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Democracy, the Environment, and the Internet

Abstract

Democratic theory and practice underwent something of a renaissance in the late twentieth century. The spread of liberal democratic political systems was accompanied by two other trends that have the potential to transform the shape of politics: the rise of environmental movements and increased public use of the Internet. These changes have generated two theoretical variations on the theme: ecological and digital democracy. This paper reviews these two schools of thought and considers the possibility of a synthesis between them.

Introduction

The recent resurgence in the popularity of democratic theory could be attributed to three major factors. First, the end of the Cold War has led to the rapid spread of various versions of liberal democratic political systems around the world. Second, the last few decades has seen a swift rise in new social movements, particularly those generated by environmental concerns, that seek to engage with or alter the institutions of power. Third, the increase in public Internet use in the developed world offers some potential to alter the way the system works.

Democracy is an idea that many people support but there is a substantial gulf between theory and practice. This paper reviews three variants of the ideal (liberal, ecological and digital democracy) and attempts to reconcile them with current political practice. The first section revisits the idea of liberal democracy and considers some its key features, strengths and weaknesses. Section two examines Dryzek's proposals for transforming liberal institutions into ecological democracy and section three considers the potential impact of the Internet. Finally, the last section outlines a possible synthesis of digital and ecological democracy ideas via three examples of current political interactions.

Overall it is argued that while all versions of democratic theory have their limitations, there is still considerable merit in the concept. Further, it is suggested that while the Internet may not have transformed democracy, there are a number of situations in which it has already had a significant impact in advancing the concerns of the environmental movement. This impact, however, is limited and engages only those few citizens who have the motivation, time, skills, political networks, and access to the information technology.

1) Liberal Democracy Revisited

In introducing the concept of digital democracy, Hague and Loader (1999, 7) identify the core values of liberal democratic government: "Democracy has at its heart self-determination, participation, voice and autonomy. It is a political culture that includes a wide range of realms for self-development and mutual collective expression." A

complex network of institutions has developed to embody these values: the constitutional separation of powers, a state controlled by an elected executive, parliamentary representation and review, the rule of law, and either explicit or implicit rights for citizens. These institutions are both supported and challenged by a range of political parties, pressure groups, social movements, and political cultures.

Although the set of rights that should be granted to citizens is often disputed, there are core rights that make regular appearance in most forms of liberal democratic theory. First, there is the right to participate in elections as voters and candidates. Second, there is the right to freedom of speech, which is designed to let citizens' voice their concerns. Third, there is the right to freedom of movement, which allows people to take their campaign to significant political locations. Fourth, there is the right to freedom of association so that like-minded people can form pressure groups or new political parties. Finally, there is the right to resist unjust authority through protests and demonstrations (May 1978, 1; Beetham 1992, 41; Macpherson 1966, 57; Moore 1967, 415).

Exercising these rights is supposed to activate both political and economic feedback mechanisms. A non-government media can report on concerned citizens' actions and inform the rest of society of a problem (Rustow 1990, 81). If citizens are dissatisfied with the response of their political leaders, they can put forward their own candidates for election (Dahl 1967, 84). If successful, they have access to parliament as a forum for open debate and could initiate their own legislation. Further, if they gain the balance of power, governments would be forced to negotiate with them and at least part of their agenda may be implemented. In theory, businesses would be forced to comply with any new regulatory measures negotiated. Some may even anticipate a change in consumption patterns due to the campaigns of reformers and seek to profit by catering for the change of tastes. Other businesses would eventually be forced to follow in order to avoid losing their market share. Of course this is a highly idealised model and all of these mechanisms depend on the active participation of citizens and consumers (Pateman 1974, 105; Eckersley 1995, 16).

In Australia a version of this ideal has been played out over the last three decades. Green groups formed in the 1970s in protest to development decisions launched very successful national campaigns in the 1980s, were elected to State and Commonwealth parliaments, formed political parties in the 1990s, and have held the balance of power in Tasmania, the Senate, and Western Australia. Both governments and oppositions were forced to change their policies in response to these developments. Yet for all the successes of the Greens, our political and economic systems are still generating major ecological problems.

Post-pluralist, Marxist and elite theorists would have no trouble explaining this result. Critical studies in the USA by Crenson (1971), Lukes (1974) and Lindblom (1977) pointed out that the hidden dimensions of political power, such as agenda setting and ideology, favoured entrenched business elites. This allows them to effectively block environmental interventions. Miliband (1970, 69-75 & 125) points out that although there is a superficial plurality of parties and pressure groups in liberal democratic societies, there is little dispute about fundamental belief in the legitimacy of capitalism amongst political leaders. As a result, state intervention is designed to support capitalism regardless of which party is in power. This support is not viewed

as favouring or working for business, it is just seen as good policy. Further, the circulation of technocrats between jobs in the private and public sector helps inject a pro-business ideology into state institutions. McEachern (1980, 27) argues that capitalist ideology essentially shapes "the space and manner in which the state will act." Although the state is not a simple puppet of business, it will defend the interest of capital. His study of the Hawke government in Australia revealed that although business did not get everything it wanted it had "the luxury of only small differences between two major parties, each vying to find ways to ensure advantage for private business" (McEachern 1991, 153 & 125). He suggests that environmental intervention during this period was motivated both by a desire to protect business from disruptive environmental disputes and a wish to capture the rapidly growing 'green' vote.

The problem for theorists who blame capitalism for environmental problems is that industry continues to do damage in the absence of market economies and liberal democratic political systems. Dilorenzo (1993, 14) and North (1995, 267-78), for example, point to the very poor environmental record of industry in the former socialist states of Eastern Europe. They see the state intervention as the problem and argue that it encourages inefficiency. The difficulty for these theorists, however, is to explain why unbridled businesses have continued to knowingly generate serious environmental problems and why many improvements in environmental quality have been caused by state intervention.

The apparent collapse of alternatives with the end of the Cold War, combined with the rapid global spread of liberal democracy and market economies, has led to a range of proposals for a major institutional restructuring of capitalism, rather than its replacement. Ecological modernisation theorists such as AtKisson (1999, 70-91 & 205-206), Hawken, Lovins and Lovins (1999, 231-283), for example, sidestep the issues of unequal political power and promote the idea of constructing economic feedback loops that provide a constant incentive for more efficient resource use and reduced pollution. Reflexive modernisation theorists like Beck (1998, 20-21; 1992, 234-35) and Giddens (1994, 107; 1998, 33) argue for a deeper restructuring of both political and economic institutions to open them up to the sub-politics of environmentalism and other social movements. These ideas are part of a wider eco-democratic literature that calls for a major transformation of the institutions of power so that feedback about environmental problems is hard-wired into a democratic decision making process.

2) From Liberal to Ecological Democracy

Dryzek is one of the most prominent thinkers in the ecological democracy school and has been developing the concept over several years. It is therefore worth looking at his work in some detail. He argues that present state hierarchical institutions cannot adequately address the environmental problems associated with industry for three reasons (Dryzek 1990, 99-101). First, there is no common purpose within the state. Second, hierarchies are too inflexible to deal with complex problems because they cannot adequately deconstruct them. Third, hierarchical systems obstruct the flow of information needed for effective problem solving. Simply giving existing state institutions more power will therefore not be adequate (Dryzek 1992, 24-27). Dryzek's solution includes: the promotion of a public sphere in which strong and vociferous social movements constantly challenge the state; the restructuring of state hierarchies into flexible multi-skilled teams with more public consultation and democratic decision making; and the extension of these changes to private organisations so that economic decision making also becomes more democratic (Dryzek 1992, 31-41). His aim is to encourage "communicative rationality".

[C]ommunicative rationality is conducive to social problem solving in as much as it enables the individuals concerned with different facets of a complex problem to pool their understandings and harmonise their actions in the light of reciprocal understanding of the various normative issues at stake. This process proceeds in non hierarchical fashion, and so no cognitive burden is imposed on any decision centre (Dryzek 1990, 102).

Dryzek's proposals are founded on theories of communicative competence, public spheres, and ideal speech forums developed by Habermas (1970, 360-375; 1987). The idea is that if individuals with different interests participate in ideal decision making forums, they will negotiate until a consensus is struck that is in accord with a general interest. Special interests should be stripped away as participants attempt to justify their position and persuade the rest of the group (Dryzek 1992, 40).

In Australia, it could be argued that the nine ESD Working Groups, 1990-91, were an approximation of ideal speech forums. They involved 144 participants from all three levels of government, most business sectors, environmentalists, unions, technical experts and community representatives. The eventual outcome was the 1992 *National Strategy for Ecologically Sustainable Development* and the incorporation of some of its principles into Commonwealth and State environment protection legislation. One of the key features of both these developments was concern about meeting the needs of present and future generations. The difficulty with this view, however, is that as the policy process progressed the goal was transformed from protecting the environment to protecting key business interests (Howes 2000, 65-85).

A major problem with trying to create ideal speech forums is that if the perception of interests and knowledge are even partly affected by political ideologies or discourses, the outcome of these forums may not be in the general interest. For example, if there was a commonly held discourse among the participants that encouraged them to make concessions for business, the outcome would be a biased consensus favouring a dominant interest. This point was made by Meister and Japp (1998, 417) who suggest that consensus may actually be an indication of a hegemonic power at work. Beck (1998, 13-16), for example, warns of the need to challenge experts in open decision making forums in order to avoid the domination of scientific discourses that play down the environmental risks, overstate the capacity of current institutions to respond, and exclude non-experts.

Dryzek (1992, 41) and Habermas (1970, 372-374) appear to both be aware of the difficulties of establishing a truly ideal speech forum because of the effects of discourse. In his earlier work Dryzek acknowledged that there are different ways of thinking, that are largely influenced by the activity in which individuals are engaged. He sorts these ways of thinking into five categories of rationality: economic, social, legal, political, and ecological. Dryzek argues that ecological rationality should have priority because without a viable ecology, there can be no society, economics, law, or

politics. He then goes on to identify several features of ecology that should be included in the proposed alternative structures:

[N]egative feedback (the production of responses to human-induced shortfalls in life-support capability), coordination (across both actors and decisions), robustness (of performance across different circumstances), flexibility (in adjusting structure to cope with novel conditions), and resilience (the ability to correct severe disequilibrium) (Dryzek 1987, 11).

The idea is that if social, economic, legal and political choice mechanisms had these attributes, they could adequately identify and respond to ecological problems that threaten their fundamental existence. Dryzek (1987, 85) recognises that "moral persuasion" is a potentially significant influence on decision makers and outcomes.

In a political context, moral persuasion can take a number of forms: education, propaganda, discussion, reasoning, linguistic manipulation, and exhortation. The agents of persuasion therefore include educational institutions, the media, religious institutions, and political leaders, activists, and organisations. In this form of social control, then, there is no threat of force, no sanction of law, and no place for the material incentives used in administered and market systems. Moral persuasion as a distinctive form of social choice retains a high degree of individual autonomy and volition (Dryzek 1987, 150).

However, Dryzek (1987, 161) plays down the effectiveness of moral persuasion in liberal democratic societies such as Australia. He maintains that more participatory decision making forums should redress at least some of the current imbalance in power, even if they are not ideal (Dryzek 1992, 34). Further, he harbours some hope for ideal speech because he believes that a general interest in achieving ecological rationality is obvious (Dryzek 1987, 204). In essence, Dryzek (1987, 184) is proposing to open up public debate, establish democratic forums for decision making, and promulgate ecological rationality. In later work Dryzek (1997, 10-19) explores the range of within the environmental debate and the effects of these discourse on institutions discourses. He still, however, maintains that a restructured, ecological democracy would help the community recognise its common interests in a healthy environment (Dryzek 1997, 200).

The proposed expansion of open, participatory decision making is laudable from a democratic viewpoint, but it may not give a desirable result. In the first place, democratic processes can produce undemocratic outcomes if the prevailing political culture is anti-democratic. The Weimar Republic, for example, voted itself out of democracy and into dictatorship when the majority of the electorate supported anti-democratic parties in the 1933 national poll (Lepsius 1978, 50). The result was a loss of civil rights, an end to elections, and the suspension of the constitutional separation of powers.

In the second place, the process itself may not be truly democratic because future generations that will be affected by such decisions are not represented. Remember the core values of democracy identified by Hague and Loader (1999, 7): "self-

determination, participation, voice and autonomy." This means that even if current generations have an opportunity to participate in decision making, future generations that are also affected by these decisions have no voice. There are two options here. We could apply Dryzek's ecological discourse to participants so that the plight of future generations is internalised by decision makers. This concern could extend to protecting other species that are affected by democratic decisions. Alternatively, there could be some participants delegated to represent the interests of future generations and other species (Eckersley 2000). This is what Eckersley (1999, 16) refers to as a 'democracy of the affected' and she proposes that it could be made operational in Australia if a procedural requirement to consider environmental impacts in democratic decision making could be added to the constitution.

In short, ecological democracy requires the transformation of decision making institutions, discourses, and political culture. It has the potential to respect core democratic values for present and future generations, and offers the opportunity for the accommodation of the interests of other species. At its heart is the notion of deliberative forums that allow citizens to be informed, networked and connected with key decision makers. This is where increased use of the Internet may prove useful.

3) Putting Democracy On-Line

Broadly speaking the literature on the effect of the Internet on democracy can be sorted into three main categories: optimism, pessimism, and equanimity. Optimists such as Hewitt (1998, 83-87) argue that the rise of the Internet is the historical equivalent to the invention of the printing press. She believes it will break down the control of information and allow the formation of direct relations between people and pressure groups around the world. This will make the formation of pressure groups and organisation of campaigns easier. There is a note of caution, however, in that online communications could lead to greater surveillance. Smith (2001, 48-50) also notes how the Internet has increasingly been used to organise protests and network pressure groups around the world.

The risk of surveillance is the point often picked up by the pessimists. Several features of this new technology increase this risk. First, all visits to web sites and all e-mails sent and received leave an electronic footprint that can be traced. This means that an employer or agency can see what you have been accessing, who you have been in contact with, and read the content of your communications. Second, electronic records of communications persist on the hard drive of a computer and in some cases may even be retrieved after they have been deleted. Third, software is available that can scan for key words in communications and bring them to an administrator's notice. These features have been highlighted in the popular media with references to Orwell's 'Big Brother' (not to be confused with the dreadful TV show of the same name) (Correy 1998; Foreshew 2001). In the academic literature, Moore (1999, 41-59) warns of the need to protect against surveillance, the hijacking of the web by the extreme right, and the development of information monopolies by powerful transnational firms that seek to act as on-line gatekeepers.

Between optimism and pessimism are theorists that approach the Internet with a degree of equanimity. Hague and Loader (1999, 21) suggest that information and communication technologies are neither a panacea for the shortcomings of liberal

democracy, nor do they spell its doom, they are simply a potentially useful tool for conducting current interactions in new ways. Hale, Musso and Weare (1999, 97-115) in their study of 290 US municipal web sites identified a lack of civic education, apathy and feelings of disconnection between citizens and leaders as substantial barriers to greater civic engagement. They concluded that the use of the Internet to date has not overcome these barriers that are largely a product of political culture. Wilhelm (1999, 175-76) also found that the Internet is not being used to its full potential. Bimber (2001, 53-65) found it had not encouraged a culture of greater participation in the US democratic system. Magarey (1999, 417-19) concluded that Australian politicians are generally not enthusiastic about the idea of e-democracy and were sceptical about the effectiveness of e-mail communications with citizens.

Malina (1999, 25-38) refers to both Habermas and Giddens in her analysis of the impact of communication technology on democracy. She concludes that social networks are the key to improving democracy and argues that the deployment of new communications technology on its own may only entrench current inequalities. Milner (1999, 63-72) compared on-line public sector initiatives to provide better information to the community in Australia, the USA and UK. While she made favourable comments about the Australian initiatives of the early 1990s, she also raised the issue of the information 'haves' and 'have nots'. The theme of the possibility of a growing digital divide is picked up by Symmonds (2000, 32) who argues that it may increase the marginalisation of already vulnerable groups.

Overall it is apparent that the Internet has not yet led to the transformation of liberal democracy predicted by some optimists. There are, however, signs that the web is increasingly being used by the state, business and some environmental groups, but it should be noted that these users constitute only a few percent of the world's total population. Magarey (1999, 410) suggests that only 26% of Australians were regular Internet users in 1997 and Bimber (2001, 61) cites a similar figure for Americans in 1999 who are both on-line and engaged in politics.

4) Putting Ecological Democracy On-Line

Despite the limitations discussed, there remains considerable merit in the concepts of liberal, ecological and digital democracy. Consider the features promoted by these theories. Liberal democracy entails rights, participatory decision making processes, and a supportive political culture that generate effective political and economic feedback mechanisms. Ecological democracy extends these features to include discursive decision making forums, the representation of all those affected by decisions, and the diffusion of ecological rationality. Digital democracy offers the opportunity for improving the information provided to citizens, increased networking of activist groups, and improved communications between leaders and citizens. The question now is whether these ideas might be synthesised into a coherent whole. I would suggest that they can and offer three examples where the Internet has already been used to improve public information, increase social networking, and facilitate participation in environmental decision making.

Providing easier to access to information was the main focus of the early forays by the state into the Internet. Many agencies and departments in industrialised states had established some sort of web site by the mid-1990s (Hale, Musso, Weare 1999, 97;

Magarey 1999, 409; Hague & Loader 1999, 13; Milner 1999, 64-70). These sites were originally a one-way information flow where citizens could access selected documents. As has already been pointed out, this sort of site does little to increase democratic participation, but I would argue that there is at least one exception: on-line pollution inventories. These programs require industry to report their release of a given set of substances if they exceed a specified emission threshold over a year. The reported releases are then put on a state-run web site that can be interrogated by citizens to provide information on polluting sites in a given area, particular substance releases, national aggregate emissions, or historical trends.

The US created the Toxics Release Inventory (TRI) in 1987 as part of 'community right-to-know' legislation (US EPA 2001; US EPA 2000; US EPA 1995). Results were originally provided to local libraries as printed reports, but as computer and communication technology spread the inventory made the transition to computer discs then to an on-line database in the 1990s. Although the information was available in other formats, the on-line database has proved more accessible and easier to interrogate for specific information. The TRI is designed to:

- Force industry to conduct eco-audits and identify points of waste.
- Bring this waste to the attention of its senior executives.
- Alert local communities and the workforce of their potential exposure.
- Provide information to pressure groups.
- Provide information to state agencies and planners.

The aim is to use the Internet as a tool of governance to put pressure on polluters to reduce their emissions. It is assumed that the negative publicity, threats of legal action, campaigns by pressure groups and concerns of investors will force firms to improve their environmental performance.

Although the TRI is not without its critics, to a large extent it does appear to be working. Research by Habitch (1990), and Gottlieb, et al. (1995) indicates that industries have been prompted to clean up their production processes. Fairley (1996) suggests that industry has been critical of the program but Hearne (1996) and English (1997) found that environmental groups have generally been supportive, although not uncritical, and used the data in various ways. Hamilton (1993, 108) and Khanna, et al. (1998, 244-46), found that the disclosure of high emission levels on the TRI could significantly depress the share price of a reporting firm as investors are scared off by possible legal action, clean-up costs, and poor public relations. In this case the TRI appears to enhance both the political and economic feedback mechanisms of liberal democratic and market systems. It also appears to engage with the laissez-faire and litigious political culture of the USA.

Similar pollution inventories have been set up in the UK and Australia (Environment Agency UK 2001; NPI 2000). While both the UK and US TRI indicate substantial reduction in emissions over 10 years, the Australian inventory is still in its early stages so historical trends can't yet be identified. My own research suggests that the different political culture and institutions in Australia will have a major influence on the effectiveness of the local inventory (Howes 2001). The American and British success, however, indicates that a well designed web-based information source can

empower environmental groups and activate the sort of liberal democratic feedback mechanisms mentioned at the start of this paper.

The second example revolves around the concept of networking environmental groups. Hewitt (1998, 87) points out that the Internet enables pressure groups to share information around the world. This potential was also highlighted by Magarey (1999, 409-10) in her study of the Australian pressure group Australians for Native Title and Reconciliation that coordinated its efforts against the 1997 Native Title Bill on-line. Smith (2001, 48) points out that the global campaigns against the proposed Multi-lateral Agreement on Investment (MAI) and Nike also made extensive use of Internet connections between groups. Wilhelm (1999, 169-170), however, found that while US political newsgroup sites were often used to post information, only a minority of postings (15.7%) led to further political interaction.

Anti-globalisation groups have probably provided the most prominent example of online networking in recent times. Many environmental and social justice groups have been part of this process. The protests in Seattle spawned the protest group S11 (2001) that uses an Internet site to organise protests at major gatherings of political and economic leaders around the world. This site has been instrumental in networking a diverse group of protest organisations and targeting specific events such as the World Environment Forum meeting in Melbourne and the Commonwealth Heads of Government meeting in Brisbane. They have also been able to coordinate protests outside major stock exchanges around the world on May 1, 2001. It would be difficult to see how such coordination could occur without the Internet as a quick and cheap way to network key activist groups. Even though the number of people actually involved in the protests may often be relatively small, the fact that such a variety of actions in many different countries can be coordinated over several years is testament to the power of on-line networking. It should be noted that this observation is not an endorsement of these groups or their actions. The example is offered simply to demonstrate how the Internet can support the liberal democratic right to protest on a global scale.

Having made these points, the outcomes sought by groups using the Internet as a networking device have still been limited. Native title was still restricted by the 1997 Act, although the bill was amended to some extent. The MAI was abandoned but its free trade agenda is being pursued in other forums such as the World Trade Organisation. Nike claims to have changed its labour practices in developing countries, but through all the criticism it remained a profitable trans-national firm. World economic and political leaders show no sign of slowing the globalisation process, although G8 leaders did commit themselves to providing extra aid to developing states after their conference in Genoa.

The third and final example is that of increasing participation in democratic decision making by improving links between political leaders and citizens. Magarey (1999, 417-19) found that Australian politicians were sceptical of e-mail communications with constituents. I would like, however, to offer an account of an on-line interaction from the perspective of a participant observer.

In 1996 an organisation was formed that brought together activists, professionals and academics who were interested in environmental politics. I joined when the

association was formed. The membership was small and geographically dispersed, but was able to keep in contact by e-mail. Eventually a web site was set up with a biannual on-line newsletter. In early 1998, while exploring the Environment Australia web site, I discovered that the Commonwealth proposed to combine five pieces of separate legislation into a new Environment Protection and Biodiversity Conservation Act. The site contained details of the proposed new legislation and called for public submissions. I down-loaded the information and circulated an e-mail to the association's executive proposing that we make a submission. This idea was approved, I drafted a submission, circulated it and accepted proposed changes by email. The final draft was then circulated, voted on, and submitted by e-mail to Environment Australia. When the Bill came before parliament e-mails with the submission attached were then sent to the relevant senate committee, the minister and shadow minister of the environment, and the leaders of the minor parties. Two e-mail responses were received and the minister sent a two-page letter. I then followed the somewhat curtailed debate in the on-line version of Hansard and reported back to the association on the outcome in late 1999 by e-mail and put a summary in the on-line newsletter.

This experience demonstrates the potential for individuals and groups to use the Internet as a way of increasing their participation in the formal workings of liberal democratic decision making. Further, it indicates that at least some level of on-line link between political leaders and citizens may be possible. Having said this, I must report that our submission appears to have had little impact on the shape of the final legislation. Further, the entire process could have been carried out, albeit in a more cumbersome manner, using alternative written and telephone communications. The point is, however, that the Internet did help to facilitate contact with political leaders and participation in the democratic process even though it did not appear to have much effect on the outcome.

Conclusions

Although the shortcomings of liberal democracy have been highlighted by many theorists, variants such as ecological and digital democracy have arisen in response to some of the prevailing problems and offer the potential to improve how society is organised and governed. While the theoretical proposals for reform far outstrip contemporary practices, there are signs that these ideas are starting to have an impact on some political interactions. It should be noted, however, that the outcomes are still limited and participation remains restricted to those who are fortunate enough to have the motivation, time, skills, and access to the relevant political and technological networks. It would be fair to say that we operate within a liberal democratic political space that is bounded by the economic system, but eco-democratic theory and the Internet have the potential to push back these boundaries to some extent.

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