



# Democracy Without Elections

Brian Martin

**For many a jaded radical, the greens are the most exciting political development for ages. The green movements claim to bring together members of the most dynamic social movements, including the peace, environmental and feminist movements, combining their insights and numbers.**

Beyond this, the rapidly achieved electoral success of green parties has really captured the imagination. The German Greens have been the centre of attention for a decade precisely because of their election to parliament.

But wait a moment. Before getting too carried away, isn't it worth asking whether elections are an appropriate way forward? After all, electoral politics is the standard, traditional approach, which has led to those traditional parties which have so frustrated many a radical. Isn't there a danger that participation in the electoral process remains a trap, a bottomless pit for political energy which will pacify activists and masses alike?

My aim in this article is to take a critical look at elections and their alternatives. I start with a summary of the case against elections, and then outline some participatory alternatives. Finally, I discuss the idea of demarchy, a participatory system based on random selection.

## The Case Against Elections

The idea of elections as the ultimate democratic device is a deep-seated one in the West. It is hard to escape it.

Children are taught all about elections in school, and may vote for student councils or club officers. Then all around us, especially through the mass media, attention is given to politicians and, periodically, to the elections which put them in power. Indeed, the main connection which most people have with their rulers is the ballot box. It is no wonder that electoral politics is sanctified.

Elections in practice have served well to maintain dominant power structures such as private property, the military, male domination and economic inequality. None of these has been seriously threatened through voting. It is from the point of view of radical critics that elections are most limiting.

**Voting doesn't work** At the simplest level, voting simply doesn't work very well for those promoting serious challenges to prevailing power systems. The basic problem is quite simple. An elected representative is not tied in any substantial way to particular policies, whatever the preferences of the electorate. Influence on the politician is greatest at the time of election. Once elected, the representative is released from popular control but continues to

be exposed to powerful pressure groups, especially corporations, state bureaucracies and political party power brokers.

In principle, elections should work all right for moderately small electorates and political systems, where accountability can be maintained through regular contact. Elections can be much better justified in New England town meetings than in national parliaments making decisions covering millions of people. In these large systems, a whole new set of reinforcing mechanisms has developed: political party machines, mass advertising, government manipulation of the news, government projects in local areas, and bipartisan politics. In essence, voters are given the choice between tweedledee and tweedledum, and then bombarded with a variety of techniques to sway them towards one or the other.

This is a depressing picture, but hope springs eternal from the voter's pen. Some maintain the faith that a mainstream party may be reformed or radicalised. Others look towards new parties. When a new party such as the greens shows principles and growth, it is hard to be completely cynical.

---

**Brian Martin** teaches in the Department of Science and Technology Studies, University of Wollongong, and has long been involved in the radical science, environmental and peace movements.

---

Nevertheless, all the historical evidence suggests that parties are more a drag than an impetus to radical change. One obvious problem is that parties can be voted out. All the policy changes they brought in can simply be reversed later.

---

**Voters are given the choice between tweedledee and tweedledum, and then bombarded with a variety of techniques to sway them towards one or the other.**

---

More important, though, is the pacifying influence of the radical party itself. On a number of occasions, radical parties have been elected to power as a result of popular upsurges. Time after time, the 'radical' parties have become chains to hold back the process of radical change.

Ralph Miliband gives several examples where labour or socialist parties, elected in periods of social turbulence, acted to reassure the dominant capitalist class and subdue popular action.<sup>1</sup> For example, the Popular Front, elected in France in 1936, made its first task the ending of strikes and occupations and generally dampening popular militancy. The experiences of Eurosocialist parties elected to power in France, Greece and Spain in the 1980s have followed the same pattern. In all major areas — the economy, the structure of state power, and foreign policy — the Eurosocialist governments have retreated from their initial goals and become much more like traditional ruling parties.<sup>2</sup>

**Voting disempowers the grassroots** If voting simply didn't work to bring about changes at the top, that would not be a conclusive argument. After all, change in society doesn't just come about through laws and policies. There are, after all, plenty of opportunities for action outside the electoral system.

It is here that voting makes a more serious inroad into radical social action: it is a diversion from grassroots action. The aim of electoral politics is to elect someone who then can take action. This means that instead of taking direct action against injustice, the action becomes indirect: get the politicians to do something.

On more than one occasion, I've seen a solid grassroots campaign undermined by an election. One example is the 1977 Australian federal election in the midst of a powerful anti-uranium mining campaign. Another is the 1983 Australian federal election at a crucial point in the campaign against the flooding of the Franklin River in Tasmania.<sup>3</sup>

It should be a truism that elections empower the politicians and not the voters. Yet many social movements continually are drawn into electoral politics. One reason for this is the involvement of party members in social movements. Another is the aspirations for power and influence by leaders in movements. Having the ear of a government minister is a heady sensation for many; getting elected to parliament oneself is even more of an ego boost. What is forgotten in all this 'politics of influence' is the effect on ordinary activists.

---

**Elections empower the politicians and not the voters.**

---

This disempowering effect of elections works not only on activists but also on others. The ways in which elections serve the interests of state power have been admirably explained by Benjamin Ginsberg.<sup>4</sup> Ginsberg's basic thesis is that elections historically have enlarged the number of people who participate in 'politics', but by turning this involvement into a routine activity (voting), elections have reduced the risk of more radical direct action.

The expansion of suffrage is typically presented as a triumph of downtrodden groups against privilege. Workers gained the vote in the face of opposition by the propertied class; women gained in the face of male-dominated governments and electorates. Ginsberg challenges this picture. He argues that the suffrage in many countries was expanded in times when there was little social pressure for it.

Why should this be? Basically, voting serves to legitimate government. To expand its legitimacy, if required, suffrage can be expanded. This is important when mass support is crucial, for example during wartime. It can be seen in other areas as well. Worker re-

presentatives on corporate boards of management serve to coopt dissent; so do student representatives on university councils.

Ginsberg shows that elections operate to bring mass political activity into a manageable form: election campaigns and voting. People learn that they can participate: they are not totally excluded. They also learn the limits of participation. Voting occurs only occasionally, at times fixed by governments. Voting serves only to select leaders, not to directly decide policy. Finally, voting doesn't take passion into account: the vote of the indifferent or ill-informed voter counts just the same as that of the concerned and knowledgeable voter. Voting thus serves to tame political participation, making it a routine process that avoids mass uprisings.

**Voting reinforces state power** Ginsberg's most important point is that elections give citizens the impression that the government does (or can) serve the people. The founding of the modern state a few centuries ago was met with great resistance: people would refuse to pay taxes, to be conscripted or to obey laws passed by national governments.

The introduction of voting and the expanded suffrage has greatly aided the expansion of state power. Rather than seeing the system as one of ruler and ruled, people see at least the possibility of using state power to serve themselves. As electoral participation has increased, the degree of resistance to taxation, military service, and the immense variety of laws regulating behaviour, has been greatly attenuated.

The irony in all this, as pointed out by Ginsberg, is that the expansion of state power, legitimated by voting, has now outgrown any control by the participation which made it possible. States are now so large and complex that any expectation of popular control seems remote.

Using Ginsberg's perspective, the introduction of some competition into elections in the Soviet Union and eastern Europe takes on a new meaning. If the economic restructuring seen as necessary by Communist Party leaders is to have any chance of success, then there must be greater support for the government. What better way than introducing some choice into voting?

Increased government legitimacy, and hence increased real power for the government, is the aim.

Ginsberg's analysis leads to the third major limitation of electoral politics: it relies on the state and reinforces state power. If the state is part of the problem — namely being a prime factor in war, genocide, repression, economic inequality, male domination and environmental destruction — then it is foolish to expect that the problems can be overcome by electing a few new nominal leaders of the state.

The structure of the state, as a centralised administrative apparatus, is inherently flawed from the point of view of human freedom and equality. Even though the state can be used occasionally for valuable ends, as a means the state is flawed and impossible to reform. The nonreformable aspects of the state include, centrally, its monopoly over 'legitimate' violence and its consequent power to coerce for the purpose of war, internal control, taxation and protection of property and bureaucratic privilege. The problem with voting is that these basic premises of the state are never considered open for debate, much less challenged.

Voting can lead to changes in policies. That is fine and good. But the policies are developed and executed within the state framework, that is a basic constraint. Voting legitimates the state framework.

### Alternatives to Elections

What participatory alternatives are there to the state and electoral politics?<sup>5</sup> Here I can do no more than highlight some relevant answers and experiences.

**Referendums** One set of alternatives is based on direct mass involvement in policy-making through voting, using mechanisms including petition, initiative and referendum. Instead of electing politicians who then make policy decisions, these decisions are made directly by the public. The direct policy-making referendum is the key measure here.

In practice, referendums have been only supplements to a policy process based on elected representatives. But it is possible to conceive of a vast expansion of the use of referendums,

especially by use of computer technology.<sup>6</sup> Some exponents propose a future in which each household television system is hooked up with equipment for direct electronic voting. The case for and against a referendum proposal would be broadcast, followed by a mass vote. What could be more democratic?

Unfortunately there are some serious flaws in such proposals. These go deeper than the problems of media manipulation, involvement by big-spending vested interests, and the worries by experts and elites that the public will be irresponsible in their use of direct voting.

Who sets the agenda for the referendum? In other words, who decides the questions? Who decides what material is broadcast for and against a particular question? Who decides the wider context of voting?

The fundamental issue concerning setting of the agenda is not simply bias. It is a question of participation. Participation in decision-making means not just voting on pre-designed questions, but participation in the formulation of which questions are put to a vote. This is something which is not easy to organise when a million people are involved, even with the latest electronics. It is a basic limitation of referendums.

The key to this limitation of referendums is the presentation of a single choice to a large number of voters. Even when some citizens are involved in developing the question, as in the cases of referendums based on the process of citizen initiative, most people have no chance to be involved in more than a yes-no capacity. The opportunity to recast the question in the light of discussion is not available.

Another problem for referendums is a very old one, fundamental to voting itself. Simply put, rule by the majority often means oppression of the minority.

**Consensus** Consensus is a method of decision-making without voting that aims for participation, group cohesion, and openness to new ideas. Combined with other group skills for social analysis, examining group dynamics, developing strategies and evaluation, consensus can be powerful indeed.<sup>7</sup>

Yet anyone who has participated in

consensus decision-making should be aware that the practice is often far short of the theory. Sometimes powerful personalities dominate the process; less confident people are afraid to express their views. Because objections normally have to be voiced face-to-face, the protection of anonymity in the secret ballot is lost. Meetings can be interminable, and those who cannot devote the required time to them are effectively disenfranchised.<sup>8</sup>

The biggest problem for consensus, though, is irreconcilable conflict of interest. The best treatment of this problem is by Jane Mansbridge.<sup>9</sup> (See her article in this issue.) As a democratic alternative to elections, consensus has severe limitations dealing with large groups.

**Small size** One solution to this dilemma is to keep group sizes small.<sup>10</sup> Even voting is not so limiting when the number of voters is so small that everyone is potentially known to everyone else. The use of consensus can be maximised.

Furthermore, small size opens the possibility of a plurality of political systems. Frances Kendall and Leon Louw propose a Swiss-like federation of autonomous political entities, each of which can choose its own political and economic system.<sup>11</sup>

One of the advantages of Kendall and Louw's system is that experimentation with different social and political systems is facilitated. The difficulties of trying new methods, and the costs of failures, are greatly reduced.

Small size may make governance easier, but there will still be some large-scale problems requiring solution. Global pollution and local disasters, for example, call for more than local solutions. How are decisions to be made about such issues?

More fundamentally, small size by itself doesn't solve the issue of how decisions are made. There can still be deep conflicts of interest which make consensus inappropriate, and there can still be problems of domination resulting from electoral methods.

Finally, in all but the very tiniest groups, the basic problem of limits to participation remains. Not everyone has time to become fully knowledgeable about every issue. Consensus

assumes that everyone can and should participate in decisions; if substantial numbers drop out, it becomes rule by the energetic, or by those who have nothing better to do. Representative democracy, by contrast, puts elected representatives in the key decision-making roles; the participation of everyone else is restricted to campaigning, voting and lobbying. In both cases participation is very unequal, not by choice but by the structure of the decision-making system.

**Delegates and federations** Another solution to the problem of coordination and participation is delegates and federations. A delegate differs from a representative in that the delegate is more closely tied to the electorate: the delegate can be recalled at any time. Federations are a way of combining self-governing entities. The member bodies in the federation retain the major decision-making power over their own affairs. The members come together to decide issues affecting all of them. In a 'weak federation', the centre has only advisory functions; in a 'strong federation', the centre has considerable executive power in specified areas. By having several tiers in the federation, full participation can be ensured at the bottom level and consultation and some decision-making occurs at the highest levels. (See Ratna's article in this issue.)

Delegates and federations sound like an alternative to conventional electoral systems, but there are strong similarities. Delegates are normally elected, and this leads to the familiar problems of representation. Certain individuals dominate. Participation in decision-making is unequal, with the delegates being heavily involved and others not. To the degree that decisions are actually made at higher levels, there is great potential for development of factions, vote trading and manipulation of the electorate.

This is where the delegate system is supposed to be different: if the delegates start to serve themselves rather than those they represent, they can be recalled. But in practice this is hard to achieve. Delegates tend to 'harden' into formal representatives. Those chosen as delegates are likely to have much more experience and knowledge than the ordinary person. Once chosen, the delegates gain even more experience and knowledge, which can be presented as of high

value to the electors. In other words, recalling the delegate will be at the cost of losing an experienced and influential person.

These problems have surfaced in the German Green Party. Although formally elected as representatives, the party sought to treat those elected as delegates, setting strict upper limits on the length of time in parliament. This was resisted by some of those elected, who were able to build support due to their wide appeal. Furthermore, from a pragmatic point of view, those who had served in parliament had the experience and public profile to better promote the green cause. Thus the delegate approach came under great stress.

The fundamental problem with the delegate system, then, is unequal participation. Not everyone can be involved in every issue. With delegates, the problem is resolved by having the delegates involved much more in decision-making, at the expense of others. This unequal participation then reproduces and entrenches itself. The more layers there are to the federation, the more serious this problem will be. Federations are not a magical solution to the problem of coordination in a self-managing society.

In this brief survey of some of the more well-known participative alternatives to elections, I've focussed on their limitations. But these and other methods do have many strengths, and are worth promoting as additions or alternatives to the present system. Consensus has been developed enormously over the past couple of decades as a practical decision-making method. The potential of decentralisation is undoubtedly great. Rather than dismissing these and other possibilities, my aim has been to point out some of the problems that confront them. The most serious is participation in a wide range of issues that affect any person. How can the activities of large numbers of people be coordinated without vesting excessive power in a small group of people?

### **Demarchy**

The most eloquent account of demarchy is given by John Burnheim in his book *Is Democracy Possible?*<sup>12</sup> Demarchy is based on random selection of individuals to serve in decision-making groups which deal with particular functions or services, such

as roads or education. Forget the state and forget bureaucracies. In a full-fledged demarchy, all this is replaced by a network of groups, whose members are randomly selected, each dealing with a particular function in a particular area.

John Burnheim's article in this issue gives a basic outline of demarchy. Therefore I will restrict my comments, focussing on how demarchy deals with the problems raised earlier about elections and participation.

Because there are no elections and no representatives, the problems of unequal formal power, disempowerment of electors, regulation of participation and so forth do not apply—at least not in the usual way. Formal participation occurs instead through random selection onto 'functional groups', namely groups dealing with particular limited areas. Random selection for each group is made only from those who volunteer, just as politicians must volunteer. The difference is the method of selection: random selection rather than election.

Few people would volunteer for every possible group. Most are likely to have special interests, such as postal services, art, manufacture of building materials and services for the disabled. They could volunteer to serve on the relevant groups, and also make submissions to the groups, comment on policies and in other ways organise to promote their favoured policies.

Demarchy solves the problem of participation in a neat fashion. Recognising that it is impossible for everyone to participate on every issue in an informed fashion, it avoids anything resembling a governing body which makes far-reaching decisions on a range of issues. Instead, the functional groups have a limited domain. The people who care most about a particular issue can seek to have an influence over policy in that area. They can leave other issues to other groups and the people most concerned about them. This is basically a process of decentralisation of decision-making by topic or function rather than by geography or numbers.

Leaving decision-making to those who care most about a topic has its dangers, of course: self-interested cliques can obtain power and exclude others. That is what happens normally in all sorts of organisations, from govern-

ments and corporations to social movement groups. Demarchy handles this problem through the requirement of random selection. No one can be guaranteed a formal decision-making role. Furthermore, the terms of service are strictly limited, so no permanent executive or clique can develop.

---

**Demarchy is basically a process of decentralisation of decision-making by topic or function rather than by geography or numbers.**

---

Another problem then looms. Won't there be biases in the groups selected, because only certain sorts of people will volunteer? Won't most of the groups, for example, be dominated by white middle-aged men? This poses no problem, given a suitable adaptation of how the random selection is carried out. Suppose, for example, that 80 men and 20 women volunteer for a group of 10, for which it is desired to have an equal number of men and women. The method is simply to select 5 men randomly from the 80 male volunteers and 5 women from the 20 female volunteers. In this way, the sex balance in the group can equal that in the overall population even with different rates of volunteering.

What if people don't volunteer? What if certain groups don't produce enough volunteers for their quota? In some cases this would be a sign of success. If the way things are operating is acceptable to most people, then there would be no urgency about becoming a member of a decision-making group. By contrast, in controversial areas participation is not likely to be a problem. If topics such as abortion or genetic engineering generated passionate debate, then concerned individuals and groups would find it fruitful to educate as many people as possible about the issues and encourage them to stand for random selection. Indeed, any unpopular decision could generate a mobilisation of people to stand for selection. Furthermore, the people mobilised would have to span a range of categories: men and women, young and old, etc. As a result, participation and informed comment would be highest in the areas of most concern. In other areas, most people would be happy to let others look after matters.

Of special interest are those who have tried out random selection in practice. One such person is Ned Crosby, who set up the Jefferson Center for New Democratic Processes. It has devoted most of its energy towards practical experiments in random selection for policy-making,<sup>13</sup> some of which are described in Crosby's article in this issue. Similar projects have been undertaken in West Germany beginning in the 1970s, led by Peter Dienel at the University of Wuppertal. The groups of randomly selected citizens brought together for these projects are called 'planning cells'. The cells have dealt with issues such as energy policy, town planning and information technology.<sup>14</sup>

Between the few experiments with policy juries and planning cells and Burnheim's vision of demarchy is an enormous gulf. What strategy should be used to move towards demarchy?

Burnheim thinks that as various government bodies become discredited, they may be willing to switch to demarchic management in order to maintain community legitimacy. This may sound plausible, but it provides little guidance for action. After all, there are plenty of unpopular, discredited and corrupt institutions in society, but this has seldom led to significant changes in the method of social decision-making. More specifically, how should demarchy be promoted in these situations? By lobbying state managers? By raising the idea among the general population? One thing is clear. The idea of demarchy must become much more well known before there is the slightest chance of implementation.

The experimentation with policy juries and planning cells is vital in gaining experience and spreading the idea of participation through random selection. The limitation of these approaches is that they are not linked to major social groups which would be able to mobilise people to work for the alternative.

Amongst the 'major social groups' in society, quite a number are likely to be hostile to demarchy. This includes most of the powerful groups, such as governments, corporate managements, trade union leaders, political parties, militaries, professions, etc. Genuine popular participation, after all, threatens the prerogatives of elites.

In my opinion, the most promising source of support is social movements: peace activists, feminists, environmentalists, etc. Groups such as these have an interest in wider participation, which is more likely to promote their goals than the present power elites. Social movement groups can try to put demarchy on the agenda by the use of study groups, lobbying, leafletting and grassroots organising.

Demarchy, though, should not be seen only as a policy issue, as a measure to be implemented as a result of grassroots pressure. Demarchy can also be used by social movements as a means. In other words, they can use it for their own decision-making.

This may not sound like much of a difficulty. After all, many social action groups already use consensus either formally or de facto. Also, the system of delegates is quite common. It would not seem a great shift to use random selection for decision-making at scales where direct consensus becomes difficult to manage.

Unfortunately, matters in many social movements are hardly this ordered. In many cases, formal bureaucratic systems have developed, especially in the large national organisations, and there are quite a number of experienced and even charismatic individuals in powerful positions. These individuals are possibly as unlikely as any politician to support conversion to a different system of decision-making. (This itself is probably as good a recommendation for random selection as could be obtained. Any proposal that threatens elites in alternative as well as mainstream organisations must have something going for it.)

Nevertheless, social movements must be one of the more promising places to promote demarchy. If they can actually begin to try out the methods, they can become much more effective advocates. Furthermore, the full vision of demarchy, without the state or bureaucracy, stands a better chance within non-bureaucratized social movements than amidst the ruins of bungled government enterprises.

One of the most promising areas for promoting demarchy is in industry.<sup>15</sup> Workers are confronted by powerful hierarchical systems on every side: corporate management, governments

and trade union bosses. There is plenty of experience in cooperative decision-making at the shop floor level; difficulties arise at higher levels of decision-making. It is here that random selection presents itself as a real alternative. Councils, composed of both workers and managers selected randomly to serve a short period, provide a basis for communication and coordination. This approach overcomes the defects of all forms of representation. Workers' representatives on boards of management have served to coopt workers, while representatives in the form of trade union delegates have often become separated from the shop floor. Demarchic groups provide a way to maintain shop floor involvement in large enterprises.

---

**Social movements must be one of the more promising places to promote demarchy.**

---

The key point here is that demarchy should not be treated as a policy alternative, to be implemented from the top, but rather as a method of action itself. The ends should be incorporated in the means. It is quite appropriate that groups promoting demarchy use its techniques.

Needless to say, the future of demarchy cannot be mapped out. It is stimulating to speculate about solutions to anticipated problems; Burnheim's general formulations are immensely valuable in providing a vision. But as democracy by lot is tested, promoted, tried out, enjoys successes and suffers failures, it will be revised and refined. That is to be expected.

The message is that the process of developing and trying out alternatives is essential for all those seeking a more participative society. True enough, some worthy reforms can be achieved through the old channels of electoral politics, but that is no excuse for neglecting the task of investigating new structures. Demarchy is one such alternative, and deserves attention.

Electoral politics — that brings me back to the greens. They may be one of the most exciting political developments in decades, but in entering electoral politics they may have limited their potential for bringing about radical change. Ironically, it is the popular, charismatic green politicians who provide least threat to established power structures. Electoral success will ensure continuing reliance on the old system of politics.

**Acknowledgements** I thank Bob James and Ralph Summy for valuable comments on an earlier draft.

**NOTES**

1. Ralph Miliband, *The State in Capitalist Society* (London: Weidenfeld and Nicolson, 1969).
2. Carl Boggs, *Social Movements and Political Power: Emerging Forms of Radicalism in the West* (Philadelphia: Temple University Press, 1986).
3. Brian Martin, 'Environmentalism and electoralism', *The Ecologist*, Vol. 14, No. 3, 1984, pp. 110-118.
4. Benjamin Ginsberg, *The Consequences of Consent: Elections, Citizen Control and Popular Acquiescence* (Reading, MA: Addison-Wesley, 1982). See also Benjamin Ginsberg, *The Captive Public: How Mass Opinion Promotes State Power* (New York: Basic Books, 1986).
5. A good general treatment is Benjamin R. Barber, *Strong Democracy: Participatory*

*Politics for a New Age* (Berkeley: University of California, 1984).

6. F. Christopher Arterton, *Teledemocracy: Can Technology Protect Democracy?* (Newbury Park, CA: Sage, 1987).
7. Virginia Coover et al., *Resource Manual for a Living Revolution* (Philadelphia: New Society Publishers, 1981) is a classic treatment.
8. See for example Charles Landry et al., *What a Way to Run a Railroad: An Analysis of Radical Failure* (London: Comedia, 1985); Howard Ryan, *Blocking Progress: Consensus Decision Making in the Anti-nuclear Movement* (Berkeley: Overthrow Cluster, Livermore Action Group, 1983).
9. Jane J. Mansbridge, *Beyond Adversary Democracy* (New York: Basic Books, 1980).
10. The case is given by Leopold Kohn, *The Breakdown of Nations* (London: Routledge and Kegan Paul, 1957) and Kirkpatrick Sale, *Human Scale* (New York: Coward, McCann and Geoghegan, 1980).
11. Frances Kendall and Leon Louw, *After Apartheid: The Solution for South Africa* (San Francisco: ICS Press, 1987).
12. John Burnheim, *Is Democracy Possible? The Alternative to Electoral Politics* (London: Polity Press, 1985).
13. Ned Crosby, Janet M. Kelly and Paul Schaefer, 'Citizens panels: a new approach to citizen participation', *Public Administration Review*, Vol. 46, March/April 1986, pp. 170-178. For more information contact the Jefferson Center, Plymouth Building, 12 S. 6th Street, Minneapolis MN 55402, USA.
14. Peter C. Diemel, 'Contributing to social decision methodology: citizen reports on technological projects', in C.A.G. Vlek and G. Cvetkovich (eds.), *Social Decision Methodology for Technological Projects* (Dordrecht: Kluwer Academic Publishers, 1989), pp. 133-151.
15. F.E. Emery, 'Adaptive systems for our future governance', in F.E. Emery (ed.), *Systems Thinking*, Vol. 2 (Harmondsworth: Penguin, 1981); F.E. Emery, *Toward Real Democracy and Toward Real Democracy: Further Problems* (Toronto: Ontario Ministry of Labour, 1989).

