## ICTS, BUREAUCRACIES, AND THE FUTURE OF DEMOCRACY

Democracy theory is in need of a new foundation. The existing paradigm is that people's representation—by parliamentarians, members of Congress, or local councillors—is a democratic arrangement that is, at best, second best. The perceived weaknesses of existing democratic arrangements are that members of the representative assemblies reflect partisan interests under the guise of the general interest; they tend to follow their own partial under

standing of what is good for their constituencies; and they are more responsive to the requirements of the political party than to the citizens they represent.

The growing popularity of referenda, recall, co-production of policies, and interactive policy-making emphasizes that people prefer direct democratic arrangements for the existing representative arrangements. The use of information and

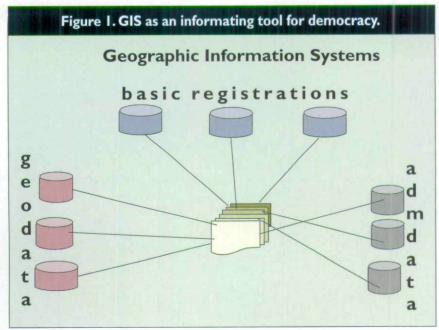
communication technologies (ICTs) makes the distortion or misrepresention of the preferences of the electorate through representative bodies, as well as public bureaucracies, more transparent

than ever before. Robert Dahl, a leading U.S. thinker on democracy theory, once characterized representative democracy as "a sorry substitute for the real thing."

Representative democratic arrangements are created because it is impossible to give all citizens an equal opportunity to participate in the collective decision-making process. An impossible notion. The promise of ICTs as direct

democracy in the form of continuous opinion polling, instant referenda, tele-conferencing, digital cities, and discussion groups makes erosion of the legitimacy of representative democracy,

**IGNACE SNELLEN** 



and the need to rediscover the democracy theory, even more poignant.

A fundamental reconceptualization of the democracy paradigm requires a dependable picture of the real world of the citizens—instead of a derivative picture of the system's world of the politicians—is brought into the political arena and into the political discussion. The transparency that is created by ICTs makes it possible to dispose not only of a dependable reconstruction of the real world, but also of the impact governmental policies have on this world. The informating capacities of ICTs, highlighted by Shoshana Zuboff [2] in combination with geographic information systems (GISs), can provide insight necessary for modern democracies to function properly. Bureaucracies that handle those GISs will be redefined within the democratic system.

Zuboff, a technology sociologist, ascribes to the informating capacities of ICTs, that is, they are reflexive; they not only automate processes by substituting human labor for machines, but the data they create shapes new perspectives on the social, organizational, and managerial situations in which they are used [1].

In Zuboff's own words:

"...information technology is characterized by a fundamental duality that has not yet been fully appreciated. On the one hand, the technology can be applied to automating operations according to a logic that hardly differs from that of the nine-teenth-century machine system—replace the human body with a technology that enables the same processes to be performed with more conti-

nuity and control. On the other, the same technology simultaneously generates information about the underlying productive and administrative processes through which an organization accomplishes its work. It provides a deeper level of transparancy to activities that had been either partially or completely opaque ... The evidence indicates that informating typically unfolds as an objective, unplanned, autonomous process."

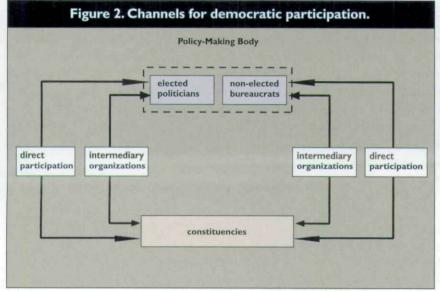
The informating character of ICTs can be of great importance for the functioning of democracies, even more than for produc-

tion organizations. GISs and relational databases are examples of applications with built-in informating capacities that promise to play a major role in democracies of the future.

The growing use of GISs in public administration accentuates the reflexive capacities of ICT applications. Three kinds of data can be gleaned from current GISs (see Figure 1):

- Geodata about the physical environments in which groups or sectors of the population reside;
- Data from basic registrations, such as statistical data about levels of schooling, criminality, unemployment, health, life expectancy, public facilities, public transport, and so on. This data provides insight into the problems in quarters and sectors of society;
- Administrative data about decisions as taken by public servants and street-level bureaucrats with respect to requests and complaints of citizens living in those quarters and sectors of society, a city, or a state. (Computers in a housing office will register a very detailed, personal picture of the applicant, such as the time he or she had to wait for a permit, the square feet allotted per member of a family, the state of the allotted house, and so on. This registration, as grouped per geographic unity or category of people, makes all kinds of comparisons and evaluations possible.)

The (un)responsiveness of public policies with regard to the problems in society is shown through a combination of this kind of data—the adminis-



trative data in particular—is an unintended ("objective, unplanned, and autonomous" [2]) outcome of the workings of the bureaucracy that is an interesting result of informating. A consequence of this, of course, is that researchers, interest groups, and the media will also have access to the unintentionally

tion of GISs is they visualize highly complicated relationships between conditioning factors of problematic situations in a very convincing manner. As such, they have become strategic policy support facilities.

## ICTs and the Role of Public Bureaucrats

The powerful analytical and marketing tools and techniques that modern public servants have at their disposal, such as GISs, relational databases, and tracking and monitoring systems, strengthen their position toward politicians. They tend to know better than

their political counterparts about the real world of their constituency. Informed citizens approach public servants directly. Politicians themselves also rely more and more on the expertise, insights, and analytical power of the bureaucracy, which is enhanced by the developments of ICTs. Indeed, important



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created administrative data. In my opinion, one of the most important future debates in democratic societies will be who gets data access. Actual discussions about "freedom of information" focus almost exclusively on the information on which policy documents, policy proposals, or policies are based.

In an information society, the raw data from which the information is derived is more important than the information processed by government. So, one of the attractions of GISs based on administrative data combined with geodata and statistical data and created within or for public administration, is their objectivity. They exist with no purpose to convince anyone of anything. Furthermore, data analysis—by hand—would require so much time and effort that the results would be sporadic and available so late that they would hardly influence actual political decisions. With computers, however, such analysis is done easily and routinely. Another attrac-

intermediary roles for the public servants are evolving in this manner.

However, the democracy theory that forms the foundation and legitimacy of the democratic practice, does not take those intermediary roles of the bureaucracy into account. It recognizes only the role of intermediary organizations, such as political parties and interest groups, next to forms of direct participation, in their relation to representative elected politicians.

From the citizen's perspective, the existing democracy theory overlooks the importance of the influence bureaucracies have on the shape of public policies and on the standards to which these policies are implemented. For the citizen, the value of democratic principles and practices consists more in the practical outcomes of democratically chosen policies (outcomes of which public servants are responsible for) than in the formal methods that

policies come into existence. Current democracy theory ignores the professionality of the public servants, which is immersed in the specific situation of their sector and which puts them in a representative position with respect to their constituency.

The transparency of public administration in the information society, which results from the development of the ICT applications discussed here, forces us to reconceptualize the democracy theory. Two different channels of democratic participation must be recognized based on constituencies: elected representatives and non-elected bureaucrats (see Figure 2).

Together, the elected and non-elected representatives of the different constituencies in society may frame the policies to be executed. A division of roles must be invented and instituted to assure that elected representatives will not be shifted aside by the non-elected ones. Otherwise, as long as formal democracy theory practically excludes discussion about the representative potentialities and the actual representative roles of bureaucracies in a democratic sense, these bureaucracies get a chance to marginalize the political representatives. In such cases, the bureaucracies are excused from not being answerable for the influence they exert.

A necessary requirement will be that bureaucracies are completely open about the way in which they develop and implement policies. Untrammeled public access to the data, used (and not used) during the policy draftings, and to the informating data, created during the implementation of policies, will become a cornerstone of such a new democracy paradigm. C

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IGNACE TH. M. SNELLEN (snellen@fsw.eur.nl) is a professor of public administration at Erasmus University in Rotterdam and the Leiden University in The Netherlands.

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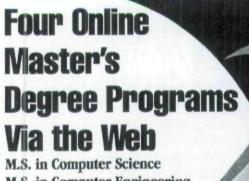
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