Chapter 5

Theories of Digital Democracy

Previous chapters have examined the technological environment, including the worldwide distribution and social profile of users, concluding that at present the Internet has provided alternative channels of communication primarily for countries and groups already rich in informational resources. In this view the Internet, like cable TV, mobile phones and fax machines before it, connects the connected more than the peripheral. The global reach, instantaneous speed and limitless information available via the Internet has the potential to serve a far wider and more diverse community worldwide -- providing a cornucopia of textbooks for Nigerian classrooms, a rich database of the latest medical research for Romanian hospitals, and a global shop window for Balinese art and Bangalore software -- but widespread popular access requires reduced financial barriers. Initiatives to wire poorer communities through public libraries, schools and community centers can aid diffusion, as can Internet cafes, and linkages via managerial, administrative and professional elites. But the fact that telephones, radios and televisions have not yet become standard items in poorer households around the world casts a skeptical light on the rosier scenarios projecting widespread connectivity for ordinary citizens in developing societies.

[Figure 5.1 about here]

Building on this foundation, this section of the book starts to explore the virtual political system that is emerging, meaning the way that governments and civic societies are in the process of adapting to information technologies, and the structure of political opportunities this creates for active citizenship and civic engagement. Throughout this section of the book the study focuses upon three core issues: Where and what type of political institutions are moving online? What are the functions of these political websites for maximizing transparent information and interactive communication? And what explains the rise of digital politics, in particular how far does socioeconomic, technological and political development drive this process? The virtual political system can be understood to mirror that in the non-digital world, using a conventional system model in which civic society -- including political parties, traditional interest groups and new social movements, and the news media -- mediate between citizens and the state (Figure 5.1). These institutions are understood to funnel demands upwards towards parliaments and government executives, in an agenda-setting and agenda-building role, as well as funneling information about government downwards towards the public. Understood in this way, what will be the overall impact of the information society on governments and
civic society? As with accounts of the global and social divides, interpretations offer sharply differing visions about the causes and consequences of digital politics.

**The Internet and Democracy**

It has become commonplace to suggest that the Western public has become more and more disenchanted with the traditional institutions of representative government, detached from political parties, and disillusioned with older forms of civic engagement and participation\(^1\). Putnam argues that the process of generational change in American has eroded the mass membership of voluntary associations and reduced social capital, debilitating the ability of communities to work together to solve common problems\(^2\). Political parties represent the core institution linking citizens and the state yet many have seen their membership rolls wane and the public seems increasingly detached from partisan politics\(^3\). While a broad 'crisis of democracy' has proved exaggerated, nevertheless indicators suggest increasing numbers of 'critical citizens' characterized by high expectations of democracy as an ideal and yet low evaluations of the actual performance of representative institutions\(^4\). For advocates of direct democracy, like Benjamin Barber, these indicators suggest that the forms of governance in the nation-state need to evolve to allow more opportunities for citizen deliberation and direct decision-making, with greater use of referendums and initiatives, devolution of power to community organizations, and grassroots mobilization to fix local problems\(^5\).

Cyber-optimists regard digital technologies as perhaps the most important development in our lifetimes that could potentially fuel this process\(^6\). It is hoped that the almost limitless information available via the Internet has the potential to allow the public to become more knowledgeable about public affairs, more articulate in expressing their views via e-mail, online discussion lists or chat rooms, and more active in mobilizing around community affairs\(^7\). As a new channel of two-way communication the Internet can function to strengthen and enrich the connections between citizens and intermediary organizations including political parties, social movements and interest groups, and the news media, as well as with public officials and agencies of local, national and global governance. The Internet may broaden involvement in public life by eroding some of the barriers to political participation and civic engagement, especially for many groups currently marginalized from mainstream politics, facilitating the ability of citizens to gather information about campaign issues, to mobilize community networks, to network diverse coalitions around policy problems, and to lobby elected representatives. Bulletin board systems, chat groups, listservs, e-mail, and multi-user domains represent a new public sphere available to exchange
ideas, debate issues and mobilize opinion. The Internet could facilitate opportunities for
direct democracy, like electronic voting for referenda and elections, may help promote
government accountability, as well as reviving community networks and urban
neighborhoods. In all these ways, the Internet offers to reconnect people to the political
process and revive flagging civic energies.

Yet in contrast cyber-skeptics suggest that in practice use of digital technologies will
fail to transform existing patterns of democratic participation, and more pessimistic
prognostications suggest that the Internet will even worsen the gap between the engaged and
the apathetic. At institutional level, Margolis and Resnick conclude that the early hopes for
an Internet-generated democratic revival have failed to be fulfilled in America as established
interests like the major parties, traditional interest groups and heavy-weight media
corporations have reasserted their predominance in the virtual world, producing 'politics as
usual'. Cyberspace may be dominated by multinational corporate players like AOL, Yahoo!
and Bertelsmann, offering commercial entertainment and kow-towing to King Dollar, along
with old mass media sources like CNN and the New York Times. Putnam suggests that
virtual or mediated forms of political and social communications may be an inadequate
substitute for traditional face-to-face social networks in local communities, since virtual
contact may preclude the face-to-face signals that build social trust, although the Internet
may be a valuable supplement to traditional forms of communication. The global and
social divides in Internet access mean that technological resources remain far from equally
distributed and online politics may thereby amplify the voice of the affluent and well
educated, with the prior interest, cognitive skills and technical ability to utilize new forms of
communication, but it may also further marginalize the apathetic and under-privileged.
Socioeconomic biases evident for decades in conventional forms of political participation
like voting seem unlikely to disappear in the virtual world, even if access gradually widens to
the electronically disadvantaged. Americans who participate in online discussion groups
may be an atypical minority, dominated by like-minded groups controlling the agenda,
thereby reinforcing views but not exchanging ideas in deliberative mode. Electronic
messages may be similar to those already communicated face-to-face or through other media
like newspapers and TV, changing the form and medium of transmission but not its
contents. Plebiscitory democracy via instant electronic voting may also prove to be nothing
more than simple head counting without opportunities for deliberative and thoughtful
debate. More political information is available via the Internet but without much prior
interest or knowledge most people may be swamped by this experience. The closest
analogy to politics on the Web could be C-Span on American TV, available to two-thirds of US households yet delivering worthy public affairs seminars, live and unedited campaign speeches, and informed commentary primarily to a small band of hard-core inside-the-beltway political aficionados. For all these reasons, while many hope that digital technologies will generate more egalitarian politics in America and Western Europe, other skeptical voices warn that in practice established interests will probably come to predominate.

The Internet and Democratization

Serious problems of civic engagement afflict established democracies but the multiple challenges currently facing newer democracies are far more serious. Many hope that in these systems the Internet can help the consolidation process by strengthening the institutions of representative democracy including parliaments and political parties, fostering linkages among new social movements and enriching community networks in civic society, as well as providing a platform for opposition parties, protest groups, and minorities seeking to challenge authoritarian regimes. Since 1973 the 'third wave' of democracy has transformed the geopolitical map and greatly expanded the universe of 'electoral democracies'. According to Freedom House, we are currently experiencing a high watermark for democracy: there are more democracies in the world today (120), and the highest proportion of democratic states (63%), than ever before in history. Nevertheless the initial giddy optimism following the fall of the Berlin Wall has been succeeded today by a more cautious ambience. During the mid-1990s the surge in the number of democratic states worldwide stabilized rather than expanded. In semi-democracies the consolidation stage proved sobering and fraught with obstacles, especially throughout much of sub-Saharan Africa, Latin America and Asia. Semi-democracies faced the challenge of the triple transformation of their nation-state, economic structures and political systems. Outside of wealthy industrialized nations, the quality of democratic government often remains flawed, poorly institutionalized and insecure. Many 'incomplete', 'partly-free' or 'semi-democracies' remain weakly consolidated, with leaders rising to power via competitive periodic elections contested by more than one party, yet plagued by multiple and endemic problems. These commonly include widespread corruption untrammeled by the weak judiciary, and the abuse of political rights and civil liberties such as government curbs on the independent media. The party system is often highly fragmented, with party organizations factionalized and lacking a grassroots electoral base. Legislatures are often poorly institutionalized, providing few effective checks on government. All this has often been accompanied by a record of
economic failure and poverty, inadequate delivery of basic services like education and health care, and periodic violence against minorities arising from deep ethnic cleavages. Occasionally semi-democracies have at least faltered or even reverted back to authoritarian rule and the façade of electoral democracy has cracked, notably in Algeria, Zimbabwe, Peru, Venezuela, and Ecuador, with coups against elected governments in Fiji, Western Samoa, and Pakistan. Whether these developments constitute the normal unsteady history of democratization characterized by ‘two steps forwards and one step back’, or the start of a third ‘reverse wave’ of democracy, remains an open question at this stage of the process.23 Despite occasional reversions, and the continued lack of significant and sustained progress in regions like Africa and the Middle East, the critical problem facing most consolidating systems at the end of the 20th century concerns the flawed and incomplete quality of democratic government.

Potentially the role of digital technologies may be equally important in challenging authoritarian regimes. Governments can try to monitor and control the Internet, and Freedom House estimate that at least twenty nations have seen some attempt at censorship.24 Problems of restricted Internet access for dissident groups are evident in authoritarian regimes such as Cuba and China. Nevertheless officials normally find it far more difficult to silence critical voices on the new media compared with their ability to regulate and control the TV airwaves. Independent journalism benefits from the relatively low start up and production costs for an online weekly newsletter or daily newspaper, compared with production and distribution costs of the printed press, or the capital investments required for radio or TV stations. Where civic society is weak, case studies ranging from the Baltic to Serbia suggest that the Internet facilitates coalitional networks linking new social movements, interest groups, and NGOs. Hill and Hughes examined the contents of political messages posted on a sample of Usenet groups and found that these provide an electronic public space facilitating political discussion for anti-government voices critical of authoritarian regimes.27 Cases like the anti-landmines campaign and the protest movements against the WTO, anti-fuel taxes, and genetically modified foods show the potential of computer-mediated communications for linking borderless worldwide coalitions.28 Brophy and Halpin argue that freedom of information on the Internet may play a vital role in strengthening human rights.29 Perhaps the strongest case is made by Christopher Kedzie, who examined the relationship between levels of democratization (as measured by Freedom House) and interconnectivity (gauged by access to email) in 141 countries worldwide in 1993.30 The study found a strong correlation between
democratization and interconnectivity, even controlling for economic development, although the direction of this relationship remains an open question\textsuperscript{31}.

Despite this evidence, there remain fears that given the pattern of unequal access already documented, the new opportunities for civic engagement and political participation on the Internet will serve primarily to benefit those elites with the resources and motivation to take advantage of them, leaving poorer groups and nations further behind\textsuperscript{32}. The potential for democratization will be restricted if few have access to the World Wide Web in Nigeria, Indonesia or Ecuador. In authoritarian regimes such as Burma, Libya and Cuba, the Internet may serve as a traditional agency of state propaganda, strengthening the government’s grip, rather than providing a channel for opposition parties and groups. Protest movements can try to utilize the Internet to network and mobilize public opinion, but multinational corporations and international agencies can fight back with all their financial and organizational muscle using the same communication channels. Like the power of gunpowder in the Middle Ages, the Internet exerts greatest force if the battle is one-sided, which is rarely the case today. Digital technologies may appear egalitarian, a resource for alternative social movements and transnational advocacy networks, but in practice they may strengthen the power of entrenched authorities, multinational corporations, and established officials, rather than challenging them.

**Evaluating the Democratic Functions of the Internet**

Before evaluating the potential impact of digital technologies on democracy and democratization, and which of these perspectives seems most convincing, we need to establish suitable normative benchmarks. Many previous studies start from an unduly narrow perspective, based on the assumption that the Internet should function to maximize individual opportunities for participation and deliberation and that, if it fails in this regard, digital technologies will have minimal impact on democracy. Of course mass public participation represents one important element in any conceptualization of democracy but it is far from the only, or even the most important, evaluative criteria. In contrast, in line with my previous work the theory in this book is rooted in the classical Schumpeterian tradition that defines representative or liberal democracy in terms of its structural or institutional characteristics\textsuperscript{33}. Understood in this way, representative democracy involves three dimensions:

?? **Pluralistic competition** among parties and individuals for all positions of government power;
Participation among equal citizens in the selection of parties and representatives through free, fair and periodic elections; and,

Civil and political liberties to speak, publish, assemble, and organize, as necessary conditions to ensure effective competition and participation.

This conceptualization focuses particularly upon how representative democracies function through free and fair elections, as the primary mechanism for holding governments accountable for their actions. Representative democracies require competition for elected office allowing citizens to choose from among alternative candidates and parties. Multiple sources of information should be available in civic society so that citizens can understand the alternative electoral choices, can evaluate the performance of those in authority, and can predict the consequences of casting their ballot. In elections, citizens need opportunities to formulate their preferences, communicate their preferences, and have their preferences weighted equally in the conduct of government. Transparency in government decision-making, where it is clear who is responsible for what, promotes accountability via the ballot box. Free and fair elections need to occur at regular intervals to translate popular votes into positions in elected office, and to allow alternation of government authorities. If these conditions are met then citizens can exercise an informed choice, hold governments, parties and representatives accountable for their actions and, if necessary, 'kick the rascals out'.

Of course many other definitions are available, especially those based on alternative conceptions of 'direct', 'strong' or 'plebiscitory' democracy which envisage a direct role for citizens in the decision-making process, so why adopt this one? The Schumpeterian perspective reflects one of the most widely accepted understandings of how representative institutions should function in a democracy, thereby providing important insights into the role of parties, legislatures and civic society, as well as the individual role of citizens. It has the advantage of being widely used for cross-national and longitudinal comparisons attempting to measure and operationalize democratic indicators, for example as measured by the Gastil Index which Freedom House have published annually since the early 1970s, ranking countries worldwide. Moreover, most importantly, in contrast to many other accounts, this view weighs the value of mass participation as only one of the core democratic functions of politics on the Internet. Promoting the conditions of party and candidate competition, facilitating the public sphere via the news media, mobilizing civic society, promoting transparency and accountability in the decision-making process, and strengthening the effective delivery of government services to citizens, are regarded as equally valuable potential functions of the Internet that can strengthen representative
democracies. Indeed, these may prove even more important functions than levels of mass participation, especially in nations ruled by authoritarian and transitional regimes. Electoral democracies may mobilize high levels of voter turnout, but other political rights and civil liberties will fail to flourish if civil society is fragmented and weak, if representative institutions are poorly consolidated, if there is minimal competition between parties providing voters with a real choice at elections and the alternation of those in power, if there is widespread government corruption and the breakdown of the rule of law, or the suppression of opposition movement and dissident voices among NGOs. Insurgent challengers need to be able to compete against established authorities.

This study therefore departs from much of the previous literature in the United States and Western Europe, which often assumes that the Internet will only strengthen democracy if it expands opportunities for political participation, such as direct citizen decision-making and deliberation in the policy process, or electronic voting. Many conclude that if the Internet fails in these regards, then digital technologies will have minimal impact on democracy and democratization. But this is an unduly limited, and thereby misleading, normative yardstick. A broader vision about the ways that digital technologies can strengthen the institutions of representative government and civil society seems more appropriate as soon as we turn our eyes beyond the rather narrow navel-gazing of rich established Western democracies to many polities like Russia, Indonesia and Peru struggling, with mixed success, to establish effective party competition allowing the stable rotation of power between government and opposition, opposition parties, interest groups and new social movements capable of organizing, mobilizing and articulating public opinion through multiple channels connecting citizens and the state, and the basic conditions of human rights and civil liberties to facilitate the open expression of dissenting viewpoints critical of the authorities. In most societies throughout the world it is the core institutions of representative government and civic society that urgently need to be nurtured and strengthened. The extensive debate about the role of digital technologies for direct or strong democracy in the United States and Western Europe can be regarded as a distracting irrelevance, a buzzing mosquito, deflecting attention from the potential function of Internet in strengthening the institutions of representative governance and civic societies worldwide.

[Figure 5.1 about here]

This understanding of representative democracy is outlined schematically in Figure 5.1 that uses a basic systems model to conceptualize the role of intermediary organizations linking citizens and the state. Working within this framework, the key issue when evaluating
the role of digital technologies for democracy is how far governments and civic society learn to use the opportunities provided by the new channels of information and communication to promote and strengthen the core representative institutions connecting citizens and the state. In this regard, opportunities for public participation and civic engagement generated via new technology are important, but so is the ability of the Internet to provide information promoting the transparency, openness and accountability of governing agencies at national and international levels, and to strengthen channels of interactive communication between citizens and intermediary institutions. These functions remain distinct, and the emerging structure of political opportunities via the Internet may well prove better suited for some functions rather than others. For example, the Internet could plausibly provide a better tool of campaign communications for minor parties than the traditional mass media like newspapers, radio and television, or it could facilitate more effective means of global networking and cooperation linking transnational NGO's across borders, or it could provide more extensive and timely access to information for journalists such as official documents and current legislative proposals, or it could strengthen internal party organizations and communications for middle-level party activists - all functions that could ultimately benefit representative democracy - without necessarily promoting greater activism and civic engagement among ordinary citizens and the general public.

**What explains the rise of digital politics?**

Developmental Theories

Understanding why some countries have moved ahead in digital politics while others lag behind raises complex issues, and developmental, technological and democratic theories provide alternative frameworks for interpreting this phenomenon. There are multiple strands within this school of thought but the classic work is Daniel Bell's account of the rise of the post-industrial information society\(^{37}\). Explanations emphasizing the role of development emphasize long-term secular changes in the economic structure that drive social and political change. The rise of the knowledge economy is associated with the shift in the labor force from agriculture and manufacturing industry towards the service sector, and the parallel shift in resources from the importance of raw materials and financial capital towards information and know-how. The knowledge economy is heavily dependent upon modern global communications, such as the multinational corporations in financial investment, banking and insurance. As computers, high-speed LAN networks and wireless communications become ubiquitous throughout service work in the private sector, for example in advanced economies like Sweden, Australia and the United States, use of digital
technologies gradually spreads from offices to homes, facilitating services like home shopping, banking and entertainment. Moreover the rise of the knowledge economy is dependent upon widespread computer literacy and a large, well-educated professional and managerial middle-class in a broad array of jobs related to information, ranging from programmers and software engineers to teachers, researchers and financial analysts. Computing skills and training are spread through higher education. In this account, structural changes in the workforce and society associated with socioeconomic development will therefore provide the underlying conditions most conducive to widespread access to, and use of, digital information and communication technologies. In turn, as the general population gradually becomes wired, this produces greater incentives for public-sector institutions to invest in forms of service delivery and communications via digital channels. If socioeconomic development per se creates the underlying conditions most conducive to the networked world, then according to this theory we should expect to find that political institutions such as government departments, political parties and interest groups have moved online most extensively in affluent post-industrial societies.

Technological Theories

Developmental explanations are common but they face the problem that, by themselves, they cannot plausibly explain certain apparent anomalies; why, for example, relatively similar post-industrial societies currently show strikingly different levels of Internet access and use in the general public, such as the contrasts between Finland and France, or Greece and Sweden, or Japan and the United States. Nor can they provide convincing accounts of even greater differences in the spread of digital politics, shown in subsequent chapters, like the way that some developing countries like India, Taiwan and Brazil have moved ahead so rapidly in e-governance, overtaking many postindustrial societies in the process. An alternative interpretation is provided by accounts which emphasize that political and social organizations are responding to adaptations and uses of digital communication and information technologies that are, at least to some extent, autonomous of levels of socioeconomic development. This perspective reflects a long tradition of theories based on the assumption that technologies shape society more than vice versa. Again there are multiple perspectives within this interpretation, including both stronger and weaker versions of technological determinism, and accounts such as that by Nicholas Negroponte exemplify this viewpoint. What these theories emphasize is that governments and civic society have ventured online in countries where a suitable technological infrastructure has developed -- such as the widespread availability of landlines and cellular telephones, facilities for
broadband delivery via cable television, high levels of investment in science and technology research and development, and the location of high tech industries and companies -- all of which facilitate the networked society. As established in earlier chapters, countries with an environment rich in access to many traditional forms of communication technologies, such as telephones, televisions, and fax machines, are also most likely to experience the diffusion of the Internet. Technological development directly influences how far political organizations can provide online services and information, and indirectly produces greater incentives for political organizations to do so, as the general public gradually becomes wired. If this account is correct, then studies should expect to find that digital politics has spread most fully in countries with high levels of technological infrastructure, at whatever level of socioeconomic development. In this case, the proportion of government and civic society organizations that have moved online should be predicted by technological indicators such as the distribution of Internet users and hosts.

Theories of Democratization

Both the developmental and the technological accounts regard the virtual political system as the superstructure based upon and driven by more deep-rooted structural phenomena. Such theories suggest that, for example, e-governance will be as advanced in Singapore as in Sweden, or that community groups and grassroots civic associations will be as active and prolific on the web in Malaysia as in Mexico. Yet there are multiple critiques of strong versions of technological determinism, on the grounds that social and political choices shape the uses of the Internet far more than the hardware and software. As already discussed, new technologies allow greater transparency in the policymaking process, wider public participation in decision-making, and new opportunities for interaction and mobilization in election campaigns, but, critics argue, whether these potentialities are realized depends upon how the technology is employed. If the process of democratization plays an important role, as political theories suggest, then the type of political organizations found on the Internet, and in particular the function of these websites in promoting transparent information and interactive communications, can be expected to reflect levels of pluralistic competition, political participation, and political rights and civil liberties within each political system. In this account, virtual politics will mirror the traditional political system, so that there will be far more opportunities for civic deliberation and public debate, for group mobilization and for party activism on the Internet in established democracies and open societies with a long-tradition of civic engagement and pluralistic competition than in authoritarian regimes that suppress dissident voices such as opposition movements, the
independent press and protest groups, or in consolidating democracies that are still struggling with weak and fragmented civic societies, poorly institutionalized legislatures, factionalized party systems, and the lack of a flourishing independent news media. If this account is correct, then the diffusion and functions of digital politics within each country should be able to be predicted by overall levels of democratization.

While each of these accounts emphasize different factors, it remains difficult to test these theories due to the strong relationship between levels of economic and political development. Theoretically, even with the most rigorous statistical models, with cross-sectional rather than time-series data it is difficult to disentangle the causal sequence involved in this relationship, and a full exploration of this issue would carry us well beyond the scope of this study. As Seymour Martin Lipset, among others, has long suggested, there are many reasons why rising affluence is commonly associated with the growing strength of democratic forces. Economic development is often associated with increased literacy and education which facilitate civic engagement in public affairs; a growing middle-class service sector which buffers between the extremes of rich and poor; the spread of the mass media providing information independent of the government; the development of civil society like networks of professional and trade associations; and the growth of the welfare state to alleviate absolute poverty. An extensive literature has demonstrated that the association is not perfect, as power is retained in the hands of the elite in many affluent societies in the Middle East and South Asia, in states characterized by ineffective and fragmented opposition movements, limited party competition, and restricted political rights and civil liberties. There are also clearly some long-standing poorer democracies, such as India. Nevertheless, despite these exceptions, a simple correlation in the 179 countries under comparison demonstrates a relatively strong, significant and consistent relationship between levels of democratization and real per capita income (R=0.462 Sig. p.001), and an even stronger relationship between democratization and human development (R=0.757 Sig.p.001). Real per capita income averages about $4,760 in authoritarian regimes, compared with about $11,630 in established democracies.

Based on Lipset’s theory, and the analysis in earlier chapters, the analytical models used in this study assume that human development helps to drive both levels of democratization and the diffusion of digital technologies. Many models were examined, to see whether alternative indicators produced different results, but after testing three independent variables were selected for consistent comparison throughout this study. Socioeconomic development was measured using the United National Development Program
standard human development index, combining measures of the standard of living, educational attainment, and longevity in a country, providing a broader and more reliable indicator than income alone. Technological diffusion was gauged by the percentage of the population online, derived from the NUA database discussed earlier. This was selected as the simplest and most relevant measure from all the available indicators, although similar results were produced when models were replicated with alternative yardsticks of diffusion like the per capita distribution of personal computers and hosts, or the composite information society index. Political development was measured by the level of democratization, using the standard Freedom House index, a 7-point scale which is based on an annual review of the political rights and civil liberties within each country.

**Mapping Digital Politics**

To go further we need to explore systematic evidence analyzing the structure of digital politics, including where and which type of institutions have ventured online, and the functions of this process for information and communications in democracies. Digital technologies have generated multiple opportunities for political information and communication. A rough and ready yardstick of the popularity of politics on the Web can be gauged using common search engines. Yahoo, Alta Vista and InfoSeek were searched to monitor the frequency that certain popular keywords are located, with eight terms selected as common topics on the Web including ‘politics’, ‘computers’ and ‘sex’. For comparison, this search replicated a similar study conducted by Hill and Hughes in 1997, to monitor any significant changes over time. The search in mid-2000 identified in total 56 million websites or pages indexed under the selected keywords. Each of these engines uses slightly different techniques for searching, so the proportion rather than the absolute number of hits provides the most reliable comparison across keywords. The results in Table 5.1 illustrate that the rank order of topics, and the rough proportion of websites and pages about politics, have remained fairly stable in recent years. Overall, reflecting the culture of the web, the terms ‘computers’, ‘sex’ and ‘television’ proved the most popular keywords on the list. But ‘politics’ ranked fourth most common from the list, slightly outweighing the number of web pages devoted to the topics of ‘movies’, or ‘religion’ or ‘investing’. Moreover in the ranking of topics, while one fifth of the sites referred to ‘sex’, perhaps surprisingly one in ten referred to politics in some shape or form, representing in total almost two million web pages or sites identified by each of the separate search engines.

(Table 5.1 and 5.2 about here)
This approximate estimate probably represents a conservative indication of the full range of political resources available on the Web because many sites are indexed under other terms. To provide an approximate estimate of the universe of political websites, Table 5.2 shows the frequency that these search engines hit a range of five politically related keywords. The term ‘government’ was easily the most common, producing 12.6 million combined hits across Yahoo, Alta Vista and InfoSeek. ‘Interest groups’, ‘political parties’ and ‘elections’ also each produced from one to five million combined hits, while there were just under one million hits for the term ‘parliament’. These sorts of counts can only produce extremely rough and ready indicators of the contents of the World Wide Web, at best, but clicking on any common search engine quickly confirms no shortage of websites and discussion groups on the Internet devoted to politics and public affairs in all its glorious and multiple diversity, ranging from the Anarchist Action Network to the Zimbabwe Labour Party. We need to develop a systematic analysis of the informational and communication function of these sites, and their potential for strengthening representative democracy. No single source of data is wholly reliable but replication of different sources – examining the distribution and function of websites identified though multiple databases – strengthens confidence that the patterns established in the analysis survive repeated testing. The study starts by analyzing the rise of e-governance in national-level departments and official agencies, and then moves on through national parliaments to civic society, including political parties, the news media, interest groups and new social movements.
Table 5.1: The Popularity of Politics on the Web

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**Note:** The percentage frequency of sites and pages identified by these keywords using Yahoo, Alta Vista and InfoSeek search engines, July 1 1997 and June 20 2000. The search identified in total 56 million counts in 2000 and 14.5 million in 1997.

**Source:** 1997 data from Kevin Hill and John E. Hughes. 1998. Cyberpolitics: Citizen Activism in the Age of the Internet. NY: Rowman and Littlefield. Table 1.2 p.25.
Table 5.2: The estimated universe of political websites

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<td>%</td>
<td>%</td>
<td>%</td>
</tr>
<tr>
<td>Government</td>
<td>12,651,340</td>
<td>77</td>
<td>81</td>
<td>25</td>
<td>58</td>
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<tr>
<td>Interest Groups</td>
<td>4,748,698</td>
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<td>2</td>
<td>51</td>
<td>22</td>
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<tr>
<td>Political Parties</td>
<td>1,880,572</td>
<td>3</td>
<td>2</td>
<td>18</td>
<td>9</td>
</tr>
<tr>
<td>Elections</td>
<td>1,618,668</td>
<td>9</td>
<td>10</td>
<td>4</td>
<td>7</td>
</tr>
<tr>
<td>Parliaments</td>
<td>887,659</td>
<td>2</td>
<td>6</td>
<td>2</td>
<td>4</td>
</tr>
<tr>
<td>TOTAL</td>
<td>21,786,937</td>
<td>100</td>
<td>100</td>
<td>100</td>
<td>100</td>
</tr>
</tbody>
</table>

Note: The percentage frequency of sites and pages identified by these keywords using Yahoo, Alta Vista and InfoSeek search engines, June 20 2000.
Figure 5.1: The Virtual Political System


31 It should also be noted that another study by Dana Ott found no significant relationship between democratization in Africa and measures of Internet access, including the number of Internet Service Providers and the monthly fee for Internet Access in 1997. See Dana Ott. 1998. 'Power to the People: The Role of Electronic Media in Promoting Democracy in Africa.' First Monday. 3(4). http://www.firstmonday.dk/issues/issue3_4/ott.


42 The Human Development Index is based on longevity, as measured by life expectancy at birth; educational attainment, as measured by a combination of adult literacy (two thirds weight) and the combined gross primary, secondary and tertiary enrolment ratio (one third weight); and standard of living, as measured by real GDP per capita in Purchasing Parity Power. The measure is standardized. See UNDP. 1999. Human Development Report 1999. Technical notes p. 159. NY: UNDP/Oxford University Press.

43 Freedom House. 2000. http://www.freedomhouse.org. Note the combined scale for political rights and civil liberties was reversed for ease of graphical interpretation so that 7 = most democratic and 1 = least democratic.