a few days later. When this is done, citizens have time to discuss the issues inbetween parts of a meeting. For those who participated in both segments of the electronic meeting at High Rise Village, the time to dialogue inbetween...

* The number of people who answered a specific question varies, but is smaller than the total number of participants.
segments was very or somewhat important to most, 79%, and not at all important to 21%.

The participants felt that their positions were better represented at the electronic meeting than at regular meetings. In fact, only 9% of those who took part in both segments thought their positions were not as well represented. 43% thought that there was no difference between types of meetings and 48% thought that their positions were better represented at the electronic meeting.

One might expect that the participants would miss face-to-face interaction, that is, getting together with other people, when they attend an electronic town hall meeting. This was not the case at High Rise Village. 61% felt that this possible drawback was not at all important. It was somewhat important to 28% and very important to 11%.

This study of the electronic town hall meeting is part of a larger study referred to as MINERVA: A Study in Participatory Technology (after the Roman goddess of wisdom). This research is being carried out at the Center for Policy Research, a not for profit corporation, in New York City, funded by the National Science Foundation. Dr. Amitai Etzioni (professor of sociology at Columbia University and Director of the Center for Policy Research) and Dr. Stephen Unger (professor of electrical engineering also at Columbia and senior research associate at the Center for Policy Research) are in charge of the staff of social scientists and engineers who are carrying out the project. The basic concept of the electronic town hall, was developed by Dr. Etzioni in a report just published in Policy
The overall aim of this study is to explore various means to correct a loss brought about by modern mass society and heretofore considered beyond retrieve. Until recently it was widely believed that it would be impossible for millions of people to have the kind of participatory democracy available to the members of small communities such as the Greek polis, New England towns, and the Israeli kibbutzim. In contemporary modern societies, there are no effective means by which large groups of citizens, whether dispersed across the country or clustered in a single community, can regularly interact among themselves or with their leaders. In some instances people may, after considerable delay, indicate their responses to broadcasted messages by means of letters or petitions that are in turn broadcasted. But live (real-time) dialogues have been virtually impossible, and communication remains mostly unidirectional. One result of such unidirectional communication is the increasing alienation of the citizen from political and social processes; another is the making of decisions that are unresponsive to the real wishes or needs of the people and, as such, widely resisted. The MINERVA study, then, is exploring potential solutions to the current state of affairs, by a combination of new technologies (especially two-way CATV) and new social procedures (involved in using these new tools).

The project is progressing in the following four areas:
1. An experimental electronic town hall meeting was conducted in a housing complex located in a major metropolitan area. The run was studied by two young sociologists, of the Center for Policy Research, Robert Zussman and Nancy Castleman.

The meeting which took place in one week in May, 1972, began with four High Rise Villagers speaking on a half an hour radio program aired on a local FM radio station. Each tenant supported a different solution to the security problem of the Village. In each of the six buildings, which make up this housing complex, facilities were made available so that tenants who wished to do so could videotape a response to the radio program. On Thursday night, an edited version of the Monday night tapes was shown over public access CATV. At the same time, post card ballots on the four suggested solutions to the security problem were placed under High Rise Village's 2308 doors on Monday night as was a longer questionnaire on Thursday evening which also included a ballot. 803 households participated in the meeting by at least voting on the alternative solutions. 490 of the much longer questionnaires were mailed back.

One virtue of electronic town hall meetings is that citizens can easily regulate their participation. When they lose interest, let's say because the meeting becomes repetitious, they can "leave" by turning off their radio or television. One of the most basic findings of the project is that the majority of the participants did not switch but stayed out the meeting, once they tuned in.
Only 18% of those who participated in the first segment of the meeting, the part aired over radio, did not follow the entire program. The proportion is much larger for the televised segment: 44% of those who participated in this part of the meeting followed only a part of it.

Why did a higher percentage of people "switch channels" for the televised segment? One likely explanation is that this segment was three times as long. Or perhaps many of the tenants felt that the issue had been pretty well talked out already. A more likely explanation has to do with the way people participated in the radio segment and in the television segment.

We refer to these different ways of participating as rules of access.* These rules or procedures guide the participation of the participants; the rules direct who gains the right to speak and the ear of the audience. These ground rules may be highly informal (catching the eye of a meeting's chairperson) or highly formal (the intricate parliamentary procedures codified in Robert's Rules of Order).

For the radio segment, the rule of access in force can be referred to as representation by viewpoint. The four people who were given the right to speak were chosen on the basis of their opinion on the security problem at High Rise Village. The televised segment, began with open access: any tenant who wished to do so, could voice his or her opinion on the issue.

* For a further discussion of the rules of access see Dr. Etzioni's article in the most recent issue of Policy Sciences.
Forty-five minutes of tenants' reactions were carried. (All in all, 49 tenants spoke.) Then the rule shifted back to the representative one: the eight member Tenants Council discussed the issues for another forty-five minutes.

The purpose of trying out the mixed rule of access, that is, starting with a structured dialogue, then opening the meeting to the "masses", then closing it, again, with a structured discussion, followed by a ballot open to all, was to test the attractiveness of the mix. The researchers hypothesized that such a mix would be more attractive than a meeting governed only by one of the rules. A meeting in which there was only "open access" would tend to be too long, repetitive, and the discussion might tend to ramble rather than to progress. A meeting with only the representative rule would not provide citizens for sufficient opportunities for expression, for new ideas to rise, and it might alienate them. The mix proved popular, as seen on the overall favorable "rating." In future runs, different mixes and pure types will be tried.

A final sense of the citizens' evaluation of the whole system comes when the participants were invited to look ahead to the day when weekly electronic town hall meetings would give them the opportunity to express their opinions and to vote. Almost two-thirds of the participants believe that such a system should be made available to everyone in the country. Almost one-half said they favored the federal government spending 25 million dollars to develop and operate such a system.
say they would use the system often, 41% sometimes, and only 16% rarely. 24% said they are willing to pay $2.50 per month out of their own pocket for such an opportunity.

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2. Since it is expected that small groups of citizens may wish to dialogue with each other before and after larger electronic town hall meetings, Richard Remp, a sociologist at the Center for Policy Research conducted experiments over telephone conference circuits. The aim was to establish whether or not people could dialogue effectively without actually seeing each other. The preliminary findings suggest that they quite well can, that electronic small group meetings are "workable."

Electronic meetings involving 420 individuals (40 groups of 9 and 2 groups of 30), using 3 different experimental conditions have been given. In addition, 108 people had face-to-face meetings which served for comparative purposes (12 groups of 9).

The first experiment involved one hour long meeting, in 16 groups each including 8 members and a chairperson. The participants discussed and voted on the desirability of setting up a citizen patrol to fight crime in their neighborhood. Those involved indicated satisfaction with the meeting on a number of different dimensions. Over four-fifths of the participants (81%) felt that the participation had been "direct and eager" as opposed to "reluctant and cautious."
Fears that the electronic nature of the meetings would result in cold and reluctant discussions seem unfounded. 55% of the participants felt that the meetings they attended was friendly and had a sense of intimacy. 30% of the participants felt that the group members were "like strangers, remote from each other," while 15% chose a middle position on this issue. (The participants did not know each other when the meetings started and they did not meet before they were introduced to one another over the circuit.)

When asked whether or not the chairperson had been effective in promoting a progressive and useful discussion, 60% of the participants indicated that he or she had been effective. 20% chose a neutral response and only 20% felt that the chairperson had been ineffective.

The large bulk of the group members also indicated that they had an opportunity to express their views fully. Only 7% indicated that they did not have a chance to express their views. Finally, using the electronic format, the members indicated that they were able to have an effective and useful discussion of the topic of crime patrols. When asked if the discussion had been effective or ineffective in exploring the proposal, 74% said that it had been effective, while only 15% said that it had not. (11% gave a neutral response.)

Having seen that the electronic groups were workable under some conditions, their viability was further tested by increasing the "load" on them. This was done by choosing a topic which provoked much greater disagreement and conflict: the legalization of heroin. Furthermore, it was arranged
that each meeting of 9 would include several individuals with opposite views on the subject. Even under this increased level of conflict, the meetings seemed to be quite satisfactory, on virtually all the dimensions examined. 77% of the members in these high conflict meetings felt that the participation had been direct and eager, slightly less than in the low conflict groups. A majority of the members, 55%, reported a feeling of friendliness and intimacy in the group; the same percentage chose this response in the groups discussing citizen patrols.

Once again, nearly three-fifths of the participants, 57%, indicated that the chairperson had played an effective role. 53% of the members felt that the exploration of the topic was effective. This is a somewhat lower percentage than in the first series of meetings, but this may be due to the greater complexity of the issue, rather than to the increase in the conflict.

To compare the viability of electronic meetings to regular ones, 12 groups of 9 each were arranged to meet in a room around a table, the way groups would normally meet. The same kinds of members and chairpersons were chosen and the same topic -- the more taxing one -- was used. The data seem to indicate that on a number of dimensions, while both electronic and face-to-face meetings were given overall positive ratings, that the face-to-face meetings were seen as somewhat more satisfactory.
Thus, 82% of those who attended face-to-face meetings described the participation as "direct and eager," compared to 77% for those who discussed heroin legalization over the circuits. Only 7% chose "reluctant and cautious," while 10% chose to take neutral positions. The meetings were characterized as "friendly, with a sense of intimacy" by 59%. (55% of those who discussed the same topic over the circuit gave this response.) 11% described the participants as feeling remote, "like strangers." Almost one-third, 30%, gave the face-to-face meetings a neutral rating on this dimension. The chairperson was seen as effective by 76%, and ineffective by 8%. (16% gave the chairperson a neutral rating) 57% of those who participated in the discussions of heroin over the circuit rated the chairperson as effective.

Interestingly, participants seemed to feel that it was harder to influence others in the electronic format. For example, the participants who discussed the legalization of heroin on the conference call circuit were asked, "Do you think you would have been more, equally, or less able to influence members if you had been sitting with the other participants around a table?" Over one-half, 56%, thought that they would have been more able to influence others around a table. Only 13% felt less able to influence others at face-to-face encounters. Almost one-third, 31%, felt equally able to influence members over the circuit and in person. Thus, the generally "cooler" nature of the electronic meetings may well prove particularly appropriate for some kinds of meetings,
although less appropriate for others.

A fourth series of meetings was given in which electronic aides were used to explore their potential helpfulness in creating a more orderly flow of interaction in small group electronic aides. These aides indicated who was speaking and who was desired to speak, by means of light panels. They also allowed participants to express assent and dissent, without interrupting the communication. These meetings are currently being analysed by Mr. Remp and his staff.

Finally, two runs were conducted to test whether or not the electronic format could be used for much larger groups. 30 people participated per meeting. In general, these meetings did not work. They ran into both technical and interactional difficulties. Accordingly, the participants were quite unsatisfied.

While the people who attended these meetings were as eager to participate as the members of the groups of 9, only 27% said that the discussion had been "friendly, with a sense of intimacy." 55% of those who discussed heroin legalization in groups of 9 chose this response.

The groups of 30 did not give their respective chairpersons the generally high ratings that these individuals had been given before. Thus only 32% judged the chairperson as effective in promoting the discussion. This compares to 57% in the groups of 9 discussing the same topic.

Even more telling, is the rating given to the meeting's effectiveness in exploring the proposal -- to legalize heroin.
Only 22%, less than one-fourth, thought that the discussion had been effective. 53% of the members of the groups of 9 gave this answer. Further experiments are planned to clarify how groups larger than 9 but smaller than 30 can use telephone conference circuits.

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3. Developments in the engineering aspects of this study have been made by Dr. Unger and Mr. Richard Spillane, a Center engineer. They have just completed the development of a "bread board" (early prototype) model of a telepoller. This device makes it possible to count large numbers of votes very rapidly, actually more rapidly than the telephone exchanges can channel in the votes. The telepoller can count a vote per three-quarter of a second, per unit, and can be multiplexed (through serial ringings) to include as many units as desired.

The telepoller will be an important technological aide for future electronic meetings. Participants will be able to know what the vote is on a motion in a short period of time.

Thus, for the electronic town hall meeting given at High Rise Village, 10 telepoller units could have counted all the votes, if they had come in at an even rate, in one minute.

The engineers have completed work on the panel used in the small group electronic meetings. The panel is attached to a telephone and allows a user to request the floor and to register assent or dissent by switching a lever, without
interrupting the on-going discussion.

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4. The conceptual specification of all the components needed for electronic town hall meetings for groups varying from 600 to 40,000 in size has been worked out by Dr. Etzioni in a paper just published in Policy Sciences. Following a limited number of technological and social innovations it will be possible, to a very large extent, to approximate the New England town hall meeting condition on a mass basis. This envisioned system of mass participation draws on a combination of some already existing and some new technological features in conjunction with new social procedures or "protocols".

To a large extent, the participatory features can be auxiliary, or "add on" features to systems that already exist, such as over-the-air network television, radio and telephone, or to systems which are desired of other, commercially viable purposes. Thus, for example, two-way cable television, where the return capacity is for sending digital signals (not video, and maybe not even audio), is attractive as a shopping device. (The viewer can order products displayed on the screen in a kind of "live" mail catalogue.) This same device can also be used for public opinion polling at very little additional cost. Hence, it seems that a system that would lead to greater citizen participation might well be possible and economically viable.
One attribute of the system that is considered essential is the dialogue among citizens and between them and their leaders precedes the polling of views. The system being sought is one of mass dialogue and response, not one that merely tallies votes. Both political theory and the practices in Hitler's Germany and Napoleonic France have shown that bringing a motion before the populace to be voted on "raw," that is, without discussion; opens the society to demagogic influences. In a truly democratic process, there is a genuine dialogue among the citizens and between them and their leaders before a vote is taken. One main purpose of this is to broaden the understanding of the citizens through pluralistic sources of information. It also allows the citizens to take into account the views and feelings of fellow citizens who are not like-minded.

Without such a dialogue, the positions that citizens are likely to take tend to be impulsive, uneducated, and unnecessarily polarizing. A reasoned, informed, and broadly-shared position requires dialoguing. This is an assumption that runs throughout the system that has been conceptualized.

An optimal mass dialogue and response system -- or, more technically, a "Multiple Input Network for Evaluating Reactions, Votes and Attitudes," MINERVA for short, -- will provide a means for people to communicate with each other as groups and with central broadcasters. Its prerequisites are:

a. a capacity to address a group (or to broadcast),
b. a real-time group dialogue of a geographically dispersed membership,
c. a continuous real-time feedback between the audience and the broadcasters (national or local political leaders or opinion-makers), under conditions approximating town hall meetings,

d. the recording of participants' public responses and the reporting of the evolving group consensus (or its absence) to participants (in real-time or only after short delays, so that they can "sense" each other and thus develop their positions in conjunction with the change in the position of others),

e. the injection of expert information into the dialogue,

f. the establishment of rules that regulate the accesses and utilization of the system and have a capacity to be revised according to the response of the participants,

g. the provision of opportunities for subpopulation dialogue, inter-subpopulation dialogue (e.g., cf the black communities of New York City, Los Angeles, Chicago, etc.), as well as various combinations of subpopulations (e.g., of the five boroughs of New York City in a city-wide network).

No single technology provides for all of these elements single-handedly. However, when put together in various mixes and following some adaptations, they could provide such a system. In a completed system, every person who owns a radio or a television set and has access to a telephone will be able to follow, react, and participate in the discussion and resolution of public affairs. Thus, an electronic equivalent to town hall meetings is provided, allowing dispersed groups to act as if they are all in one central gathering place.

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In the near future, the Center for Policy Research will conduct a major field experiment involving 10,000 members of the League of Women Voters of New Jersey in two electronic town hall meetings. The study, planned for early 1973 will be conducted by Dr. Kenneth Laudon and Ms. Sara Lipson, of the Center. It will focus on the effects of using communications technology on organization decision-making and membership attitudes and participation, in addition to shedding further light on the possibilities of electronic meetings.