Local governance and the local online networked public sphere: Enhancing local democracy or politics as usual?

A thesis submitted to the University of Manchester for the degree of PhD in the Faculty of Humanities

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SCHOOL OF SOCIAL SCIENCES
# Contents

**Introduction**

<table>
<thead>
<tr>
<th>Section</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Introduction</td>
<td>8</td>
</tr>
</tbody>
</table>

**Chapter 1. Post-industrial society and the prospects for civic renewal**

<table>
<thead>
<tr>
<th>Section</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Introduction</td>
<td>20</td>
</tr>
<tr>
<td>The information technology revolution</td>
<td>21</td>
</tr>
<tr>
<td>The second modernity, reflexivity, and the socio-technical</td>
<td>29</td>
</tr>
<tr>
<td>The crisis in democracy and civic renewal</td>
<td>38</td>
</tr>
<tr>
<td>Conclusion</td>
<td>56</td>
</tr>
</tbody>
</table>

**Chapter 2. A local networked public sphere?**

<table>
<thead>
<tr>
<th>Section</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Introduction</td>
<td>59</td>
</tr>
<tr>
<td>Digital politics</td>
<td>62</td>
</tr>
<tr>
<td>Cyber optimists and the networked public sphere</td>
<td>71</td>
</tr>
<tr>
<td>Cyber sceptics and the networked public sphere</td>
<td>82</td>
</tr>
<tr>
<td>The context for a local networked public sphere</td>
<td>87</td>
</tr>
<tr>
<td>Conclusion</td>
<td>97</td>
</tr>
</tbody>
</table>

**Chapter 3. Research approach**

<table>
<thead>
<tr>
<th>Section</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Introduction</td>
<td>100</td>
</tr>
<tr>
<td>Research philosophy</td>
<td>102</td>
</tr>
<tr>
<td>The case study</td>
<td>109</td>
</tr>
<tr>
<td>Choosing a case study</td>
<td>109</td>
</tr>
<tr>
<td>The Greater Manchester Transport Innovation Fund proposal</td>
<td>111</td>
</tr>
<tr>
<td>Researching the Internet: a Web epistemology?</td>
<td>117</td>
</tr>
<tr>
<td>Hyperlink Network analysis</td>
<td>121</td>
</tr>
<tr>
<td>Social Network analysis</td>
<td>123</td>
</tr>
<tr>
<td>Relational Hyperlink Analysis</td>
<td>125</td>
</tr>
<tr>
<td>A mixed method approach in network analysis?</td>
<td>128</td>
</tr>
<tr>
<td>Network ethnography</td>
<td>132</td>
</tr>
<tr>
<td>Conclusion</td>
<td>135</td>
</tr>
</tbody>
</table>

**Chapter 4. Structural analysis of the local online network**

<table>
<thead>
<tr>
<th>Section</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Introduction</td>
<td>138</td>
</tr>
<tr>
<td>Capturing the online network</td>
<td>139</td>
</tr>
<tr>
<td>Mapping and describing the congestion charge network</td>
<td>148</td>
</tr>
<tr>
<td>Unlocking significance in the online network</td>
<td>164</td>
</tr>
<tr>
<td>Reading the ERG model</td>
<td>170</td>
</tr>
<tr>
<td>Conclusion</td>
<td>176</td>
</tr>
</tbody>
</table>
# Chapter 5. Use and views of the online network: An analysis of actor narratives

## Introduction
- Selecting actors for interview
- Views and uses of the online network by actors associated with ‘impartial’ sites.
- Views and uses of the online network by those campaigning for a ‘No’ vote in the Referendum
- Views and uses of the online network by those campaigning for a ‘Yes’ vote in the Referendum
- A local networked public sphere or politics as usual?
- Identity, civility and locality
- Institutional culture
- Conclusion

## Conclusion
- Introduction
- Research summary
- Response to research questions
- Comment on theory
- Comment on methodology and method
- Policy implication
- Further research?

## Bibliography

## List of Tables

<table>
<thead>
<tr>
<th>Table</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Indicators of participation</td>
</tr>
<tr>
<td>2</td>
<td>‘Seedset’</td>
</tr>
<tr>
<td>3</td>
<td>Measures of cohesiveness and density</td>
</tr>
<tr>
<td>4</td>
<td>Structural effects used to model congestion charge network in PNet</td>
</tr>
<tr>
<td>5</td>
<td>Individual actor attributes used to model the congestion charge network in PNet</td>
</tr>
<tr>
<td>6</td>
<td>Summary of parameter estimates and standard error (p &gt; 0.05) for online network at close of referendum</td>
</tr>
<tr>
<td>7</td>
<td>Sites selected as prominent in the online network</td>
</tr>
</tbody>
</table>

## List of Figures

<table>
<thead>
<tr>
<th>Figure</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Initial map of Manchester Congestion charge referendum network (3232 nodes mapped by degree excluding 27 isolates)</td>
</tr>
<tr>
<td>2</td>
<td>Site ‘closeness’ at the start of the referendum</td>
</tr>
<tr>
<td>3</td>
<td>Site ‘closeness’ at the end of the referendum</td>
</tr>
<tr>
<td>4</td>
<td>Site ‘betweenness’ at the start of the referendum</td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td>---</td>
<td>--------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>5</td>
<td>Site ‘betweenness’ at close of the referendum</td>
</tr>
<tr>
<td>6</td>
<td>HITS_hub sites at the start of referendum</td>
</tr>
<tr>
<td>7</td>
<td>HITS_hub sites at end of referendum</td>
</tr>
<tr>
<td>8</td>
<td>HITS_authority sites at start of referendum</td>
</tr>
<tr>
<td>9</td>
<td>HITS_authority sites at end of referendum</td>
</tr>
</tbody>
</table>

**Appendices**

Appendix 1: Report of Chief Executive of Passenger Transport Authority, June 2008  
Appendix 2: Letter from Greater Manchester Momentum Group, May 2008  
Appendix 4: Facebook groups on Manchester Congestion Charge  
Appendix 5: Skyscrapercity online discussion forum  
Appendix 6: Google search on Manchester Congestion Charge  
Appendix 7: Site attribute, SNA centrality measures for congestion charge network at close of referendum  
Appendix 8: Matrix data file for congestion charge network at close of referendum  
Appendix 9: Site attributes expressed as binary variables for PNet  
Appendix 10: ‘Goodness of fit’ statistics for converged ERG model  
Appendix 11: Ranking of sites in network at close of referendum on SNA measures of centrality  
Appendix 12: List of interviewees (anonymised)  
Appendix 13: Interview schedule

Final word count: 83,596
Abstract

This study examines the potential for the Internet, or more specifically the World Wide Web, to enhance local democracy and local governance by providing a networked public sphere. It is located in post-industrial theories of social and political transformation, which see a new, uncertain and complex society emerging which may transform the political significance of the ‘local’. Whilst a number of causes are identified as culpable in this process, it is the ICT revolution and the development of the Web in particular, that is seen as possessing a democratising potential that, if realised, may bring greater resilience to geographic localities.

The potential of the Web to provide a new networked public sphere is based upon contested views that its topography, its hyperlinked structure, can enable the ordinary citizen’s voice to be heard above those that traditionally dominate political discourse. However, there has been no attention paid to this potential being realised at a local governance level within which, this study argues, a favourable environment should exist for a local online networked public sphere to prosper. Accordingly, this prospect is empirically explored here through a case study of the use made of the Web by a variety of local civic, political and institutional actors during a 2008 local (Manchester, UK) referendum on introducing the largest traffic congestion charging scheme in the country.

This research applies a distinctive mixed method approach within a conceptually defined internet mediated domain of local governance. Relational Hyperlink Analysis is used to analyse the structural significance of the captured congestion charge. This analysis uses Social Network Analysis (SNA) and an associated statistical technique, Exponential Random Graph Modelling (ERGM) to render the network visible and understandable. To further illuminate how the network was used by local civic and institutional actors involved in the referendum the research draws upon a network ethnography approach which uses SNA to identify subjects for qualitative investigation.

The study offers some evidence of the Web providing ‘just enough’ links in this local context to suggest the structural existence of a networked public sphere. However, further evidence from the narratives and the statistical model paint an alternative picture. This suggests that, in the main, hyperlinking behaviour and use made of the network corresponds to a ‘politics as usual’ scenario where cliques are more likely to proliferate and powerful economic and media interests dominate online as they do offline. If the ordinary citizen’s voice is to be heard in this context then there is a requirement for policy intervention to establish a trusted local networked public sphere or online civic space, independent of vested interests but linked to the local governance decision making process. In addition to this there is a requirement for greater education, particularly aimed at senior local governance policy makers, in the culture of online engagement.
No portion of the work referred to in the thesis has been submitted in support of an application for another degree or qualification of this or any other university or other institute of learning.

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Introduction

Journalistic claims for the social web to transform politics are expansive. Commenting on the internet's potential to “.....revolutionise the very meaning of politics” Freedland (2007) observed how the internet had recently facilitated political election campaigns in Spain, South Korea, the Philippines and the USA, electronically mobilising voters in an unprecedented fashion, making websites and electronic communication strategies mandatory for even the most technophobe of aspirant politicians. He also anticipated internet use causing a more profound shift in political culture away from the current top down managerial model of government/citizen relationship to a more bottom-up citizen led approach. Moreover, he also pondered the potential of the internet to render less important the geographical units, the physical space citizens inhabit that has traditionally determined and proscribed their democratic role, when the technology facilitates borderless political communities and campaigns. In such a way, he claims, use of this technology could question the existence of traditional government institutions.

Another new media commentator, Anthony Lilley (Lilley, 2007) illustrated the extraordinary communicative power of the internet, and in particular its latest reincarnation Web 2.0 or, as it is more popularly known, the social web. Drawing on algorithms originating in network theory to measure the value of networks (D.P Reed, 2001) Lilley claims that Web 2.0, driven by a powerful category of network, is almost 2 to the power 20 times, that is a million times, more powerful in terms of the numbers of people it can potentially reach than alternative forms of technological communication, such as TV, telephone and email.

Such contemporary journalistic commentary foregrounds issues arising from research undertaken by a number of social and political scientists over the last two decades. They have attempted to gauge the impact new
technologies, and the Internet in particularly, have had on social, political and economic relationships. This investigation has been concerned with not only evaluating what this impact might be at different geographical levels of political governance: the local, regional, national and the increasingly `globalised', but also explaining how the Internet might deliver such transformation. It is the intention of this thesis to look at both aspects of such investigation by exploring how the Internet, or to be specific, the Web might transform the political relationship between local government and its citizens in the UK.

Academic investigation into the potential of the Internet, or Information Communication Technologies (ICTs) in general, to enhance democracy has been given a political spur by a growing unease amongst policy makers in, particularly, western liberal democracies over the apparent decline in civic and political participation. Evidence of this was provided in the UK by the 1997 election of the New Labour government placed in power on the back of the lowest general election voter turnout in the UK since World War 2. Their initial policy response to declining levels of civic commitment was captured in the Modernising Government White paper (Cabinet Office, 1999), which underlines a commitment to re-configure the political management and delivery of public services. In common with modernising trends worldwide (OECD, 2003) their themes were improving public sector performance through delivering cost effective services; bringing services closer to the public, and using information communication technologies (ICTs) to usher in information age e-government and thereby enabling greater democracy in society.

The focus of much of this modernisation drive within the UK was the local government institution. This can be explained by local government’s dual function: it delivers government services locally and indeed was responsible for “a quarter of public expenditure on services including education, social services, police, housing and public transport” (Cabinet Office, 1999, 12); and, as an elected local government, it is the “…..primary locus of democracy at a sub-central government level” ( Pratchett, 2004, 359).
Despite equivocal levels of success with its e-government programme (Electoral Commission, 2002; Local e-Democracy National Project, 2004; Lomas, 2005; Macintosh and Whyte 2005; eGov monitor, 2006; Pratchett, 2006b) the last UK Government was determined to utilise the power of ICTs to reconfigure government institutions and government to citizen relations. It anticipated the new media would facilitate access to the “….new forms of community out there which government currently is unable to talk to...” (Tom Watson MP, Minister for Transformational Government, 1 April 2008). Along side introducing new statutory duties on local authorities to engage with its citizens (Local Government and Public Health Bill, 2006) it launched a Power of Information task force (http://www.cabinetoffice.gov.uk April 2008) to consider how public servants could use the new social media.

It is, as yet, unclear how far the new coalition Government in the UK will continue to push the modernisation of local government. They are however committed to notions of regenerating civic activism as captured in the concept of the Big Society (see http://www.cabinetoffice.gov.uk/media/407789/building-big-society.pdf) and complementing this is a clear commitment to ‘localism’ as Eric Pickles, Minister for Communities and Local Government, stated in a recent speech, ‘I have 3 very clear priorities: localism... My second priority is localism, and my third is... localism’ (Pickles, 2010). This may be significant in considering the future prospects for local e-democracy. As some have previously suggested (Local e-Democracy National Project, 2004) e-democracy has a real role to play in reinforcing the legitimacy of local government as multi-level governance structures are introduced as envisaged by the `new localism' agenda promoted by the last Government (Blears, 2003). In a similar vein (Kolsaker, 2006) argues that shifting modes of governance can unlock the real significance of e-government which “....lies in the potential to enable new forms of citizen/state relations”. If there is an appetite within the local government institution for e-democracy, and Coleman and Blumler (2008) argue that there is, then there may be a similar desire amongst the citizenry. As Dutton et al (2009) have shown, drawing upon the 2009 Oxford Internet Survey, a majority of the population (59%) had used the
internet to access a range of government services including getting information about policy.

However, if voter turnout is used as a measure of democratic engagement then whilst the figures illustrate a rise in turnout for general elections since the record low turnout in 2001 it has yet to rise to pre-1997 levels (BBC, 2010). Meanwhile voter turnout at local government elections remains, outside of them being held at the same time as general elections, at around a third of the electorate (Local Government Association, 2008). Nonetheless, there is a wider context within which notions of civic decline or regeneration must be understood if policy initiatives promoting e-democracy are to be successful. As Bentivegna (2006, 335) has noted it is “…illusory to attribute to ICTs the power to transform distracted and uninformed citizens into informed participants”.

Accordingly, many academic commentators (Hall 1999, Putnam 2000, Grugel 2000) looking for explanations for the apparent decline in both formal and informal political participation and interest in political institutions, have turned their attention to the notion of civic society seeking to understand what it is and how it does or does not function. Their rational for this line of inquiry, an assumed link between voluntary civic activity and good or effective democratic governance, has historical antecedent in De Tocqueville’s work (2003) in identifying the relationship between civic association and formal political activity in 19th Century America. Others (Beck 2000, Hirst and Thompson 1995, Castells 1996, Urry 1999) have focused upon the singular or combined transformative effects of globalisation, individualisation, the gender revolution and the Internet revolution which, they contend, is shaping a new, uncertain and complex society.

It can be this context, as Stoker (2006) points out, that complicates participation in democratic politics for both the individual citizen and politician. While contesting the level and causes of the decline in civic engagement many (Hirst and Thompson 1995, Putnam 2000, Castells 1997, 2007, Stoker 2006, Coleman 2006) consider the Internet as a potential
instrument for re-invigorating civic society and enabling a new citizen/state relationship. It is within this context that Habermas’s (1989) concept of the public sphere has gained popularity amongst those (see Calhoun, 1996) interested in the democratic renewal of society. Moreover there are those (for example, Keane, 1995, Dahlgren, 2005, Coleman and Blumler, 2008) who argue that the Internet can be used to re-configure the public sphere. In these accounts a re-constituted, Internet enabled, public sphere may transform the individual into a political actor, a citizen capable of challenging, in the common interest, the public authority or policy issues of the day.

While there has been much empirical research into the effects of ICTs on political and civic engagement: it has, for example, been effectively used as a focus for global campaigns (Defillips, 2001); it has had an effect on political activism (Norris, 2004) and political participation (Gibson, 2006) and civic engagement (Shah et al, 2001. However, empirical research and discussion into the possibilities of ICTs, or more specifically the Internet, facilitating a new public sphere has generally either focused on its potential to promote a more deliberative democracy (see for example: Bimber 1998; or Dahlberg, 2001, 2007) or, of specific interest here, on how the structure of the Web can enhance democracy by delivering a more networked public sphere ( Sparks 2001, Benkler 2006, Hindman 2009, Etling et al 2010). Coleman and Blumler (2008) have attempted to straddle both aspects of this discussion by suggesting that the democratic potential of a Web enabled public sphere can be realised within contemporary notions of networked governance.

Whilst this study will not concern itself with the deliberative democracy debate it is interested in the prospects for a Web enabled public sphere being developed within the context of local governance. There has been little or no empirical research into the development of such a networked public sphere at this level of local governance.

This is an interesting omission and arguably it is now an area of research whose time has come. The evaluation of the local e-government programme
in the UK found some significant barriers amongst institutional actors and citizens to e-democracy tools. However, this pre-dated the take-off of Web 2.0 or the social web which is characterised by a communication power (Lilley, 2007) and user involvement that is as extraordinary as it is unprecedented. This phenomenal level of individual user involvement was acknowledged by Time Magazine (2006) dedicating their person of the year award to ‘You’. Politicians and political parties of all stripes have rushed to embrace the new social media (Meijer & Burger, 2008) but, with the exception of Obama’s campaign in the USA for the Democratic Party presidential nomination, have generally failed to exploit its real collaborative, communicative potential. Coleman (2006), however, argues that the new technology does provide an opportunity to reconceptualise democratic representation and enhance political connectivity between representatives and the represented.

Web 2.0 applications such as blogs, wikis and other social network sites such as Facebook have proliferated in the UK (see Dutton et al, 2009). Political parties, national and local politicians, local councils and community activists have started to utilize aspects of this new social media and some preliminary evaluation of these endeavours, particular those within the ‘blogosphere’ have already taken place. These drew some interesting conclusions: local councilors who blog generally use the new media in a traditional broadcast fashion (Wright, 2008); the blogosphere currently doesn’t but may, under certain conditions, comprise a new public sphere (Siapora, 2008) while Bruns (2008, 75) on the other hand sees the new media as re-forming a “..a wider public sphere where citizens are themselves actively and visibly involved in the process of public communication and deliberation..”.

It may be that the Internet, or the Web, can provide the technical or structural infrastructure where local government ‘top-down’ networks can meet private individuals’ ‘bottom-up’ networks and in doing so transform the government to citizen relationship. It may also be the case that policymakers and academics live in hope rather than expectation as enabling new forms of civic/state relations relies in part on transforming
local government which, as an institution, has proved remarkably resilient
to change. This raises the question of what role institutional context plays in
policy implementation. Some of the admittedly preliminary and rather broad
assessments of the impact of information age government suggest there
may be explanations that lie beyond a simple failure of policy. This is
echoed by a number of commentators (Barnes et al, 2004, Lowndes et al
2006, Prachett, 2006) with regard to citizen participation who see the
institutional context, or to be more precise how policy is mediated through
the institutional context, as explaining how the level and type of citizen
engagement may vary at different times. In this account the role of
institutional ‘rules of the game’ (Pratchett, 2006) of institutional actors and
their ‘public value orientation’ (Lowndes et al 2006, Gains et al 2008) or of
ICT networks (Pratchett, 1999) predominate.

A further consideration is that empirical research in this area within the UK
may be hidebound by normative concepts such as community, public sphere
and network which may limit or prejudice an analysis of ‘what is’ in favour
of ‘what ought to be’. This is of relevance in achieving an understanding of
how the new social media phenomenon may reinvigorate civic society or
civic /state relations. Macintosh and Whyte (2003) contend that the
technical, social and political dimensions render the local e-democracy field
a complex environment to research. For Postill (2008), the challenge is how
to “conceptualise the relationship between technological and social change
at a local level” (pg 414). This is a key point as leading theoreticians of
social transformation in the post industrial information age (Castells 1996,
Beck 2005) contend that the transformative process is diminishing the
social, political and economic significance of the local. Postill argues that
ethnographic analysis that draws upon the field theory lexicon of Pierre
Bourdieu and the Manchester School of Anthropology is a useful way of
“seeing patterns within a messy social domain”(Postill, 2008, 427). He
conceptualises an internet mediated domain of local governance as a “field
of residential affairs”.

In conducting empirical research in Malaysia he found “..not a homogenous
‘field sociality’, rather an internally differentiated field of striving with
various forms of sociality distinguished by the nature of their interactions, discursive practices and field articulations”. In revealing the complexity of this particular local governance domain, from a “ground-up theoretical exploration” he was able to see that certain internet technologies (websites) were more suited, and therefore more successful, to some social contexts than others.

However, while aspects of such an internet mediated local governance domain have undergone preliminary evaluation it remains the case that there has been little empirical research into the constraints and opportunities afforded for local democracy through the development of an online local political “sphere of influence” (Dutton, 2009, 5). One, however, that is capable of facilitating a new networked ‘public sphere’ which can enhance the quality of local governance through transforming the relationship between the UK local government institution and the citizen.

As such the aim of this thesis is to undertake empirical research that attempts to answer the following questions:

(i) Does such a local political online space exist as a Web enabled networked public sphere capable of facilitating communication or discourse on civic issues between local government institutions and the wider civic society?
(ii) How do local civic stakeholders view or exploit this space?
(iii) What are the transformative implications of conducting local politics in this space?

These questions will be addressed through the following chapters. Chapter 1 aims to contextualise, theoretically, the broad question driving this research, namely: can the Internet or, to be precise, the World Wide Web play a transformative role in local civic renewal? This will be accomplished by presenting a picture from two overarching, but arguably congruent, theories of how society is moving from the industrial to the post-industrial, the role new technology maybe playing in this transformation and the political implications this may have for local liberal democracies. The focus will then
shift to highlight the academic and political re-discovery of civil society as the crucible for liberal democracy. It is within this process that the concept and contemporary utility of the public sphere is introduced. This chapter then moves on to examine any empirical purchase there maybe for such notions as a ‘crisis in democracy’ along with any attendant policy solutions that deploy information communication technologies (ICTs) as a means of favourably re-organising civic society to enable a more effective public sphere.

Chapter Two will present the case, and open up the empirical research question, for the Web providing a new local networked political sphere of influence. Initially, an overview of the current state of digital politics will be presented. The purpose of this is mainly to underline the position of the Web as a media of growing political significance. The second section will move to present a discussion, and where it exists, empirical evidence, of those that consider the web to offer real opportunities for a democratic renewal of civic society in the form of new networked public sphere. This will be contrasted in the third section with those who are more sceptical of this optimistic discourse. The final section will argue that there is, or should be, an appropriate policy environment for developing an online local networked public sphere within the local governance process.

Chapter Three essentially deals with issues of research design. First and foremost it presents a guiding research philosophy which critically enables both a quantitative and qualitative research approach to be applied here. It then justifies the use of a single case study for conducting this empirical research. The case study presents a rare and unique opportunity to study how the Web was used during a UK local government referendum on the introduction of a traffic congestion charging system. This was a fiercely contested local civic issue that provided a setting for exploring the research question. The next section proceeds to argue for the adoption of a particular Web epistemology to research this case study, namely, that of hyperlink analysis and then, to be specific, the innovative method of Relational Hyperlink Analysis. This method understands the Web as a social network and applies techniques and statistical models associated with Social
Network Analysis designed to render the network visible and understandable. In this way it pays particular attentions “....to hyperlinks as social connections, not merely indicators of popularity or visibility”. It is argued here that it is a particular useful technique for the purpose of exploring the significance of a local online political sphere of influence. Following this an argument is presented for conceptualizing the online network associated with the congestion charge as a ‘network domain’. Crucially for this research such a concept allows network boundaries to be determined by common network attributes and the narratives of actors associated with the network. The final section of this chapter explains how, by drawing upon a network ethnography approach, such narratives will be identified and captured.

Chapter Four details how the research methodology was applied, detailing how the online hyperlink network associated with the Manchester Congestion Charge referendum was captured and mapped. This is the necessary pre-condition for analysing the significance of the hyperlink connections within the network. Capturing and graphically visualising this network involves using software, VOSON, specifically developed for this purpose. This software also permits some basic Social Network Analysis which is presented as a first step in explaining some of the characteristics of the online network. Following this the Relational Hyperlink Analysis technique is applied on the captured hyperlink data. This involves using the Pajek and PNet software the details of their application is also be explained in full. This quantitative stage of the research approach concludes with a discussion on the results of this analysis. The analysis revealed some prevailing characteristics within the online congestion charge network. Chief amongst these was a distinct homophily effect exhibited by the local governance websites and those websites with Web 2.0 applications. The findings generally negates the notion that, outside of policy intervention, a local networked public sphere might be found at the interface of institutional governance ‘e’ networks and those of private individuals. Those more likely to mediate the online network were non-governance web sites and those managed by the traditional media.
Chapter Five presents an analysis of the actor interviews captured through the network ethnography approach described in Chapter Three. It will explain how the network ethnography approach was applied to select the subjects for interview. In essence this involved applying some basic SNA measures to the captured hyperlink network with the aim of identifying prominent websites in the network. The purpose of this was to enable the social actors associated with these websites to be contacted and an interview requested in order to more fully understand and explain the particular set of results coming from the quantitative analysis.

The actor narrative analysis will then be presented in two parts. The first will provide an analysis of how these actors viewed and exploited the new technology for the purposes of their campaigns. As such it will analyse how those actors associated with sites that were impartial during the referendum campaign, that is, the local government and media sites viewed and used the online network. This will also serve to draw out the institutional use of the online network. It will then pay particular attention to the ways in which those actors associated with sites campaigning for or against the TIF package used the online network. This will serve to contextualise the particular roles played by these social actors and help to explain their views and uses of the online network. It will also complement the structural analysis conducted in the last chapter which analysed the network by site category.

The second part of the analysis is designed to further explain and understand the views and uses of the online network captured in the first part. It will do so by identifying emergent themes from across the narratives. This will reveal the constraints on using the online network as a local, networked public sphere. In identifying such constraints the thematic discussions will raise the policy implications for transforming such an online network into a local networked public sphere.

In concluding this research the final chapter adopts a nuanced position on the prospects for a local online networked public sphere. It argues that
there may well be ‘just enough’ links connecting divergent and distinct domains of interest with local governance sites in the online network associated with the congestion charge referendum to suggest the existence of such a political sphere of influence. However, the research also revealed a distinct homophily effect in the network where local government sites were more likely to link only to each other and Web 2.0 sites to do likewise. Mediating the online communication in the network were sites connected to non-governmental organizations and the traditional media. Whilst this in and of itself does not necessarily discount the possibility of such a networked public sphere existing the narratives associated with those actors connected to the network revealed a different reality. They suggest that economically dominant business interests may have exerted influence on the online network, through significant non-governmental organizations. Moreover the traditional media intervention into the online network was also seen as contentious. Issues around trust and enacting local citizenship online also served to militate against the network being used as a meaningful public sphere. The research concludes with policy recommendations to support the development of an effective and potentially transformative local networked public sphere.
Chapter 1

Post-industrial society and the prospects for civic renewal

Introduction

This chapter has two objectives. The first is to contextualise, theoretically, the broad question driving this research, namely: can the Internet or, to be precise, the World Wide Web play a transformative role in local civic renewal? This will be accomplished by presenting a picture from two overarching, but arguably congruent, theories of how society is moving from the industrial to the post-industrial, the role new technology maybe playing in this transformation and the political implications this may have for liberal democracies. The focus will then shift to highlight the academic and political re-discovery of civil society as the crucible for liberal democracy and examine any empirical purchase there maybe for such notions as a ‘crisis in democracy’ along with any attendant policy solutions that deploy information communication technologies (ICTs) as a means of favourably re-organising civic society to enable a more effective public sphere. The second objective is more straightforward and is simply to foreground and explain such concepts as ‘space of flows’ or ‘public sphere’, for example, which will be important in later chapters.

Accordingly, this chapter will first present Castells’s theory of an emerging network society, one that is primarily enabled by the information technology revolution and is reconfiguring the economic, cultural and political landscapes drawn by industrial society. Secondly, and in a similar vein, Beck’s concept of a reflexive second modernity will be introduced. This sees wider transformative forces at work including globalisation and a
concomitant global risk that are forming a new society characterised by a growing political uncertainty in the key institutions and ideas that helped govern industrial society. Both theories are characterised by their implications for the well-being of liberal democracies and, in particular citizens’ political relationship or connection with how they are governed at a local level. Both theories suggest a re-constitution of this relationship to counter such transformative forces that may exacerbate political marginalisation of the individual citizen from local and national governance. How citizens use the new communication technologies will, in Castells’s account, be key in determining if local democracies can be re-invigorated. By the same token the challenge posed for local governance institutions faced with this process of reflexive modernisation is to use the new ICTs to transform themselves, to become ‘fit for purpose’ in this second modernity. To paraphrase Lash (2005) it is at the interface of the social and the technical that the political might be re-invented.

The notion of citizens becoming politically marginalised is, of course, reflected in concerns expressed by political elites, particularly in the UK, who talk of a ‘democratic deficit’ which may potentially undermine their political legitimacy as elected representatives. To this end the third section of this chapter moves from the meta-narrative to the micro-analysis of the current political health of civil society to look at how far such meta-theories resonate with the relatively recent empirical study in this area. Within this section the concept of Habermas’s (1989) public sphere is introduced as a ‘space’ or civic arena where members of the public may be transformed into political actors or citizens.

The Information technology revolution

The scale and ambition of Castells’s work over three volumes (1996, 1997, and 1998) has, unsurprisingly, attracted criticism (see Garnham, 2004, Wajcman, 2002). Whilst these will be referenced where appropriate the importance of Castells’s work to this research is that it serves as a heuristic as it arguably has done for much internet research (see, for example, Benkler, 2006, Dutton, 2009) that has followed it.
In his first volume, ‘Rise of the Network Society’ (Castells, 1996), Castells attributes a social, political and economical significance to the information technology revolution in the late 20th century similar to that of the Industrial Revolution in the 18th century. It has, he argues, induced “a pattern of discontinuity in the material basis of economy, society and culture” (1996, 30) and, by implication, heralded a new, complex economy, society and culture in the making. He categorises this process of technological innovation as revolutionary as it exhibits characteristics such as: pace of change; convergence of technologies; pervasiveness; transformation of processes of production and distribution; and, a decisive shift in the location of wealth of power to those social groups (or ‘elites’ as Castells describes them) able to master the new technology system. In other words, Castells states that “information technology is to this revolution what new sources of energy were to successive Industrial Revolutions...” (1996, 31).

For Castells the key feature of this new technology is not that it is just centred on information but that “…information generation, processing and transmission become the fundamental sources of productivity and power because of new technological conditions in this new historical period” (1996, 42). In short, he coins the concept ‘informationalism’ to represent a new mode of development in a capitalist mode of production. Consequently, it should be expected he reasons, given historical precedents, that new forms of social structure and relationships will emerge. The driving, material force behind this new informational society is a global cluster of firms, organisations and institutions that form a new socio-technical paradigm that has a number of distinctive features.

Firstly, information is its raw material, secondly it is pervasive and as such all individual and collective processes are shaped by the new technology, thirdly, there is a networking logic of any system or set of relationships using these new information technologies. Fourthly, the paradigm is characterised by its flexibility. This is related to networking but also distinct

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1 By way of further definition, Castells includes among information technologies: the converging set of technologies in microelectronics, computing (machines and software) telecommunications/broadcasting, optoelectronics and genetic engineering. He includes the last category as it deals with decoding, manipulation and reprogramming of informational codes of living matter.
in that processes, organisations and institutions can be modified or transformed through rearranging their components. The final feature is the growing convergence of specific technologies into an integrated system facilitated by their shared dependence on information generation and manipulation. The following paragraphs will attempt to explain how Castells’s paradigm impacts upon the economic, social and political development of society. However, as this paradigm comprises part of his methodology a brief word about this first.

Castells uses his notion of an information technology revolution as a device through which he can analyse the emergence of new social forms and processes. This has approach has been criticised by both Garnham (2004) and Wajcman (2002) as technologically deterministic to the extent that it sees processes and structures as novel or revolutionary when in fact they are part of a long-term, historical, capitalist process of development. Indeed this criticism is echoed by Beck (see below) when he described this approach as mono-causal. Castells dismisses any accusations that this methodological choice implies a technological determinism and argues that that the “...dilemma of technological determinism is probably a false problem, since technology is society and society cannot be understood or represented without its technological tools” (1996, 5). This neatly sidesteps what Woolgar identifies as problematic as very few scholars in this field would explicitly support raw technological determinism “...yet the main thrust of much work is expressed in terms of trying to distinguish the effects of the technology from other relevant circumstances” (Castells (ed), 2005, 126).

Castells does fleetingly consider epistemological approaches such as chaos theory as potentially suitable insofar as it emphasises non-linear dynamics as useful in understanding the behaviour of living systems. Whilst he acknowledges the usefulness of this approach in understanding the diversity, complexity and uneven, non-linear, development process inherent in the information technology revolution he rejects the approach as being unable to provide any systemic framework or unifying meta-theory. It is, rather, his information technology paradigm that he uses to frame his analysis. An
analysis that Giddens (Giddens, 2006) believes has moved away from the Marxism of Castells’s earlier writings and is now closer to a more Weberian approach. Garnham (2004) on the other hand sees it as a purely structural approach. Indeed, Castells’s view that “…networks are characterised by the pre-eminence of social morphology over social action” (pg 469) appears to support a more structuralist conception of social change.

Applying his approach, Castells devotes much of the remainder of his first volume to considering the macro economic and cultural changes associated with the rise of the network society. He extends his argument on the distinct character of the new economy by examining the relationship between technology and profitability and productivity. His view is that the informational economy is a distinctive socio-economic system in relationship to the industrial economy not because they differ in the sources of their productivity growth but because of the “….productivity potential contained in the mature industrial economy because of the shift toward a technological paradigm based on information technologies” (1996, 91). Local, regional and national capitalist economies² have been restructured and de-regulated to take advantage of this new productivity potential and this dynamic, in Castells's opinion, has created a global economy distinguished from the existing world economy by its ability to operate in real time.

This process is far from complete and universal and for that to happen “…requires fundamental social, cultural and institutional transformation...” (1996, 91). However, it is this transformative potential that, for Castells, explains why the new economy is informational and not just information based, “….as the industrial economy was not just based on new sources of energy but on the emergence of an industrial culture characterised by a new social and technical division of labour” (1996, 91).

² In his third volume `End of Millenium', Castells examines how a non capitalist economy, the industrial statism of the old Soviet Union failed to deal with the rise of the informational economy.
This new informational culture, according to Castells, manifests itself in a global, network enterprise comprising economic agents of firms, organisations and institutions. This enterprise, or new ‘organisational logic’, grew out of the economic restructuring of the 1980s. Whilst these business changes and strategies were related to technological change they were not dependent upon it and in many case, Castells argues, they preceded the diffusion of information technologies in businesses. The purpose of these change strategies was to equip businesses with the ability to cope, commercially, with the pace of change in their economic, institutional and technological environment. Invariably they aimed to develop a business model based upon flexible production, management and saving labour. The product of this endeavour, according to Castells, is a business network that integrates small businesses and global corporations into a “…common matrix of organisational forms in the process of production, consumption and distribution” (1996, 151). For Castells, the defining feature of the informational economy is this convergence of this new organisational form or ‘logic’ with the information technology paradigm.

Just as the new economy emerging from the informational society is shaped, according to Castells, from humankind’s new technological ability to use as the “...direct productive force..... the capacity to process symbols”. So, he argues, is our culture being irretrievably changed by the capacity of the new technology paradigm, for the first time in history, to integrate “into the same system the written, oral and audiovisual modalities of human communication”. It is this new multimedia communication facility that constructs a new symbolic environment, which, in Castells’s view makes virtuality our reality. Castells argues, acknowledging the work of Roland Barthes and Jean Baudrillard, that that there is no separation between ‘reality' and symbolic representation, stating that “in all societies humankind has existed in and acted through a symbolic environment”. In this sense reality has always been virtually experienced but what historically distinguishes the new communication system is that ‘reality itself (that is, people’s material-symbolic existence) is entirely captured, fully immersed in a virtual image setting, in the world of make believe, in which appearances
are not just on the screen through which experience is communicated, but they become the experience'.

The comprehensiveness of this new communication system does not necessarily mean that culture is homogenised or dominated by a few. Castells considers that the very diversification, multimodality and flexibility of the system allow it to integrate all forms of expression, interests and values. Such comprehensiveness does, however, imply that those cultures not using the system, for whatever reason, may be marginalized and increasingly excluded from the informational society. This notion of social and political exclusiveness and inclusiveness is further unravelled in Castells's argument that the new informational paradigm has redefined the social meaning of space and time.

Castell's hypothesis is that the logic of the new socio-technical structure, the network society, is to displace the dominance of clock time and physical location over social processes of production, power and experience. Moreover, he maintains that whereas time has historically dominated space the network society is characterised by space organising time. This society is constructed around the flow of capital, information, technology and organisational interaction and these flows are the "expression of processes dominating our economic, political and symbolic life" (1996, 412). For Castells, this means a new spatial logic, 'the space of flows' is emerging, materially supported by global electronic circuits, nodes and hubs that organises social practices.

How this logic might impact upon human production and experience has been touched upon above. In terms of power, however, Castells claims that "the space of flows is becoming the dominant spatial manifestation of power and function in our societies" (1996, 409). In essence, Castells argues that the network society is associated with, and facilitates, the emergence of an increasingly globalised elite whose power and wealth is projected throughout the world and whose experience is cosmopolitan. In contrast, life and experience for the majority of people is rooted in their local places and culture. The tendency in Castells's opinion will be for global power to escape "...the socio-political control of historically specific local/national
societies” (1996, 446), creating a dystopian “structural schizophrenia between two spatial logics that threatens to break down communication channels in society” (1996, 458).

This is an important point for this research. The ‘space of flows’ not only articulates the significance of the new communication structures, empirically reinforced by Dutton et al (2009), but also locates notions of power, better articulated by Castells in later publications (Castells, 2009), within this structure. For Castells how this power is exercised in the space of flows or who exercises the power may determine the health of local democracies. This notion of power is important in understanding the challenges facing those interested in local civic renewal. It is particularly important, as will be shown, for prospects of a local online networked public sphere enhancing local democracy.

Castells also recognises that the concept of `global power' as exercised through `globalisation' is a contested area. Hirst and Thompson’s view (1992, 1995) is that national society has an enduring power. They argue that national economies are not being subsumed by a global economy and that the world economy remains inter-national. Moreover, they contend that national governance, though its traditional function is changing, still has a pivotal role to play in governing the international economy. Urry (1999) argues that the sociological concept of the social as society, and its related notions of nation-state, citizenship and national society, is becoming less useful as a framework for analysis in an age that is characterised by the movement of people, information, ideas, money and technology across national borders. Instead he seeks to develop social theories that depend on metaphors of network, flow and travel. He subscribes to Castells’s view and argues that the “.. global presupposes the metaphors of network and flow rather than region” (Urry, 1999, 33) which brings into question existing forms of social structure, accountability and power.

Castells does acknowledge the enduring power of national society. In his second volume `the Power of Identity' (Castells, 1997) he argues that forms of nationalism, cultural and religious identity can be defensive, constructed in opposition to increasingly porous national borders, a secular
internet culture and the exclusion or marginalisation of groups and communities from the emerging network society. It is in this context he sees the nation state being re-configured as part of this process of social restructuring. The difficulty he poses for the contemporary nation-state is “how to link up interests and values expressed, globally and locally, in a variable geometry in the structure and policies of the nation state?” (1997, 305). The answer, Castells claims, is for the modern nation state to become assimilated with the network society and become “nodes in a broader network of power” (197, 304). This envisages a more strategic function for the nation state very much in keeping with Hirst and Thompson's (1995) notion of the nation state moving away from national sovereignty and towards “....distributing and rendering accountable powers of governance upwards towards international agencies ....and downwards towards regional and other sub-national agencies...”(1995, 408). This is reflected in Stoker’s (2006) thinking on how local civic society might be effectively renewed through using ICTs to enable citizen participation in accountable governance institutions at the local, national and international level.

Notwithstanding this, Castells considers there to be a “...crisis of democracy as we have known it the past century” (1997, 342). This crisis turns upon the nation state's loss of sovereignty and consequent political legitimacy in the eyes of its citizens. As such political meaning and identity as embodied in ‘national culture' and captured in the concept of citizenship are necessarily challenged. Hirst and Thompson (1995) view national cultures and political projects based upon them as political dead ends. Instead they suggest new communications technology form the basis of an international civil society and this crisis of legitimacy can be overcome by the modern nation state seeking “....bases of citizen loyalty and legitimacy outside primitive cultural homogeneity” (1995, 420). Beyond suggesting the notion of a global citizenship Hirst and Thompson do not address how the citizen politically interacts with the new role of the nation state and thereby potentially renewing the democratic or political process. Urry (1999) proposes a program of citizens' rights and duties as global citizens but recognises that this is only indicative of the “ links between cosmopolitanism and citizenship” (1999, 175).
Castells attempts to address this link and sees potential for the democratic process to be reconstructed in the informational society. He contends that if the nation state is to achieve a new legitimacy then local and regional government should be strengthened through some devolvement of the nation state's powers. In addition, he points to the opportunity offered by electronic communication to enhance political participation and empower or facilitate political mobilisation around a variety of issues at different geographical levels.

For Castells, notions of democratic renewal have to be couched in the context of the social and political cleavage evident in the information age and touched upon above. As he states in his third volume (Castells, 1998) the logic of the informational society, informational capitalism, is to “....create a sharp divide between valuable and non-valuable people and locales” (1998, 165). As has been stated Castells does not subscribe to technological determinism but uses the concept of a network society as helping to define

.....the terms of the fundamental dilemma of our world: the dominance of the programs of global network of power without social control or, alternatively the emergence of a network of interacting cultures unified by a common belief in the use value of sharing” (Castells (ed), 2005, 43).

The second modernity, reflexivity, and the socio-technical

Ulrich Beck also considers we are living in transformative times (Beck, 1999, 2000, see also Beck et al 2003, Beck and Lau 2005) that are characterised by social turmoil, chaos and crisis. Whilst he shares many points of convergence with Castells’ ideas, as will be illustrated, he does not subscribe to monocausal theories, such as the impact of ICTs, to explain this social turmoil. However, if, as some commentators have argued (Lash 2003, Hier 2008), Beck underestimates the consequences of the interaction between the social and the technical then the narratives of Castells and Beck become congruent.
Beck’s contribution is to provide the concept of ‘reflexive modernity’ to help identify the causes of transformation and signpost the potential characteristics of an emerging society. It is a reflexive modernity in the sense that it will be the opposite of what went before: it will be epochal and the social and political institutions that governed industrial society will be transformed. It is this that makes Beck relevant to this study as he provides a sense of the scale of the change that governance institutions and particularly local governance institutions may have to make to remain relevant and/or legitimate to local civic society in the 21st Century. This potential scale of change is reflected in the sensibilities captured in some of the interviews (see Chapter 5) conducted as part of the empirical research for this study.

Beck puts forward the assumption that

...towards the end of the twentieth century ... ....A new kind of capitalism, a new kind of economy, a new kind of global order a new kind of politics and law, a new kind of society and personal life are in the making which both separately and in context are clearly distinct from earlier phases of social evolution’ (2000, 81).

He conceptualises this new society as a second age of modernity emerging from, but forming a structural and epochal break with, the first industrial modern period. Like Castells, he insists that the shape of this new society is still being negotiated and modernity has not vanished but is transforming itself. Beck contends it is the centrality of the nation state societies, within the developed western world, that characterise first modernity where social relations, networks and communities are essentially understood in a territorial sense. This has now been undermined by a series of interlinked processes: globalization; individualisation, the gender revolution, underemployment and global risk. It appears however, that for Beck it is the process of globalisation that is primarily driving this change.

At the beginning of the 21st century the conditio humana cannot be understood nationally or locally but only globally. Globalisation is a non-linear, dialectic process in which the global and the local do not exist as cultural polarities but as combined and mutually implicating principles (Beck 2002, pg 17).
Beck maintains this dialectic process which forms interconnections across national boundaries also transforms the nature and quality of social and political life inside nation states and he conceptualises this nexus of the global and the local as cosmopolitanisation. He distinguishes this from the notion of a bourgeois cosmopolitan elite by insisting that for him the new cosmopolitanism is a ‘rooted cosmopolitan’ “...having roots and wings at the same time. So it rejects the dominant opposition between cosmopolitanism and locals as well: there is no cosmopolitanism without localism” (Beck, 2002, pg 19). So for Beck, as with Castells, the challenge for local communities is to interact with an increasingly globalised society but if they wish to retain their distinctiveness of place they must, by implication, retain some power over this interaction. This suggests an invigorated and politicised local civic society able to negotiate the terms of such interaction and realise a ‘rooted cosmopolitanism’.

It is Beck’s notion of a world risk society that is a key explanatory concept for explaining the transition from the first to the second modernity. This also illustrates the challenges confronting governance institutions to remain relevant to their citizenry. Beck’s idea of risk in this context, as Latour explains (2003), is not about individuals becoming less safe per se but more about how individuals who are more entangled, enmeshed in larger more complex networks live with global risk. These, according to Beck (2006), are new risks, such as for example: climate change; nuclear waste and financial crises. They do not respect national borders or nation states. Their effect over time cannot be easily determined and limited, and their assignment of causes and consequences is no longer possible with any degree of reliability. It is not only the uncertainty that these new risks engender but also their incalculability which calls into question ‘first’ modern notions of steady linear advancement in security and knowledge through scientific and technical progress.

The effects of living with such risks are manifold. Politically the effect can be paradoxical: in an age of heightened risk, of having historical knowledge of dealing with uncertainty yet not knowing how to deal with this new
uncertainty, the individual demands security from the “..key institutions of modernity science, business and politics to guarantee rationality and security but they find themselves confronted by situations in which their apparatus no longer has a purchase..” (Beck, 2006, 8). The effect of this is that trust in the key institutions of modernity is undermined, or as Beck puts it, the perception of them changes from ‘trustee to suspect’. This has consequences for the individual, who in wanting to trust ‘expert systems’ but being forced to mistrust them must now cope with the uncertainty of the global world by his or herself. They, according to Beck, become alienated from the very institutions and systems they expect to provide rationality and security. This may or may not be problematic for a revival of local civic society and any new emerging public sphere within a representative democracy. A degree of mistrust in established institutions may be politically healthy for local democracy in the sense that it may encourage, as De Tocqueville (2003) historically observed, collective self-organisation within local communities to resolve problems. However, the danger of cynicism is that it may undermine representative democracy by preventing citizens participating in the decision-making process.

Beck is keen to emphasise that the transition from first to second modernity is not post-modern in the sense that boundaries and distinctions are cast aside and analytical concepts concerning the de-structuration of society and de-conceptualisation of social science need to be employed to investigate this new social phenomena. On the contrary he argues that while modernity has not vanished, in the sense that basic principles of modernity such as, for example, rational decision-making remain and boundaries are not fixed but become optional or uncertain, it is becoming increasingly problematic and for him the issue is the re-structuration of society and the re-conceptualisation of social science. Thus for Beck a paradigm shift in both the social and political sciences is therefore required to understand and explain what he views as essentially a historical break with modernity.

Beck acknowledges that other theories have put forward the notion that the present represents a historical break with the past but dismisses them as they
trace the break to developments within autonomous subsectors of society, for example, to developments within the sphere of information technology (as with the theories of post industrial society, information society and network society) or to the loss of key certainties in the cultural sphere (as in the theory of post modern society) (Beck, Bonss and Lau 2003, 13).

Beck eschews narrow or monocausal theories and is emphatic that the structural break with modernity is not a consequence of exogenous factors but as a result of modernisation itself.

For Beck the logic of modernity is to modernise the modern society. "When modernisation reaches a certain point…. it begins to transform, for a second time, not only the key institutions but also the very principles of society” (Beck, 2003, 1). In this context institutions which were once considered necessary are increasingly seen as contingent, these include the nation state, the welfare state, mass political parties anchored in class culture and a stable nuclear family. In the first modernity these combine to support, and be supported by, economic security, industrial regulation, ‘jobs for life’ and unquestioned science. The modernisation process undermines these institutions and foundations of modern life often in a way that is neither desired nor anticipated.

It is these unintended consequences of this modernisation process - for example, the boundary shattering force of unfettered capitalism or the diminishing significance of clock time and physical place brought about by the technical revolution - which Beck defines as reflexive modernisation, that “….reverberate throughout the whole of society in such a way they become intractable” (Latour 2002, 36). It is this critical mass of unintended consequences which “….not only changes social structures but revolutionises the very coordinates, categories and conceptions of change itself” (Beck, Bonss and Lau, 2003, 3).

Beck’s theory of reflexive modernisation frames this ‘meta-change’ that is transforming first modernity into second modernity. It is based upon the view that as important institutions are undermined so is the "logic of order
and action." (Beck and Lau 2005, pg 527), that comprises the foundation of these institutional structures.

This logic drew a strict boundary between categories of human beings, things and activities and made distinctions between modes of activity and ways of life, something which made it possible to assign areas of authority and responsibility unambiguously (Beck and Lau, 2005, 527).

This logic of first modernity enabled differentiation between, for example: the public sector or the market place; the family or not the family; nature or society; work or leisure; war or peace. Beck and his colleagues claim that in the context of reflexive modernity this either or logic leading to differentiation breaks down and a new "both/and logic.." (Beck and Sznaider, 2006) applies. Thus within second modernity there exists both the public sector and the market place; the family and not the family; nature and society; work and leisure; war and peace. A further effect flowing from the undermining of ‘first’ modern institutions is a change in functions both regulatory and commercial. There occurs in second modernity an outsourcing of governance functions of the state, of national rights to global rights and of economic functions to supra-national economic bodies. At the same time there has been an insourcing, a shift of activities onto small firms, mainly employing freelancers and subcontractors.

Moreover, within ‘first’ modernity rules and regulations were constituted for the individual according to an agreed set of roles in a variety of institutions. Within Beck’s ‘second’ modernity these institutional roles have changed, they have been ‘de-normalised’ and the individual is increasingly left without prescribed rules to become according to Lash a ‘rule finder’. The challenge is to find new ways to live within this emerging society that conform to a less secure, less regulated existence. According to Lash (2003),

We may wish to be reflective but we have neither the time nor the space to reflect. We are instead combinards. We put together networks, construct alliances, make deals. We must live, are forced to live in atmosphere of risk in which knowledge and life chances are precarious (2003, 52).
The interesting question begged here of course, and both Beck and Lash do pose it – is what kind of governance is fit for purpose in this age of second modernity where perhaps Lash’s notion of constitutive rules, rules that define the playing field but are developed by the players as they play, rather than the more prescriptive regulative paternalistic rules, predominate. As Lash speculates, “perhaps new second-modernity institutions must be comprised primarily of, not regulative but constitutive rules. And in this sense they may not be recognizable to us as institutions” (2003, 54). For Coleman and Blumler (2009) it is the internet which can enable a new type of governance by facilitating virtual political spaces which are defined not by existing governance institutions but more by an active citizenry determining the space it wishes to engage within.

For Beck the answer to the governance question lies within his conceptual framework of reflexive modernisation which is, for him, more about reflex than reflection. Reflection is a state of mind determined by first modernity consciousness epitomised by the Cartesian subject/object relationship in ‘I think therefore I am’. In Beck’s reflexive second modernity we do not have the time or space for this reflective distance and must act on reflex and such reflexes are generally immediate and indeterminate. As such, institutions if they are to serve second modernity must “.embark on a learning process, in the course of which reflexive procedures are developed and implemented for dealing with uncertainty and insecurity and ambiguity” (Beck and Lau , 2005, pg 553). This echoes notions of the ‘adaptive state’ (Bentley and Wilesdon (ed) 2003) which contends that local government must become more agile and flexible in its response to this growing uncertainty and unpredictability within the public realm.

Posing the question of what type of institution will govern in the second modernity allows Lash to find a congruency between Castells’s analysis and that of Becks. Lash explains this by unpicking Beck’s theory of reflexive modernisation to show the first modernity as comprising a logic of structures and second or reflexive modernity as conforming to Castells’s logic of flows. The society of ‘first’ modernity can be conceived of as a structural linear system with clearly defined boundaries, rules and authority
where social change came about through something external acting upon this system. While within second modernity changes are produced from within by industrial production manufacturing unintended, unanticipated consequences itself. These unintended consequences of reflexive modernity presume the existence of non-linear systems and processes capable of producing such unexpected, uncertain and indeterminate outcomes. However, for Lash the key point is that these complex non-linear systems are both social and technical and as such can be mapped onto Castells’s analysis of how social power and inequality is regulated through an emerging spatial logic, the ‘space of flows’ supported by a socio-technical structure, the network society. In defining Beck’s second modernity as a logic of flows, Lash is arguing that Beck underestimates the technological dimension of this emerging new society. Lash takes this on a step and maintains that it is commonplace within the global information age, or second modernity, to say that power and inequality operate less through exploitation than exclusion. This is entirely consistent with Castells’s analysis.

Lash maintains that it is socio-technical institutions such as platforms, operating systems, communication protocols, intellectual property rights that are likely to govern power relations in the second modernity. It is precisely these systems that maintain the electronic hubs and nodes of Castells’s network society and individuals’ relationship or access to such networks determine whether they are included or excluded from that society. While Beck acknowledges that that the modernisation process “…opens up a space in which people choose new and unexpected forms of the social and political” (Beck and Lau, 2005, pg 525), Lash is insistent that it is at the interface of the social and the technical

...that we take on the precarious freedom of a ‘life of our own’; that we invent the political, that we take on ecological responsibility. Reflexivity in the second modernity is profoundly socio-technical (Lash, 2003, pg 55).

To summarise then, the value in these accounts of an emerging post-industrial society to this study is that they not only provide an explanation
of why society is changing but are emphatic that such change marks a historical break with the way in which social, political and economic life was conducted within industrial society. In this emerging society, where as Stoker (2006, 66) has observed “...politics has become more complex”, industrial practices of conducting politics, of governance in a representative democracy are misplaced. One consequence of this new complexity, highlighted by these accounts, is of localities becoming politically marginalised and citizens becoming disenchanted with the local governance institutions. A remedy for this, according to these narratives, is for localities to take on a ‘rooted cosmopolitanism’ and become part of the electronic network society. Implicit in these ideas, if local democracy is to be preserved, is a requirement for local civic renewal with a re-engaged citizenry able to negotiate entry into this new society. Moreover, as Lash acknowledges, central to this process of local civic renewal will be the facility of local governance institutions and citizens to find, technologically enabled, new political spaces.

It is interesting then, and paradoxical given the 20th Century was such an apparent triumph for liberal democracy ³, that these accounts of an emerging post-industrial society should be characterised by references to social turmoil, chaos and ‘crisis in democracy’. Indeed such notions are echoed by political elites, certainly in the UK, who are fearful that what they perceive as growing citizen disenchantment with the political process, elected representatives and institutions will lead to a ‘democratic deficit’. This perception of a crisis within liberal democracies has led to a revival of academic and political interest in the civic arena. As Stoker (2006, 54) points out, "..weaknesses and faults in civil society are sometimes used to explain failings in the process of democracy, and in particular the capacity of people to engage”.

The following section examines some of the empirical evidence gathered by political scientists to see what support their may be for these accounts of a

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³ Two thirds of all countries by the end of the 20th century had democratic governance (Diamond. L 2003)
The crisis in democracy and hopes for civic renewal

To begin with, some working definitions are probably necessary. It is acknowledged there a number of competing perspectives of democracy, such as for example, representational or direct democracy (Mansbridge, 1980), ‘market’ or ‘Athenian’ democracy (Elster, 1986). This can reflect as Blaug (2002, 113) argues that democracy is “a struggle over power, and as such, it provides an entirely different experience to those who hold power and those who do not”. This notion of struggle for power within the context of participation within civil society will be returned to but for the purpose here the normative viewpoint of democracy as defined by Schumpeter (1943, 269) will suffice: "that institutional arrangement for arriving at political decisions in which individuals acquire the power to decide by means of a competitive struggle for the people's vote."

Within this definition citizen engagement in the formal political process is clearly fundamental and this level of political participation therefore is an important measure for political scientists to gauge the health, or credibility, of liberal democracies. Grugel (2002) argues that Schumpeter’s definition concentrates mainly on this process and attaches little importance to civil society. However, it is arguable that a civic base is implicit in this definition.

Civil society itself also requires some definition. Unsurprisingly perhaps, the concepts’ relatively recent academic and political renaissance has provoked much debate on the precise nature and constituent parts that may comprise civil society. This is a complex debate and one that cannot be done justice here. Nonetheless, the purpose of the following is to provide a flavour of this complexity whilst foregrounding a concept, that of the ‘public sphere’, which, to add to the complexity, is often associated, or used interchangeably, with that of civil society but is of particular importance to this research.

Grugel (2002, pg 93) acknowledges this complexity when she considers that
what is meant by ‘civil society’, however, is not always clear......It is the arena of associations of individual and community agency...There is agreement, in a broad sense, that it comprises socio-political institutions, voluntary associations and a public sphere within which people can debate, act and engage with each other in order to deal with the state.

Diamond (1994, pg 5) appears to see civil society as synonymous with a public sphere and views it as

..distinct from “society” in general in that it involves citizens acting collectively in a public sphere to express their interests, passions, and ideas, exchange information achieve mutual goals, make demands on the state and hold state officials accountable.

Calhoun (1993, pg 269) however, insists they

‘...are not precisely equivalent concepts. Indeed, the importance of the concept of public sphere is largely to go beyond general appeals to the nature of civil society in attempts to explain the social foundations of democracy and to introduce a discussion of the specific organisation within civil society of social and cultural bases for the development of an effective rational-critical discourse aimed at the resolution of political disputes’.

It is this latter distinction which appears of most use to this research and will be dealt with in a little more detail. Whilst it is acknowledged that there are other conceptions of a public sphere or public space (see Benhabib, 1996) it is, arguably, Habermas’s notion of a discursive public sphere that envisages, even as a normative ideal, the democratic restructuring of late capitalist society that is perhaps most relevant here. In Habermas’s (1989) original conception the public sphere was created as part of the administrative requirements of the nation state emerging in Europe in the late 16th and early 17th century. In describing the process where local administrations where brought under control of the state he maintains (1989, 18) that

elimination of the estate-based authorities by those of the territorial ruler create room for another sphere known as the public sphere in the modern sense of the term: the sphere of public authority. The latter assumed objective existence in a permanent administration and a standing arm.
Moreover, as part of this process a public was also defined, bankers, merchants entrepreneurs and manufacturers, the emerging bourgeoisie. According to Habermas it was

...this stratum, which more than any other was affected and called upon by mercantilist policies, the state authorities evoked a resonance leading the publicum, the abstract counterpart of public authority, into an awareness of itself as the latter’s opponent, that is, as the public of the now emerging public sphere of civil society (1989,23).

The liberal public sphere was regulated from above by the state authorities, but separate from it, and was political in that private individuals associated publicly, within social structures provided by civil society, to engage in an informed rational debate with the purpose of influencing the governing rules or policies imposed by the authority. For Habermas the apogee of the liberal public sphere occurred within the salons of Paris or the London coffeehouses in the early 18th Century, where individual members of the bourgeoisie could assemble and engage in a rational discourse, nurtured by a burgeoning political press, on the current affairs of the day. For Habermas this bourgeoisie comprised a distinct political community defined by and in opposition to the public authority or state. This constituted a dynamic and dialectical relationship with the state and is axiomatic to Habermas’s understanding of the public sphere: in certain circumstances one could transform the other. Indeed, put simply, it was the developments within late capitalist society, the emergence of monopoly capitalism on one hand and the social welfare state on the other, which forced the demise of the liberal public sphere. Habermas argues that the governing rules or laws, that had hitherto arisen from the consensus of private individuals engaged in rational discussion now

.....correspond in a more or less unconcealed manner to the compromise of conflicting private interests. Social organisations which deal with the state act in the political public sphere, whether through the agency of political parties or directly in connection with the public administration......Large organisations strive for political comprises with the state and each other, excluding the public sphere whenever possible (Habermas, 1974, 354).
In other words the political influence of private individuals, citizens, freely associating was significantly diminished. As Calhoun (1993, 276) points out, the success of a political public sphere and by this he means that it “...provides for a discourse about shared societal concerns that is both rational-critical and influential” depends on a favourable organisation of civil society. This was no longer the case and in Habermas’s view this liberal model of the public sphere cannot be applied to contemporary society but remains instructive as a “...normative claim...” (1974, 354). The Habermasian ideal has been widely criticised most notably for excluding women (Ryan, 1991, Fleming 1993) and the working class (Negt and Kludge, 1993) from public life. Dalhgren (2005) also argues that the idea of discursive rationalism inherent in Habermas’s concept ignores other forms of communication that can be of importance in the democratic process such as affective communication, humour or irony. In a similar vein Kohn (2000) argues that the idea of ‘reasonableness’ is a social construct and the ability to hold a rational reasonable discussion usually benefits those already in power.

These are perhaps more criticisms of bourgeois society in the early 18th century rather than Habermas’s analysis but nonetheless they remain valid when applied to any contemporary re-working of the public sphere concept. Critically, for many modern scholars who invoke the principle, if not the historical model, of the Habermasian public sphere in promoting mechanisms or policies for civic renewal, he does not discount the possibility of it being ‘...realised today, on an altered basis, as a rational reorganisation of social and political power .....’ (Habermas , 1974 355).

What is left then is an idea that a favourable organisation or re-organisation of civil society can potentially provide a new political environment or new civic arena (Stoker 2006). For this political environment to comprise a public sphere in the Habermasian sense it should enable at the very least, the following:

(i) an independent space from the state or market;
(ii) where interaction, discursive or otherwise, between individual citizens can occur;
(iii) where they can discuss political affairs of the day in an informed manner;
(iv) with the aim of influencing state action.

The next chapter will consider how the Internet might constitute such a new civic arena in a post industrial networked society for now it is worth examining the assumption that such a re—organisation is required.

Civil society then, may or may not provide an environment, public sphere or arena, where citizens assemble, organise and engage with each other and perhaps directly or indirectly with their political representatives and institutions. This facility has, as de Tocqueville (2003, 604) observed on the relationship between civil association and democracy in 19th century America, an almost symbiotic relationship with formal political activity. ..the more the number of minor communal matters increases, the more men acquire, even unknowingly, the capacity to pursue major ones in common. Civil associations therefore, pave the way for political associations; on the other hand political associations develop and improve in some strange way civil associations.

Grugel (2002, 93) reflects Tocqueville’s ideas when she claims, “organisations and individuals from within civic society can hold the state accountable, share their experiences, promote their interests and learn values of civility and trust”. As such, measures to gauge the extent of this engagement in civil society, the level of civic activity, can be seen as indicative of the robustness of liberal democracies as are the indicators of formal political participation. However, as Hall (1999, 417) points out many commentators differ on what constitutes this “diffuse set of social relations”. Arato and Cohen (1997, 9) define it as sphere of social interaction between the economy and the state which included the “....intimate sphere ( especially the family)....” but did not include political parties as these arose out of civil society and were part of the economic and state sector. Norris (2001, 96), however, understands civil society as “....including political parties, traditional interest groups and new social movements, and the
news media. The preference here is to adopt as broad a working definition as possible and that posed by the Centre of Civil Society at the LSE appears to meet this requirement. Their definition is probably most useful for this study in that it acknowledges that civil society can be a dynamic social phenomenon which may or may not be distinguishable from the economy or the state. They claim that

Civil society refers to the arena of un-coerced collective action around shared interests, purposes and values. In theory, its institutional forms are distinct from those of the state, family and market, though in practice, the boundaries between state, civil society, family and market are often complex, blurred and negotiated. Civil society commonly embraces a diversity of spaces, actors and institutional forms, varying in their degree of formality, autonomy and power. Civil societies are often populated by organisations such as registered charities, development non-governmental organisations, community groups, women’s organisations, faith-based organisations, professional associations, trades unions, self-help groups, social movements, business associations, coalitions and advocacy group.

Much of the renewed interest in civil society has been sustained by “… the literature built on developing the concept of social capital” (Hall, 1999, 418). It is this concept of social capital, as elaborated by Putnam (2000), which has proved “…heuristically rich” and enabled social scientists to enter ‘..the contemporary discussion on citizenship and community”(Milner,2002, 17).

For Putnam, drawing upon the early 19th century observations of de Tocqueville (2003), social capital was a ‘public good’ generated through individuals associating together, beyond the sphere of the family or market, in common endeavours whether social, recreational or political. It is through participating in such social networks that individuals increase levels of interpersonal trust, which in turn boosts their propensity to engage in collective activity to solve common problems or to ensure that governments address such problems. Putnam associated high levels of social capital with a number of outcomes, such as, low rates of crime; higher rates of economic growth and, importantly for my purposes here, good governance within liberal democracies.

Putnam’s research (2000) showed the steady decline of social capital in America since the end of the Second World War eroding, he argues, the
ability of communities to solve common problems. However, when Hall (1999) applied Putnam’s concept and approach to Britain he found levels of formal and informal association to be high but levels of social trust, interpersonal trust, to be declining thereby not only citing Britain as a counter-example to the USA but illuminating one of the reasons why the concept of social capital has been contested. Milner (2002) is one of those who contest the usefulness of the concept of social capital as a universal indicator of declining citizen engagement in civic affairs. He presents evidence showing little or an uncertain relationship between levels of interpersonal or social trust and the density of associational membership. Grenier and Wright (2003) disputed Hall’s analysis arguing that the unevenness of participation in social networks was an important factor in determining levels of social capital and this suggests, therefore, that associational membership is not as robust as Hall considered. Pattie, Seyd and Whiteley (2004) supplied more contemporary evidence on this issue and found a majority (55%) of Britons were not members of any group. Stoker (2006, 56) on the other hand, argued that if the data on associational membership is examined longitudinally, over a decade, then it appears Britons move in and out of membership, “...and fewer than 15.6 per cent of the population were never members of an association during the 1990s”. Nonetheless, Stoker is clear that these levels mask an unevenness in associational activity that favour professional and managerial workers and as such “...may be increasing the prospect for political engagement for some much more than others” (2006, 57).

These, disputed, levels of social capital, may or may not explain, given the assumed interdependence of civic activity and political participation — and the issue of causality will be returned to — the UK experiencing in 1997 the lowest electoral turnout since world war two. This led to the term ‘democratic deficit’ joining the lexicon of those anticipating a democratic hiatus within liberal democracies. Was this a blip in an otherwise healthy body politic or did it represent a growing trend of citizen disenchantment evidenced by declining levels of electoral turnout, citizen participation in civic affairs and citizen trust in elected officials and political institutions?
An analysis of voter turnout in Europe over the last half-century (International Institute for Democracy and Electoral Assistance, 2004) reveals evidence from countries, including the United Kingdom, that voters may be less inclined to vote than they were a generation ago. However, in a further seven countries fluctuations both up and down are so numerous that it is not possible to identify a trend in either direction. Moreover, in parliamentary elections from 1945 to 2002, the average turnout in the EU member countries has been 83.0 per cent of the registered electorate. In short, an overwhelming majority of citizens have voted in a majority of the elections in which they are eligible to vote.

An examination of electoral participation worldwide by the same body (http://www.idea.int/vt/survey/voter_turnout1.cfm) reveals a not dissimilar picture. Overall participation in competitive elections across the globe rose steadily between 1945 and 1990. Voter turnout, expressed as a percentage all citizens old enough to vote rose by about 6 percentage points from 62% in the 1950s to 68% in the 1980s, but fell back down to around 64% in the 1990s. Interestingly the same turnout figures expressed as a percentage of the number of people registered to vote remained more constant throughout the 1940s to 1980s but then dipped suddenly in the 1990s, falling from around 77% to 68%. In other words, while the participation rate of all eligible voters has dropped only marginally, the drop in the participation rate of those actually registered to vote has been more pronounced. While these figures do show some evidence of declining interest in electoral participation it still remains the case that the majority of citizens are participating in the democratic electoral process worldwide.

Maybe it is the case that these data when presented at this overall level mask other trends that may become apparent if disaggregated by gender and age? Research conducted for the UK Electoral Commission (2004), drawing upon data collected by the European Social Survey 2002, concluded that there was no gender gap in voting participation at either national or local elections in the UK. This report did reveal, however, a gendered ‘activism’ gap where men were more likely to participate when indicators such as involvement in political campaigns and membership of voluntary
associations were taken into account alongside voting patterns. It acknowledges that the differences were small but statistically significant with women more likely to participate in consumer boycotts and ethical issues than participate in campaigns. Analysis of the same data for other European countries demonstrated that this ‘activism’ gap prevailed in most countries apart from the four Scandinavian countries where women participate more than men\(^4\). However, a more recent report ‘Audit of Political engagement’ (Hansard Society, 2007), discussed below, suggests that this gap may now have been closed.

Age is perhaps a defining variable for many activities none more so it appears than for voter turnout. When disaggregated by age a distinct trend of voter disengagement emerges amongst young people aged 18-24 (Electoral Commission, 2004). While this phenomena appears to be common to a number of industrialised democracies it is in the UK where it was perhaps highlighted when more than 6 out of 10 of those aged 18-24 chose not to vote in the 2005 general election. By comparison this almost mirrored the proportion (75%) of those aged 65+ who did vote (Electoral Commission, 2005).

Declining turnout in UK elections should be seen in the context of similar patterns amongst most established democracies in the world. Nevertheless, it is the case that there has been a particularly sharp fall in the UK since 1997. Does this represent a ‘turnout time-bomb’ or a ‘crisis in democracy’, particularly in the UK and particularly in relation to young people or do results from the 2005 general election and last round of local elections, where there was a small increase in the proportion of those voting, suggest that “the slump in voter turnout now appears to have eased, at least in most types of authority” (Rallings and Thrasher, 2006, 14). Turnout in the 2010 general election at 65.1%, up 4 percentage points from 2005 (BBC, 2010) and turnout at the local elections in 2009 at 39.2% up by a similar proportion from the previous year, suggests that this indeed is the case.

\(^4\) This evidently is consistent with the role of women in the political life of these countries where the proportion of women in parliament and in cabinet exceeds other European countries (Electoral Commission, 2004)
Voting is one indicator of measuring political engagement in liberal democracies, and although one commentator (Milner, 2002) argues that it should be the defining one, there are other dimensions of political engagement. Since 2003 the Electoral Commission has published seven annual Audits of Political Engagement (Electoral Commission, 2003, 2004, 2005, 2007, 2008, 2009,). These have been produced in response to perceived concerns about declining levels of public involvement in the political process in the UK. Table 1 (2007, 7) shows the range of indicators used in the audit(s) and the polled responses to them. The 16 indicators were designed to measure diverse, but distinct aspects of political engagement: behaviour; knowledge; opinions; attitudes; and, values. They are updated in full every three years. One of the key findings emerging from the audit was that levels of political engagement, measured by these indicators, have remained relatively stable since 2003. This would appear to offer support to those that do not consider levels of participation to be on an inevitable downward spiral.

Other findings also provide succour to this view. Table 1 reveals more than half (54%) of people stated that they were interested in politics but, given that the report reveals (2007, 46) that the vast majority of people (94%) have discussed political issues in the last year, this is likely to be an underestimation. This arises, as the report suggests, as a consequence of people “….taking the ‘politics’ out of the ‘issues’” (2007, 47) and generally viewing politics as being ‘other’ than what they were discussing. Surprisingly, given voter turnout at local elections, levels of interest are also higher for local than national or international issues, with men and women being equally interested in the ‘local’. Moreover, level of education and affluence of area are less important as a predictor of level of interest in local issues. The measure of voter turnout in Table 1 also supports an optimistic view of the situation. It reveals that 55% of people are likely to vote in an immediate general election, this represents an increase in the propensity to vote since the first audit in 2003 suggesting, correctly, that the 2005 general election turnout would be exceeded.
The latest full set of these indicators have been published (Hansard Society, 2010) and it is interesting to note, particularly for this study, that there is only one indicator that is statistically significantly different from the 2007 audit and indeed, all the other audits. That is the indicator measuring the proportion of those who think the present system of governing works well. In 2010 this indicator dropped to 28%, 5% points down from 2007 and describing a downward trend since a high of 36% in 2004. This resonates with Beck’s concerns around what institutions are fit to govern in the 21st century.

### Table 1. Indicators

<table>
<thead>
<tr>
<th>KNOWLEDGE AND INTEREST</th>
<th>67%</th>
<th>49%</th>
<th>47%</th>
<th>54%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Know own MP’s name</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Passed political knowledge quiz</td>
<td>44%</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Feel knowledgeable about politics</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Feel knowledgeable about role of MPs</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Interested in politics</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ACTION AND PARTICIPATION</td>
<td>55%</td>
<td>14%</td>
<td>15%</td>
<td>14%</td>
</tr>
<tr>
<td>Have discussed politics</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Propensity to vote</td>
<td>40%</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Presented views to MP/cllr</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Electoral activist</td>
<td>15%</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Political activist</td>
<td>14%</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Political membership/giving</td>
<td>40%</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>EFFICACY AND SATISFACTION</td>
<td>33%</td>
<td>27%</td>
<td>35%</td>
<td>41%</td>
</tr>
<tr>
<td>Getting involved works’</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Trust politicians generally</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Satisfied with Parliament</td>
<td></td>
<td></td>
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<tr>
<td>Satisfied with their own MP</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Think present system of governing works well</td>
<td>33%</td>
<td></td>
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</tbody>
</table>
There are also data in the 2007 Audit (the 2010 Audit is not relevant here) that provide a gloomy view of the current state of political and civic engagement. In terms of political activism, other than voting, the report categorised just one in six people (14%) as ‘active’ as a consequence of them having participated in at least 3 out of list of eight activities such as, for example, signing a petition, going on strike or attending a demonstration. While over half (55%) of the public had participated in one of the list of activities in the recent past this was most likely to be signing a petition. Formal political activity, such as, membership of a political party or attending a political meeting, was undertaken by just 5% and 8% of people respectively. Demographically, the audit revealed that the propensity to engage was unevenly distributed in favour of older, higher educated members of society.

People in social classes ABC1 were more than twice as likely to engage as those in classes C2DE with young people, aged 18-24, being the least likely to engage in any political activity, though women were as equally likely to be politically active as men. While the uneven nature of engagement is not new these figures represent a turnaround not only on the gendered ‘activism gap’ noted above but from the first audit in 2004 where young people where most likely to engage in such activities as demonstrating and signing petitions. The report argues that this now reflects “...that for most people, political activism is a supplement to voting rather than an alternative to it” (2007, 30) and supports this by revealing that “…73% of political activists declared themselves certain to vote at an immediate general election” (2007, 30). This would seem to echo Norris’s notion (2000) of the ‘virtuous circle’ where the political process is mutually reinforcing, that is, the more active you are the more likely you are to seek out politically opportunities to engage. The converse, of course, would also be true and the challenge here would be to break out or into the circle to include the disengaged.

This level and nature of political activism is also consistent with the decline of citizen engagement noted by Stoker (2006) who remarked, drawing upon data collected by the European Social Survey 2002, that whilst it would be
wrong to argue that people were apathetic they were “... cut off from the world of formal politics – for them it is an alien world...” (2006, 89). It also, as Table 1 shows, appears ‘alien’ for the majority of people (73%) to trust politicians ‘not very much’ or ‘at all’. These overall levels of trust have remained relatively consistent over the period of these audits and, according to Stoker (2006), for the last two decades. Worryingly, perhaps, the current audit showed that this trend might be deepening as it revealed a 5-percentage point rise in the proportion of people saying they do not trust politicians ‘at all’. As Stoker has commented, (2006) when taken at face value these figures may represent a healthy cynicism towards our elected representatives but, when coupled with figures from a MORI survey in 2005 (Toynbee, 2005) which revealed a distinct lack of trust in information provided by government bodies, they maybe indicative of a more profound disenchantment with political institutions. Milner (2002), however, presents evidence demonstrating little relationship between levels of trust in political institutions, and civic participation declaring this is entirely consistent “...from a Tocquevillian perspective, which views participation in voluntary associations as challenging state power and thus potentially undermining trust in political institutions” (2002, 23).

It is the quality of participation of those that do engage that is questioned by Pattie, Seyd and Whiteley (2004). They draw attention to the changing nature of citizenship captured in the concept of ‘atomised citizen’. This describes the increasing tendency of the citizen, both in the UK and the USA, to engage in the political process as individuals rather than collectively. As they discovered: “traditional representative, collectively organised politics is being steadily replaced by individualistic, consumerist politics” (2004, 79). The idea of a ‘consumer citizenship’ is not a new one in British politics, being formally introduced in 1991 by the Conservative Government’s Citizen Charter. It has been further promoted by the policy of the New Labour government who have been instrumental in opening up access to government and other public bodies through their e-government initiatives. In their Modernising Government (1999, 5) white paper they declared their intent by making “… a clear statement by the Government of what government is for. Not government for those who work in government; but
government for people – people as consumers, people as citizens”. It is
moot whether this has helped to make more accountable the providers of
public or other services to those that consume them but it is hard to argue,
within the norms of liberal democracy, against the intention. Indeed,
individualistic consumer type citizenship has moved beyond merely
attempting to hold service providers to account. The rise of ethical
consumption is an attempt by citizens to use their purchasing power to
influence governmental policy on a range of issues from the environment to
foreign affairs. Notwithstanding this, it may become problematic for the
civic tradition, and by implication ‘good’ democratic governance, when the
traditional, collective nature and activity of citizenship is reduced to, or
becomes conflated with, that of the individual, personalised activity of a
consumer.

This difference may be critical if, as De Tocqueville (2003, 600) considered,
citizens learn the skills of democratic participation and the civic virtues of
trust and reciprocity through collective activity: “In order to ensure that
men remain or become civilised, the skill of association must develop and
improve....” Or, as Pattie, Seyd and Whiteley put it, collective activity is
healthy for democracy as it helps to “...aggregate interests in society” (2004,
276) thereby facilitating the policy development process and aiding effective
governance. For the citizen it helps spread the social cost of participating
along with the accrued policy benefits. It also, they argue, helps in
combating individualistic tendencies or preferences for ‘NIMBYism’ as it
confronts the citizen with the “.... logic of their own choices” (204, 276).

So, to respond to the question posed earlier on the appositeness of such
terms as ‘crisis in democracy’ for describing the current state of liberal
democracy. It is argued, in the face of evidence presented here, that
Norris’s view (2002, 96) that “....a broad crisis in democracy has proved
exaggerated’ is broadly true. This appears to be the case, certainly i

n the UK, at both a national and local level. Nonetheless, indicators of the
uneven distribution and changing nature of political and civic participation
are grounds for concern for liberal democracies. A growing lack of trust in
politicians and governing institutions might be considered ‘healthy’ were it not aligned with an increasing proportion of people who consider the governance process is not working. Whilst voter turnout at the national level has increased from the all time low of 2001 it has yet to return to pre-1997 levels. At the local level voter turnout, outside of general elections, remains at around a third of the turnout. Moreover, in general, it is the older, higher educated people who are more likely to be politically engaged. Such evidence, as Grugel (2002, 94) points out, suggests that civic society is not automatically inclusive but “...identifies how unequal economic, social and cultural resources shape the contours of civil society itself”. If this represents a struggle about who is entitled to say what in the resolution of common problems then it is worth returning to Blaug’s (2002) view that democracy is a different experience for those who hold power than for those who do not. Moreover, it also underlines Calhoun’s (1993) reflections on the requirement for a favourable organisation of civil society to enable the development of an effective public sphere.

This suggests policy intervention maybe required to redress what is clearly an unfavourable organisation of civil society. If this is the case then the causes for such citizen disenchantment and a declining civic tradition merit attention. There are numerous causes offered to explain current levels of citizen disenchantment. Inglehart (1997) offers the emergence of the super critical post-modern citizen whose high expectations are inevitably disappointed by the political establishment. Another, put forward by Castells (1996), is the level of political corruption has bred cynicism and thus disengagement. Increasing globalisation is acknowledged as challenge to democracy (Hirst and Thompson, 1996, Archibugi & Held 1996) and is yet another factor that may breed disenchantment by placing the political process out of the reach of the ordinary citizen.

Stoker (2006), on the other hand, points to little evidence to date of a relationship between any of these potential indicators and levels of citizen engagement. Putnam (2000) amassed much data to relate low levels of social capital to declining levels of civic engagement in the USA. He examined a number of potential reasons for this decline in social capital:
increased economic pressure – people working longer hours; the changing composition, feminisation, of the workforce – the rise of 2 career families; changing pattern of urbanisation – urban sprawl replacing compact towns; and, the introduction of television. Whilst he found they all contributed to declining levels of social capital the definitive variable was age. It was, he found, the process of generational change that was replacing a civic minded generation with less involved children and grandchildren. The challenge was, he argued, to replenish the stock of social capital through policy and structural responses to address the supply and demand for opportunities for civic engagement. In Hall’s analysis (1999) he attributed the robust levels of formal and informal participation he found within the UK to precisely such responses: an educational policy that had, by the 1980s, transformed the British system to the extent that most individuals received a secondary education; changes in the class structure through post industrialisation increasing membership of the middle class; and, forms of government action to sustain voluntary community involvement.

For Stoker declining levels of social capital are an indicator of citizen disenchantment but not a cause. It is the uneven distribution of participation, as identified above, and Stoker credits Putnam with recognising this, that means that “the claim of a general decline in social cohesion and connectedness across advanced industrial countries, cannot, however, be seen as a key explanatory factor in the scale of political disenchantment...” (2006, 58).

Stoker’s alternative view reflects the characteristics of Beck’s second modernity. He considers current levels of disengagement should be understood in the context of ideologically uncertain times where citizens are unclear about what constitutes a ‘good’ society. The ideological certainties, where politicians were distinctly socialist, conservative or environmentalist, started to unravel in the 1980s and finished with the collapse of the Soviet Union. Consequently, Stoker claims, politics is much harder and more challenging for both politicians and citizens. Moreover, he argues, this challenge is made worse by the myths that prevail in mass democracy portraying a simplistic functioning of the democratic process that do not
match the complex reality of the current environment. Within this environment “politics takes place through the medium of governance” (2006, 67) that involves policy negotiation, development and implementation in different political arenas at the local, regional, national and international level. This represents a shift away, within the UK, from the traditional ‘Westminster’ model (Gamble, 1990) of the British unitary state towards governance by and through networks (Durose et al, 2010). This governance network manifests itself in partnerships, comprising both public and private sector organisations, formed at both a local and national level to facilitate better delivery of public services. However, as Durose (2010, 5) indicates “this institutional complexity and fragmentation associated with governance is a challenge to the traditional chains of accountability associated with representative democracy”. Whilst governance networks might complicate representative democracy there is also a tension between the local democratic and public service functions of local governance (Copus, 2010) that not only add to the complexity of local politics but have a number of implications for policy implementation which will be discussed in the next chapter.

To surmount these challenges and facilitate greater engagement Stoker advocates a range of policy and structural changes to re-configure the relationship between citizens and between citizens and their political representatives. He argues for more socially representative politicians, higher ethical standards and a more proportional electoral system. He advocates the provision, via capacity building and importantly the utilisation of ICTs, a wider range of opportunities for engagement between citizens. Structurally, he promotes adopting a new architecture of multi-level governance capable of responding to the challenge of globalisation that would locate decentralised power at a local or neighbourhood level within a governance structure that is acting nationally and internationally. Such measures, facilitated by the new technologies, would, according to Stoker, help rebuild and sustain a new civic arena by fostering social capital and encourage democratic input at both a local, national and global level.
Milner (2002) finds the use of social capital as a measure or cause of citizen engagement problematic. He finds its two key elements: associational density and interpersonal trust, difficult to apply as universal indicators or causes of citizen engagement. He argues that the relationship between associational density and social capital is not straightforward and can vary according to the nature of the organisation and the country, making international comparisons difficult. Similarly for social trust, he claims there is "...no independent empirical referents apart from the subjective responses, and thus no way to know whether the words mean the same thing in different times and places" (2002, 21). For Milner it is the extent of civic literacy, political knowledge, that explains political participation and the most meaningful indicator of this is turnout at local elections. He considers that casting a vote at a local election is the most measurable expression of the informed citizen acting in a civic capacity as member of a local community.

Crucially, therefore, Milner focuses attention on the formal political process and sees little relationship between civic, non-political activity and political participation. Rather, it is the three-way relationship between civic literacy, political institution and political participation that contributes to the well-being of the community. Milner advocates policies on the basis of what appears to explain observed variations in international levels of civic literacy. He found countries with high levels of civic literacy had high voter turnout in local elections. Common to these countries was an electoral system of proportional representation; high newspaper consumption; civics education for adults and, particularly in the Scandinavian countries, a growing use of ICT as a source of information. Similarly Putnam, whilst arguably ambivalent on the role of the Internet in arresting the decline of social capital in 'Bowling Alone' (Putnam, 2000) provides empirical evidence in later work (Putnam et al, 2003) on the role of the Internet in helping to revive local communities.

There are then a number of potential causes for the current levels of citizen disengagement with representative democracy: unrealistic expectations; lack of trust or cynicism; declining levels of social capital; or, simply that
contemporary politics is just too complex. Many of the commentators discussed here have proposed remedial policy changes that generally promote a greater civic culture or literacy amongst the general public. These are aimed at developing, or re-discovering, shared values and knowledge on the assumption that this will increase the capacity and propensity for greater civic engagement. Indeed the UK government produced guidelines for local government (Andrews et al, 2006) on this very issue. However, whilst such capacity building may well be part of the process of favourably re-organising civic society this research is more concerned with the proposal that the Internet may be part of the solution in enabling a new civic arena or public sphere. One that possibly makes politics less complex and inverts Blaug’s (2002) point that democracy is a different experience for those who hold power than for those who do not by allowing the ordinary citizens voice to be heard by local government above those who have traditionally dominated political discourse. Such prospects for the Internet or the World Wide Web facilitating such a local networked public sphere will be examined in the next chapter.

Conclusion

This chapter has sketched a picture, drawn from two of the leading theorists on societal transformation in the post-industrial age, of how the projected changes in society may have implication for liberal democracies. It is, for the purpose here, immaterial whether one agrees with Castells’s theory of social change driven by an ICT enabled network society or Becks’ view that it is modernisation itself, which includes the adoption of new technologies, that is rupturing the social, political and economic certainties that characterised modern life in industrial society, or even Lash’s argument that the two theories are in fact congruent and that Beck’s theory of “…reflexivity in the second modernity is profoundly socio-technical” . The purpose here was not to offer a definitive proof of any these ideas rather it was to provide a narrative of social, economic and political transformation that captures not only the key concepts that will occur in following chapters but registers the centrality of the role technology, namely the Internet and the World Wide Web, may play in these changes. Such meta-narratives
often suffer from hyperbole so it was important to ground the theories in empirical evidence that sought to measure the scale of citizen disenchantment within contemporary liberal democracies and particularly that of the UK. These generally discounted the idea that there existed a crisis in this democracy but nonetheless there was cause for concern around the variable and uneven rates of engagement. Alongside this the political scientists referenced here considered ICTs to be part of any potential policy solution to this problem.

There are also a number of ways in which the ideas of the political scientists resonate with the meta-theories of transformation. When Stoker (2006) describes the complexities and uncertainties of contemporary politics that serve to make politics difficult for the ‘amateur’ he is echoing Beck’s unanticipated consequences of modernisation. When Stoker also argues that this complexity is compounded by the shift in public authority from the Westminster model to one of governance by and through networks that serves to blur the distinction between public and private he is, again, reflecting Beck’s idea of a ‘de-normalisation’ of institutions where boundaries and regulations become hard to discern. The notion of a contemporary public sphere is interesting in this respect suggesting as Calhoun (1993) points out that it must address the problem of political identity or how a political community is constituted. This chimes with how both Beck and Castells see the political significance of geographical localities being transformed by a globalised, networked society.

This can, and indeed is, facilitated by the World Wide Web, the space of flows, which can privilege communities of interest over communities of place. Interestingly, as Polat and Pratchett (2009, 193) have observed “the technology is often enacted in ways that are explicitly local in their focus, with the potential to enhance rather than undermine localities”. Moreover, it is communities of place, national or local, and the public authority vested in these places that have historically defined, in Habermasian terms: ‘the public’. Furthermore, according to Habermas, it is the public sphere that served to transform members of the public into political actors or citizens or political communities. It is this politically transformative function of the
public sphere that is, arguably, one reason why it survives as a normative concept, particular amongst those interested in democratic renewal. However, as Calhoun (1993) and Grugel (2003) have pointed out for a public sphere to flourish there is a requirement for a favourable organisation of civic society.

This suggests policy intervention and the weight of evidence here points to the Internet, or the World Wide Web playing a transformative role in local democratic engagement. It also suggests that local government, as the public authority of the day and, according to Pratchett (2003, 359), “....the primary locus of democracy at sub-central government level...” needs to be centrally involved in such a process.

This raises the research question of interest here, namely:

(i) Does such a local political online space exist as a Web enabled networked public sphere capable of facilitating communication or discourse on civic issues between local government institutions and the wider civic society?

This chapter has concentrated on contextualising the broader question of the relationship between the Internet and local civic renewal. The next chapter will examine existing research into the facility of the Web to provide a local networked public sphere thereby locating this thesis’s empirical contribution to this body of work. It will also expand on the above research question by motivating a requirement for two additional but complementary questions:

(ii) How do local civic stakeholders view or exploit this space?
(iii) Are there transformative implications of conducting local politics in this space?
Chapter 2

A local networked public sphere?

Introduction

The information technology revolution described by Castells (1996) is today most commonly associated with the internet a system of interconnected computer networks that spans the globe and even links in to outer space. It provides the electronic hubs and spokes of Castells’s network society which provides the infrastructure for electronic mail and the hyperlinked information of the World Wide Web - it is the network of networks.

It is these two innovations, e-mail and the World Wide Web (WWW) that facilitate networked communication across the internet. It is the latter that is the focus of this research. The WWW, or the Web, is the invention of Tim Berners-Lee the name he gave to his global hypertext database that sits on the internet. Documents within this database can be identified by the Uniform Resource Locator (URL) and linked to via the publishing language Hyper Text Markup Language (HTML) and the Hypertext Transfer Protocol (HTTP). It was the creation of the web, coupled to the development of web browsers, or graphical user interfaces, which enabled information to be retrieved at, as we now know it, the click of a mouse as opposed to entering strings of code. This, along with the non-proprietary nature of the web, cemented its position as the most popular networked communication protocol on the internet. The Web today enables a wide range of applications from static Web pages to those that facilitate social networking, blogs and discussion forums otherwise popularly known as Web 2.0.

Significantly the Web remains non-proprietary. It is therefore a global networked communication space that is formally free and, leaving aside the question of access to the technology, anyone can, in theory, participate in
this network. It is this networking facility to link individuals or political communities, however defined and wherever located, to share information in real time unmediated by the economic and political interests that have traditionally dominated political activity and communication offline that has attracted politicians and academics alike to explore the potential of the web to transform democracy. For similar reasons the UK government, along with governments worldwide saw the internet and in particular the new Web 2.0 applications as tools to help them modernise their state machinery and reconnect a disenchanted citizenry with the democratic process and policy development. This chapter will follow this theme and focus, in particular, on the potential of the networking capacity of the web to create a new local political environment.

What this new political environment might look like is difficult to describe let alone conceptualise. This is a function of the relatively recent arrival of the technology, its phenomenal mass popularity, its seemingly endless dynamic capacity for innovation, re-invention and social utility and perhaps more pertinently its emergence as a politically contested arena. This difficulty in foreseeing the shape of this new political environment is reflected in how many commentators attempt to describe it and the conceptual baggage these descriptions may or may not carry. Stoker (2006) for example, acknowledging this difficulty, calls for a new civic arena where the internet will empower a local democratic citizenry and link it to a global polity invoking Beck’s idea of a ‘rooted cosmopolitanism’. Others (Coleman, 2009, 2010, Dahlgren, 2000, for example) more specifically see its potential for re-configuring the Habermasian public sphere and yet more (Castells 2007, 2009, Benkler 2006, Brun 2008) draw upon Habermas’s ideal but see the internet refashioning it as a networked public sphere or space. Foot and Schneider (2000) on the other hand, simply conceptualise this new environment as a ‘political web sphere’.

The Habermassian public sphere remains a powerful influence on those that are interested in the democratic restructuring of civic society within liberal democracy. Yet its value in this endeavour is contested, Habermas (1974) himself has said the historical model he described is inapplicable to late
capitalist society while Dutton (2009, 5) considers “...it to be too closely tied to a romantic view of the past and therefore not able to capture the rise of an entirely new sphere of influence”. This research has much sympathy with Dutton’s view but metaphorically ‘tips its hat’ to the Habermasian public sphere when it questions if, in the shift from industrial to post-industrial society, a new networked, web-enabled, local political sphere of influence has developed. This can be contrasted with the public sphere in industrial society as described by Castells (2007, 258), again drawing upon Habermas’s notion of a political public sphere in a social welfare state, “…this public space was built around the institutions of the nation state ……an institutional public space based upon the articulation between a democratic political system ………and a civil society connected to the state”. Or Garnham’s (1990) view that such a public sphere existed around public service institutions such as the BBC.

Such notions essentially see the political public realm as a single unified entity either captured in organs of the state or state run media institutions. This research question is interested in looking at the extent to which this may have evolved exploiting the potential of the Web to enable a new networked political sphere.

The relevance of this question will be explored through a number of different but interrelated sections. In the first instance, an overview of the current state of digital politics will be presented. The purpose of this is mainly to underline the position of the Web as a media of growing political significance. The second section will move to presenting a discussion and empirical evidence, where it exists, of those that consider the web to offer real opportunities for a democratic renewal of civic society in the form of new networked public sphere. This will be contrasted in the third section, as is often the case, with those who are more sceptical of this optimistic discourse.

These sections will demonstrate: (i) if a web enabled networked political sphere of influence is to capture the meaning of a public sphere it must be structurally linked to the political decision-making process; (ii) that the Web
may or may not structurally offer the political potential to re-configure democratic relations; and, (iii) there is a dearth of empirical research on the possibility of a local web enabled networked public sphere.

As such the fourth section will argue that there is, or should be, an appropriate policy environment for the development of an online local networked public sphere within the local governance process. This has been provided in recent years, in the UK as elsewhere, through the Government promoting a web enabled modernisation local e-government and e-democracy programme. It will also provide an understanding of the concept of local civic engagement and locate it within the local government institutional context within which it can have enhanced meaning. It will comment upon the political significance of the proliferation of Web 2.0 applications. It will argue that this combination of these institutional ‘top-down’ e-democracy initiatives with those of private individuals’ endeavours from the ‘bottom-up’ poses the question: has this provided the conditions for an online local networked public sphere?

**Digital politics: who engages and what difference does it make?**

It is helpful to first of all gain some understanding of the extent and nature of digital politics. While Chapter One dealt with the general state of civic and political engagement this section will examine the extent to which this may have been transformed by the Internet and the Web.

In 2001 Norris attempted to map the extent of digital politics using a number of internet search engines to monitor the frequency with which certain popular keyword are located. Accordingly, eight terms, including ‘sex’, ‘computers’ and ‘politics’, were chosen as common topics on the web. The results showed that ‘computers’, ‘sex’, and ‘television’ proved the most popular keywords on the list but politics ranked fourth on the list proving slightly more popular than ‘movies’ or ‘religion’ or ‘investing’. This in effect meant that almost 1 in 10 sites or around 2 million webpages referred to politics in some shape or form and, as Norris herself concluded, this was likely to be a conservative estimate as many sites would be indexed under
other terms. However, Hindman (2009), see below, reports the portion of the web devoted to political content is relatively tiny. Nonetheless, the rise of e-government in the last decade can be indicative of the extent of digital politics and Norris found, in mid 2000, more than 14,000 government agencies worldwide online. This number will almost certainly have increased in the intervening years. In the UK an e-government programme encouraged a proliferation of local government and government agency websites. However, Norris (2001) found many of the governmental websites facilitated ‘top down’ communication. Notwithstanding this, the rise of e-goverance, with its emphasis on civic communication and involvement in government policy making (Malina, 2003) can be seen as benefiting representative democracy through promoting public confidence in governmental institutions and maximising accountability. Evidence supporting this was provided by Tolbert and Mossberger (2006) who found that e-government can increase levels of trust and confidence in Government. In Britain, according to Dutton et al (2009) drawing upon the 2009 Oxford Internet Survey, a majority of the population (59%) had used the internet to access a range of government services including getting information about policy. They also found that users of the Internet trusted the information they found there more so than information provided by television, radio and newspapers.

Before moving on to survey some of the evidence assessing the significance of internet usage on the political process it may serve to briefly look at who is likely to participate in online politics. Clearly, one factor that will help in determining who does or does not participate is access to the internet. Norris (2001) deals with the issue of the digital divide proving firstly that access is primarily a function of technological diffusion within a country as opposed to levels of social development or maturity of the democratic model. Whilst stopping short of economic determinism Norris provides evidence that strongly suggests that it is levels of economic development in a country that drives access to digital technologies. Indeed, Norris (2001) found, in mid 2000, that 87% of people online lived in post-industrial societies or to put it even more starkly: more than half of all Americans surfed the Internet compared to 0.1% of Nigerians. This, as Norris points
out, mirrors the penetration of traditional media leading her to conclude that access to the Internet reflects and reinforces existing inequalities between rich and poor societies. The digital divide not only exists between rich and poor countries but also within countries mirroring, as Norris (2001) found, existing patterns of social stratification. Norris looked at trends in computer and internet use in Europe and America between 1996 and 1999 using the Eurobarometer and Pew Surveys. During these emerging years of the internet Norris found that use varied, significantly, according to income, occupation, education and age. Generally speaking younger, affluent, well-educated people were more likely to be online. Evidence of a gender gap proved less conclusive. Norris also demonstrated that alongside absolute differences in access to the internet there existed similar inequalities of access relative to the distribution of other forms of information and communication technology such as VCRs and cable TV.

Using the Eurobarometer data Norris (2001, 87) showed internet use is significantly associated with access to all forms of communication technologies suggesting that “......individuals living in affluent households with many different forms of consumer durables designed for traditional forms of home entertainment are also most likely to access networked computers”. This is certainly true for the UK as reported by Dutton et al (2009, 16) who found that those “...in the highest income category were more than twice as likely to use the Internet in 2009 ( 97%) than those in the lowest income category ( 38%)”. They also found that higher use of the internet was consistent with higher levels of educations and higher social groups of household. In addition to this pattern of use Dutton et al revealed that 30% of the UK population did not use the internet. In other words important social inequalities persist in the virtual world.

Wolf (2002), a self-confessed cyber sceptic, makes an interesting contribution to the discussion on the digital divide. Whilst not disagreeing with Norris’s conclusions nonetheless argues that there are real policy implications flowing from the way the term digital divide is used and generally understood. “The use of the word ‘divide’ suggests that issues between information rich and information poor countries, businesses,
communities and individuals are largely homogenous and that there exists a singular path towards bridging the gap” (2002, 2). For Wolf there is no ‘one size fits all’ generic remedy to the digital divide and problems of access are not all resolved through the provision of technology. Rather the technology must be deployed as part of a deployment programme that understands access is also contingent upon the specific local social, economic, political and cultural circumstances.

Notwithstanding this the internet has achieved a critical mass of usage, and it has moreover become, certainly in the UK, the “…..first port of call when people look for information” (Dutton et al 2009, 19). It is this turn to the ‘space of flows’ where, as Dutton argues (2009), the real political significance may lie. This significance was explored by Norris (2001). She analysed the Eurobarometer data between 1997 and 2000 and found, after controlling for education income and occupation, that those online were significantly more likely to have greater knowledge of and trust in political institutions, were more satisfied with democracy and were more likely to engage in political discussions and vote than those not online. However, Norris concludes (2001, 228) that the structure of opportunities for participation found on the internet suggests that “...the rise of the virtual political system seems most likely to facilitate further knowledge, interest and activism of those who are already most predisposed towards civic engagement, reinforcing patterns of political participation”.

Gibson et al (2005) however challenged this notion by demonstrating that the Internet effect on political participation in the UK was to provide wider opportunities for participation particularly amongst those young people and women who in general did not engage in formal politics offline. More recently Dutton et al (2009) found that those interested in politics where more likely to use the internet for political activity. However, on matters of trust, possibly contradicting Tolbert and Mossberger, they found while internet users in the UK trusted most people more than non-users the Government remained the least trusted institution in Britain for users and non-users alike.
However, it is worth noting that Norris also argued (2002) that the Internet was able to level the political playing field in its facility to amplify the message of those political groups or movements that did not have the resources to access the mass-media. In this way, she argued, it enabled more pluralism, more political voices to be heard alongside those of the mainstream political organisations.

In a more recent piece of research Norris (2004) examined a new dataset, the European Social Survey (2002) to establish the extent and significance of the role of the Internet on political activism. Again Norris looked at those who are and who are not regular users of the internet to see how they compared across different types of political activism categorised as voting; campaign-oriented; cause-oriented and civic oriented. What she found was that regular internet users were significantly more active across all types of political activism than non-users. However, this activism gap was substantially more pronounced among cause-oriented activism, such as buying or boycotting products for political reasons as well as in membership of certain types of civic organisations, namely belonging to a sports club, trades union, consumer groups and hobby groups. As in her previous research Norris seeks to isolate the internet effect on participation by controlling for the variables that are commonly thought to influence political participation in conventional politics. After controlling for the effect of these variables in her analysis she again found

..use of the internet to be significantly related to political activism, suggesting that this relationship is not simply explained away as a result of the prior social or attitudinal characteristics of those most prone to go online. The most important factors predicting activism concern internal political efficacy (a feeling that the person could influence the political process) age, education, region and civic duty. After these factors, use of the internet proved the next strongest predictor of activism, more important than other indicators such as social or political trust or use of any of the news media (2004, 15).

Norris’s research is consistent and important in proving that the more politically active an individual is the more likely that person is to use the technology for political purposes but, and this is the internet effect, in so doing broaden the scope and amplify the efficacy of their political activity.
Unsurprisingly the internet effect on aspects of the political process, either directly or indirectly, is contested. Many have evaluated, if not the re-development of the public sphere, other related effects. Putnam (2000), for example, has argued that internet will reduce civic activity because it de-personalises communication and in doing so reduces levels of social capital. Margolis and Resnick (2000) found that it was 'politics as usual' whereby it is established interests, including traditional parties and commercial media interests, that have asserted their dominance in the virtual world of digital politics. This rather gloomy prognosis was underlined by Google's decision (BBC News, 2006) to censor its services to gain access to the Chinese market. On the other hand (Shah et al, 2001) found a positive relationship on internet use and civic engagement primarily depending upon patterns of use. They discovered people using the internet for information and communication purposes were more likely to engage in civic activities, trust other people and be content with their lives than those who used the internet for social or recreational purposes (these were defined as game playing or chat room participation).

Hampton and Wellman (2003) challenged Putnam’s findings with their research that demonstrated that internet communication actually strengthened levels of social capital in a community. Bimber (2003) has demonstrated that the Web can lower the cost of entry into political campaigning thus making it easier to challenge established political parties. More recently, research conducted by Mossberger et al (2008), has revealed a positive correlation between internet use and civic and political participation.

It is, perhaps, the particular use, and level of social penetration, of Web 2.0 applications that has most recently brought to the fore the potential of the political web. Defined by O’Reilly (2005):

Web 2.0 is the network as platform, spanning all connected devices; Web 2.0 applications are those that make the most of the intrinsic advantages of that platform: delivering software as a continually-updated service that gets better the more people use it, consuming
and remixing data from multiple sources, including individual users, while providing their own data and services in a form that allows remixing by others, creating network effects through an "architecture of participation," and going beyond the page metaphor of Web 1.0 to deliver rich user experiences.

One of the ways in which Web 2.0 has delivered ‘rich user experiences’ is through the provision of social networking sites, such as Facebook, for example. Dutton et al (2009) speculate, with nearly 1 in 2 internet users within Britain creating a social networking profile, that “perhaps it has begun to approach, if not pass, a tipping point at which the social shaping and implications of the internet are becoming more apparent” (2009, 5). It is also within the context of this popular take-up of the new social media that notions of a new, online public sphere appear to re-gain some academic purchase.

Politically social networking sites have been used to some effect. From the relatively small time, where 6,000 students in the UK, demonstrating via a social networking site, embarrassed HSBC bank into a u-turn on plans to scrap interest-free overdrafts for recent graduates (Collinson, 2008) to the recent Facebook inspired campaign by Barack Obama to secure the US Democratic Party’s nomination as presidential candidate. A newspaper article entitled ‘Barack Obama Master of Facebook politics’ (Sullivan, 2008) revealed that Obama had realised the power of social networking to raise 94% of his $31m campaign kitty through individual $200 donations. Given that the opposing Clinton campaign ran the most successful traditional campaigning model of all time and yet was still financially, and electorally, out muscled by Obama it is likely that this has irrevocably transformed political campaigning in the USA. It this campaign, according to Castells (2009), which marked the ‘coming of age’ of the political internet. This is shrewdly exploiting an unprecedented level of social use of the new media which first prompted Time Magazine to declare ‘You’ (the user) as their person of the year in 2006. Currently, according to Hitwise (August 2010), the social networking site Facebook has 0.5 billion users worldwide, 26 million of whom are in the UK.
Within the UK politicians and political parties of all stripes have rushed to embrace the new social media. The three main political parties have a presence on social networking sites as do the Plaid Cymru, the SNP and the Green Party, along with the British National Party and the Monster Raving Loony Party. In a study of how such parties are using the new media Lilleker and Jackson (2008, 3) found

...there are two social elements at play when considering the social impact of web 2.0; firstly the concept of an architecture of participation creating an informational democracy from below; secondly the demand for a shift in organisational thinking in terms of wishing to be an equal, non-elite partner within that democratic structure. The question is whether these two competing forces can actually be reconciled.

Their findings demonstrated that, in general, they were not reconciled and the parties were not exploiting the 'architecture of participation' that Web 2.0 potentially offers them. While the technology offered the ability to share information, create networks and interact there was no evidence of a shift in organisational thinking, indeed political parties were still trying to control the communication process. Interestingly, in findings that echo Norris’s work on internet usage (2002), they show that it is the smaller parties that are most likely to attempt to fully exploit the participatory potential of Web 2.0.

The rise of the political blogosphere over the past two years is another interesting use of the new media by political representatives and commentators. Blogs or web logs are websites providing text, images and links to other websites where individuals typically place commentary on a daily basis providing an interactive facility for readers to respond. It would be wrong to over exaggerate the influence of political blogs in this country, as Ian Dale (2007, xii) states “We are still a good few years behind the United States, where blogs have broken huge media stories and performed a scrutiny roles which few blogs here have been able to match”. Nonetheless, the fact that the activity merits a guidebook is perhaps testament to its growing or potential influence. Moreover, visits to weblogs in the UK was, (Hitwise, July 2008), increasing at a faster rate than visits to
news and media sites and, interestingly, blogs in the UK have a greater market share of visits than blogs in the United States. The rise in the blogosphere has attracted academic comment. For Coleman (2005) the new technology provides an opportunity to reconceptualise representation and enhance political connectivity between representatives and the represented.

In a similar vein, Simmons (2008, 90) comments on how the intimate nature of blogs can lead to personal stories becoming public and in the context of “the shifting political backdrop of late modernity……the collapse of dominant truths, contested claims and diverse experiences” a new intimate citizenship can evolve. She draws upon the example of the Mums Army blog (www.mumsarmy.blogspot.com/) where women aimed to organise anti-social behaviour campaigns through posting personal accounts of perceived social problems in local settings. Interestingly for Siapora (2008, 106), the problem with the blog is that its “…subjective, idiosyncratic, exclusionary and non-deliberative aspects…” preclude it functioning as a public sphere.

If the blog is to fulfil the democratic promise offered by Castells (2007) who located the potential of the blog in the ‘autonomous creation of content’ the author of the blog must relate their personal accounts in ways that challenge existing forms of power and mobilise a ‘collective autonomy’. This, Siapora contends, can only be done by the blogger avoiding unsupported personal opinion and courting publicity. Brun (2008, 75) on the other hand sees the new media as re-forming a “…a wider public sphere where citizens are themselves actively and visibly involved in the process of public communication and deliberation..”. He sees the true test of engagement encouraged by current online political activity by politicians such as Obama in the USA or Cameron in the UK at the point when the online community active around such sites expresses a desire to become involved in the policy development process. However, it should be noted that the extent of polarisation in the blogosphere, or ‘cyberbalkanisation’ remains unclear. Adamic and Glance (2005) found little or no political communication, or hyperlinks to be precise, occurring between blogs of opposing views yet Park and Thelwall (2008) suggest that such binary opposition in this sphere might be breaking down.
This section is interesting in so far as it has provided an overview of the extent, and, contested, significance of Internet usage on civic and political participation. Some suggest that the Internet effect is to reflect, yet amplify in different ways, offline political activity. Others contend that it can widen participation providing opportunities for different forms of engagement by people who would not otherwise engage offline. It can lower the cost of participation and might level the political playing field for groups and individuals who would otherwise struggle to afford access to the traditional media. On the other hand the online political discourse might also be dominated by those economic and political interests that have traditionally prevailed. The affect it has on levels of trust appear to be also unclear: participation in e-government can increase levels of trust in government institutions yet the government, for Internet users and non-users, remains one of the least trusted institutions in the UK.

Yet, participation in the ‘space of flows’ within the UK has reached a critical mass and if this does represent a ‘tipping-point’ then, as Dahlgren (2005) points out, the real point of departure in these discussions is between those who consider that society is in a transformative flux rendering uncertain existing political relationships, processes and institutions and those who think it is just business as usual. More pointedly, Bentivegna (2006, 341) has argued that the role of ICTs must be understood in the context of a contemporary society where public space is being reconfigured into multiple public spheres. The following section will pursue this theme and focus on the debate and empirical findings on the potential of the Web to create a new networked public sphere.

**Cyber optimists and the new networked public sphere**

As Dahlgren (2005, 154) contends the cyber-optimist perspective is informed by a view that society is in a transformative flux rendering, amongst other things, “...the certitudes of the past in regard to how democracy works problematic”. Keane (1995, 366) embraces this theme proposing what represented a radical re-think of the role of the public sphere arguing that the hegemony of “...state structured and territorially
bounded public life...” is being fractured and making obsolete the ideal of a single unified public sphere and in its place there is a “development of a complex mosaic of differently sized overlapping and interconnected public spheres....”. Keane proposes a new political role for public spheres facilitated by computer networks linking the local to the metropolitan to the global, these he termed Micro, Meso and Macro-public spheres. These he argued would map more coherently onto the political changes being wrought by globalisation and the new social movements. Keane’s argument was essentially a riposte to those that maintained (see Garnham, 1990) that a unified public sphere could be provided through a state sponsored public service institutional model.

For Keane such a model suggested a territorially bounded sphere dependent on the political primacy of the nation state. This idea, he argued, had been empirically discredited by a growing number of Internet enabled public spheres that “are politically constructed spaces that have no immediate connection with physical territory” (1995, 376). On the other hand his proposed inter-linked and overlapping Micro, Meso and Macro - public spheres might facilitate the ‘rooted cosmopolitanism’ envisaged by Beck. Keane sees his micro-public sphere as being generally populated by local adherents of the new social movements comprising low profile networks of small groups who may challenge public authority when “...these public spheres coalesce into publicly visible media events, such as demonstrations in favour of gay male and lesbian rights or sit ins against road building or power plant projects” (1995, 368).

Much of the empirical work following Keane dealt with social movements and the internet (see O’Donnell, 2001, for example) which while relevant in some areas, such as their facility for fashioning political identity and political community, is generally disconnected from institutional politics and as such not the focus of this research. It is argued here, however, that Keane’s contribution to this discussion is providing a counterweight to the notion of a prevailing single unified public sphere with a view that it may now exist as an interconnected network of public spheres.
Coleman, on the other hand, is very much interested in the facility of the Web to enhance the relationship between government and citizens. He is dismissive of the term cyber optimist and “...deterministic notions of technologies possessing inherent democratic features preferring to emphasise the “vulnerable potential” of digital information and communication technologies which will only be realised in specific cultural and policy contexts” (2005b, 207). For Coleman the current travails or “...burdens of democratic citizenship” (2007, 49), within liberal democracies can be explained in how the relationship between citizen, political actor and institution is mediated. He, like others (Hall, 1999; Patti, Seyd and Whiteley, 2004), considers there to be a crisis of trust which is about not only the authenticity of political claims but by the ways in which citizens come to know them, or think they know them or not to know them at all. It is, according to Coleman, “...about the relationship between political claims and a lay epistemology” (2007, 60).

Coleman’s argument rests upon a number of interrelated assumptions. Similar to Stoker (2006) he contends that contemporary politics is now difficult to engage with and requires effort and time to participate in an informed manner. Alongside this the prevailing models of citizenship, “...constructed around people’s instrumental interest and normative duty to participate” are inappropriate in addressing civic engagement or social inclusion as they “...have tended to miss the experiential and affective dimensions of what it means to be a civic actor” (2005b, 198). In other words policy proposals fashioned in the spirit of this model and aiming to promote engagement can miss the mark as they lack the understanding to capture the ‘connection’ required in political relationship. Coleman (2005, 178) argues that

...new digital technologies of mediation make possible more direct techniques of representation which do not transcend the necessity for representing or being represented in a political democracy but serve to democratise representation by making it a more direct relationship.

In this way Coleman is arguing that the new technologies may enrich democratic representation through expanding the forms of communication
and addressing Dahlgren’s (2005) criticism of the limitations of Habermas’s discursive rationalism. More than this though, Coleman along with Blumler (2009, 7) go on to describe the “...internet as a potential space for the articulation of civic democracy” and expand on this theme of the ‘vulnerable potential’ of the internet. Echoing Calhoun’s (1993) requirement that a successful public sphere required a favourable organisation of civic society they argue that the “...potential is vulnerable...mainly because an infrastructure for its proper realisation is lacking” (2009, 11). They maintain that this is a failure of policy and the state should intervene to establish a digital infrastructure, a civic commons, which facilitates public deliberation between the citizen and government. That such intervention is required is motivated by locating their argument in an assessment of the strengths and limitations of e-democracy initiatives promoted by liberal democratic governments, including the UK, and those developed, independently by citizens.

This is a provocative proposal and will be returned to in discussing the results of this research. However, what is also pertinent about Coleman and Blumler’s argument is that they argue against a “...singular, univocal public” (2009, 179) claiming that “the public sphere has a connecting rather than an integrating function. The role of the civic commons would be to connect diverse social networks......” Furthermore they are insistent on a structural link to institutional politics.

This is consistent with Calhoun (1993) who argued that the mere existence of a public sphere is no guarantee of democracy; a successful public sphere had to have an orientation towards the state. Sparks (2001) went further and maintained that while the Web made all kinds of political information and debate accessible an online public sphere that successfully engaged in the democratic process had to have a structural connection with the formal institutionalised decision making process. As such Coleman and Blumler see their concept of an online public sphere or civic commons sitting within contemporary notions of networked governance. They argue (2009, 180)
in thinking of the public sphere as a constellation of intersecting networks, rather than a space occupied by an ontologically homogenous collectivity, we are seeking to adapt the civic commons to the co-productive logic of contemporary governance.

Brun's (2008) notion of the Web facilitating a ‘produsage democracy’ sits comfortably within this framework. By this account the emergence of Web 2.0 applications generating the development of user-led content sites, such as citizen journalism sites, political blogs and discussion forums, has resulted in the emergence of “…a patchwork of overlapping public spheres centred around specific themes and communities which through their overlap nonetheless from a network of issue publics…” (2008, 75).

Moreover, ..movement into and between the individual spherules of the networked model is now considerably more fluid and often requires little more than the operation of comments and hyperlinks to occur; the network has dissolved the boundaries limiting access to the public sphere...’ (2008, 75).

This new network of public spheres has the capacity, according to Brun, to engage a wider range of actors in policy development and, importantly, to engage them in a context where they can contribute or co-produce policy with elected representatives. Of course this requires institutional co-operation but Brun is very much in the camp of those that see the conventional political process and its attendant problems as reaching a point where maintaining political credibility will depend upon transforming the nature of democratic engagement.

Ackland and Gibson (2008, 12) whilst not commenting upon the potential of the Web to deliver a networked public sphere did, usefully for this purpose here, summarise the particular communicative functions that hyperlink have been empirically seen to perform, and, by implication, may perform in a public sphere context:

1. information provision – at their most basic level hyperlinks lead to new sources of information.
2. Network building or strengthening in addition hyperlinks work together to establish patterns of linkage and association between
social and political actors that can reflect existing networks or build new ones.

3. Identity/image building or ‘branding’ – hyperlinks signal endorsement and recognition of other groups/agents’ messages and thereby form shortcuts to the outlook/views of site producers.

4. Audience sharing – hyperlinks promote the rapid transference of internet users around the Web.

5. Message amplification or ‘force multiplication’ – dense and highly self-referencing hyperlinks between groups sharing a cause or outlook can magnify or exaggerate their presence to users.

Dahlgren (2005) is of the opinion that the Web enables an embryonic network of multi-public spheres and helpfully lists the different sectors that may comprise this network, they include: the e-government initiatives; advocacy /activist domain – these would include online initiatives by elected representatives and non-governmental organisations; online civic forums; the parapolitical domain – which airs social and cultural topics where politics might not be explicit but always remains a potential; and, the journalist domain- which includes major news organisations which have an online presence to net-based news organisations that usually aggregate news stories from other sources, such as Yahoo news, to bloggers.

Notwithstanding this, very little has been done to empirically ground these optimistic accounts of the Web’s potential to enable a networked public sphere. Foot and Schneider (2002) and Foot et al (2003) did develop the concept of a political web sphere. This comprises “…a hyperlinked set of dynamically defined digital resources spanning multiple web sites relevant to a central theme or “object”” (2002, 225). They contend that an analysis of the strategic practice of hyperlinking enables the identification of a rapidly evolving, dynamic online political system. They argued (2003) that

Through links, Web producers transform independently produced sites into contiguous elements of a common Web sphere. The notion of a Web sphere, bounded temporally and by a shared object-orientation, offers a unit of analysis that enables examination of both the structure and substance of hyperlink networks.

For them the most crucial element of this definition is the dynamic nature of the sites to be included and therefore the boundaries of the sphere. Such dynamism will come from the researchers’ identification strategies and changes in the sites’ hyperlinks themselves. The question of boundary
identification will be returned to as it is of some importance to the research approach employed here.

Dutton (2009) whilst distancing himself from Habermas’s idea of the public sphere, see above, has nevertheless offered a re-conceptualisation of the public sphere as a ‘Fifth Estate’. Drawing upon empirical data collected through the World Internet Project (WIP) he argues that growing use of the internet highlights its potential to be as important to the 21st century as the Fourth Estate – the mass media - was to the 20th Century. In the UK, for example, of the proportion of the population aged 14 and over using the internet rose from around one third in 2000 to 70% in 2009 (Dutton et al, 2009). Moreover, the same study showed that the Internet was the first place users would go to for information across a range of subjects. Additionally they tend to trust the information that they find their as much or more than, the information they receive through the mass-media (Dutton et al, 2009). Whilst acknowledging that the digital divide or access to the internet remains a problem he argues that the evidence points to the Internet achieving “…a critical mass that enables networked individuals to be a significant force” (2009, 5). Dutton’s conceptualisation builds upon Castells’s notion of the Internet as a space of flows. It is this

...space of flows enables a multitude of actors to reconfigure access to information, people, services and technologies. That can reconfigure existing institutions such as when governments post information and documents online......Individuals can also network in ways that constitute the Fifth Estate as an independent source of social accountability across multiple areas (2009, 10).

Benkler’s ‘Wealth of Networks’ (2006) explores the potential of the Internet, or specifically the Web, to deliver a networked public sphere. Following Castells and Beck, Benkler argues that the networked information economy allows for a more critical and self-reflexive culture and more specifically enables a networked public sphere offering a greater political freedom to the individual citizen than that offered by the conventional mass-media. Benkler is less concerned about the link with institutional politics or even the role of the state for that matter but more about how the networked public sphere enables individual citizens to challenge existing power
relations. He illustrates this by describing how the blogosphere successfully organised a boycott of a television broadcasting company that wanted to air a documentary that attacked the Democratic candidate in the 2004 US Presidential election, John Kerry. The company owned a number of television stations in what were key states in the election campaign. They were a formidable opponent but nonetheless the blogosphere successfully combined to organise a boycott that forced the company not to air the documentary. For Benkler this demonstrated what a significant counterforce the online networked public sphere can provide to powerful economic and political interests. The speed with which individuals established an online presence, shared information and exchanged views on different political strategies and tactics “was completely different to anything that the economics and organisation of the mass media made feasible” (2006, 225).

Moreover, Benkler argues it was the internal dynamics of the networked public sphere that enabled the different ideas on what kind of politician action to take to be filtered and synthesised and decided upon. The practice of hyperlinking allowed anyone who was interested and who connected to one of the nodes (websites) in the network to follow the links and get a sense of the range of proposals. It was, according to Benkler, the particular topology of the network that enabled this and the issue to become politically salient. This is an important point for Benkler as he draws upon a range of empirical, mathematical and scientific, analyses of the topology of the Web to refute a number of criticisms levelled against the democratising potential of the Web and the networked public sphere.

Importantly, his yardstick in this discussion is not that of a utopian public sphere but rather he uses the political opportunities offered to the individual citizen by the traditional mass-media arguing that, in comparison, the Web can “yield a more attractive democratic discourse...” (2006, 239). His first target is to counter the argument that there is a concentration of relatively few sites that people visit while the vast majority of sites are never visited. In this way, so the argument goes, the Internet is simply replicating the mass-media model and not offering a structural alternative for the democratic discourse. Benkler draws on a number of studies on the
distribution of links on the Web which he acknowledges is, as a field of inquiry, only a few years old. He uses the study by Barabasi and Albert (1999) to argue that

...a variety of networked phenomena have a predictable topology: The distribution of links into and out of nodes in a network follows a power law. There is a very low probability that any vertex or node in the network will be very highly connected to many others, and a very large probability that a very large number of nodes will be connected only very loosely; or perhaps not at all (2006, 243).

He maintains that many studies since, such as Huberman and Adamic (1999), have consistently shown that the number of links into and out of Web sites follows a power law distribution. On the face of it then this would appear to support those that consider the Web to offer nothing structurally different to the mass-media model. However, Benkler advances four characteristics of network topology that structure the Web in such a way as to present a more attractive, from a meaningful democratic participatory perspective, version of the public sphere. Firstly he observed that links are not smoothly distributed throughout the network. Sites exhibit a tendency to cluster into densely linked ‘communities of interest’. Such clusters have a distinct networking property. The property of transitivity is associated with clusters, this means that there is higher probability that if node A is connected to node B, and node B is connected to node C then A will also be connected C. Secondly, the “giant strongly connected component…” at the heart, or core, of the web revealed by Broder (1999, 3) – where all but 10% of sites on the Web where interlinked to a greater or lesser degree- was found by Dill et al (2002) to repeat itself within clusters.

Thirdly, drawing upon studies such as Pennock et al (2002) he describes how links in small clusters – typically hundreds of web pages- no longer conform to the power law distribution. Instead the distribution of links is more like that of a normal bell shaped distribution. The consequences of this are that there will be one or two very well linked to sites but, unlike in a power law distribution, many sites are moderately linked. Fourthly, he utilises the empirical and theoretical work undertaken on ‘small-world effects’ in networks. According to Benkler this has shown that the number
of links from one point in a network to any other is relatively small. As such, he maintains, three of four clicks of a mouse button should allow a user to cover large sections of the Web.

It is this network topology of the Web, argues Benkler, which enables a networked public sphere far superior to that offered by the mass-media.

We know now that the network at all its various layers follows a degree of order where some sites are vastly more visible than most. The order is loose enough, however, and exhibits a sufficient number of redundant paths from an enormous number of sites to another enormous number, that the effect is fundamentally different from the small number of commercial professional editors of the mass-media (2006, 253).

Furthermore, it is this "...ordered system of intake, filtering and synthesis that can in theory emerge in networks and has empirically been shown to have emerged on the Web. It does not depend on single points of control."

(2006, 254). For Benkler then it is this ordered system of networks that also allows him to counter arguments, perhaps best advanced by Sunstein (2001) that the Web results in a polarisation and fragmentation of discourse where individuals are less likely to have their views challenged. Benkler acknowledges the tendency for such polarisation to occur but argues, and draws upon his case study described above, that what appears to happen, facilitated by the hyperlink network, is that clusters of like-minded ‘communities of interest’ tend to operate not as Sunstein’s echo chamber but more as a forum for filtering ideas and views. Those views that gain greater purchase amongst these communities are then filtered up to the more visible sites, that is, those sites that have more links to and from them and importantly are more likely to have links to other and different communities of interest. Moreover, Benkler argues that the Web with its many redundant paths, its different points of entry, the vast majority of which are in all probability linked to other parts of the Web, is less vulnerable than the mass-media to monied interests brokering power.

In a similar vein, Prior (2008) examines the facility of hyperlinks to serve a similar social function online as Granovetter’s (1973) ‘weak ties’ served
offline. If they did, so Prior’s thesis goes, then through connecting distinct domains of interest they might serve to overcome Sunstein’s views on the prevalence for online political polarisation and fragmentation of opinion. Prior’s findings are equivocal and while discounting the likelihood of hyperlinks connecting distinct domains of interest and thus acting as weak ties he acknowledges that a politically balanced view may be achieved through the ‘aimless surfing’ by the casual user. This suggests that structurally the web has, as Benkler maintains, ‘just enough’ links.

More recently, there have been a number of empirical research projects that have sought to further explore and assess Benkler’s argument in the particular realm of the Iranian, Arabic and Russian political blogosphere (Kelly et al, 2008, Etling et al, 2009, 2010). They found, in support of Benkler, that the “…peer-to-peer architecture of the blogosphere is more resistant to capture or control by the state than the older, hub and spoke architecture of the mass media model….“ (Kelly et al, 2008, 24) and in its structural facility to cross-link different views and debate “…..the Russian blogosphere meets many of the pre-requisites of the networked public sphere….“ (Etling et al, 2010). Pertinently for this research here these studies also deployed social network analysis techniques to render visible and understandable these online networks.

Hermida (2010), in an empirical study of a BBC initiative to re-invigorate civic engagement, has argued that a contemporary measure of a online networked public sphere is one that links institutional ‘top-down’ networks with those ‘bottom-up’ networks of private individuals found in the Web 2.0 applications.

These accounts provide empirical and theoretical support for the notion of the Web providing a networked public sphere to help renew the democratic process. It is arguable that the lack of any structural orientation to the state is a weakness in his thesis but his presentation on the network topology of the Web, underlining its potential to provide a networked public sphere, is convincing. However, it needs to be examined through the prism of those
that have a less optimistic view of the facility of the Web to renew the democratic process.

**Cyber sceptics and the new networked public sphere**

Cyber sceptics suggest that new technologies will not as a matter of course transform existing patterns of civic and political participation. Margolis and Resnick (2000), mentioned above, pronounced that it was `politics as usual' whereby it is established interests, including traditional parties and commercial media interests, that have asserted their dominance in the virtual world of digital politics. Sunstein (2001) saw the tendency for the internet to fragment public discourse accelerating the move away from a model of the public sphere where citizens would encounter different points of view which would challenge their own opinion. For Sunstein the technology enabled the user, or consumer, to personalise and control or filter content in an unprecedented fashion. This level of control avoided any chance encounters with the type of unsolicited information provided in newspapers, magazines or periodicals. Sunstein envisaged the technology contributing to an unhealthy future for democracy where citizens increasingly received their information from an `echo chamber'. In his latest book Sunstein (2007) reflects on the empirical evidence gathered on the subject since his publication of Republic.com and, whilst defending his original concerns, acknowledges the contribution made by Benkler. His main purpose here is to propose a range of policies that could strengthen the Internet’s potential to serve as a deliberative domain enhancing the public role of citizens.

In terms of the potential of the Web to engender a new networked sphere of political influence, or public sphere, it is Mathew Hindman’s (2009) endeavours which have done most to reinforce the cyber sceptics position. Hindman’s core argument is, and in making this argument he is directly refuting Benkler, that many can post in cyberspace but few are read and this is important because “from the perspective of mass politics we care most not about who posts but about who gets read” (Hindman 2009, 18). This is speaking to a particular definition of democracy which he
acknowledges is descriptive, as opposed to the normative view that democracy is a ‘good thing’, and questions if the new technology is broadening political engagement. Can it “...amplify the political voices of ordinary citizens” (2009, 6) in a way that challenges the dominance of traditional elites? To explore this question, Hindman like Benkler, analyses the link structure of the Web which he argues (2009, 15)

... is critical in determining what content citizen see. Links are one way that users travel from one site to another; all else being equal the more paths there are to a site the more traffic it will receive. The pattern of links to a site also largely determines its rank in search engine results.

Hindman shows, through empirical analysis of a dataset comprising 120,000 site visits by 60,000 users, that the number of inbound links and the number of site visits was highly correlated. Moreover, when he took out the top 500 sites by traffic from this analysis the correlation co-efficient fell from 0.704 to 0.118. This is, as he recognises, the power law distribution of links over the entire Web that has been previously identified. Hindman then goes on to empirically challenge Benkler’s view that the distribution of links in smaller clusters, sub-categories, of online political communities is more normal, more egalitarian, and as such supports universal uptake and local filtering of content to achieve a political salience. Hindman analysed the link distribution of a dataset developed by creating twelve lists of two hundred highly ranked ‘seed sites’ in a variety of political categories relevant to the United States. Six categories were chosen ranging from abortion to gun control to general politics, in each category one list was taken Google search engine results and one list from Yahoo. Software was designed to ‘crawl’ the links from each of the sites to the connected page which was then examined and retained if it was relevant to the political category in question. This resulted in a dataset of hyperlink distribution of around 13,000 websites divided into twelve lists. As Hindman states (2009, 51)

the overall picture shows a startling concentration of attention on hyper-successful sites......In nine of the twelve cases, the top ten sites account for more than half of the total links. The top fifty sites account for 3 to 10 percent of the total sites in their respective
categories, but in every case they account for the vast majority of inbound links.

Moreover, the inlink distribution amongst these sites was found to be governed by a power law which persisted even when these political communities where broken down into their smaller sub communities. This, Hindman argues, is consistent with the winner takes all distribution of links that is apparent in the Web as a whole and as a consequence rendering unlikely that content on the smaller, less linked to, sites would achieve political salience. It is a concentration of audience, Hindman claims, “….that equals or exceeds that found in most traditional media” (2009, 17).

Hindman compounded his argument through examination of another large dataset. Hitwise, a firm that partners with large internet service providers to collect and analyse Internet traffic, provided him with data from over 1 millions web sites with traffic tracked from 10 million US households. Analysis of this data showed that of total web traffic 0.12 percent goes to political Web sites, compared with 2.9 percent to news and media sites, 7.2 percent to search engines and 10.5 percent to pornographic sites. A breakdown of visitors to these political sites was also quite revealing. It demonstrated that those aged 18-34 generated just 22% of traffic to political sites whilst those aged 45 and over were responsible for 57% of the traffic. Thus, Hindman contends, not only is the political portion of the internet smaller than some may have imagined it is perhaps not the quick fix solution for the problem of youth disengagement.

Hindman also demonstrates that search engine use, can be pivotal in determining the visibility of political content. This is a consequence, according to him, of Google, Yahoo and Microsoft accounting for 95% of all search engine traffic, coupled with a generally shallow use of these search engines. By this he means that users are limiting the political content they might see by employing search engine queries or strategies that do not return a range of political content or information. He demonstrates that the same query on each of the main search engines returns the same results. Interestingly, findings from the Oxford Internet Survey (Dutton et al, 2009)
confirmed that users in Britain were increasingly focusing more on search engines with such use rising from 19% in 2005 to 64% in 2009.

In examining the notion that the internet enables a challenge to the domination of traditional elites in political discourse Hindman presents some revealing evidence. He maintains that while blog and websites are inexpensive to set up they do not stand comparison with online traditional news organisations. The latter, with its expensively funded teams of journalists, supply most of the publics’ political information. As such claims that the internet is lowering the cost of entry are misleading. Furthermore, search engines such as Google spend two thirds of their net revenue, or $1.33 billion, on equipment. While the internet lowers the cost of distribution the cost of producing content remains high. There is an economic pressure to yield a return on this investment and the internet is an attractive vehicle for achieving large economies of scale. In this way the internet can amplify the economic logic of concentration for online media and search engine companies.

The political blogosphere is the one area, Hindman claims, where a political breakthrough has been achieved in the dominance of the established mass-media. Political blogs in the US are, according to Hindman, the most widely read form of political commentary. However, he presents data to show that this is not inconsistent with continued domination of the discourse by the traditional elite. He maintains (2009, 133)

...a small group of A-list bloggers actually gets more political blog traffic than the rest of the citizenry combined. Talk about blogs empowering ordinary citizens rings hollow when the top bloggers are better educated, more frequently male, and less ethnically diverse than the elite media that blogs often criticise.

For Hindman the online public sphere is not one where the voice of the ordinary citizen is likely to be heard. Moreover, the relentlessness of the power law distribution of hyperlinks renders Benkler’s notion of a networked public sphere fuelled by moderately read sites also unlikely. Nonetheless Hindman considers the situation retrievable and advances a number of
policies, such as teaching people how to use search engines properly, to address the situation. These will be revisited in the concluding chapter.

There are then different accounts of the prospects of the Web to deliver a networked public sphere. Hindman’s evidence, like Benkler’s before him, is compelling, arguing, as he does, that the link structure of the Web, largely governed by dominant economic interests and the traditional elites, renders it unlikely to yield, without policy intervention a more equal, democratic networked public sphere. Nonetheless, Hindman is unable to account for the instances, as in Benkler’ example, where the Web has been successfully deployed as a public sphere to challenge existing power structures.

There are commonalities between these optimistic and more sceptical positions. Coleman, Sunstein and Hindman, for example, all call for policy intervention to develop the Web as a model for the public sphere. Implicit in this is an acknowledgement of the potential of the Web to provide such a networked public sphere. Notably however, there is also a lack of any empirical research on the networked public sphere at the local government level. This is interesting as commentators like Coleman and Dahlgren, for example, have acknowledged that the contemporary moves toward networked governance and e-governance provide a context or a structural framework for a Web enabled networked public sphere. In the UK it is local government that has been the focus of much central government policy aimed at using the Web to as a vehicle for modernising the local government institution. The new technology was to be used to transform its relationship with local citizens with a view to enhancing their involvement in the decision making process.

While this section has identified an empirical gap in the networked public sphere literature the following will provide the context within which this empirical gap might be addressed.
Civic participation and the context for a local networked public sphere

Coleman and Blumler (2009) have argued that a networked public sphere can be best enabled by combining the best elements of e-democracy as delivered from above by government institutions and from below by citizens. The aim of this section is not to provide an exhaustive account of such initiatives but to sketch the salient contours of this environment. In outlining the policies that have promoted such initiatives and evaluations of their outcomes this section will argue that, notwithstanding the practical and ideological difficulties associated with the issue of civic participation, there remains an appetite amongst local government and local communities for utilising the new technologies to enhance the local governance process.

The significance that people attach to local participation is illustrated by Pattie et al (2004). Drawing upon the 2000 Citizen Audit in the UK they reveal that nearly six in ten people continue to believe that by working together they can have an impact on their local community. Moreover, of those that vote in local elections two thirds think that their votes could have some or a great deal of influence. This is important given Norris’s findings (2004) that it is this belief that a person can influence the political process that is a predictor of online activism. By comparison this sentiment is shared by only half of those who vote in national elections and a third who vote in European Elections. Notions of ‘active citizenship’ and ‘community involvement’ feature prominently in the policies of New Labour who see it as supporting a number of beneficial outcomes such as

...strong and active communities in which people of races and backgrounds are valued and participate on equal terms by developing social policy to build a fair, prosperous and cohesive society in which everyone has a stake ...and to ensure that active citizenship contributes to the enhancement of democracy and the development of civil society (Home Office, 2003, pg 15).

However, as has been noted (Centre For Local Governance, taken Feb 2007 http://www.cflg.manchester.ac.uk/downloads/community_engagement_and
“...this politically powerful and intuitively popular concept is fraught with confusion and tensions which make it difficult to theorise, analyse, and put into practice”. What will become apparent during the course of this discussion that such tensions and difficulties are reflected in the policies and practice of online engagement.

While clearly popular with policymakers tensions with the concept will arise as it touches upon power–relations and Cooke and Kothari (2001, 152) have argued that some participatory techniques “...can conceal inequalities and in some circumstances reify them”. It is similarly caught up in contested notions of democracy (Blaug 2002, Elster 1986, Mansbridge 1983) and, as such, participation can be a ‘top down’ activity stimulated by public agencies providing opportunities for individuals or groups to participate in their decision-making or service delivery. Or it may be a ‘bottom up’ activity that involves, for example, individuals, or voluntary groups joining together to lobby or protest an issue to ensure their voices are heard.

Part of the confusion with the concept of engagement lies with the problems of conceptualising who is being engaged, how and for what purpose and this it appears may vary depending upon the rationale for engagement or the policy agenda. Thus people may engage as customer, citizen or part of a wider community (itself a contested concept). This is illustrated by, amongst others: Arnstein, 1969; Martin and Boaz, 2000; and Lowndes et al 2001a. What is interesting from these accounts, apart from the variety of types of participation presented, is the way in which different types of participation have been emphasised, or been more prominent, at different times. So Arnstein in the late 1960s, who coined the ‘ladder of participation’, considered citizen participation to be about re-distribution of power to the citizen, no mechanisms short of those that delegated power to the citizen were considered as truly participatory. Martin and Boaz, on the other hand, distinguished between three types of participation: communication (two-way information flow); consultation (dialogue about specific issues or policies) and co-production (active involvement in policy debates, design and delivery of local services) but considered them all complimentary and “...vital components of a strategy that seeks to produce more citizen
centred government” (2000, 48). Lowndes et al, in a survey of local authorities in 1998, identified five categories of forms of participation: consumerist methods which are primarily customer orientated and concerned with aspects of service delivery; traditional methods, such as public meeting, which a have a long history of use in local government; forums - activities which bring together users of particular services or those with a shared background or interest; consultative innovations which are new methods for consulting on particular issues; and, deliberative innovations which consist of new methods encouraging citizens to reflect on issues through deliberative processes. They found that consumerist methods dominated as means of consulting the public indicating that “local authorities have clearly responded to the customer orientation encouraged by Conservative governments in the 1980s and early 1990s” (2001a, 208). Of greater interest to these researchers was the level of innovative methods in use such as, focus groups, visioning techniques and interactive websites. The latter method of course suggests the influence of the emerging information society and associated e-government policies of the first New Labour administration.

This recent history of public participation in the UK is traced by Barnes et al trace (2004) through the policy contexts of community development initiatives of the 1970s, the consumer orientation of the 1980s and the emphasis on creating ‘responsive public services’ in the late 1990s. They argue that the more recent focus on citizen and community engagement in public decision-making draws upon these sources but has its own characteristics. For them it is the interplay of New Labour’s policy themes of democratic renewal, performance improvement (or management) and community capacity building that helped to introduce “... new mechanisms shaping the form and process of public participation many of which focus on locality as a site of engagement between the state (in the form of public sector agencies) and the citizen (as consumers, users and communities)” (2004, 270).
This focus on locality introduces problematic notions of governance and in particular New Labour’s move towards multi-level and networked governance.

This represents a response to the growing complexity of the government function where globalisation has geographically differentiated decision-making and service provision is undertaken by multiple agencies. It is within this context that New Labour has emphasised the theme of bringing government and local government in ‘touch with people’. ‘New localism’ (Blears, 2003) represents a distinguishing feature of the current local democratic landscape and can be characterised “in terms of improving practices and structures in order to contribute to: decentralised decision making; better local decision making; revitalised local democracy; and, civil and community renewal” (Office of the Deputy Prime Minister, 2005, 11). This theme was apparent in the White paper ‘Strong and Prosperous Communities’ (Department of Communities Local Government, 2006) which underlined the importance of local authorities working in partnership with other local service providers and the need to secure the participation of citizens and communities, and is evident in the new ‘duty to involve’ being introduced under the auspices of the Local Government and Public Involvement in Health Act 2007.

It is, as yet, unclear how far the coalition Government in the UK will continue to push the modernisation of local government. They are however committed to notions of regenerating civic activism as captured in the concept of the Big Society (see http://www.cabinetoffice.gov.uk/media/407789/building-big-society.pdf) and complementing this is a clear commitment to ‘localism’ as Eric Pickles, Minister for Communities and Local Government, stated in a recent speech, “I have 3 very clear priorities: localism... My second priority is localism, and my third is... localism” (Pickles, 2010). This may be significant in considering the future prospects for local e-democracy

Information age e-government, and as envisaged by the Modernising Government White paper (Cabinet Office, 1999) was expected to support
many of the objectives of New Labour’s policy themes. It underlined a commitment to re-configure the political management and delivery of public services. In common with modernising trends worldwide (OECD, 2003) information communication technologies would be used to enable the improvement of public sector performance through delivering cost effective services and bringing services closer to the public. The focus of much of this modernisation drive within the UK was the local government institution. This can be explained by local government’s dual function: it delivers government services locally and indeed was responsible for “a quarter of public expenditure on services including education, social services, police, housing and public transport” (Cabinet Office, 1999, 12); and, as an elected local government, it is the “…..primary locus of democracy at a sub-central government level” (Pratchett, 2004, 359). Estimates on the levels of investment in local e-government projects for this period vary but serve to reflect the scale of the policy’s ambition:

- The Society of IT Managers (SOCITM) estimated that local government spent £13 billion on e-government over the past five years. (EGov monitor, 2005);
- Central Government committed itself to spending £675m on local e-government and related projects between 2001/02 to 2005/06 (Office of Deputy Prime Minister, 2002),

How much of this investment was spent on e-democracy initiatives is not clear. Wright (2006, 247) maintains that “…no other government has funded or conducted e-democracy initiatives on a similar scale”. Others (Honor Fagan et al, 2006) have observed how the modernising agenda concentrated e-government activities, and resources, on delivering cost effective services with the focus on the citizen as ‘consumer’. Indeed, e-democracy and e-government was often conflated at a strategic level (see Office of Deputy Prime Minister, 2002) with e-democracy initiatives comprising a sub-set of the wider strategy. However, Pratchett (2006a) argues that e-government and e-democracy are two separate processes that should be subject to different strategies. Whilst they may rely on similar technologies they have entirely different functions. E-government
applications are designed to perform cost–effective transactions with
individual members of the public. In contrast e-democracy initiatives are
“often seeking to foster more sustained relationships with citizens and may
be seeking to encourage a sense of collective engagement and
responsibility” (2006a, 18). This tension between e-government and e-
democracy may very well be a reflection of the particular nature of English
local government. Copus (2010, 96) describes it well,

English local government is a dual-purpose institution. It provides an
additional layer of democracy, political representation, and
engagement to that offered by parliamentary politics. But it is also
responsible for the provision of public services vital to nations where
the state has taken the major responsibility for welfare and social
cohesion. That dual role generates a tension as these roles are not
necessarily mutually compatible or respond to the same stimuli.

In closing the local e-Government programme in April 2006, the
Government admitted that it succeeded in delivering only “part of the Prime
Minister and Cabinet's March 2000 vision of all local councils offering all
local services online by December 2005”.
(http://www.communities.gov.uk/index.asp?id=1133577. Other
commentators have pointed to the “appallingly low uptake of government
services via …technological means” (Lomas, 2005, 3).

From a governance perspective, the initial impact of e-democracy on the
levels and quality of civic participation, appear negative. Early pilot
initiatives in increasing voter turnout through electronic means appeared to
have little success in attracting new voters but may have served to increase
public confidence in using these channels (Electoral Commission, 2002).
Moreover, research by the Local e-Democracy National Project (2004)
concluded that both local government politicians and officers saw little
demand for e-democracy and indeed perceived citizens to be hostile to such
innovations. Wright (2006, 244) while noting that “e-democracy initiatives
have proliferated at a local level” concluded that the radical potential of the
internet to enhance representative democracy “…largely been normalised to
support existing processes” (2006, 248). In assessing the extent to which
local government websites enabled online networked governance through
hyperlinking the report was equivocal. While just under two thirds of the sites surveyed linked to community organisations they concluded that "websites are much more likely to have links to other elected local authorities (especially neighbouring) and central government departments than they are to other service providers in the locality" (2004, 19). More recent research by Pratchett (2006b) drew some preliminary conclusions:

(i) E-democracy tools appear to be addressing perceived problems reinforcing them rather than fundamentally changing the balance. Thus consultation remains high on the political and e-democracy agenda in the UK and e-participation is conceptualised primarily as engagement of individuals rather than groups.

(ii) There appears to be little relationship between existing offline forms of political engagement and participation and current e-democracy initiatives

(iii) There remain significant barriers to e-democracy, especially resistance among key political actors. This represents, in part competing notions of democracy but also a question around how much citizens want from e-democracy and whether the tools on offer really 'scratch where the citizen is itching'

(iv) Establishing the impact of and success of e-democracy initiatives remains elusive

Some of these admittedly preliminary and rather broad assessments suggest there may be explanations that lie beyond a simple failure of policy. Alongside the policy context a number of commentators (Barnes et al, 2004, Lowndes et al 2006, Prachett, 2006a) see the institutional context, or to be more precise how policy is mediated through the institutional context, as explaining how the level and type of citizen engagement may vary at different times. Indeed, Lowndes et al see such a context as explaining how levels and types of engagement may vary from area to area in the UK regardless of existing levels of social capital or deprivation. Prachett defines (2006a, 6) institution as

..norms and practices which encapsulate the values of democracy. They are the rules of the game through which democracy works: they determine who holds power; how issues come onto the agenda and so on. Institutions consist of both the formal rules...and the informal but nonetheless well established rules through which democracy really works.
In other words levels of participation where found to relate to “...the openness of the political system, the presence of a public value’ orientation among local government manager, and the effectiveness of umbrella civic organisations” (Lowndes et al, 2006, 541). A further explanation for the apparent limited success of e-democracy, which is part of the institutional context argument, was put forward by Prachett as early as 1999. In this account it is the influence of local government ICT policy networks that have skewed ICT resources towards enabling the development and delivery of mainstream services at the expense of the other policy areas of local democracy and public policy development.

More pertinently for this research here, whilst not providing a remedial tool for failing participation initiatives, Barnes et al (2004, 277) provide a view of the transformative outcomes that might be delivered by a successful participation process. For them

the question of how far public participation can contribute to political renewal ...must focus on how far processes of participation foster social networks and enable the development of collective identities, as well as enabling the construction of new discourses within which public policies can be debated.

The evaluation of the last government’s e-government programme pre-dated the take-off of Web 2.0, or the social web. However, it appears that local government have been hesitant in deploying the new social media. A report by SOCTIM (2008) highlighted just one council for its innovative and interactive web 2.0 approach. This hesitancy was partly explained by the concerns expressed in this comment posted by a local council web manager in an online discussion forum for local government officers (Public Sector Forum, 2008):

We are currently devolving the responsibility for the creation and publishing of some central and front facing parts of our web site to others. Now I don’t think it matters how many times I tell these folks to do something a certain way, if they are not responsible for the outcome, they are not going to be too concerned. That’s manageable to a certain extent because those new publishers are internal. But if that freedom is given to others in a web 2 way (whatever that means ) and those are external then what price any adherence to any
standards ............... And what about the views of our Politicians’
So far it is the removal of the “freedom” to publish “anything” that
has got us all too where we are. Nice polished web sites ........that
provides information in an understandable manner. And when that
“control” is removed, then what? I see a liberated but messy future.
One which we cannot afford to ignore but one which presents
problems which we have not even begun to think about yet ...

These comments reflect not only the importance of the institutional context
described above but also the political tensions and difficulties that appear
characteristic of endeavours, both online and offline, to improve citizen engagement in the local decision making process.

Notwithstanding this, Web 2.0 applications are now a feature of local government politics. The blogosphere is one example. Wright (2008) surveyed councillor blogs utilising the government funded civic blogging platform, ‘Read My Day’. He found that the councillors were not exploiting the ‘architecture of participation’ inherent in the new technology, that is, they were not, in the main, networking very well with the wider blogosphere or interacting with those leaving comments on their blogs. In similar findings to Lilleker et al (2008) the councillors displayed a traditional media mindset generally using the new media to broadcast rather than interact. This may well prove to be a learning curve and the evidence from the United States and in particular the Obama campaign is that politicians do become more adept at using the new technology.

However, this may be all very well at a national level where the bigger stage may capture the imagination and encourage greater civic engagement but, for local government where turnout at election and engagement with the day to day governance process is stubbornly low, the sixty four million dollar question in determining its democratic effectiveness, and I suspect its wider usage, is who is reading these blogs? As Lee Rowley, a local conservative councillor for Maida Vale, and enthusiastic blogger, states “But the question still remains are we talking to our audience or to ourselves?” (Dale 2007, pg 75).
Of course the other dimension of online local governance comprises ‘community’ websites and private individual’s blogs and networks. In examining citizen to citizen interaction on the internet, Meijer, Burgeerr and Ebbers (2008, 29), argue that "a new domain of public participation is being constructed by citizens to fit the new routines of the information society”. However, they also found that the level of interaction on such sites was largely stratified supporting Putnam’s idea (2000) of ‘digital balkanisation’ where the ‘bonding’ element of social capital was emphasised over the ‘bridging’.

Notwithstanding these equivocal evaluations of local e-democracy initiatives local government and local communities continue to attempt to re-configure their relationships via the Internet. Community websites and in particular hyper-local community websites are the current focus of local government online interaction with its citizens. These are news and information sites covering small sections of the community established and managed by members of that community. They are very much ‘bottom up’ networks providing Web 2.0 technologies enabling interaction between members of the community and, if desired, between members of the community and local government. They will, according to a council web site manger (e-Government Bulletin, 2010),

....help the council understand the needs and concerns raised by citizens without being authoritative or seen as moderating every single comment. This type of engagement will hopefully break down the barriers or walls that currently exist between councils and citizens and increase citizens’ trust towards local authorities.

The current proliferation of these hyper-local websites (see http://openlylocal.com/hyperlocal_sites) is perhaps a testament not only to the continuing appetite for civic e-engagement in the local governance process but also to localities endeavour to be part of the emerging network society.

In summary then, this section has traced the policies and practices that have shaped the current local e-government/e-democracy environment. It
is an environment characterised by a particular local government institutional context and contested notions of democracy and what civic participation actually means or what its outcomes should be. These complexities will frame and contextualise the empirical research conducted as part of this study. Moreover, this environment is also characterised by: a historical policy focus on, and considerable financial investment in, promoting the Web to re-configure local governments’ relationships with its citizens; a proliferation of Web 2.0 enhanced private individuals’ and community networks; and what appears to be, regardless of equivocal outcomes, a continuing appetite to use the Web to enhance the local governance process. It is these conditions that suggest a favourable environment for exploring the prospects for an online local networked public sphere.

**Conclusion**

There is now, according to Dutton (2009), a critical mass of people using the internet the political implications of which are still to be fathomed if not contested. Dutton argues that this critical mass of users is politically significant in that this level of usage is the minimum required to support his conception of the Internet as a new political sphere of influence, a Fifth Estate in society distinct from the Fourth Estate traditionally provided by the mass-media. Whilst this research is pursuing a slightly different agenda to that of Dutton’s his argument around the significance of a critical mass of Internet users is empirically relevant.

As also is the research presented by Benkler (2006) who contends that the Web is a vehicle for a networked public sphere which can challenge traditional sources of political authority and power. Hindman (2009) on the other hand has presented evidence to the contrary, which shows, echoing Margolis and Resnick (2000), that the structure of the Web favours the political discourse of traditional elites and economic power. Nonetheless, research to date into the potential of a networked public sphere has concentrated on the Web as a whole and has ignored the potential of a local
online networked public sphere developing in the context of local government e-democracy initiatives and those promoted by local citizens themselves. In other words there is a dearth of research at a local level that seeks to empirically ground Coleman and Blumler’s (2009) argument that a Web enabled networked public sphere might exist within the context of modern networked governance. Furthermore, as the last section in this chapter has argued, whilst this local context is complex, fraught with political and institutional tensions, there appears to be a prevailing appetite for local e-democracy amongst local government institutions and civic actors.

As such, the first chapter outlined a broad research question, namely can the Web transform local democracy as captured in the relationship between local governance and civic society? This second chapter has now identified a requirement for more specific questions.

The first question specifically addresses the identified empirical gap and asks:

(i) Does such a local political online space exist as a Web enabled networked public sphere capable of facilitating communication or discourse on civic issues between local government institutions and the wider civic society?

The second question addresses the particular complexities associated with citizen participation in the local governance process. It therefore seeks to identify and understand any social, political and institutional constraints and opportunities that might be presented in using such a participatory device, and asks:

(ii) How do local civic stakeholders view or politically exploit this space?

The third question addresses the policy implications associated with using such a space for engaging citizens in the local policy making process, and asks:
(iii) What are the transformative implications of conducting local politics in this space?

The following chapter will explain how these questions will be explored by presenting a methodology and related methods.
Chapter 3

Research approach

Introduction

To date, as the last chapter demonstrated, there has been little, or no, empirical research into an interconnected Web enabled local political sphere of influence. One that is capable of facilitating a new ‘public sphere’ which can enhance the quality of local governance through electronically networking citizens, civic and local governance institutions.

In addressing this under-researched field this investigation is located in notions of modernization in relation to this internet mediated domain of local governance. Theories of social transformation contend that the post industrial information age is helping to shape a new, uncertain and complex society which challenges the political significance of the local and may also shift the ‘public sphere’ from the institutional or mass media dominated realm to a new political sphere of influence. At a policy level the UK government, drawing on ideas that new ICTs can facilitate a rebirth of civic society and local democracy, has promoted policy pushing local government to innovate using ICT to help localities engage with citizens. Meanwhile Internet use has reached a critical mass where the ‘space of flows’ is now the first port of call for users seeking information, including that on government policy. The introduction of Web 2.0 applications has not only enabled such unprecedented level of social use of the new media but possibly introduced a new architecture of civic and political participation.

The question the last chapter posed was has this context enabled a new local networked public sphere to develop? This identified a number of specific research questions, namely:
(i) Does such a local political online space exist as a Web enabled networked public sphere capable of facilitating communication or discourse on civic issues between local government institutions and the wider civic society?

(ii) How do local civic stakeholders view or exploit this space?

(iii) Are there transformative implications of conducting local politics in this space?

The purpose of this chapter is to present a methodology and associated methods with which to explore these questions. Following Benkler (2006) and Hindman (2009) the intention here is to address the first question by a structural analysis of hyperlinks generated, or not, from websites involved in a highly politicised local case study- of which more later. The working assumption being, as presented in Chapter One, that for a local online networked political sphere of influence to exist as an _effective_ public sphere it should display the following characteristics:

- it will not exist as a single unified entity but as a number of interlinked politically relevant Web sites;
- there should be links to local government, the decision making process or the public authority; and,
- there should be links to opposing views to enable an informed discussion on the issue in question.

To structurally explore this online network this research will use Lusher and Ackland’s (2008) Relational Hyperlink Analysis which innovatively evaluates hyperlinks not just as indicators of visibility and popularity (as per Benkler and Hindman) but as social connections. This analysis uses Social Network Analysis and an associated statistical technique, Exponential Random Graph Modeling, which enables statistical analysis of social networks. The second research question is aimed at exploring and understanding the political significance that local civic stakeholders attach to using the new technology. This suggests use of a more qualitative research method and this research will draw upon Howard’s (2002) network ethnography which uses Social Network Analysis to frame subjects for qualitative investigation to unpick
the complexities associated with institutional and civic activity in this sphere. In drawing on both qualitative and quantitative research methods the analysis seeks to map not only the physical characteristics that might identify a local networked public sphere but also the social and political context within which a local networked public sphere might have local political traction. In this way the third question is addressed by illustrating the transformative implications of conducting local politics in this new online political sphere of influence.

This chapter then will justify the adoption and deployment of the above research methods. It will do this by first of all situating the research approach within a philosophy that provides explanations of social change and enables use of both quantitative and qualitative methods. The remaining sections of the chapter explore the chosen methods in more detail. Section two will deal with issues concerning researching the internet and hyperlink analysis in particular. The third section will look at the facility of Social Network Analysis, the fourth section will deal with how networks may be used to frame qualitative investigation drawing upon a network ethnography approach and lastly, it will present some conceptual problems, and potential solutions, associated with network analysis.

**Research philosophy**

This research is interested in examining if or how local politics can be re-invented or transformed at the juncture of the technological and the social. Of course, the fact that a distinction is made here between technology and society can suggest a particular view of social reality. Rather than let that remain implicit in the research, and given that an argument will be made for adopting a particular epistemology for conducting this research, it is preferable to state at the outset the guiding ontological position. As Marsh and Furlong (2002, pg 17) write:

> Each social scientist’s position to their subject is shaped by their ontological and epistemological position. These can be implicit rather than explicit but regardless of whether they are acknowledged or not
they shape the approach of theory and method which the social scientist utilises.

The history of the social sciences is in many ways a history of philosophical debate which has witnessed different philosophical traditions coming to prominence within the discipline at different times. From a purely philosophical perspective it is possible to, crudely, identify four main ontological traditions: materialist; idealist; dualist and agnostic which according to Benton and Craib (2001) have philosophical echoes within the disputes over ontology within the social sciences. However, these disputes within the social sciences tend to be more “...localised in character” (2001, 5) and turn upon whether society is an independent reality in its own right or comprises nothing more than the collection of individuals who make it up. As Benton and Craib (2001, 5) further observe “.....there are deep, on-going controversies about what the constituents of the social world are”. This ongoing ontological dispute over the role of structure and agency in society was acknowledged in Chapter One, when discussing the post industrial transformation theories of Castells and Beck. It is now timely to state the particular philosophy framing this research.

Karl Marx fundamentally repositioned the utility of Hegelian dialectics when he stated “it is not the consciousness of men that determines their existence, but their social existence that determines their consciousness” (1977, preface). The research philosophy here is part of this tradition and is distinguished from idealistic notions of reality by having a view of the world that sees objective, measurable relations between social phenomena and a social reality that exists independently of our knowledge of it. Ontologically, this is within a foundationalist view of social reality, one that understands there to be fundamental differences within the human and natural world that persist through space and time and, critically, can explain social life and social formations. This world view has real implications for the choice of research methods. As Archer acknowledges (1995, 16), “in any field of study the nature of what exists cannot be unrelated from how it is studied”
Due to a philosophical - and historical - link between this conception of social reality and an empiricist understanding of what knowledge would sustain this view, many social scientists coming from this viewpoint choose to adopt research approaches aligned with those used in the natural sciences and accordingly privilege methods of direct observation and collection of quantifiable data. They do so because their understanding of the social world is that it exists in the same way as the natural world, that is to say it has defining features which are directly observable, and, as such, techniques employed in the natural sciences can therefore be similarly utilised in the social sciences to map and explain how social life is.

Whilst this research approach here does not altogether eschew such a positivist tradition it is uncomfortable with a strict application of this approach. This is because it is not entirely compatible with view of the social world informed by Marx’s understanding of the relationship between social existence or ‘being’ and consciousness. As such it cannot be wholly supported or evidenced by what is largely an empiricist approach to knowledge which is unlikely to furnish the required ontological depth. Furthermore, this research subject requires an epistemology that supports a mixed method, both quantitative and qualitative, approach to data collection.

It is for these reasons that this research is situated in a realist philosophical tradition. This tradition sees the social world as existing independently of our knowledge of it but structurally distinct from the natural world as Bhaskar (1993, 79) explains:

(i) social structures, unlike natural structures do not exist independently of the activities they govern;
(ii) social structures, unlike natural structures do not exist independently of the agents’ conceptions of what they are doing in their activity;
(iii) social structures unlike natural structures, may be only relatively enduring (so that the tendencies they ground may not be universal in the sense of space time variant).
Moreover, as Hollis and Smith (1990) acknowledge there is a lengthy debate within this tradition over whether some social structures are even observable. Thus structures such as, for example, racism, class or patriarchy may not be tangible and their existence provable in the positivist sense but nonetheless positing their existence may gives us the best explanation of certain social behaviour. In other words such structures do not exist apart from their effects. In addition to this, as Bhaskar contends in point (ii) above, social structures such as institutions, the family for example, are concept dependent but “…contrary to the hermeneutic tradition in social science they are not exhausted by their conceptual aspect. They have a material dimension” (1993, 4). This has important methodological implications, as Sayer (1999, 6) points out, “we therefore have not only to explain their production and material effects but to understand, read or interpret what they mean”.

This tradition therefore facilitates a distinct research approach. In ontological terms it is similar to the positivist tradition, that is, the world exists independently of our knowledge of it and social phenomena have causal powers and therefore it is possible to make causal statements. However, in epistemological terms, according to Marsh and Furlong (2002) it owes much to relativism as it contends that our interpretation or understanding of social phenomena affects social outcomes and not all social phenomena or relationships between are them observable. Bhaskar similarly underlines the research value to social sciences of the relativist approach where “…..there is no incompatibility (but rather mutual entailment) between ontological realism and epistemological relativity...” (2002, 34).

However, for Bhaskar, and realists in general, the real work of social scientific thought is not to isolate the general conditions of knowledge as such, but the particular mechanisms and relations at work in some identified sphere of social life. For them such explanatory mechanism lie “…. in the real relations and processes in which people stand to each other and nature, of which they may or may not be aware; which is generative of
social life and yet unavailable to direct inspection by the senses” (1975, 132).

In this context the empiricist maxim that knowledge must be grounded in sensory observation is clearly redundant. Additionally, it is this understanding of the nature of the world which enables realism to acknowledge the hermeneutic tradition. In this way, social actors’ beliefs or interpretations can be harnessed as a resource for social scientific thinking. Notwithstanding this, theoretical argument and empirical evidence may well lead to accounts of social structures which contradict those of the social actors.

However, it is Bhaskar’s version of realism, critical realism or critical naturalism as he terms his research approach for the social sciences that has a particular utility for this research.

Critical realism grew out of classical realism the core views of which owe much to Marx’s work. However, it is, according to Benton and Craib (2001, 119), the work of Bhaskar “...that has provided the most systematically developed and influential version of the approach...” While Benton and Craib (2002) question if the continuing association of Marxist ideas are implicit in contemporary critical realism, Bhaskar (1979, 2002) seems concerned to retain the link between knowledge and human emancipation, evident in Marx’s social theory, within the development of critical realism. While a full exposition of this idea is beyond the purpose of this account it does point to the further facility of critical realism in framing an understanding of social progress. This is pertinent to this research as a philosophical framework which can understand social progress is one that can register change and transformation. Bhaskar did indeed develop a transformational model of social activity. Central to this model, which Archer (1995) claims is a social theory in its own right, are that people and social structures are not dialectically related, they do not constitute two parts of the same process – they are ontologically different.
Men do not create society. For it always pre-exists them. Rather it is an ensemble of structures, practices and conventions that individuals reproduce or transform but which would not exist unless they did so. Society does not exist independently of conscious human activity (the error of reification). But it is not the product of the latter (the error of voluntarism). (Bhaskar, 1975, 120).

For Bhaskar social structures may constrain or limit human development but they do not determine it. His conception preserves the status of human agency and it is Bhaskar’s understanding of the nature of the relationship between society and people that enables him to sustain a concept, predating Beck’s ideas on reflexive modernity, of societal change via intended and unintended outcomes of social action (1975, 124),

...people, in their conscious human activity, for the most part unconsciously reproduce (or occasionally transform) the structures that govern their substantive activities of production. Thus people do not marry to sustain the nuclear family, or work to reproduce the capitalist economy. But it is nevertheless the unintended consequence (and inexorable result) of, as it is also the necessary condition for, their activity.

A further facility of critical realism is to enable the exploration of the role of technology in society. Within this philosophical framework technology is a social form. It is social, in addition to being material, insofar as it “…consists only in the relationships between persons or between such relationships and nature that such objects causally presuppose or entail” (Bhaskar, 1975, 126). In this understanding technology can be understood and researched as part of social relations. As such a critical realist conception of society views technology as part of the dynamic process of socialization where technology may shape social life and is shaped by it.

There are other accounts (Mackenzie & Wajcman, Wajcman, Chadwick, Latour) that attempt to re-formulate the notion of the ‘social shaping of technology’ which rejects technological determinism while softening the reductiveness in social determinism. One such account (Latour, 1992) bestows a degree of agency upon technology and indeed upon material entities. Latour illustrates his idea of the material world exercising a kind of agency with the example of road bumps or ‘sleeping policemen’ which are given the task of limiting the speed of cars where the rule of law is not
considered sufficient. Wajcman (2002, 355) whilst not wholly convinced by Latour’s thesis acknowledges that it does serve as “... a corrective to a rigid conception of social structure” and helps to “...sensitise us to the materiality in social relations”. Mackenzie (1999, 23) suggests it is illustrative of “…a reciprocal relationship between artifacts and social groups”. Whilst Chadwick (2006, 20) asserts that “…it is helpful to acknowledge that technologies can have political characteristics, not in absolute sense, but in terms of the constraints they impose in their everyday use-how they narrow opportunities and marginalise alternatives”. Others, such as Wellman et al (2003) and Hutchby (2001) for example, have drawn on the concept of ‘affordances’ to explain the relationship between the technological and the social. For Hutchby, who related Gibson’s (1979) psychological concept of affordance to technology, the affordances of an artefact impose limits on how that artefact may be used but “by the same token, there is not one but a variety of ways of responding to the range of affordances for action and interaction that a technology represents” (Hutchby, 2001, 453). Wellman argues that technological change, particularly the internet, has created social affordances that have accelerated the shift towards a different kind of sociality, that of networked individualism.

As stated at the outset this research is concerned with exploring how the internet may have transformed local politics by creating an interconnected, networked online political sphere of influence. The realist research approach detailed here provides on the one hand, a philosophical framework that permits a discounting of competing explanatory accounts for change, for example, technological determinism or the philosophically debilitating void that is relativism while enabling an accommodation or evaluation of the transformational theories of Castells and Beck. On the other hand it furnishes the research approach with a methodological toolkit containing both quantitative and qualitative methods of data collection, both of which are necessary for unpicking and revealing the complex and perhaps complicated environment that is the internet mediated domain of local governance.
The following section introduces the case study which will provide the test bed for exploring this domain.

**The case study.**

For the purposes of this research a case study method will be adopted. Yin (2003, 13) defines such an approach as ‘...an empirical enquiry that investigates a contemporary phenomenon within its real-life context, especially when the boundaries between phenomenon and context are not clearly evident”. Typically, according to Yin, cases studies are deployed within the above context when the research is asking ‘how’ and ‘why’ questions. Moreover, Yin maintains that using a single case is “...a common design for doing case studies” (2003, 39) under certain circumstances. Such circumstances can include instances of when the case represents a rare opportunity to analyse and explore contemporary phenomenon. Caution is counselled in attempting to generalise the results from one single case study to other cases and Yin advises that findings from single case studies are best generalised to theory.

The case study approach can accommodate different research techniques, both quantitative and qualitative, to be employed (Eisenhardt, 1989; Stake, 1995; Yin, 2003). Moreover, a single case study approach can be particularly useful in providing a setting within which the actions of the social actors can be more readily understood and examined (Munro 2007).

**Choosing a case study**

The particular effect of online political activism has, as discussed in Chapter Two, been subject to much academic debate. Nonetheless it remains the case, as Dutton et al (2009) have pointed out, that the majority of people within the UK are increasingly turning to the ‘space of flows’ as a first port of call to access information and, where they are interested in politics, to engage in political activity. This as Chapter Two demonstrates can range from students using the new media to protest against bank charges (Collinson 2008) or for a living wage for campus workers (Biddix and Park,
2008). Of interest to this research are those online initiatives that seek to directly influence Governmental policy. These include governmental endeavours such as the e-petitions’ initiative sponsored by the UK Government (see [http://petitions.number10.gov.uk/](http://petitions.number10.gov.uk/)) and, in a slightly more robust form, according to the Hansard Society (2011), by the Scottish Government and Welsh Assembly. Other non-governmental initiatives such as 38 degrees (see [http://www.38degrees.org.uk/](http://www.38degrees.org.uk/)) have utilised the technology to mobilise support for their campaigns against Government plans to privatise UK forests or the National Health Service.

Whilst such initiatives may well serve to test the development of an online networked public sphere the Manchester Congestion Charge referendum was chosen as a suitable case study here as it fell within the remit enforced by the research question, that is, within a local government domain. Thereby enabling an evaluation of whether a local political online space might exist as a Web enabled networked public sphere capable of facilitating communication or discourse on civic issues between local government institutions and the wider civic society. It was also likely, given its contentious nature, to engage the breadth of civic actors typically found within this domain and aligned with the definition of civic society presented in Chapter One.

It is acknowledged that the contentious nature of the referendum has at least two implications for this research. It was, first of all, likely to inflame opinion and militate against the deployment of rational public deliberation on the issue which, as discussed in Chapter One, is one of Habermas’s criteria for the existence of a public sphere. However, this, as Chapter One also describes, is a contested criteria and maybe, as Dutton (2009) claims, it is, contemporarily, little more than a ‘romantic notion’. Moreover, the focus of this research is on the structural capacity of the Web to deliver a local networked public sphere and it is in this context that the second implication is important. The referendum polarised opinion and as such was likely to lead to the off and online balkanisation or homophily described by Sunstein (2001). However, as Benkler (2006) revealed and Sunstein (2007) subsequently acknowledged, homophilly in and off itself is not necessarily a
problem online as long as there are, as Benkler argues, ‘good enough’ links within the online network to ensure the particular views from such homophilous groups achieve a political salience by reaching, in this case, the public authority of the day.

The Greater Manchester Transport Innovation Fund proposal

The case study of interest here is the use made of the Web by local civic and political stakeholder during a referendum in the UK on the Greater Manchester Transport Innovation Fund (TIF) proposal (Appendix 1: Report of Greater Manchester Passenger Transport Executive, 2008) - or the Manchester Congestion Charge scheme as it came to be more popularly known (BBC, July 2008).

The decision to hold a referendum on the scheme was taken in July 2008 by the Association of Greater Manchester Authorities (AGMA) the governance body through which the 10 local government authorities co-operate to co-ordinate a sub-region-wide approach to many issues including local transport (see for example: www.agma.gov.uk). This decision followed a year of intense, often acrimonious political lobbying, both for and against the proposal, by elected politicians – both local and national, the business community and activists from across the political spectrum ranging from environmental groups to car drivers’ associations. It was, as one interviewee (see Chapter Five), a local media commentator put it, “...the most important issue or story that has effected this area in a long while...almost everybody had an opinion”. The referendum of 1.9 million registered voters was to be held on December 11 2008. This would be the first referendum to be put before the electorate in Greater Manchester since 1975 when the UK voted to stay in the European Union.

The Transport Innovation Fund was a UK Government funding mechanism for transport infrastructure improvement. Under the terms of the fund any bids from local government bodies to secure funding for such improvements had to contain proposals to implement road congestion charging to generate future revenue. AGMA, along with the Greater Manchester Transport
Authority (GMPTA)\textsuperscript{5}, developed a proposal, namely the Greater Manchester Transport Innovation Fund proposal, which sought to secure an investment of up to £3 billion in public transport. Half of this amount would come from the Government and the remainder would comprise a loan which would be paid back through revenue raised from the introduction of a congestion charging scheme and other public transport revenues.

Whilst it was the introduction of the congestion charging scheme that would come to dominate the public discussion the proposal did contain a package of local transport improvements (see Appendix 1). These included: a 10% increase in bus services; 120 new yellow school buses; new bus stations; 63 new trams and an extension of the tram network; new rail carriage and improvements to 41 railway stations; and, 125 miles of cycle routes. These would serve the Greater Manchester conurbation, a geographical area covering 500 square miles comprising 2.5 million people and encompassing ten Local Authority areas, namely: Bolton Council, Bury Council; Manchester City Council; Oldham Council; Rochdale Metropolitan Borough Council; Salford City Council; Stockport Metropolitan Borough Council; Tameside Metropolitan Borough Council; Trafford Council; and, Wigan Council.

However, alongside these proposals to improve the local transport infrastructure was, most contentiously, the proposal to implement the largest congestion charging scheme in Britain (Sturke, 2008). It would cover 80 square miles and consist of two cordons; the outer ring roughly cording the conurbation comprising the Greater Manchester Urban area; and, an inner ring around the Manchester City centre area. It was this aspect of the TIF proposal which was to divide opinion amongst businesses, politicians and residents alike.

\textsuperscript{5} This is a governance body comprising 33 councillors from the 10 local government authorities with a remit to develop local transport policies. These policies would then be executed by the Greater Manchester Passenger Transport Executive (www.gmpte.com)
AGMA recognised the potential political problems with the introduction of such a scheme and set itself four tests which had to be passed before recommending support for the TIF bid (AGMA, 2006)

- there must be significant investment in public transport improvements including Metrolink and enhanced capacity must be in place prior to introducing a charging scheme;
- measures must complement the competitiveness and inclusion priorities of the sub-region and not undermine the competitiveness of the regional centre or the town centres in the area;
- measures must be acceptable, not only to the public but also to the business community; and,
- measures must be relevant to where congestion exists or where it may emerge in the future notwithstanding the advent of public transport improvements.

These measures were designed to bolster the confidence of AGMA’s component members: the 10 local government authorities. Indeed, there was a lot at stake for local political interests and the governance of the sub-region. If successful the TIF proposal, as well as ushering in a congestion charging scheme, also provided considerable inward financial investment (£3bn) to improve the transport infrastructure of all 10 local authority areas and generating, so it was claimed, 10,000 new jobs.

This investment was much needed given that this was an infrastructure which was widely seen to be inadequate for both public need and the continued economic growth of the sub-region. Balanced against this were concerns over the impact of a congestion charge scheme on individual commuters’ pockets. This was used to some effect by those campaigning against the charge who claimed (Daily Telegraph, October 2010) those commuting daily could be faced with charges of £1200 per annum. Associated with this concern must also have been fears of the political price to pay should congestion charging prove unpalatable with the local electorate. Such a price was indeed paid in the local elections in May 2008 when a local councillor, who was also the chair of the Greater Manchester
Passenger Transport Executive (GMPTE), lost his seat following a campaign by a group opposed to congestion charging (Salford Advertiser, May 2008).

For the governance body, AGMA, there were wider political considerations. The Greater Manchester conurbation is largest sub-regional economy in the UK outside London and the South east of England (MIDAS, 2007). That the sub-region has achieved this position is largely due to the alliance, developed over the last two decades, between national and local government and the local business community (Peck and Ward, 2002). AGMA would have been concerned to ensure any dispute over the TIF proposal did not damage this relationship in the long term. Moreover, AGMA has long harboured aspirations to punch its political weight and gain city region status with increased governance powers devolved from national government. Whilst this was partially granted in April 2009 at the time of the TIF proposal the political leadership at AGMA must have had an eye on how its political management of the proposal and subsequent referendum would have been viewed by central government. The level of importance AGMA attached to this issue can perhaps be gauged by the fact it spent £21.9 million (Manchester City Council, 2009) on developing the TIF proposal.

Political concerns over relationships with the local business community were not misplaced. Whilst the charges for crossing the rings were not as high as say the congestion charge scheme in London it was nevertheless perceived as both threat and opportunity to the economic interests of different sections of the business community. Crudely speaking those businesses who came out against the proposal had interests in freight haulage and retail parks located on the edge of the urban area and included substantial multi-national businesses such as Kellogg’s and Unilever alongside major local companies such as Peel Holdings, owners of the Trafford Centre one of the largest shopping centres in the UK. The business interests of those supporting the proposal were generally located within the city centre area and whilst numerous where generally not in the same financial league as those businesses opposing the proposal. Both sets of businesses interests formed lobby groups: the ‘Greater Manchester Momentum Group’ (Appendix
2: GMMG, 2008) opposed the proposal; and ‘United City’ (Crains, 2008) supported it. It became apparent through the interviews conducted as part of this research (see Chapter Five) that each lobby group had hired local PR consultancy firms to campaign for their interests. The activities of those businesses campaigning against the TiF proposal were commented upon with some concern by a local constituency Labour Party (Salford Labour Party, 2008). The concerns focused upon allegations that a representative of Peel Holdings was involved in offering help to campaigns to unseat local councilors who supported the introduction of a congestion charge.

Local campaigns for and against the congestion charge sprang up. Examples of these included: Clean Air Now (http://www.manchesterfoe.org.uk/can/) an environmental based campaign for the congestion charge and, opposing it, Manchester Against Road Tolls (Association of British Drivers, June 2007). At a national level, along with the aforementioned drivers lobby, seven Members of Parliament, with constituencies in and around Greater Manchester, launched a cross-party campaign against the congestion charge (ePolitix.com, October 2008). This served to underline how the issue was dividing the governing Labour Party at a national level. This was significant as it was leading figures within the Labour Party, certainly at a local level, who were instrumental in developing and promoting the TiF bid.

Opinion on the merits of the congestion charging scheme was also divided amongst the ten local authority members of AGMA. Although the Government had agreed to accept the Greater Manchester TIF bid with an increased allocation of money three, out of the ten local authorities, indicated that they could not accept the introduction of a congestion charge system. Accordingly, AGMA agreed to put the matter in the hands of the local electorate and to hold a referendum on the issue (Manchester City Council, 2008). Under the terms of the referendum if a majority of the public voted in favour of the referendum in seven out of the ten local authority areas then this would be considered a vote in favour of the TiF bid.

Prior to the decision to hold a referendum on the issue AGMA launched an impressive public consultation and awareness campaign on the TiF
proposals. This was aimed at meeting one of the four tests AGMA had set itself, namely, gaining the approval of the public and the business community for the TIF measures. The results of this consultation exercise not only give an indication of the level of public interest in the proposals but render the referendum results all the more surprising. AGMA, with the help of Ipsos Mori, the market research company, devised a comprehensive strategy for raising awareness and sampling public opinion on the TIF proposals over a four month period from July to October 2008 (Appendix 3: Greater Manchester Passenger Transport Authority, 2008). A 24 page brochure was delivered to every home, 1.2 million, and business, 118,000, in Greater Manchester.

It invited responses to the TIF proposals that could be made via a website, email, text, letter or by video recording at one of the 65 exhibitions held throughout the conurbation. In total, 85,088 responses were received and 10,741 people visited the exhibitions. Alongside this Ipos Mori conducted a representative sample survey of 5,010 local residents and 1,002 local businesses to gauge opinion on the TIF proposal. They found a majority (53%) of residents was in favour of the TIF proposal but, within the business community, opinion was more evenly divided with 42% in favour and 45% against. Interestingly, and by way of contrast, a smaller sample survey of 1000 local residents conducted by polling company Populus (BBC June 2008) had found almost two thirds (62%) of residents against the congestion charge.

However, the results of the referendum held on December 11 2008 were overwhelmingly clear (Manchester City Council, 2008) on a turnout of 53% over three-quarters (78%) of the Greater Manchester electorate rejected the TIF proposal.

Within the story of this TIF proposal are a number of interesting political studies but this research is concerned with how this complex array of vested interests and political passions was mediated online. Inevitably it was reflected over the Internet. Within the AGMA public consultation process, described above, the governance website dedicated to the issue,
www.gmfuturetransport, received 65,592 visits comprising 50,383 unique visitors. A search query on Youtube (Youtube, Oct 2010) revealed 29 videos on the Manchester congestion charge, Facebook had 66 groups (see Appendix 4) contesting the charge and Skyscrapercity (Appendix 5), an online forum, had a discussion thread on the congestion charge of 7201 contributions. This is perhaps illustrative of the technology being used to provide an online presence for various offline political interests. It reveals little, however, of how the Web may have been used in a politically transformative way. In other words did it provide a public sphere within which local governance might have meaningfully and effectively – in the sense of influencing policy or opinion - exchanged information on this issue with the local civic and political actors who contested the TIF proposal?

To capture evidence of the Web being used in such a fashion requires a particular approach to researching the Internet.

**Researching the internet: A Web epistemology?**

The historical cleavage, touched upon above, between interpretivist and positivist epistemologies remains evident in social science research into the new medium. The research approach adopted here aims to sidestep this cleavage and utilise the strengths of both approaches in exploring this reality.

Discussing pre-internet technologies, the media theorist Postman (1979, 39) described them as

……metaphors through which we conceptualize reality in one way or another. They will classify the world for us, sequence it, frame it, enlarge it, reduce it, argue a case for what it is like. Through these media metaphors, we do not see the world as it is. We see it as our coding systems are. Such is the power of the form of information.

This description readily fits the internet and, though we should bear in mind Castells’s technological paradigm (1996) in understanding the qualitatively different impact the new ICTs may have upon society, it serves as a
reminder that for the social scientist the epistemological challenge in examining this new media is the same.

Mediated information or communication via books; newspapers; television; and film have long been subjected to scrutiny by social scientists employing different, contested, epistemologies keen to definitively explain, or understand, this reality. The internet has stimulated similar debate. Jones (1999, 4) comments on how much of the early research on the internet was driven by the “…metaphor of the Internet as a market-driven social space...”. Jones argues that this positivist conception of the Internet lent itself to predictive, mainly quantitative, market research at the level of the individual consumer. His preference is to view the internet as a ‘heritage’ space (1999, 7) where “…the lingering and persistent accumulation of our experiences, somehow, goes beyond ourselves”. In arguing for the internet to be understood as a social ‘connected’ space as opposed to a technical ‘cyberspace’ Jones is advocating a move away from seeing the Internet as a storage medium favouring a positivist approach to information collection to a more interpretivist one that seeks to understand social interconnectedness “…between life on line and its meaning in relationship to life off-line”(1999, 23).

However, Rogers (2004), as we shall see, swings the epistemological pendulum back into a more realist, positivist territory and for him the debate about the new media, the internet is about its future “…as a space that maintains the collision between alternative accounts of reality” (2004, 1). To illustrate his point, and it is a point that serves this purpose here too, he discusses the role of informational politics, understood by Castells (1997) to be media communication strategies that attempt to manipulate public views or opinion on the internet. He argues that authoritative spaces on the web such as search engines are not technical but political spaces that may privilege access to certain sites at the expense of others. This clearly brings into question issues of fairness and scope of representation of search engines in providing us with what is essentially a view of the world. The continued prominence of the Google search engine and the recent growth of an industry providing search engine optimization – the process of
manipulating hyperlinks and content to make a website more visible to search engines - to organisations both commercial and otherwise bears testament to this. Rogers also draws on another example, that of the UK citizens portal ukonline.gov.uk (now Directgov), to highlight certain digital cultures and how the UK government’s informational politics as employed in this authoritative space provided, constrained or enabled a particular view of the world. This portal was established to by the UK government to host citizen discussions in a governmental framework. However, aspects of the medium’s culture such as flaming, pseudonyms and spamming did not accord with the government’s picture of serious citizen discussion and messages were often removed that did not satisfy a code of conduct. The other aspect of digital culture that proved problematic for the UK government concerned hyperlinking. This is an electronic link from the web page providing direct access to another part of the same or different web page. The UK government forbade hyperlinking to its site without prior written consent. The consequences of the UK government’s response in this instance to these aspects of digital culture, as Rogers points out (2004, 11), was that citizens

...are asked to follow the formats of the government’s online informational politics – formats that constrain what counts as a contribution. The second related consequence is that those discussions and positions that live elsewhere (on the Web) may not join the debate by referencing it in the form of a hyperlink. In principle, the debate thus is a governmental as opposed to social debate.

This illustrates how alternative accounts of reality may be constrained on the web. But, pertinently, for the purpose here, these examples also highlight the epistemological challenge for researchers of the medium. What counts as knowledge in this context? Which particular web dynamics should one capture to elicit these different accounts?

Rogers attempts to address this issue and move towards a specific web epistemology by distinguishing between two approaches towards evaluating the quality of information, or how information is included on the web. These are classified as voluntaristic and non-voluntaristic approaches. The voluntaristic approach to evaluating information is one of self-reporting and
one such example is wikipedia.org where information is collectively authored. In a non-voluntaristic approach there is no self reporting allowed and inclusion is based on measures of quality of found, as opposed to self-reported, ties. One example of this could be the Google search engine which uses a well-guarded algorithm to measure inlinks to sites and thus determine their inclusion in its hierarchical ranking of sites. Rogers, although appreciating that much of the web has been built on voluntarism, favours the non-voluntaristic evaluating model as it affords some distance from the objects under study and (2004, 16) puts forward a

...realist defense of the non-voluntaristic approach, many have observed that participatory practices often do not live up to their promises, participatory spaces without participants also depress. But the larger rationale behind the non-voluntaristic approach is that it places the burden of evaluation – and debates about evaluation - on techniques that blame the web. This overall approach creates a beneficial climate.

Having justified his approach Rogers goes on to define what he considers to be a ‘living web’ and the kind of epistemological techniques and practices that may capture it. In so doing he first draws a distinction, in line with his approach (2004, 17), between “...information gleaned from the medium – embedded information - and information gleaned from without the medium and put up on the web - disembedded information”. An example of disembedded information would be that which arrives from press agencies as news feeds and is seen as a continuous stream on sites such as BBCnews.com. An example of embedded information would be hyperlinks, domain names and page modifications. It is this embedded information that Rogers is interested in, and sees as comprising a dynamic ‘living web’.

The fine difference between these two distinctions is not something Rogers dwells upon but clearly the genesis of all information on the internet is from without the medium. Rogers’s distinction seems to turn upon the immediacy of the information source. Nonetheless, it is a distinction that he has made explicit and one that does serve his, and this research’s, epistemological approach. Rogers describes this web epistemology (2004, 19) as “…the various techniques that capture online (embedded information) analyze it and recommend it ………. in competition with disembedded information”. For
Rogers and Marre (2000, 145) embedded information such as hyperlinks could represent “…a semblance of socio-epistemic network between organizations”. As such they could be mapped and understood as meaningful strategic choices on the part of site producers.

It is this contribution towards this new Web epistemological practice where the real significance of Rogers’s work lies. Whilst there are limitations to the positivist approach it embodies, nevertheless, as a heuristic it has served to deepen our understanding of how to research the Web.

**Hyperlink Network analysis**

Park and Thelwall (2003) helpfully distinguish between three of the common research approaches to the analysis of hyperlinks. The first approach seeks to examine the particular ways, or patterns of connections, in which hyperlinks have structured the Web. This approach describes the particular topography of the Web and informed, for example, Benklers’ (2006) and Hindman’s (2009) views discussed in Chapter Two.

A second approach is that of Webometrics this derives from Information Science and implies a range of distinct methods that, put simply, count the number of hyperlinks to evaluate the relative importance of the website content under investigation. Hyperlink Network Analysis, by contrast, derives from Social Network Analysis (SNA), explained in more detail below, and focuses upon the hyperlinks as a social structure forming shared or communicational ties between the websites they connect. It is this approach that is of interest to this research. Jackson (1997) is often credited with suggesting that SNA would be an applicable methodology for studying hyperlinks among websites. Much of the studies that applied network analysis to computer mediated communications (CMC) networks tended to focus on how the particular structure of the CMC network could influence peoples’ behaviour or attitude (see for example: Hampton and Wellman, 2000). In such studies the nodes in the network were individual people. Park (2003, 53), however, went on to describe websites as social actors.
From this perspective, an actor is a website belonging to a person, private company, public organization, city, or nation-state. These nodes are linked by their hyperlinks...the structural pattern of hyperlinks in their websites serves a particular social or communicative function.

More recently Havalais (2008, 48) has argued that hyperlinks are becoming “..the currency and connective tissue of the networked society”. He contends that hyperlinks are increasingly structuring our social interaction and he insists that while it is important to understand the structure of hyperlink networks it is equally important we ask why such links are made if we are to understand the social meaning of hyperlinks. Adamic (2008) also sees hyperlinks as having social meaning, forming social networks which can be contextualised, understood and even predicted through analysis of the particular web or blog page that generates the link. It is within this context of exploring the meaning or social significance of hyperlinks that the technique of Relational Hyperlink Analysis (Lusher and Ackland, 2009) is foregrounded.

Questioning the meaning of hyperlinks raises Rogers and Marre’s (2000, 146) assessment that such links may comprise a ‘meaningful socio-epistemic network’. Underlying this assertion is the assumption that

...hyperlinking behavior is non-random (in a colloquial sense). To be meaningful, hyperlinking should be less a matter of the mere whims of the organization’s webmaster. The semblance of an epistemic network can be visualized as a debate only if actors significantly acknowledge other actors by linking to them in the webwork.

Upon analysis of their case study to test this assumption and a revealed pattern of hyperlinks between chosen websites, they conclude (2000, 157) that

Broadly speaking, hyperlinking by one organization to another, and reciprocal hyperlinking, may be said to represent a single or common acknowledgement of meaningful participation in the debate. To link is to recognize; linking by a leading participant brings the other party into the (interlinked) circle of the debate on the web.

Whilst it is acknowledged that to link is to recognize the ‘meaningfulness’ and ‘significance’ of the link remains questionable. This is because if a
hyperlink network is a social network then the structural properties of that network may cause hyperlinks to be generated in a random way as opposed to one generated with the purpose of linking to another site’s content. Understanding what is driving hyperlink connections may lead to fundamentally different conclusions about why such a website might be prominent in any given network. Lusher and Ackland (2009) address this issue and advance a method of Relational Hyperlink Analysis (RHA) for empirical social science research into hyperlink networks on the internet. This method utilises ideas and techniques of Social Network Analysis in particular Exponential Random Graph Modelling (ERGM). It is argued here that such a technique is particularly useful for exploring online political networks such as a local networked public sphere.

It is probably instructive at this point, prior to discussing the specific advantages of RHA, to provide an outline explanation of Social network Analysis and in so doing justify its use in this context.

**Social Network Analysis**

SNA is a sociological technique which focuses on a set of social actors, people, organizations or websites, and the relations between them. It sees the particular social environment created by these relationships as a social structure and formally represents them as a social network. In so doing SNA enables the mapping and measuring of relationships between these social actors.

The process and application of SNA is described in detail by Wasserman and Faust (1994) and Scott (2000). There are a number of key concepts central to SNA and of relevance to this study, namely:

- **Actor.** An actor in this context is a social entity. SNA is concerned with understanding the linkages between social entities and the implications of these linkages. An actor may be an individual, organization or collective social unit or, as mentioned above, website.
- Relational tie. Actors are linked to one another by social ties. “The collection of ties of a specific king among members of a group is called a relation” (Wasserman and Faust 1994, 20).
- Social Network. “A social network consists of a finite set or sets of actors and the relation or relations defined on them” (Wasserman and Faust 1994, 20).

In distinguishing SNA from other research approaches Wasserman and Faust (1994, 4) offer the following:

- Actors and their action are viewed as interdependent rather than independent, autonomous units;
- Relational ties (linkages) between actors are channels for transfer or flow of resources (either material or non-material);
- Network models focusing on individuals view the network structural environment as providing opportunities for or constraints on individual action;
- Network models conceptualise structure (social, economic, political and so forth) as lasting patterns of relations among actors.

SNA is probably more commonly associated with quantitative methods of analysis that “illuminate structural relations usually opaque to lay actors, through delineating the ties between parts of social bodies” (Knox et al 2006, 117). A discussion on the strengths and weaknesses of this approach is presented later in this chapter but this emphasis on quantitative investigation is, according to Wasserman and Faust (1994), because mathematical concepts were important in the early theoretical development of SNA. SNA originates in work undertaken in the 1930s and 1940s by psychologists and anthropologists who developed sociograms to explore ties of friendship, community and kinship. A sociogram is a map in which points (nodes) represent individuals or organisations connected by lines (edges) representing their social relations. The pattern of connections among these lines represents the relational structure of that society or social group. Graph theory was used to analyse sociograms and later, statistical and probability theory were utilized, as researchers began to study relational characteristics observed in networks such as reciprocity and transitivity.

Using SNA to analyse the Web and hyperlink data in particular has some precedent, see above, with Park (2003) describing websites as social actors.
In this case hyperlinks are the relational ties that link webpages and form social networks. The significance of the hyperlinks will be analysed by drawing upon the innovative Relational Hyperlink Analysis proposed by Lusher and Ackland (2009).

**Relational Hyperlink Analysis**

Relational Hyperlink Analysis is, for Lusher and Ackland (2009), the application of Social Network Analysis techniques to the study of hyperlinking behaviour. In this way (2009, 3) "RHA is a relational social science framework, which pays particular attention to hyperlinks as social connections, not merely indicators of popularity or visibility". They distinguish their approach from the two most common ways of studying hyperlinks: the network science approach that examines the structural properties of networks such as power laws illustrated by Hindman (2009); and, the webometric approach where (2009, 1) “.....counts of inbound hyperlinks are regressed on the characteristics websites and the actors who run the website (e.g. research team or organization) in an attempt to identify the attributes that lead to the acquisition of Hyperlinks” . They argue that by applying the statistical technique associated with SNA, Exponential Random Graph Models (ERGM or p* models), it enables, in contrast to the other methods, the internet researcher to ask the more refined question “Why do actors make or receive a hyperlink?” (2009, 13).

ERGMs are a particular class of statistical model for social networks permitting a statistical analysis of social networks. They were originally proposed by Frank and Strauss (1986), and further developed by, amongst others, Snijders et al (2006). A more detailed explanation of how ERGMs work will be provided in the next chapter where they will be applied to the case study. Suffice it to say for now that it is the particular function of ERGMs that provide advantages over other statistical techniques when applied to specific hyperlink networks. Such networks, according to Lusher and Ackland, are characterized where the hyperlinking behaviour of social actors “..can be expected to exhibit both structural and actor-relation network effects” (2009, 13). A structural network effect is where relational
ties, or in this case hyperlinks, are driven by social structural phenomena such as reciprocity or transitivity. An example of reciprocity as a social structural network effect driving a social tie formation is where a stranger might extend their hand in greeting and, typically, this is reciprocated without any prior knowledge of the stranger’s qualities. Translated to the Web this might occur where a link is made from one website or page to another simply because they are returning the link as opposed to linking because they want to engage with the site’s content. Similarly, transitivity can be described as ‘the friend of my friend is my friend’, again a particular social structure drives a social tie that is formed without knowledge of the actor’s, or website’s, particular qualities or attributes. By contrast an actor relation network effect is one where social ties, or hyperlinks, are made because of the actor’s attributes, or in this case, website content. An example of this effect is homophily which describes the tendency for like minded social actors to link to each other the social tendency aptly described in the old adage ‘birds of a feather stick together’.

This approach is distinct from that of Benkler (2006) and Hindman (2009). In analysing the distribution of hyperlinks they made no account of the particular, social, process driving hyperlinking behaviour. To be clear, it is important to note that that this study does not argue that traffic to a website will be directed differently if a link is driven by either the particular structure of the network or the content of the website. However, this study does argue that this technique is particular useful in this context for the purpose of exploring the significance of an online political sphere of influence.

This is because it allows this question to be posed: is the linking behaviour an ‘accidental’ consequence of the website being part of a particular network structure or the product of a ‘purposeful’ desire on the part of the website producer to engage with the site’s contents? As such the ability to distinguish between what is driving hyperlinking behaviour should enable a greater understanding of why some sites should be more prominent than others in the network. Moreover, if links made as a consequence of structural network effects can be controlled for then links driven by site
attributes may be evaluated as evidence of a networked public sphere. Evidence of such purposeful linking behaviour may also usefully inform the semi-structured interviews that are part of the next stage of this research.

In other words the ability to control for purely structural effects on social ties, or hyperlinks, in a network can allow the researcher to properly evaluate the significance of the hyperlinking behaviour. It is the facility of ERGMs to distinguish between structural and individual level network variables that set it apart as a statistical technique for analyzing social networks. Lusher and Ackland’s innovative contribution here is to apply ERGMs to the analysis of hyperlinking behaviour.

Such a technique has not been applied to an evaluation of a local online networked public sphere. It is presented here as an alternative way of investigating the existence, and understanding the development, of such a networked public sphere. It is anticipated then that this analysis of hyperlinks will reveal, in the first instance, if a local networked public sphere was likely to exist and secondly, if it did exist, how it came into existence. Understanding this process should provide greater insight into which particular websites, or sites with particular attributes, are likely to drive or inhibit the development of a networked public sphere. Such information should contribute not only to the debate on the Web’s facility to provide such an online political sphere but to the development of strategies for shaping future networked public spheres.

What it will not do is provide an understanding of the political significance that the participants in the case study, those associated with websites in the online congestion charge network, may attach to the hyperlinked network. This understanding will be important in illustrating the constraints, opportunities and transformative implications associated with conducting local politics in an online sphere. The proposed research methods for investigating the chosen case study have so far been quantitative in nature but the research question suggests an additional requirement for a complementary interpretive, qualitative method that will enable the views of
the civil and political stakeholders contesting the TIF proposal to be captured.

The deployment of a mixed method approach here is necessarily caught up in discussions on the strengths and weaknesses of a purely quantitative, structural analysis of a social network and conceptual issues around determining the boundaries of the network to be investigated. The following, in advocating a mixed method approach, navigates this discussion.

**A mixed method approach in Network analysis?**

Some have criticized what they see as an overemphasis on mathematically modeling the structural characteristics of a social network at the expense of more ethnographic explanation of networks. This, according to Lopez and Scott (2000, 16) means “... social network analysis is not, in itself, a specific theory or set of theories” but “a series of mathematical concepts and technical methods”. For Knox et al (2006, 116) SNA practitioners have developed a methodological expertise and specialised software packages which has enabled them to claim a monopoly on “scientific” network thinking by providing them with the means of going beyond “loose”, metaphorical approaches to networks and providing a range of formal tools for “precisely mapping networks.

This trajectory, Knox argues, has tended to exclude collaboration with the discipline of social anthropology which has a historical tradition of deploying network analysis to inform ethnographic research. Knox’s view is that combining aspects of the two traditions could open up exciting potential for network analysis which may offer deeper insight into the significance of social relations.

Nonetheless Knox does recognise that the value of SNA is in its abilities to “illuminate structural relations usually opaque to lay actors, through delineating the ties between parts of social bodies” (2006, 117). This as Knox acknowledges offers a valuable contribution and contrast to, for example, social science’s reliance on sample surveys which generally
highlight individual attributes at the expense of structural relations. This can as a consequence lead to an overemphasis on the significance of individual attributes on social outcomes. This has been partly overcome through grafting the idea of ‘ego-networks’, networks that map not the ‘whole’ network but ties between an individual and their ‘alters’, onto sample surveys. From such applications comes an understanding of the role of network in social outcome. This approach was classically illustrated by Granovetter’s (1973) ‘Strength of Weak Ties’ where an individual’s network became part of that individual’s attributes along with class, gender, etc. However, this understanding is likely to be limited by the very nature of the ego network - it is by definition an individualised concept of a network. Moreover, it can assume that all such ties or connections between individuals, or institutions, are significant.

An alternative approach is ‘whole- network’ analysis which enables, when data on whole populations are collected, all the ties in such a given population to be measured and thereby, in theory, facilitating an understanding of the complete structure of social actor relationships. One interesting and influential approach here is that of ‘structural equivalence’ developed by Harrison White et al (1976). Structural equivalence exists, according to Wasserman and Faust (1994), where two actors have identical ties to and from all other actors in the network even where the actors concerned are not directly tied to each other. For example, two footballers who may not know each other but share a common relationship to an agent are in structurally equivalent positions. This approach is interesting as it uses SNA to identify an absence of connection, or the existence of similar connections, to delineate structural relationships. Here SNA is used, as Knox (2006, 199) observes, “…to recover a form of latent structure that are entirely opaque to observers”.

For Knox these two approaches indicate a tension within SNA between those emphasising the value of ‘contact’ or connection between individuals and/or organisations and those who stress ‘position’ or role within a field or domain of social activity. The real difference between the two approaches is that the latter or whole network approach does not necessarily see the existence of
ties as being important rather it may be the absence or structural holes in the network which may be of greater interest. This, as will be demonstrated in later chapters, is important to this research where the absence of online connections to leading local politicians is of interest in the domain of local governance. However, to continue, there is a major problem with researching whole networks and that is defining and collecting data on whole populations. As Knox (2006, 120) states

If one is concerned to examine whole networks and if one also recognises that everyone is in some ways connected to everybody else, then it is not clear how coherent boundaries around any ‘whole’ can be meaningfully devised.

Again, this is an important consideration for this research as defining a boundary to an online local networked political sphere is problematic.

Postill (2008) confronts this issues specifically in relation to understanding the relationship between technology and social change at the local level. Progress in this research area, he contends has been hampered by an overreliance on the key notions of community and network. As far as internet research goes they are, he claims, effectively interchangeable terms; with ‘bits and bytes’ replacing ‘streets and alleys’ (Hampton and Wellman, 2003) and communities of place morphing into geographically dispersed personal communities or personal networks (Pahl, 2005).

In many ways this discussion is a well trodden path echoing Tonnie’s (1887) classic distinction between gemeinschaft and gessellschaft and continuing with present day ontological concerns on the meaning of community (Clarke, 2007). For Postill reliance on these traditional, widely used and ‘paradigmatic’ concepts is problematic as they circumscribe a social unit of analysis that is necessarily boundary dependent which may be inadequate for describing, understanding or explaining certain sets of social relations. This is particular true in the context of trying to keep pace with such a fast moving technology as the internet “...while avoiding the default position of whereby a seemingly stationary ‘local community’ is assumed to be impacted upon by ‘global’ technologies” (2008, 414).
A possible resolution to this knotty problem, for both Postill and Knox, lie in utilising concepts such as ‘social field’ in a more grounded empirical approach. Field theory is however replete with complexity and as Martins (2003, 42) states “…is in places necessarily indeterminate and resists formalization”. Fortunately Postill cuts through the complexity and explains (2008, 418) that a social field “…is a domain of practice in which social agents compete and cooperate over the same rewards and prizes”. For Postill this entails a rejection of network analysis in favour of ethnographic methods of immersion in the chosen domain of practice. Knox, on the other hand is more concerned to marry the strengths of both approaches and draws upon Mische and White (1998, 703) who argue that the “…theory of network ties has thus far remained ad hoc, casual, indeed largely implicit, because networks have not been understood as embedded in domains”.

Within this approach networks are embedded in domains the boundaries of which can only be fully understood through exploring narratives that identify those that belong, the insiders, and by implication those that don’t; the outsiders. Furthermore many networks can co-exist within the same domain; they can be cross cutting with social agents ‘switching’ between networks during the course of a typical day. This, intuitively, fits within an understanding of a modern technologically enhanced lifestyle where social agents can ‘switch’, potentially without moving geographically, from social to residential to work-based to political to administrative networks. Utilising this approach has its advantages; potentially overcoming the problem of boundary definition and providing “a useful way of seeing patterns within a messy domain of social action” (Couldry, 2007, 211).

However, there are pitfalls in employing a purely interpretivist approach where networks are “…not measures of structural roles, but are themselves cultural constructions – they do not pre-exist or exist apart from their enactment in conversation and discursive communication processes” (Knox et al, 2006,128). From a critical realist perspective this is problematic. If networks are metaphors for social structure then, while they may be concept dependent, “…..they are not exhausted by their conceptual aspect.
They have a material dimension” (Bhaskar, 1993, 4). Riles (2001) and Mische (2003) offer a potential solution. Riles, like Mische and White (1998), understands networks as a reflexive social form and contends that “the effectiveness of the Network is generated by the Network’s self description’ that causes ‘an inherent recursivity’” (2001, pg 172). In other words it has a dimension as a set of social relations and a dimension as a social object in itself and it is the interplay between the two that generates recursivity. For Mische (2003, 13), integrating a structural analysis of networks with more ethnographic, interpretative approaches enables the “...location of socio-cultural mechanisms...” which, echoing Bhaskar's philosophy, can help to illuminate and explain social relationships and processes.

To conclude this brief discussion, this research will not jettison, as per Postill, the concept of network in this analysis but does acknowledge methodological problems, particularly around boundary definition, associated with employing it. Similarly, it also seeks to remain receptive to the concept of social field where “....sociality is inherently plural and context dependent” (Postill 2008, 417) but located within potentially, multiple, cross cutting networks embedded in the domain of local governance.

The next section explains how these two concepts will be combined by drawing upon Howard’s (2002) network ethnography approach.

**Network Ethnography**

The final part of this research approach involves utilising a qualitative method that draws upon the ‘network ethnography’ method advanced by Howard (2002) and enhanced by Biddix and Park (2008).

Howard attempts to address the challenging problem of sampling using qualitative methods in the context of researching “hypermedia organisations’ that is, organisations or ‘communities’ that ‘...have adapted in significant ways by using new communication technology to conduct the business of social organization .................” (2002, 552).
He argues that there are significant differences between traditional media and the new media, for example: the increased volume of public and private information spread over any number of decentralised databases; the increased speed and synchronicity of communication between various bodies or groups and “…simulations of offline interaction, speedy circulation of social signs and meanings rapid decomposition and recomposition of messages, and increased transience of socially significant symbols” (2002, 552). Such differences pose real methodological challenges for the researcher particularly for those who see the advantage of using qualitative methods when the most interesting attributes of the objects under investigation are particular hard to pin down in a rigorous qualitative manner.

However, Howard is clear that a qualitative approach is advantageous in studying such hypermedia organisations in that it helps to avoid the most common pitfalls in such studies, for example of organisational determinism “ ..when the researcher imputes community culture from the formal structure of its networks and hierarchies’ (2002, 553), and technological determinism ‘ “…when the research imputes community culture from the formal structure of communication tools” (2002, 554). For Howard a qualitative approach allows the researcher to see how culture may be built from the bottom up.

Nonetheless, Howard is clear that traditional ethnographic methods will not capture the ‘interesting attributes’ of these new forms of social organisation. Such attributes inevitably turn upon how the technology has reconfigured the social use of space and time and traditional ethnographic method was designed for studying social interaction in a well- defined, demarcated territory, a field, within which social cues can be contextualised and interpreted. The problem, of course, for an ethnographer studying a hypermedia organisation is that social cues are generally reduced or ‘unbundled’ from a particular social environment that can bestow context and meaning. For example, interpreting online communication can be challenging as such communication could be reinterpreted or misinterpreted without some deeper knowledge of the individuals or relationships involved.
Howard does acknowledge that “....rich and complex communities can still evolve over communication tools that reduce social cues” (2002, 555) but adds a caveat that these social worlds are distinct from the ones were we spend most of our time. Howard’s article predates the pre-eminence of Web 2.0 and the multi-media technology platforms that facilitate the rich and complex communication evident in many of the new social network sites and virtual worlds such as, for example, ‘Second Life’ and ‘World of Warcraft’ where millions of people spend time working and playing. However, notwithstanding this new social technical paradigm, Howard’s point still holds true that within this virtual space there is a limited social interaction compared to our everyday lives and it takes extra care to connect the two.

Howard’s response to this challenge is network ethnography which he describes as the “...process of using ethnographic field methods on cases and field sites selected using social network analysis” (2002, 561). He maintains that this is not simply a marriage of two traditional methods but a distinct research method which provides some conceptual advances:

(1) ...the meaning of field sites is adapted, and instead of choosing territorial field sites the researcher has to choose a perceived community and select the important nodes in the social network as field sites. Indeed the field site may not be a socially significant physical place at all but may be more ephemeral...

(2) The researcher can manage sample bias that might appear in selecting informants with extreme, snowball or other sampling methods. Whereas snowball sampling does not allow the researcher to control the direction of sample growth, social network analysis will identify some of the more significant informants in the network but may also bring to light other members and roughly illustrate their relationship to the rest of the community.

(3) The researcher can dynamically use the initial ethnographic and social network analysis to improve subsequent enquiry.....The social network analysis will identify key organisations, events and people worth discussing in in depth interviews.

(4) The researcher can more accurately chart community change over time and track the passage of ideas (2002, 562).
Howard concedes that, compared to traditional ethnography, network ethnography has its disadvantages. These arise, primarily from the level of immersion possible in a computer mediated community and the related epistemological risks that come from the necessarily fragmented contact with subjects. In spite of this weakness Howard claims this method overcomes many of the challenges associated with research into hypermedia organisation.

Biddix and Park (2008) concur that the key strength of the network ethnography approach is its potential to minimise sample bias by incorporating network analysis to identify sub-groups or clusters worth further study. In a refinement of Howards approach they used hyperlink analysis to identify subjects for further investigation in their study of online networks of student protest. They found that the network ethnography approach overcame the limitations inherent in a network only analysis, that is, the interviews they conducted revealed offline influences on the student network. However, an interview only approach would have overlooked the role of other institutions in the protest movement highlighted by the hyperlink analysis.

This research will draw upon Howard’s approach, refined by Biddix and Park, primarily to identify subjects to interview. It is anticipated that this approach will deepen the understanding of why the local online network is as it is through revealing offline influences.

**Conclusion**

This chapter has presented a research design informed by a related philosophy. The value in adopting critical realism as a research philosophy in the context of exploring an online networked public sphere and its politically transformative potential is:

(i) ontologically it sees the social world as existing independently of our knowledge of it. However, it acknowledges that some
social structures are concept dependent but critically they are
not exhausted by this conceptual aspect – they have a material
dimension;

(ii) epistemologically this means that evidence to prove or
disprove such social structures may be presented from an
interpretive and positivist stance; and,

(iii) social agency and structure are viewed as ontologically distinct
and social and political change occurs through their interaction.

This view of the world also enables alternative views such as technological
determinism to be discounted in explaining how social change can occur as
a consequence of the relationship between technology and society. A rare
and unique opportunity, namely the referendum on the Manchester
congestion charge, was presented as a single case study within which to
investigate the online local networked political sphere of influence
associated with this referendum. This case study is particularly relevant as
it provides a context where local civic and political actors are contesting an
issue developed and promoted by local government. The question of
interest to this research is: how would the web be used in this context?
Would it be used in a way that facilitated communication from different
points of view to enable the issue to be discussed from an informed
viewpoint? Were there offline influences on the online network?

To address these questions the innovative method of Relational Hyperlink
Analysis (RHA) is appropriate. Unlike other methods, webometrics or the
network science approach, RHA allows hyperlinks to be viewed as social
connections as opposed to just indicators of website popularity or visibility.
This technique can privilege the evaluation of links made as a consequence
of website attributes. This may enable a greater understanding of why sites
may be more prominent in the online network and, moreover, why sites
with particular attributes may drive or inhibit the development of a local
online networked public sphere.

RHA is presented as a particular technique to map and analyse the online
network associated with the Manchester Congestion charge referendum.
What it will not do is discern any offline influences, if any, on the online network. As such aspects of a Network ethnography approach were chosen as a way of identifying subjects for a more qualitative investigation. Both of these methods draw upon Social Network analysis and one of the abiding methodological problems with network analysis is defining the boundary of the network under analysis. This chapter has presented an argument for conceptualising the network under investigation as a network domain and consequently for defining the boundary(ies) of the online network by both website attribute and actor narrative. The advantage in this context in deploying a mixed method approach to network analysis is that it can provide a deeper understanding of the influences that may shape or constrain the development of a local online networked public sphere.

The following chapter will detail how these methods were applied to the case study. It will also present the results of the quantitative analysis of the online network.
Chapter 4

Structural analysis of the local online network

Introduction

The previous chapter provided a justification for using a mixed method approach to investigate the case study on the Manchester Congestion charge referendum. The research questions guiding this investigation are:

(i) Does such a local political online space exist as a Web enabled networked public sphere capable of facilitating communication or discourse on civic issues between local government institutions and the wider civic society?
(ii) How do local civic stakeholders view or exploit this sphere?
(iii) Are there transformative implications of conducting local politics in this space?

The first stage of this mixed method approach will involve applying the quantitative Relational Hyperlink Analysis technique advocated by Lusher and Ackland (2009). The second, qualitative, stage of the approach will consist in drawing upon a Network Ethnography method promoted by Howard (2002) and enhanced by Biddix and Park (2008).

This chapter will, firstly, detail how the online hyperlink network associated with the Manchester Congestion charge referendum was captured and mapped. This is the necessary pre-condition for analysing the significance of the hyperlink connections within the network. Capturing and graphically visualising this network will involve using software, VOSON (Ackland, 2008), specifically developed for this purpose. This software also permits some basic Social Network Analysis which will be presented as a first step in explaining some of the characteristics of the online network. Following this
the Relational Hyperlink analysis technique will be applied on the captured hyperlink data. This will involve using the Pajek and PNet software the details of their application will be explained in full. This quantitative stage of the research approach will then conclude with a discussion on the results of this analysis.

The final section of this chapter will focus upon describing how the complementary qualitative research approach was applied. In essence this will involve applying some basic SNA measures to the captured hyperlink network with the aim of identifying prominent websites in the network. The purpose of this is to enable the social actors associated with these websites to be contacted and an interview requested in order to more fully understand and explain the particular set of results coming from the quantitative analysis.

**Capturing the online network.**

The first challenge to this analysis is to identify and capture the online hyperlink network associated with the congestion charge referendum.

Following Lusher and Ackland (2009) VOSON server based software was used to capture this network. This software (Ackland, 2008) incorporates web mining, text mining, data visualisation and basic Social Network Analysis (SNA) techniques. Whilst Lusher and Ackland freely admit that their choice of software was partly determined by the fact that Ackland created it, nevertheless they maintain that (2009, 19)

VOSON has been specifically designed for collecting and analysing hyperlink networks, that is, where the network nodes are web sites maintained by organisations or individuals, and the network ties are hyperlinks between these websites.

It is distinguished, they contend, from other software freely available to academics interested in hyperlink analysis, for example, Mike Thelwals’s
‘SocSciBot’ ⁶ and Richard Rogers’s ‘Issuecrawler’⁷, as it is software specifically designed for social science research and indeed designed to support Relational Hyperlink Analysis and other types of social scientific Web research. The authors contend (2000, 19)

In contrast, SocSciBot has been primarily designed as a tool for webmetrics, and the methods behind IssueCrawler also appear to be largely derived from an infometrician’s view of the web. For example, IssueCrawler does not use hyperlinks between sites as the tie indicator but instead uses co-links (a concept that comes out of bibliometrics): if site A and site B both link to site C, then there will be a tie between site A and B, regardless of whether they actually hyperlink to one another. As far as we know, VOSON was the first publicly-available tool for research into online networks that specifically incorporated SNA methods. The underlying philosophy behind VOSON (which is evident in the research that has been conducted using it) is to regard a hyperlink network as a social network.

A further distinguishing feature of the software is that it is an e-Research tool defined by the authors as (2000, 19):

e-Research (or cyberinfrastructure, as it is called in the US) is the use of advanced ICTs (generally involving Internet- or web-based technologies) to enable new forms of collaborative research, involving access to distributed research resources (datasets, methods, compute cycles).²⁴ The terms e-Research and e-Social Science (which refers to e-Research technologies being used to enable new social science research) are sometimes used to refer to research into online networks. It is useful to clarify that research into online networks is not the same thing as e-Social Science: e-Social Science refers to a mode of collaborative research involving advanced ICTs that often has nothing to do with the web as an object of research. Based on this definition, SocSciBot is not an e-Research tool since it is client software that is downloaded on to the user’s computer: there is no collaborative access of distributed research resources. IssueCrawler is a hosted service that is accessible via a web browser, and thus clearly enables access to distributed research resources. However, it is not clear that collaborative access to these resources is facilitated (that is, is it possible for a team of researchers in different locations to access and work with a common dataset?). Unless collaborative access is allowed, then IssueCrawler is not an e-Research tool, as per the definition above.

⁶ http://socscibot.wlv.ac.uk/
⁷ http://www.issuecrawler.net/
Put simply, VOSON ‘crawls’ the World Wide Web following outward bound hyperlinks from a pre-determined set of web pages: a ‘seedset’, chosen by the researcher. This involves the web address of these pages, or the unique resource locator (url), being manually typed into the software which then crawls the web following outward bound hyperlinks until either 1000 outward bound links are found or 50 pages crawled or 25 pages crawled without finding a link. The software then uses the Yahoo Application Programme Interface (API) to find inward bound hyperlinks pointing to each of the chosen ‘seed’ pages up to a maximum of 1000 hyperlinks (set by Yahoo) per seed page. In this way VOSON develops a database of web pages and sites linked by inward and outward bound hyperlinks to the designated seedset. VOSON then enables a number of analytical operations on the collected database: the pages can be mined for text, the data can be visualised through a number of different mapping concepts and a series of basic Social Network Analysis measures can be derived.

It should be noted that there are, in adopting the VOSON software as a tool to ‘crawl’ the web, limitations imposed on this research. Specifically, VOSON will not, as a matter of course, measure the role of Facebook in the online network under investigation. This is because Facebook is a closed platform sitting on the Internet but not on the World Wide Web, in other words, it is a software application that uses the Internet for, highly regulated, communication purposes but does not rely on Web browsers for display. It is, as described by Anderson (2010, pg 2) a ‘walled garden’ sitting on the Internet. This is very much a post-HTML environment and as such VOSON cannot, as a matter of course, follow relevant hyperlinks to penetrate this ‘walled garden’ and collect and map relevant hyperlinked text pages.

Notwithstanding this limitation a decision to proceed with VOSON was taken for the following reasons. Alternative ‘Web crawlers’ mentioned here will, by definition, suffer from the same limitation. Moreover, it is not clear, as of yet, what software is available that could overcome the privacy settings maintained by individual Facebook members to effectively map relevant network connections. Furthermore, the remit of this research is to explore if
the Web can deliver a local, networked public sphere and therefore any such software would be required to ‘map’ relevant networks on Facebook with those on the Web.

As such it is acknowledged that this limitation is likely to underestimate the effect of Facebook on the online political activity associated with the Manchester Congestion Charge referendum. However, the effect of this limitation has been mitigated in two ways. Firstly, the specific url of a Facebook group dedicated to the congestion charge was selected as part of the ‘seedset’ (see below). VOSON subsequently proved able to map the hyperlinks from within this group to other sites on the Web but not to other groups within Facebook. Secondly, the actor narratives associated with the online political activity around the Congestion Charge provided an insight into how Facebook was used by those civic stakeholders involved in the referendum.

Choosing the ‘seedset’

The choice of web pages to comprise the ‘seedset’ is clearly important in determining the hyperlink network to be captured. Park and Thelwall (2003) maintain that the unit of analysis in hyperlink network analysis should be determined by the research question. In point of fact the ultimate unit of analysis for the statistical modelling here is the hyperlink itself but nonetheless Park and Thelwall’s argument is a valid one. The research here is examining the prospects for a local online networked public sphere conceptualised as occurring within a local governance domain of interconnecting networks. This is “...a messy domain of social action” (Couldry, 2007, 211) with institutional ‘top down’ networks interconnecting with individuals’ ‘bottom up’ networks. Capturing such a hyperlinked network will necessarily involve selecting a seedset with a mix of secondary level domain names, for example http://www.gmfuturetransport.co.uk/, and web pages below this level, for example, http://www.facebook.com/group.php?gid=44393024872.
Moreover, this conception of a domain permits the network boundary to be determined in two ways: by following an interpretive strategy of letting the narratives of social actors in the network define boundaries (Mische and White, 1998, Mische 2003); and, following what Laumann et al (1983, 21) have called “a realist strategy of setting network boundaries by definition assumes the proposition that a social entity exists as a collectively shared subjective awareness of all, or at least most, of the actors who are members”. In other words this realist strategy assumes that there are common or shared attributes amongst members of the network.

Both approaches will be followed in this research but it is the latter that will be used in the first instance to enable the network to be mapped. This involves identifying and capturing a hyperlinked network of websites whose common attribute is site content that references the Manchester congestion charge referendum.

It should be noted here that this study does not aim to capture within the network to be analysed a representative sample of websites referencing the Manchester congestion charge referendum. Indeed it is far from certain that such an endeavour is possible following this method. What is attempted here, and this is the criterion for ‘seedsite’ selection, is to capture a cross-section of those websites with content that references the congestion charge and reflects the range of those civic and political stakeholders, as described in Chapter Three, contesting the referendum.

The process for identifying the seedset was, in the first instance (following Hindman et al 2003, Ackland and Gibson 2008), by a Google search on ‘Manchester Congestion Charge’. From the top 20 rankings (see Appendix 6) 9 sites were selected. Secondly, a further 3 sites known to the researcher were selected to fulfil the criterion of selecting a cross-section of sites, these were: wevoteyes,co.uk; agma.gov.uk (the website of the Association of Greater Manchester Authorities; and, a Facebook site established by a local council with a view to engaging young people in the TIF debate. The remaining sites were chosen by inputting this initial selection of sites into VOSON and then ‘crawling’ the web along the hyperlink connections to
capture the connected sites. From this initial trawl a further 5 sites were chosen that matched the selection criteria. Table 2 lists the 17 urls chosen for the 'seedset'.

Table 2 'Seedset'

<table>
<thead>
<tr>
<th>url</th>
<th>Campaign stance</th>
</tr>
</thead>
<tbody>
<tr>
<td><a href="http://www.gmfuturetransport.co.uk/">http://www.gmfuturetransport.co.uk/</a></td>
<td>Impartial</td>
</tr>
<tr>
<td><a href="http://manchestertolltax.com/">http://manchestertolltax.com/</a></td>
<td>No vote</td>
</tr>
<tr>
<td><a href="http://www.gmmgroup.co.uk/index.php?id=71/">http://www.gmmgroup.co.uk/index.php?id=71/</a></td>
<td>No vote</td>
</tr>
<tr>
<td><a href="http://www.tamesidetories.com/">http://www.tamesidetories.com/</a></td>
<td>No vote</td>
</tr>
<tr>
<td><a href="http://stopethecharge.co.uk/">http://stopethecharge.co.uk/</a></td>
<td>No vote</td>
</tr>
<tr>
<td><a href="http://www.tamesidemart.co.uk/">http://www.tamesidemart.co.uk/</a></td>
<td>No vote</td>
</tr>
<tr>
<td><a href="http://www.abd.org.uk/">http://www.abd.org.uk/</a></td>
<td>No vote</td>
</tr>
<tr>
<td><a href="http://www.gmtu.gov.uk/reports/transport2007.htm">http://www.gmtu.gov.uk/reports/transport2007.htm</a></td>
<td>Impartial</td>
</tr>
<tr>
<td><a href="http://www.gopetition.com/online/12888.html">http://www.gopetition.com/online/12888.html</a></td>
<td>Impartial</td>
</tr>
<tr>
<td><a href="http://www.agma.gov.uk/ccm/portal/">http://www.agma.gov.uk/ccm/portal/</a></td>
<td>Impartial</td>
</tr>
<tr>
<td><a href="http://www.wevoteyes.co.uk/">http://www.wevoteyes.co.uk/</a></td>
<td>Yes vote</td>
</tr>
<tr>
<td><a href="http://www.tifreferendumreturningofficer.com/">http://www.tifreferendumreturningofficer.com/</a></td>
<td>Impartial</td>
</tr>
<tr>
<td><a href="http://www.bbc.co.uk/manchester/content/articles/2007/01/24/240106_road_pricing_feature.shtml">http://www.bbc.co.uk/manchester/content/articles/2007/01/24/240106_road_pricing_feature.shtml</a></td>
<td>Impartial</td>
</tr>
<tr>
<td><a href="http://en.wikipedia.org/wiki/Manchester_congestion">http://en.wikipedia.org/wiki/Manchester_congestion</a> Charge/</td>
<td>Impartial</td>
</tr>
<tr>
<td><a href="http://www.foe.co.uk/resource/press_releases/">http://www.foe.co.uk/resource/press_releases/</a></td>
<td>Yes vote</td>
</tr>
<tr>
<td>manchester_congestion_char_09062008.html</td>
<td></td>
</tr>
</tbody>
</table>

It was anticipated that choosing such sites would serve, through mapping the hyperlink connections between them and other as yet unidentified sites, to reveal a reasonably significant online political network on the congestion charge. Significant in the sense that half the sites were ranked highly by the Google search algorithm (see Appendix 6) and that it also reflected a cross-section of civic and political interest in the congestion charge referendum. It was further anticipated that such an online network would enable further investigation to render visible and understandable online patterns or latent structures that currently remain opaque.

Once the 'seedset' was finalised, VOSON was set to crawl the internet on a weekly basis commencing on November 15 2008 and finishing on Jan 12 2009. The referendum concluded on the 11 Dec 2008 but the purpose of taking extracts of the network over this period was to reveal any temporal
changes in the network and also reinforce the cross-sectional criterion for inclusion in the network.

Figure 1 illustrates the mapped network drawn from the network database created by VOSON ‘crawling’ the internet for links to and from the chosen seedset. This was taken from the first crawl on November 15th.

**Figure 1. Initial map of Manchester Congestion charge referendum network (3232 nodes mapped by degree excluding 27 isolates)**

This map contains over 3,000 sites and whilst, on the face of it, it presents an intriguing cluster pattern it did pose some practical difficulties for this research: (i) this network will contain a lot of sites that are irrelevant for the purposes of this study, for example, purely commercial sites that do not
reference the congestion charge referendum and, given that the intention is
to define the network through nodal attribute; that is, sites would have to
explicitly reference the congestion charge debate; they would have to be
removed and this study did not have the resources to manually investigate
each site in a potential time series of 7 such networks to determine their
relevance; (ii) such a large network did not lend itself easily to rendering it
visible and understandable.

Accordingly, a decision was, taken following Kelly and Etling (2008), to
analyse the core structure of the network. This was identified by selecting
the most densely linked part of the network. Hence subsets of these wider
networks were selected that had a degree score of 4 or more, that is, only
those sites were selected that were linked to by 4 or more ‘seedsites’, or
they had reciprocated links with two ‘seedsites’. Sites within these subsets
were then manually examined for relevance which resulted in an online
congestion charge network containing 53 sites at the start of the
referendum and 58 by the end of it.

A possible explanation for this difference is the dynamic nature of political
activity. It seems plausible that interest in and political activity around the
referendum, both online and off, would grow from the start of the
referendum and peak by the end of it. As such VOSON has captured more
sites referencing the Congestion charge by the end of the referendum than
there were at the start. All sites in both networks were classified in the
same way as the following explains.

To enable further analysis the sites in the network were categorised
according to a particular attribute, or function, of the site. This site
categorisation served the purpose of the research in investigating a local
networked public sphere in the context of the case study and the notion of
interconnecting online networks initiated by, amongst others, governance
bodies and by private individuals. So the sites were categorised as: a
‘Governance’ site (Gov), that is, they were a local government site or were
an official site overseeing the TIF consultation and referendum; a ‘Non-
government’ organisation site (NGO), these included sites that were
established by civic activist to protest or support the TIF proposal; ‘Political Party’ sites; ‘Media’ sites, these included traditional mass media sites; and, ‘Web 2.0’ sites, that is, those sites employing Web 2.0 applications. The latter were categorised according to the definition provided by O’Reilly (2005):

Web 2.0 is the network as platform, spanning all connected devices; Web 2.0 applications are those that make the most of the intrinsic advantages of that platform: delivering software as a continually-updated service that gets better the more people use it, consuming and remixing data from multiple sources, including individual users, while providing their own data and services in a form that allows remixing by others, creating network effects through an “architecture of participation,” and going beyond the page metaphor of Web 1.0 to deliver rich user experiences.

To be clear, all the sites captured by VOSON and selected as the core of the network were manually examined and if they enabled Web 2.0 applications as defined by O’Reilly then they were categorised as ‘Web 2.0’. For the purpose of this structural analysis those sites not categorised as Web 2.0, but categorised as, for example, ‘Gov’ or ‘Media’ are to be understood as Web 1.0, broadcast, sites, in other words they do not facilitate any interactive engagement or exchange of information with the public but simply provide information for public consumption. The objective of categorising sites in this way was to measure, through this structural analysis, the extent to which the ‘bottom-up’ networks of private individuals might link with the more ‘top-down’ institutional networks. This linkage, as described by Hermida (2010), can be understood as a more contemporary measure of an online networked public sphere.

However, while this categorisation is clear cut in the majority of cases it is not definitive for two sites. These two were connected to media institutions, the BBC and the Manchester Evening News, but ran Web 2.0 applications, an interactive map and a blog respectively, that gained prominence in the captured online network. The decision was taken to categorise these sites as ‘Web 2.0’ as opposed to ‘Media’ in line with the above objective. Arguably this decision might have biased the outcomes of the structural analysis. However, both of these media institutions were captured by
VOSON as hosting other sites (distinct urls) in the online network these were investigated and found to be Web 1.0 sites and thus represented separately in the analysis as ‘Media’ sites.

Furthermore, how the sites in the online network were used is further analysed, through qualitative investigation, in Chapter Five. This analysis views the sites through the lens of the site’s evident campaign stance during the referendum. Here all sites run or established by government or media institutions are categorised as ‘impartial’. This additional categorisation complements that used in the structural analysis as it enables further understanding of the use made of the new technology and the online network by such institutions and those campaigning for a ‘Yes’ or ‘No’ vote in the referendum.

The following presents some initial descriptive analysis of the captured networks.

**Mapping and describing the congestion charge network**

While the difference in the number of sites contained in the networks derived from the same ‘seedset’ appears small, 5 additional sites are apparent in the online network by the end of the referendum, it merits further investigation to see if this might suggest other differences between the networks.

VOSON enables some basic Social Network Analysis measures. The ones used here to compare the networks are measure of network density and centralisation. “Density describes the general overall level of cohesion in a network and centralisation describes the extent to which this cohesion is organised around particular focal points. Centralisation and density, therefore, are important complementary measures” (Scott, 2000, 89).

Centralisation is a measure, at the network level as opposed to individual node level, of the influence a site or a group of sites may have on the overall network. It therefore enables comparison across networks.
According to Wasserman and Faust (1994) closeness centralisation is a measure of the distance, in this case number of hyperlinks away, actors or sites in the network are from each other and can be useful in understanding how quickly they might interact with each other. It can also be seen as a measure of site independence in that if a site is close to many other sites it will not be overly reliant on one or two sites for links or flow of information to maintain its position in the network. Betweenness, on the other hand, is a measure of how often a site may lie on the shortest path between two other sites and can be used to gauge the potential for that site to act as a ‘gatekeeper’ in linking activity or flow of information in the network.

Table 3 presents these measures for the online network at the start and at the close of the referendum. For the density measure, a score of 1 represents a complete network where every node is linked to every other node; a score of 0 represents an empty network; devoid of any links. For betweenness and closeness based centralisation measures, a score of 0.5 represents the ideal where, for example, in a 3 node network actor 2 would be linked to both actor 1 and actor 3 (taken from VOSON system user guide, Ackland, 2008, 56).

<table>
<thead>
<tr>
<th></th>
<th>Network at start of referendum ( n= 53)</th>
<th>Network at close of referendum ( n= 58)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Network density</td>
<td>0.088</td>
<td>0.095</td>
</tr>
<tr>
<td>Centralisation (closeness – normalised)</td>
<td>0.05</td>
<td>0.08</td>
</tr>
<tr>
<td>Centralisation (betweeness – normalised)</td>
<td>0.2</td>
<td>0.2</td>
</tr>
</tbody>
</table>

Thus, from Table 3 it can be seen that the density and closeness measures are relatively low at the start and close of the referendum suggesting that the online network remains, over this period of time, a loosely coupled, not
very cohesive network. As sites are not that close to each other in the network this may indicate a reliance on a smaller number of sites for the links in the network. However, both of these measures do rise at the close of the referendum perhaps indicating an increasing propensity for closer interaction amongst the sites in the network and mitigating the influence of one or two key sites. The betweenness measure is relatively high at both points in time suggesting, consistent with the interpretation of the closeness measure, that one or more sites may exert some ‘gatekeeping’ influence over the links between sites in the network.

Whilst this brief analysis at a network level is instructive it does not reveal the particular sites that may be influential within the network. VOSON enables network maps to be visually rendered and additionally presents measures of node level centrality. This measure of centrality provides an indication of the extent to which any node or website is prominent in the network. Measures of closeness and betweenness are again used here and can be interpreted in a similar way as above but here they are applied to each site in the network. Two further inter-related measures of centrality are used here: the HITS_hub and HITS_authority and are derived from the Hyperlinked-Induced Topic Search (HITS) algorithm which

.....is based on the premise of the existence of hyperlinked communities that contain two distinct, but inter-related, types of pages - authorities (highly referenced pages) on a particular topic, and pages that point to the authority pages. The latter are referred to as hubs since they serve as central points from which authority is conferred on other authority pages in the community. Thus, there is a mutually reinforcing relationship between authorities and hubs: a good hub points to many good authorities, and a good authority is pointed to by many good hubs (Ackland, 2008, 57).

The websites on the network maps are presented as nodes and are colour coded according to their particular attributes and the key to the code is provided below the map. The size of each site or node on the map is proportionate to the measure used and the other sites: thus the bigger node the more prominent it is on that measure and in relation to the other sites.
Figures 2 and 3 compare the sites in the network at the start and end of the referendum on the closeness centrality measure. At the start of the referendum (see Figure 2) there is little difference on this measure between any of the sites. In other words none of the sites are prominent on this measure indicating, consistent with the closeness centralisation measure above, a loosely coupled network. This is perhaps what might be expected at the start of a political campaign where hyperlinking activity or behaviour may reflect a lack of awareness at this stage of other sites that are out there in the space of flows. Figure 3 reveals a slightly different picture. Here, by the end of the referendum, are a number of sites that appear prominent on this measure. These sites appear fairly evenly distributed between Media, Web 2.0 and Non-governance sites suggesting that these sites appear to be interacting more with other sites, and perhaps less reliant upon one or two key sites, than the Governance sites.
Figure 2. Site Closeness at the start of the referendum
Figure 3. Site Closeness at the end of the referendum
Figures 4 and 5 illustrate the measure of betweenness at the start and close of the referendum. This, as you will recall, is a measure of the potential of a site to act as a ‘gatekeeper’ or ‘bridge’ or ‘broker’ within the network. At the start of the referendum (Figure 4) there appears to be four sites potentially brokering the links in the network. There are two governance sites: www.tifreferendumreturningofficer which was the site established by the Electoral Reform society to administer the referendum and www.agma.gov.uk, the site representing the Association of Greater Manchester Authorities. The other two sites are non-governance sites and both campaigned for a No vote in the referendum. One site is www.abd.org.uk representing the national Association of British Drivers and the other is the locally established campaign group: www.manchestertolltax.com. By the close of the referendum (Figure 5) there were still four sites prominent on this measure, evenly split between governance and non governance sites, the only difference is that www.gmfuturetransport has replaced the www.tifreferendumreturningofficer as the other prominent governance site. This is probably understandable as the www.gmfuturetransport site was the governance site with all the official information on the Tif bid and, as the interviews in the next chapter reveal, was a contentious site amongst campaigners. Whereas the Electoral Reform society site was perhaps of interest at the start of the campaign but less so toward the end of the referendum by the time each elector had been posted their ballot paper and instructions on the conduct of the referendum.
Figure 4. Site ‘betweenness’ at the start of the referendum
Figure 5. Site ‘betweenness’ at close of the referendum

Site attribute

<table>
<thead>
<tr>
<th>Gov</th>
<th>NGO</th>
<th>Political Party</th>
<th>Media</th>
<th>Web 2</th>
</tr>
</thead>
</table>

156
Figures 6 and 7 present the network maps showing the sites that were prominent on the HITS_hub measure, again at the start and close of the referendum. This is a measure of the extent to which a site points or links to more ‘authoritative’ sites in the network. Such sites are known as hub sites and can be understood as moving traffic from their site via hyperlinks to other sites that are seen as more authoritative on the particular topic in question, in this case the congestion charge debate. At the start of the referendum (Figure 6) there appear to be a number of prominent hub sites. There are 5 or 6 non-governance sites, 3 media sites and 3 Web 2.0 sites. What is of interest here is that for the first time local government websites appear as prominent.

The websites of Trafford, Rochdale and Stockport all appear as prominent, and certainly more so than the other local government sites in the network. Trafford and Stockport opposed the TIF bid while Rochdale was in favour of it. This does raise questions about what in particular was driving their hyperlinking behaviour in comparison to the other local government sites. This was followed up in the subsequent interviews conducted as part of this research. The other governance site of note here is the official www.gmfuturetransport.co.uk. This site appears not to serve as a hub either at the start or the end of the referendum, in other words it does not appear to reference other authoritative sites in the network.

By the end of the referendum what is noticeable, from Figure 7, is the increased prominence of the Media and Web 2.0 sites. Again this could reflect a heightening of campaigning activity towards the close of the referendum where these sites may be starting to engage with other more authoritative sites in the network. Again, what is of interest here is the range of sites that are acting as hub sites. There are prominent sites on this measure from all the different site attributes representing a range of divergent views on the congestion charge debate. What is of relevance next are the ‘authoritative’ sites they are likely to reference.

Figures 8 and 9 show the sites the hub sites are likely to be linking to: the ‘authoritative’ sites in the network. These figures utilise the HITS_authority
measure and show little difference on this measure between those sites prominent in the network at the start and close of the referendum. At the start of the referendum (Figure 8) there are 7 authoritative sites in the network, these are the sites that the hub sites are likely to be linking to and referencing as authoritative sites on the issue of the congestion charge. There are four Non governance sites: www.manchestertolltax.com; www.stopthecharge.co.uk; www.gmmgroup.co.uk; and, www.abd.org.uk. All these authoritative sites were campaigning for a ‘No’ vote in the referendum. There were 3 ‘authoritative’ governance sites: www.agma.co.uk; www.gmfuturetransport.co.uk; and www.tifreferendumreturningofficer.com. Their appearance as the ‘authoritative’ governance sites in the network is perhaps unsurprising given that they had leadership roles during the referendum. What is perhaps more surprising is that none of these sites act as a hub in the network. They appear entirely passive in respect of referencing, or linking to, other sites. This is in marked contrast to the Non-governance ‘authoritative’ sites who all appear to also act as hub sites in the network.
Figure 6. HITS_hub sites at the start of referendum
Figure 7. HITS_hub sites at end of referendum

Site attribute

<table>
<thead>
<tr>
<th>Site attribute</th>
<th>Gov</th>
<th>NGO</th>
<th>Political Party</th>
<th>Media</th>
<th>Web 2</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gov</td>
<td>Red</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>NGO</td>
<td></td>
<td>Blue</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Political Party</td>
<td></td>
<td></td>
<td>Green</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Media</td>
<td></td>
<td></td>
<td></td>
<td>Brown</td>
<td></td>
</tr>
<tr>
<td>Web 2</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Yellow</td>
</tr>
</tbody>
</table>
Figure 8. HITS authority sites at start of referendum
Figure 9. HITS_ authority sites at end of referendum

Site attribute

<table>
<thead>
<tr>
<th>Site attribute</th>
<th>Gov</th>
<th>NGO</th>
<th>Political Party</th>
<th>Media</th>
<th>Web 2.0</th>
</tr>
</thead>
</table>
By the end the referendum (Figure 9) the only difference in the composition of the ‘authoritative’ sites in the network is that www.wevoteyes has replaced www.abd.org.uk as an ‘authoritative’ non-governance site. This is the only dedicated pro-congestion charge campaigning site to appear as prominent in the network. The interviews provide a likely explanation for this occurrence. The www.wevoteyes site was a late arrival to the campaign, in comparison to the other anti-congestion charge campaigning sites, and it may have taken this period of time to establish itself. By contrast the Association of British Drivers site had, in the early stages of the campaign, acted as a resource to other anti-congestion charge campaigns and this service was probably less needed as these campaigns also established themselves. What this map does show is that there are authoritative sites in the online network representing both local governance and the pro and anti-congestion charge campaigns among the Non-governance sites.

What the maps of the ‘authoritative’ sites demonstrate is the lack of any sites with a Web 2.0 application. Does this mean that the Web 2.0 sites that were acting as hub sites were referencing or linking to the authoritative governance or non-governance sites? This might point to individual’s private networks, ‘bottom-up’ networks, linking to the more institutional (governance) ‘top-down’ networks. This is certainly of interest with regard to investigating the potential for a local networked public sphere. On the face of it these network maps, particularly the ones illustrating the HITS_hub and HITS_authority measures, do suggest the existence of an online political sphere linking divergent views from private individual with the local governance process. However, care should be taken in giving to much emphasis to this result as the majority of Web 2.0 sites, along with the Governance sites, had lower then average scores on the HITS hub measure (see Appendix 7).

Comparing the online political networks associated with the congestion charge debate at the start and close of the referendum has served to illustrate a degree of fluidity and dynamism in the hyperlinking activity
which defines this network. The manner in which different sites came in and out of prominence is of interest in itself perhaps suggesting that the online political sphere was reflecting the change in the political temperature of the debate. Of course explaining how these sites became prominent in this online network is important in understanding the potential, from an empirical and policy perspective, for an online local networked public sphere. If these maps do provide some evidence for the structural existence of online networked public sphere then it can be asked: is such an online political sphere of influence likely to happen by chance – random structural effects of the network - or by the purposeful hyperlinking behaviour of the social actors involved in the network?

The problem is that a number of processes particular to social networks may be driving these links. From the perspective of exploring the political potential of an online local networked public sphere it is the site content that should, ideally, attract hyperlinks from other sites but, as Laumann et al (1983, 18) argue, “From a network perspective, individual behavior is viewed at least partially contingent on the nature of an actor’s social relationships to certain key others”. Thus in simple friendship networks, for example, social phenomenon exist such as ‘reciprocity’ where someone extends the hand of friendship and one responds in a like manner, or ‘transitivity’ where a friend of a friend is judged to be a friend. These are examples of purely network structural effects driving social relationships which may have nothing to do with the individual attribute(s) of the person involved. By contrast, there are social relationships which are driven by the individual attributes of social actors. ‘Homophily’ is a good example of this and is aptly described in the old adage ‘birds of a feather stick together’. The challenge here is to distinguish between these network effects to draw inferences about the social processes that may have produced this particular congestion charge network.

Unlocking significance in the online network

The facility to control for structural properties of a social network is an advantage of Exponential Random Graph Models (ERGMs). As such they are
particularly useful in modelling social networks to explore claims that social processes not only drive relationships, ties or hyperlinks in this case, but are themselves contingent upon their particular social environment. Robins et al (2007) usefully outline how a model is specified and in doing so offer an explanation for how they work.

The model assumes “...that the network is generated by a stochastic process in which relational ties come into being in ways that may be shaped by the presence of absence of other ties (and possibly node level attributes)” (2007, 177). As such the model regards each network tie, in the observed network data, as a random variable the potential value of which may express the nature or value of that relationship. It is not implied in making this assumption that all social relationships are formed randomly but rather it is an acknowledgement that social life is complex and there is an uncertainty associated with how and why relationships are formed. Moreover, it is also an acknowledgement, that the model will not make perfect predictions. As Robins et al (2007, 177) emphasise “there is going to be some statistical ‘noise’”.

The working hypothesis underpinning the model is that social network ties are indeed dependent on each other, and actor attributes, in other words, people do not form social relations independently from their other social connections. This dependence hypothesis implies the researcher specifying the structural characteristics, and characteristics of actor attributes, that might shape the network. Such characteristics are represented by configurations in the network, in other words, they are small subsets of possible network ties and/or actor attributes. An example of such a configuration would be a reciprocated tie or a transitive triad but even a single tie is a configuration. In the statistical model these network configurations correspond to parameters.

The structural, and actor attribute, characteristics of interest are determined by the posed research question. In the context of exploring the congestion charge network as a potential networked public sphere the challenge is to control for structural effects that might be driving hyperlink
formation in order to illuminate the effects that the actor attributes – or site content – may have on network formation.

For this reason a number of structural effects that were assumed to be shaping the congestion charge network were specified (Table 4). Effects such as reciprocity and transitivity were chosen as they are common in social networks and, it was assumed, were likely to feature in the congestion charge network. Other effects, presented in Table 4, were chosen to model other configurations likely to be present as suggested by the above analysis of the congestion charge network. Such analysis demonstrated a number of popular sites in the network, possibly skewing the indegree distribution of hyperlinks. To model this more complex configuration the popularity parameters (following Lusher and Ackland, 2009) ‘mixed 2 star’ and ‘K in star’ were selected. The ‘K–out–star’ parameter was selected to model those ‘hub’ sites that were linking to a number of other sites.
Similarly, to model how network links may be driven by the attributes of individual sites or actors, parameters were specified in the model and are detailed in Table 5. Harrigan (2008) advises that these parameters are sufficient in this case, that is for modelling directed binary attributes, and simply model the propensity of each site with a given attribute (Gov, NGO...
etc) to send links, receive links or choose other sites with the same attribute. Each of these three parameters was applied to each of the five website categories or attributes (Gov, NGO, Political Party, Web 2.0 and Media) resulting in 15 individual actor attributes to be modelled.

**Table 5. Individual actor attributes used to model the congestion charge network in PNet**

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Explanation</th>
<th>PNet parameter name</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 Sender</td>
<td>The attribute of the sender of the tie, which may be continuous, categorical or binary (models the propensity of an actor with the attribute to send ties, i.e. to be active in network terms)</td>
<td>Rs</td>
</tr>
<tr>
<td>2 Receiver</td>
<td>The attribute of the receiver of the tie, which may be continuous, categorical or binary (models the propensity of an actor with the attribute to be popular)</td>
<td>Rr</td>
</tr>
<tr>
<td>3 Homophily</td>
<td>The propensity of a person with a binary attribute (e.g. “sex”) to choose other persons with the same attribute</td>
<td>Rb</td>
</tr>
</tbody>
</table>

(Adapted from Lusher and Ackland, 2009, 12)

**Using PNet**

Following Lusher and Ackland (2009) it was decided to use one of the software tools from the suite of programmes collectively referred to as PNet to conduct ERGM.
PNet (Wang, Pattison & Robins, 2006) is a program developed for the examination of social networks using the new specifications (Snijders et al., 2006) for exponential random graph models. These new specifications include parameters for modelling more complex social networks, the parameter ‘k-in star’ used in this model is an example of the new specifications. These can be seen as part of a progression in understanding and modelling dependencies in more complex social relationships. Thus it used to be the case that a dyadic relationship – a reciprocated tie - was key to understanding dependencies in social tie formation. Following this more complex dependencies involving triads – transitivity – were assumed to be significant. Latterly, Snijders et al (2006), have proposed new specifications that model, for example the K-in-star, the possibility of a dependence between four actors.

PNet can be downloaded from http://www.sna.unimelb.edu.au/pnet/download.html

According to the PNet user manual (Wang et al, 2009, 1) this programme in enabling a statistical analysis of ERGMs


Each of these functionalities will be used here.

It was decided to model the network data at the close of the referendum. This was because the analysis provided by the network maps (above) seemed to illustrate a more politically ‘mature’ network, in other words it was a network that appeared to be linking divergent views with the local governance process. On the face of it then this was a network that would bear conducting ERGM and, in doing so, hopefully reveal the processes that might be driving the hyperlinking behaviour exhibited by this network.
A number of data preparation steps were necessary in getting this network data out of the VOSON software and into the PNet software\textsuperscript{8}. PNet uses two input files. One is a network or matrix file which, put simply, describes the links between nodes in the network as a series of binary digits. The matrix file used here can be seen at Appendix 8. It was achieved by downloading the relevant network data from VOSON into the software Pajek. This software is specifically developed for the social analysis and visualisation of networks and can be downloaded from [http://vlado.fmf.uni-lj.si/pub/networks/pajek/pajek128.exe](http://vlado.fmf.uni-lj.si/pub/networks/pajek/pajek128.exe). Once in Pajek this network data was saved as a text file and then manually edited to leave only the binary digits. The edited file was then inputted into PNet. The second file is an attribute data file. This was derived by downloading the network data from VOSON as a .csv file, it was then read into Excel which was used to edit it down to the urls of the websites and then an attribute was manually assigned to each of the urls. For the attribute data file used here (see Appendix 9) each of the website categories (Gov, NGO, Political Party, Web 2.0 and Media) was defined as a binary variable; ‘1’ if it was categorised as such and ‘0’ if it was not.

The parameters specified above (Tables 2 and 3) were then manually entered into the PNet software which used them to model the data supplied by these two input files. Table 4 presents the ERG model derived from this process.

**Reading the ERG model**

This ERG model works to produce parameter estimates and associated standard errors which are used to establish confidence in the estimation. According to Lusher and Ackland (2009, 10),

> The parameter estimates of the configurations in an observed network are compared to those in a hypothesized distribution of networks of similar qualities, such as a similar number of nodes and a

\textsuperscript{8} The PNet user manual (Wang et al, 2009) and ‘The PNet for Dummies’ (Harrigan, 2008) manual was helpful in this process.
similar number of network ties. It is then possible to see if there are more or less configurations in the observed network than might be expected by chance. If there are some configurations occurring at greater or less than chance levels, it can therefore be inferred that the observed network structures are not just coincidental observations but consistent patterns of social relations.

Table 6 details the statistics and fitted estimation collated using PNet to model the online congestion charge network at the close of the referendum. To explore the question of structural and individual level effects the network was modelled accordingly as model A, with mainly individual level attributes, and, model B with both structural and individual level attributes. It should be noted that the Goodness of Fit for this model (see Appendix 10) is not perfect. However, the vast majority of statistics did fit (100 out of 105), that is, the value of the ‘t’ statistic for specified parameters was below 0.1 and for the non-specified parameters it was below 2. This was the best fitting model for this data and it was deemed in the circumstances, that is further qualitative research was to be conducted, to be good enough. As Harrigan (2008, 28) states “….the decision as to whether to accept the model or to attempt to find another model is one which is up the individual researcher”.

To briefly explain Table 6. The column down the far left hand side details the chosen parameters to be measured and controlled for: the 6 structural parameters followed by the 3 actor attribute parameters modelled for each of 5 the node/site level categories (Gov, NGO, Political Party, Web 2.0 and Media) resulting in 15 separated actor attribute parameters in all. Model A is characterised by providing an estimate on all 15 individual actor attribute parameters with just one structural parameter. Model B provides measures for all parameters in the model. In other words, it introduces the remaining structural parameters into the model thus controlling for the purely structural self-organising tendencies of the network. Thus to understand how the individual actor attributes play out over and above the structural effects it is necessary to read how the parameter estimates change from Model A to Model B. The estimates of interest are those denoted with an asterix*. This indicates there is a 95% chance (the only standard error applied by Pnet) that the statistic is significant, that is, it has not occurred
by chance but is a real social effect. If such a parameter estimate displays a negative sign before it then this indicates that the effect happens at less than chance levels, given the other parameters in the network, in other words, such network ties are unlikely to be observed within the network. A positive and significant estimate means that such an effect exists at greater than chance levels, and is more than likely to be observed within the network. It is important to emphasise the interdependence of the ERG model and that individual parameter estimates have to be read in relation to other estimates in the model.

Interpreting the model

In Model A, it can be seen that the modelled homophily effect – birds of a feather stick together- for ‘Gov’ and ‘Web 2.0’ sites are significant and positive. This indicates that these sites have a greater propensity to hyperlink with sites similar to themselves. Moreover these statistics remain significant when the structural parameters are introduced in Model B suggesting that this effect is a consequence of the site attribute and is more than likely to occur as a consistent pattern of social relations in the congestion charge network. It can be seen that the more sophisticated structural effects introduced in ‘Model B’ have resulted in reducing the parameter values for the ‘Gov’ and ‘Web 2.0’ sites, but not enough to override the contribution of the sites’ attributes. The homophily effect is also significant but negative for NGO sites indicating that they are less likely to hyperlink with sites similar to themselves.

A similar story can be seen when the sender effect for ‘NGO’, ‘Political Party’ and ‘Media’ sites is modelled. Their parameter estimates, significant and positive at Model A, remain significant and positive even when the structural effects in Model B are introduced. This suggests that these sites have a propensity for sending links to other sites and this is a unique consequence of these sites’ attributes. Moreover, if these sender effects are read in conjunction with the homophily effect then it can be read that it is only these sites in the network that are sending links to other sites with different attributes to their own.
When the receiver effect is modelled it is only the Web 2.0 sites, in Model B, that are statistically significant but negative indicating that this effect will occur at less than chance levels. If this is read in conjunction with the homophily effect then it can be seen that Web 2.0 sites in the network are less likely to receive links from sites with different attributes.

Table 6. Summary of parameter estimates and standard error (p > 0.05) for online network at close of referendum

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Model A Estimate (SE)</th>
<th>Model B Estimate (SE)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Structural</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Arc</td>
<td>-3.79 (1.37) *</td>
<td>-5.58 (1.10) *</td>
</tr>
<tr>
<td>Reciprocity</td>
<td>0.99 (0.29) *</td>
<td>0.01 (0.01)</td>
</tr>
<tr>
<td>Simple connectivity (Mixed 2 star)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Popularity (K-in-Star)</td>
<td></td>
<td>1.46 (0.21) *</td>
</tr>
<tr>
<td>Expansiveness (K-out-star)</td>
<td></td>
<td>-0.79 (0.34) *</td>
</tr>
<tr>
<td>Clustering (AKT-T)</td>
<td></td>
<td>0.52 (0.10) *</td>
</tr>
<tr>
<td><strong>Actor attributes</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Interactive/ Homophily Rb</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Gov</td>
<td>2.61 (0.38) *</td>
<td>1.99 (0.34) *</td>
</tr>
<tr>
<td>NGO</td>
<td>-0.49 (0.30)</td>
<td>-0.60 (0.29) *</td>
</tr>
<tr>
<td>Political Party</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Web 2.0</td>
<td>1.76 (0.41) *</td>
<td>1.60 (0.39) *</td>
</tr>
<tr>
<td>Media</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Sender Rs</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Gov</td>
<td>0.33 (0.91)</td>
<td>0.55 (1.02)</td>
</tr>
<tr>
<td>NGO</td>
<td>2.25 (0.86) *</td>
<td>2.38 (1.01) *</td>
</tr>
<tr>
<td>Political Party</td>
<td>0.86 (0.40) *</td>
<td>1.07 (0.42) *</td>
</tr>
<tr>
<td>Web 2.0</td>
<td>1.51 (0.85)</td>
<td>1.97 (1.00)</td>
</tr>
<tr>
<td>Media</td>
<td>1.93 (0.88) *</td>
<td>2.41 (1.02) *</td>
</tr>
<tr>
<td><strong>Receiver Rr</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Gov</td>
<td>-0.29 (1.07)</td>
<td>-1.02 (0.67)</td>
</tr>
<tr>
<td>NGO</td>
<td>0.23 (1.09)</td>
<td>-0.51 (0.69)</td>
</tr>
<tr>
<td>Political Party</td>
<td>-0.85 (0.94)</td>
<td>-0.76 (0.59)</td>
</tr>
<tr>
<td>Web 2.0</td>
<td>-1.76 (1.09)</td>
<td>-1.74 (0.70) *</td>
</tr>
<tr>
<td>Media</td>
<td>-1.32 (1.09)</td>
<td>-1.24 (0.69)</td>
</tr>
</tbody>
</table>
Discussion

The results of the ERG model appear to suggest that website producers during the congestion charge referendum were networking or interacting with other sites in different but meaningful ways. The producers of the Governance sites were mainly linking to other Governance sites and a similar pattern of social relations was being observed by the Web 2.0 site users who were, in the main, linking to other Web 2.0 sites. This was, according to the ERG model, a decision motivated by the attributes of the site(s) and not a consequence of the particular structure of the network. As such, from the Governance perspective it appears there was a conscious decision not to link to the Web 2.0 sites and not to encourage visitors to their sites to participate in the many discussion forums or view the videos hosted by the Web 2.0 sites in the network. Similarly it appears that the Web 2.0 users were only likely to link to other Web 2.0 sites and not towards the official information on the proposed ‘congestion charge’ scheme posted on the Governance sites.

Interestingly, it is the NGO, Political Party, and Media sites that displayed a greater propensity to link to other sites different to theirs and potentially attempting to engage their visitors in perspectives or points of view different to their own.

It is also instructive to view the ERGM results alongside the visualisation of the network as seen in the figures above, in particular the HITs hub and authority measures captured in Figures 7 and 9. These maps showed a range of hub sites, including 4 prominent sites on this measure with Web 2.0 applications, that were linking to a smaller number of authoritative sites on the congestion charge all of which were either governance or non-governance sites. On the face of it then this contradicts the distinct homophily effect uncovered by the ERGM as the Web 2.0 sites in the HITs hub network map (Figure 7) are by definition linking to one of the authoritative sites, and there are no authoritative Web 2.0 sites, illustrated in Figure 9. However, the ERGM is a probability model and results from such
models have to be interpreted and presented accordingly. As such it is reasonable to assert that the modelled results demonstrated a *propensity* for Web 2.0 sites to link to sites with similar attributes. Such an assertion does not negate the fact, as demonstrated by Figure 7, that a minority of links coming from such sites will link to sites with dissimilar attributes. Moreover, the model presents results as statistically significant at a 95% confidence interval – the only one available in PNet – a more robust confidence level may well have given more weight to this small number of links. What is also noteworthy here is that 2 of the sites with Web 2.0 applications prominent in Figure 7 are sites managed by traditional media outlets, namely the BBC and the Manchester Evening News. If the results are viewed in this light then the analysis provided by the network maps and the ERGM may appear more congruent than contradictory.

Nonetheless, the picture painted by this analysis is not a straightforward one. It describes an online local political sphere which, from a network viewpoint, is characterised by a tendency towards homophily. Yet whilst this may be a prevailing characteristic of the hyperlinked network there are a number of sites which do link divergent views with the local governance process. Moreover, this appears to be driven not by the particular network structure but by a desire to engage with site content.

The sites driving these links tend to be run, not exclusively but predominantly, by either non-governance organisations or the traditional media. This does suggest the possibility of an online local networked public sphere certainly of the kind envisaged by Benkler (2006) where there may be ‘just enough’ links to connect divergent views which can be then used to challenge the public authority. But is this really the case? Is this a public sphere independent of the vested commercial or state interests? And what can explain the prevailing tendency towards homophily a tendency particularly exhibited by the governance or Web 2.0 sites? To attempt to explain these results and also validate them a more qualitative approach is adopted for the next stage of analysis. This stage draws upon the network ethnography technique developed by Howard (2002) enhanced by Biddix and Park (2008). The usefulness of this approach is that it makes explicit
the way in which social actors are chosen for interview. An analysis of these interviews is presented in the next chapter.

Conclusion

The purpose of this chapter has been to provide details of how the research methodology, explained in the previous chapter, was practically applied in the context of exploring the political significance of the online network associated with the Manchester Congestion Charge referendum.

In doing so it has showcased some distinctive and innovative methods, Relational Hyperlink Analysis (RHA) and network ethnography, for investigating the local political potential or significance of online networked politics. It has also highlighted the utility of the particular software associated with RHA that of VOSON and PNet.

Results from the quantitative analysis have been presented. The network has been visually mapped at the beginning and close of the referendum and described on a range of Social Network Analysis measures. This analysis has revealed a dynamic and fluid network with some sites growing in prominence by the end of the referendum. Perhaps the most revealing insight presented by this mapping exercise was the existence of a range of different sites with divergent views on the congestion charge debate referencing or linking with more authoritative sites on this topic. This, of course, suggested the possibility of a local online networked public sphere existing in this context. This networked data was subjected to ERGM, the results of which revealed a distinct homophily effect within the network particular in relation those sites with governance or Web 2.0 attributes. This finding tended to discount the possibility of individual’s private networks linking in a ‘bottom up’ fashion with the more institutional governance networks. However the modelled data also revealed that sites with non-governance or media attributes were linking to other dissimilar sites suggesting some linking to divergent views on the congestion charge debate.
This analysis has revealed that this is a network where hyperlinking behaviour has been more likely to have been driven by a desire to engage with site content rather than the particular structure of the network. What it has not done is explain why this should be the case. Why, for example, are governance sites more likely to only link to other governance sites? What can explain, particularly in the context of many years of state subsidised e-government and e-democracy initiatives, such hyperlinking behaviour. Similarly why would users of Web 2.0 enabled sites not, in the main, link to the governance sites?

It was in the expectation of answering such questions that a method drawn from a network ethnography approach was applied to the network data to help identify key civic and political activists associated with this online network. The intention being to conduct semi-structured interviews with these activists with the aim of not only understanding why the network is as it is but also the political constraints and opportunities associated with engaging in this online network.

The following chapter presents an analysis of these interviews.
Chapter 5

Use and views of the online network: An analysis of actor narratives

Introduction

The purpose of this chapter is to present an analysis of the actor interviews captured through the network ethnography approach described in Chapter Three.

This analysis will be presented in two parts. The first will provide an analysis of how these actors viewed and exploited the new technology for the purposes of their campaigns. In classifying sites as ‘impartial’, or campaigning for a ‘Yes’ or ‘No’ vote during the referendum, this part of the analysis will contextualise the particular roles played by these social actors during the campaign and help to explain their views and uses of the technology and the online network. It will also complement the structural analysis conducted in the last chapter which analysed the network by site category.

The second part of the analysis is designed to provide an understanding of why such particular views and uses of the online network might prevail. It will do so by identifying emergent themes from across the narratives. This will reveal the constraints on using the online network as a local, networked public sphere. In identifying such constraints the thematic discussions will raise the policy implications for transforming such an online network into a local networked public sphere.

These identified themes also speak to the questions driving this research. The first theme, ‘A networked public sphere or politics as usual’, further explores the main line of enquiry for this study, namely: ‘Does such a local political online space exist as a Web enabled networked public sphere capable of facilitating communication or discourse on civic issues between local government institutions and the wider civic society?’ The remaining themes consider the transformative implications of conducting local politics
in this space. ‘Identity, civility and locality online’ examines some of the issues identified from the narratives that might be constraining the development of an online local networked public sphere. The ‘Institutional culture’ theme looks at the potential for institutional transformation within local government and, by way of contrast, looks at how the traditional media were able to be more innovative in their approach to using the new social media.

However, this chapter will, first of all, explain how the network ethnography approach was applied to select the subjects for interview.

**Selecting actors for interview**

In applying the network ethnography approach the purpose is to select those actors prominent in the captured online congestion charge network. It is, as Howard describes, the “...process of using ethnographic field methods on cases and field sites selected using social network analysis” (2002, 561).

However, as the following explains, such actors where prominent not only by their presence in the network but by their absence from it. This method is consistent with the notion of a network domain conceptualised in Chapter Three where the boundaries of the network may be determined not only by the network structure but by the narratives of actors associated with the network.

To enable subjects to be framed for this further qualitative investigation a number of SNA measures were derived, from VOSON, for each of the sites in the captured network (see Appendix 11).

All the measures used are measures of node centrality thereby indicating the extent to which any given node is prominent in the network. A cross section of 13 sites reflecting the range of site attributes that had a ranking in the top 20 on at least one SNA measure was then selected (see Table 7). The exception is the cleanairnow.co.uk site. This site was included as it was
considered necessary to look at the environmentalist ‘voice’ within the network domain and this gained the highest SNA scores of such sites. This necessity was driven by a desire to understand why or how, given that one motivation for the TIF proposal was protecting the environment through reducing car usage, the campaign on the referendum had been overwhelmingly dominated, both online and off, by an economic discourse.

Table 7 describes the sites category as used in the structural analysis and the site’s campaign stance during the referendum, that is, the site was campaigning for a ‘Yes’ vote, or a ‘No’ vote or ‘impartial’ during the campaign. It should be noted that the all local government sites or ‘Gov’ sites were legally obliged, as is the norm during any formal UK political contest, to be impartial in any of their published material, digital or otherwise. Media sites were also classified as impartial as they had attempted to provide a ‘balanced view’ of the referendum.

### Table 7. Sites selected as prominent in the online network

<table>
<thead>
<tr>
<th>url_pagegroup</th>
<th>Site cat</th>
<th>Campaign stance</th>
</tr>
</thead>
<tbody>
<tr>
<td><a href="http://www.gmfuturetransport.co.uk/">http://www.gmfuturetransport.co.uk/</a></td>
<td>GOV</td>
<td>impartial</td>
</tr>
<tr>
<td><a href="http://www.manchestertolltax.com/">http://www.manchestertolltax.com/</a></td>
<td>NGO</td>
<td>No vote</td>
</tr>
<tr>
<td><a href="http://www.gmmgroup.co.uk/">http://www.gmmgroup.co.uk/</a></td>
<td>NGO</td>
<td>No vote</td>
</tr>
<tr>
<td><a href="http://www.wevoteyes.co.uk/">http://www.wevoteyes.co.uk/</a></td>
<td>NGO</td>
<td>Yes vote</td>
</tr>
<tr>
<td><a href="http://www.tamesidetories.com/">http://www.tamesidetories.com/</a></td>
<td>POL</td>
<td>No vote</td>
</tr>
<tr>
<td><a href="http://www.facebook.com/group.php?gid=44393024872">http://www.facebook.com/group.php?gid=44393024872</a></td>
<td>WEB 2.0</td>
<td>impartial</td>
</tr>
<tr>
<td><a href="http://www.bbc.co.uk/Manchester/content/articles/2007/01/24/240106_road_pricing_feature.shtml">http://www.bbc.co.uk/Manchester/content/articles/2007/01/24/240106_road_pricing_feature.shtml</a></td>
<td>WEB 2.0</td>
<td>impartial</td>
</tr>
<tr>
<td><a href="http://blogs.manchestereveningnews.co.uk/">http://blogs.manchestereveningnews.co.uk/</a></td>
<td>WEB 2.0</td>
<td>impartial</td>
</tr>
<tr>
<td><a href="http://www.cleanairnow.co.uk/">http://www.cleanairnow.co.uk/</a></td>
<td>NGO</td>
<td>Yes vote</td>
</tr>
<tr>
<td><a href="http://www.libdemvoice.org/">http://www.libdemvoice.org/</a></td>
<td>POL</td>
<td>impartial</td>
</tr>
<tr>
<td><a href="http://www.stockport.gov.uk/">http://www.stockport.gov.uk/</a></td>
<td>GOV</td>
<td>impartial</td>
</tr>
<tr>
<td><a href="http://www">http://www</a> Trafford.gov.uk/</td>
<td>GOV</td>
<td>impartial</td>
</tr>
<tr>
<td><a href="http://www.rochdale.gov.uk/">http://www.rochdale.gov.uk/</a></td>
<td>GOV</td>
<td>impartial</td>
</tr>
</tbody>
</table>

As table 7 illustrates a total of 13 sites were chosen for further investigation. Of course, further research was necessary to locate the right person
associated with the chosen site to interview. This involved contacting, either through telephone or email, the organisation responsible for the website and requesting an interview with the person who determined the site’s content. This process provided a subject for interview from all of the sites identified as prominent in Table 7 apart from either of the two political party websites: the Libdemvoice.org and the tamesidetories.com. However, it did serve to uncover a further 2 contacts, who were recommended as useful informants, both of which worked for Public Relations Agencies, contracted by different elements of the pro-congestion charge lobby, and influenced the communication strategy of these campaigns.

Interestingly, whilst the mapped hyperlink network was useful in helping to identify prominent actors, it also usefully served to highlight notable absentees from the network. For example, significant by their absence from the online network was the dominant, both locally and nationally, political party: the Labour Party. Given that this was also the party that had developed and promoted the TIF proposal their lack of prominence online was a curiosity that merited further investigation. This lack of Labour Party representation online was a question that was posed to the first round of interviewees. Whilst they were forthcoming on the subject they also suggested contacts in the local Labour Party who had, in their opinion, campaigned either online or offline around the referendum. This identified a further 3 interviewees from different positions in the local Labour Party hierarchy: a local MP, who had opposed the congestion charge; a Deputy Leader of a local Council who had supported it; and, a local activist and blogger who had also supported the congestion charge.

Another notable absentee was the Manchester Community Information Network. It’s ‘mymanchester.net’ site was evident in the wider network but not in the core network. Again their absence from the core online network on the referendum was curious given its remit as a not-for-profit community development organisation that uses social media as a tool for empowering communities and improving public services. As such they were contacted and their Director, who described himself as a ‘neutral’ in the campaign, agreed to be interviewed.
In total 17 subjects were selected for further investigation. In the main these subjects were all senior personnel (see Appendix 12 for a full list of interviewees) in their respective organisations or campaigns and were directly responsible for influencing their campaign strategy both offline and online. Once located the preferred method of enquiry was a semi structured interview (see Appendix 13), recorded where possible, and as per Biddix and Park (2008), the mapped hyperlink connections (as shown in Figures 7 and 9) was incorporated into the interview process to discern the significance of the online network to the interviewees. Half of the interviewees requested anonymity so for the purposes of uniformity only the role of the interviewee has been used.

The following section examines the ways in which the various stakeholders in the referendum campaign viewed and used the online network according to their campaign stance.

**Views and uses of the online network by actors associated with ‘impartial’ sites.**

Sites categorised as impartial during the referendum campaign where those run by local government, who were legally obliged to be impartial and those run by the traditional media, who strove to be even-handed in their coverage of the campaign.

As such analysis from the actor narratives associated with local government will be drawn from five sites identified as prominent in the captured online network and then selected for further analysis. There are four sites categorised as ‘Gov’ sites. Three of these were the websites belonging Trafford, Stockport and Rochdale Metropolitan Borough Councils (MBC), the fourth was the website belonging to the Greater Manchester Passenger Transport Executive, [www.gmfuturetransport.co.uk](http://www.gmfuturetransport.co.uk), this was politically controlled through the Association of Greater Manchester Authorities (AGMA) and was under the same obligations as local government to be impartial during the referendum. The fifth site is the Facebook group
www.facebook.com/group.php?gid=44393024872 established by Oldham MBC to engage with young people in their borough on the benefits and disadvantages of the TIF package. It is should be noted that while all four council sites were obliged to be impartial the political leadership of Rochdale and Oldham where politically in favour of the TIF package and those at Trafford and Stockport were opposed to it.

There were two media sites identified as prominent in the online network and selected for further analysis. Both sites had been categorised as Web 2.0 sites for the purposes of the structural analysis as they had used elements of the new social media to engage with their audience. Thus http://www.bbc.co.uk/manchester/content/articles/2007/01/24/240106_road_pricing_feature.shtml deployed an interactive map and the journalist responsible for it was interviewed here. While http://blogs.manchestereveningnews.co.uk/ was the blog of the chief political reporter of this local paper and his narrative is drawn upon here.

The three local government sites selected here were atypical of the majority of local government sites in the network. They were more prominent in the network than their peer sites as they had linked to other non government sites in the network. For two of the local councils, Rochdale and Stockport, this had been a conscious decision ‘..to preserve the notion of legal balance’. For the third council, Trafford, it transpired that the political leadership of the council, while opposed to the TIF package, had instructed the Council’s Website manager not to engage at all in the Referendum debate. As such there were no official links from the council’s website to any other website referencing the Referendum. However, the Council’s Web site manager revealed that the prominence of this council’s website in the online network had been gained by hyperlinks coming from a community discussion forum connected, by three clicks, to the council’ website. This forum had a discussion thread, on the congestion charge, 1,380 contributions long. The council’s relationship with this forum is interesting and is discussed, below, under the theme ‘Institutional culture’.
None of these councils had linked to, or engaged in, any of the social media sites discussing the referendum. Two reasons for this were offered for this by Marketing manager from Rochdale was ‘...there is a real problem of resources and Web 2.0 media requires a lot of input to engage on a regular basis ...{the council} would have to have a fundamental change of emphasis’. Additionally there were also concerns about accessibility ‘...the digital divide is a real issue in places like this ......got to cater for a diverse constituency’. The Deputy Chief Executive from Stockport reflected doubt about the value of the new media ‘....it has to prove it’s worth ...don’t want to dive in just for the sake of using a new tool’.

However, actors associated with two of the five sites selected as prominent in the network had engaged with the new social media. The actor associated with the gmfuturetransport site, a Communication officer working for the GMPTE, explained that whilst this site had been a static broadcast site he had been given a remit to intervene into the various online discussion forums ‘..to inform and educate’. There were real problems with this role which militated against an effective intervention into these forums and are discussed below under the theme ‘Institutional culture’. This actors intervention into these discussion forums were guided by an analysis of online traffic connected with the Referendum provided by a PR advisor hired by the GMPTE to advise on communication during the Referendum.

The other intervention was provided by the Facebook group established by Oldham MBC’s attempt to engage the local youth in a discussion on the benefits and disadvantages of the TIF package. The site was not branded as a local council site but simply as ‘What’s the charge got to do with Oldham’. The site had mixed results. It was successful in that it did generate comments and debate from young people and according to officer interviewed it afforded the council access to a section of the community it did not normally reach. However, the site was, in the words of this officer ‘ambushed’ by those campaigning against the TIF package. The officer commented ‘it was like guerrilla warfare with the ‘No’ campaigners posting very aggressive comments designed to drive young people off the site’. More pertinently for the discussion under the theme ‘Identity, civility and
locality’ the ‘No’ campaigners, so the officer claimed, came from all over the region to talk about general issues and not specifically to address local ones. The officer considers that for the local council this had been a negative experience and helped to ‘reinforce the idea that you can’t replace traditional forms of communication like face to face or leafleting.’

By contrast both media sites had used the new technology to engage in different but effective ways with their audience. The BBC site deployed an interactive map. This map asked visitors to the site to choose, in response to the question ‘how would the congestion charge affect their behaviour’, one of five options: drive and pay the charge; drive at different times; use public transport/motorbike/bicycle; work or shop elsewhere; and, not affected. Visitors were asked to enter their postcode and choose a response. Their postcode area would then be coloured according to the option they choose. Blue was associated with the most negative response ‘work or shop elsewhere’. For most of the referendum the map was coloured entirely in blue. This map was commented on in interviews by campaigners from both sides. The journalist interviewed here had been responsible for developing the map and managing the news online content coverage of the referendum.

It proved to be a popular site generating more views than the London Underground’s map, 28066 to 27843 respectively (MapTube, viewed 2010). He commented that ‘it was extremely well used if you look at the map tube website it was the most popular MapTube website they had done ...more than the one on the London underground..........I’m not sure what effect it had, it allowed other commentators to refer to it, it also opened up the debate to those outside Greater Manchester as the referendum only asked voters in Greater Manchester .....but what about those commuting from outside the area you were excluded from the process but this opened it to the whole region and beyond ..........bizarrely we had people registering views from Scotland and the Scilly Isles’

Similarly, the blog developed by the local print journalist enabled him to have a different relationship with his audience. He considered it afforded him a number of advantages: he could discuss and present issues in more
depth than he was able to in the paper; it made him more accountable; and, ‘...helped to combat scepticism of the media through increased transparency’. His blog was characterised by a number of features: features, namely; participants had to identify themselves; in the main they were leading figures in their respective campaigns or politically significant local – and sometimes national – figures; and, probably because of who its participants were, it was read by figures of similar standing. In other words it represented something of an ‘elite’ online discussion forum during the referendum certainly compared to some of the forums mentioned below.

What is interesting from these narratives that is that local government actors interviewed here had, in comparison to the media counterparts evinced little interest in engaging with the ‘bottom- up’ networks of private individuals or citizens. As Hermida (2010) pointed out is in the linking of ‘top down’ institutional networks with those of private individuals that the promise of a new public sphere lies.

Views and uses of the online network by those campaigning for a ‘No’ vote in the Referendum

The referendum on implementing the TIF package was, contrary to opinion polls, overwhelmingly defeated by the Greater Manchester electorate (see Chapter 3 for more detail). One of the actors interviewed here, a PR executive working for the Greater Manchester Passenger Transport Executive (GMPTE) with responsibilities for monitoring online traffic associated with the TIF referendum, considered that the rejection of the TIF package was ‘a real endorsement of the way in which the ‘No’ campaigners used Web 2.0’.

However, narratives from two actors, each associated with a site that was campaigning for a ‘No’ vote and prominent in the network, revealed divergent views and uses of the new media. The sites were http://www.gmmgroup.co.uk/ and http://www.manchestertolltax.com/. It should be noted that both sites were categorised as ‘NGO’ sites. As such they were very much Web 1.0, broadcast sites, but were identified in the structural analysis in the last chapter as likely to be mediating the online
discourse on the TIF referendum in so far as they were likely to be linking to sites different from their own.

The www.gmmgroup.co.uk site was established by the Greater Manchester Momentum Group (GMMG) which was formed in January 2008 to lobby against the TIF package and suggest policy changes. It was the brainchild of a PR agency commissioned by a number of large business interests, namely; Peel Holdings; Kellogg’s and Unilever located in Manchester’s Trafford Park industrial estate on the very edge of the proposed ‘outer’ cordon for the congestion charge scheme. The GMMG was later bolstered by the support of the Federation of Small Businesses. At the outset the GMMG moved swiftly to appoint one of the PR agency’s executives to act as a full time campaign director. It is the narrative of this actor that is drawn upon here.

The GMMG established an online presence via two websites. One, the www.gmmgroup.co.uk site, went online in January 2008 and was ‘very straitlaced, formal and business orientated.’ The second site, ‘Stop the Charge’ (http://stopthecharge.co.uk/) went online six months later and fulfilled a requirement to communicate more broadly with members of the public and was designed to be ‘more of a populist campaigning site’ Importantly, and uniquely amongst the campaign sites, both sites had optimised their search engine rankings. Typically this involves hiring a specialist to finesse the site content, HTML and associated code to ensure key words are picked up by the indexing activities of such search engines like Google. A good search engine optimisation will help to ensure the site appears in the top rankings of any search engine thereby increasing the web presence of the site. It is this that is likely to explain the site’s position as a ‘mediator’ in the captured online network. Despite this strategic, and almost certainly financially expensive, approach to establishing a web presence the PR executive was very clear that their campaign’s online presence was designed to complement their offline activities and in this campaign the internet was ‘...very much a secondary medium.’

The campaign she ran was built upon what she described as ‘basic campaigning’. She took an early decision to boil down the entire TIF
package to the economic impact on the ordinary commuter and local communities of the congestion charge. It was this economic discourse, acknowledged by the ‘Yes’ campaign, that dominated the Referendum campaign. She relied on face to face meetings to get over the key messages of her campaign, messages which would be then transmitted or snowballed from peer to peer networks. Reinforcing this activity was a variety of printed campaign literature and she considered one of the most effective of these to be the quarter of a million beer mats the campaign produced. All the printed campaign information, as well as highlighting the key message, also directed people to the ‘stopthecharge’ website.

Given this campaign was very focused on, in her words, ‘optimising networks’ it was interesting that she had not given much, if any, emphasis on using the internet and in particular the Web 2.0 tools for this purpose. Her attitude to the new social media was ambivalent. She considered it, from a political perspective, useful to monitor the discussion forums to get a view on what people were thinking. For example, she closely followed the results of the interactive map hosted by the BBC site. Apart from this her general attitude was that the new social media did not ‘merit the expenditure of limited time and resources’ and, moreover, she is not convinced she would have made different decisions had she had extra campaigning wherewithal.

The narrative of the actor associated with the other ‘No’ voting site selected as prominent in the network, http://www.manchestertolltax.com/ revealed a very different understanding of the potential of the new media.

The campaigning activists associated with this site were described by the environmental activist interviewed here as ‘....the Falange of the driving lobby...they were only a couple of hundred people but their influence is out of all proportion....’ A key part of this influence undoubtedly came from their close association with, and support from, the big business interests within the Greater Manchester Momentum Group (GMMG) coalition ( see below under ‘A networked public sphere or politics as usual?’) It is also arguable
that this influence was partly attributable to the way in which they used the new media as claimed by the PR executive working for the GMPTE.

The actor associated with the manchestertolltax site, and interviewed here, was a member of the national lobby group the Association of British Drivers, whose site, www.abd.org.uk, was also part of the core online congestion charge network. He had established the local ‘No’ vote campaign and been instrumental in forging the relationship with the GMMG and Peel Holdings in particular. For him the internet was a vital campaigning tool ‘...I honestly don’t know how important the internet was to those weren’t involved but to activists it was vital ...I’d say it was 70% online and 30% offline campaigning.’

Their use of the old and new media was complementary. ‘One of the first things we did was set up an online petition ‘gopetition’ –and that was set up at around the same time as we set up the website and we got Peel [Peel Holdings Plc] to finance the billboards that went up round the town... from an online point of view the petition took off very quickly – the publicity for that was generated from the billboard campaign around the city centre. Basically the online petition then gave us a database which we used we then sent out electronic bulletins’.

He had very quickly established an understanding of the usefulness of the various online discussion forums, ‘First place I went every morning there was two or three key sites to keep up with to tell you what was going on and you would do that throughout the day..... the MEN comments [online discussion forum] to see what stories there were this was a hotbed of ‘No’ supporters ..........and there was ‘skyscapercity’ that was kinda like the hotbed of the ‘Yes’ campaign...... Ottewell’s [local paper’s chief political reporter, see ‘Institutional Culture’ below for more detail] blog was informative and that’s where I went for hints as to what was going on..... and there was a frankly appalling site a real rank absolutely left winger he’s got this labour blog [see below] he’s had for ages but that helped me understand what the other side were getting up to on the extreme’.
But in contrast to the PR executive running the GMMG campaign he had a clear view of how to strategically exploit this media.

’I learnt fairly quickly ..that I could wait and put a comment in that I thought would be most effective ..not to leap in straightaway because to be honest it was like a football scrum in there [ the MEN online discussion forum] but at least it was our football scrum.....perhaps the biggest coup we had was the press release we posted about traffic levels dropping in the city centre which we got from the Greater Manchester Traffic Unit ...all of a sudden through the MEN comments section, which was vital, and a soon as this story broke it became common knowledge and spread like wildfire and it became the story of traffic levels dropping that the other side never really dealt with’.

Moreover, they had established a Facebook group against the congestion charge (see Appendix 4) which had over 17,000 members.  This was also used to strategically further their aim of countering the bias they saw in official information on the TIF package.

‘....we used the Facebook site .....we just dropped hand grenades in there ...anything that I found went straight onto the Facebook site. There was story in the Salford advertiser that said if the [TIF] finances didn’t add up then there would be higher council taxes ...they denied it and denied but I eventually found it tucked away in a document and I put it in Facebook and away it went..... eventually there was an IT guy who was savvy about Facebook who sent out a weekly letter to all Facebook members’.

Whilst it is not possible from the data collected here to comment upon the impact made on the referendum result by these activists’ use of the new media it is, nonetheless, apparent they used it to effectively mobilise opinion for their campaign. Had it not been for the evident support from big business it might have been possible to claim, in Norris’s (2001) terms, that the internet here had levelled the political playing field for these activists. Yet it is likely that it was the combination of big business support and their shrewd use of the technology that helped these activists have an influence
‘…out of all proportion’. Moreover, it is of interest in commenting on the
development of a networked public sphere that these activists used the
evident balkanisation of online opinion to their advantage. They effectively
‘fed’ the online enclaves of ‘No’ voters certain choice pieces of information
which would resonate with a greater number of supporters. This appears to
have had two effects, one the information became the accepted position of
the wider ‘No’ campaign and, secondly, this quantity of support pushed this
position back into the public sphere to challenge the official version of
events. If, as the structural analysis in the last chapter suggests, there were
‘good enough’ links in the online network then this echoes Benkler’s (2006)
finding of the Web delivering a networked public sphere.

Did those actors associated with the ‘Yes’ campaign make similar use of the
online network? The next section examines the narratives from those
interviewed who were associated with sites that were campaigning for a
‘Yes’ vote.

Views and uses of the online network by those campaigning for a
‘Yes’ vote in the Referendum

There were two sites selected as prominent in the online network that
campaigned for a ‘Yes’ vote. These were www.wevoteyes.co.uk/ and
www.cleanairnow.co.uk. Interviews with actors associated with these sites
led to a further two actors being interviewed who supported the Yes
campaign. One was an executive of another PR company who was hired to
work on the Wevoteyes campaign and the second was a local Labour Party
activist who also ran a blog.

It was clear from these interviews that no-one in the ‘Yes’ campaign used
the new media to the same affect as the activists associated with the
manchestertolltax campaign. One reason for this, given by more than one
of these Yes campaigners, was that the decision to hold a referendum took
them by surprise, in the words of the PR executive ‘…it was a very difficult
landscape because we didn’t know we were going to end up in a referendum
campaign… if I’d known 18 months out that we heading toward any kind of
public vote …would have gone in completely different direction but if you are going for consultation trying to show acceptability rather than win a vote then that’s a very different environment.’

As a consequence of this ‘our site was very much 1.0, not that we didn’t have the appetite for any Web 2.0 technology in the mix, but we didn’t have time …we could have squandered tens of thousands of pounds in a month developing a Web 2 site and to do it properly would have taken more time and money than we had…’, and, perhaps surprisingly there was ‘…..no site optimisation it had a price tag attached to it equivalent of a full month of ads…we took a strategic decision not to do that but spend it on billboards.’

There were some examples of the ‘Yes’ campaign using the new media. The PR executive recollected that just prior to the vote they had toured the city ‘..in the van we had beamed out an SMS text message ‘ have you voted’ ….we beamed around 500 people a day – you had to have bluetooth switched on.’ Alongside this there was Lucy Powell’s9 ‘Blue Monday’ video that went viral on Youtube. Such initiatives appear to have been too little and too late and for the Labour Party blogger the success of Lucy Powell’s video was simply an illustration of the illusory nature of the internet effect on the campaign, ‘….it went viral with 200,000 hits or something like that in no time at all but people were re-watching it because they liked New Order not because they were persuaded to vote ’Yes’’. Furthermore, as he admitted, ‘….me and another labour supporter were all over Facebook driving links to the video to make it viral’.

The Yes campaign also established a Facebook group but at 1600 members it did not achieve the critical mass of their opponents group. Moreover, the Labour Party blogger was dismissive about the usefulness of such Facebook groups claiming that joining such a group was ‘...like signing a petition’.

9 Lucy Powell, the PPC for the Labour Party in the 2010 General Election, released a video towards the end of the referendum promoting a Yes vote. The video’s soundtrack, ‘Blue Monday’ by local Manchester band New Order, was one of the best selling singles of the 1990s.
Indeed, there appeared to be a consensus amongst these actors that the internet had had little impact on the referendum result. The environmental activist associated with cleanairnow.co.uk summed this position up:

‘The internet played relatively little role we overestimated it to be honest the most important message was the big posters put up by the ‘No’ campaign say ‘No to paying £5 a day’ and a lot of people who drove saw them…. they were highly effective’

Of course the ‘Yes’ campaign was defeated and this might help to explain some of these views – by definition their campaign was not as effective as the ‘No’ campaign- but nonetheless it is interesting that none of the these prominent actors appeared to use the new technology to mobilise their support as effectively as the ‘No’ campaigners mobilised theirs.

In concluding this part of the analysis the following points should be emphasised. In doing so it should be borne in mind that the structural analysis in the last chapter had concluded that the online network was characterised by homophily, a characteristic more likely to be associated with local government sites and those sites deploying Web 2.0 technology. Nevertheless, links within the network were found, in Benkler’s (2006) terms, to be ‘good enough’ for the existence of a networked public sphere. This analysis has illustrated how actors’ uses and views of the new technology varied according to the campaign stance of the site with which they were associated. Actors associated with the ‘No’ campaign had used the online network more proficiently than those associated with the ‘Yes’ campaign. They had conducted site optimisation and had used the balkanisation in the online network, the online discussion forums and their Facebook group, to more effect than the ‘Yes’ campaigners.

How actors associated with those institutional sites which were classified as ‘impartial’ exploited and viewed the new technology varied by type of institution. Actors from local government interviewed here, in the main, expressed reserve about engaging in the ‘bottom-up’ networks of private citizens which proliferated in the online discussion forums and social
network sites identified in the online network. This was in contrast to those actors from media organisations who viewed, and used, the new technology to try and establish a new relationship with their audience. Local government actors had failed in this case to exploit the potential of the ‘good enough’ structural links in the web to connect their ‘top-down’ institutional network to the ‘bottom up’ networks of private individuals. In this sense then they had not taken an opportunity to facilitate an effective local networked public sphere.

Use and views of Facebook appear mixed. As acknowledged in the last chapter, the VOSON software used to capture the online network is likely to have underestimated the prominence of Facebook in the online network. Nonetheless, the narratives captured here do reveal that it was used to mixed results by the various stakeholders involved in the referendum campaign.

The following analysis presents a discussion under emergent themes identified from across the captured narratives. In doing so it will provide an understanding of why such particular views and uses of the new technology may have prevailed in this case study.

**A local networked public sphere or politics as usual?**

Cyber sceptics suggest that new technologies will not as a matter of course transform existing patterns of civic and political participation. Margolis and Resnick (2000) found that it was ‘politics as usual’ whereby it is established interests, including traditional parties, commercial and media interests, that have asserted their dominance in the virtual world of digital politics.

The narratives from those actors associated with the No campaign illuminate the ways in which economically powerful offline commercial interests may have exercised influence online during the course of the referendum. The Greater Manchester Momentum Group (GMMG) was established by business concerns such as Peel Holdings; Kellogg’s; and, Unilever.
These are, by any measure, economically powerfully businesses. Peel according to its website\(^{10}\) is one of the leading infrastructure, transport and real estate companies in Britain with assets of £6bn. Kellogg’s is, of course, a well known multi-national company employing more than 26,000 people worldwide with a turnover of $13 billion\(^{11}\). Both of which are dwarfed by Unilever which claims\(^{12}\) a world wide workforce of 179,000 and a global turnover in excess of $39 billion. How might their undoubted economic offline presence be felt online?

The GMMG, in contrast to any of the ‘Yes’ campaign web sites were able to pay for both of their sites to be optimised for search engines. A good search engine optimisation will help to ensure the site appears in the top rankings of any search engine thereby increasing the web presence of the site. As such a Google search for ‘Manchester Congestion charge’ delivered the ‘No’ campaign a second place position just behind the official governance site (see Appendix 6). More significantly for this research it is likely to explain the hyperlinking strategy of these sites and their propensity to link to other sites dissimilar from themselves.

It is revealing to note that the cost of site optimisation was considered beyond the ‘Yes’ campaign who were themselves supported by a different set of businesses.

The GMMGroup was not confronted with this choice, they had both. According to the Labour Party blogger, ‘........ there was a lot of money and a lot of it was in kind ...tons and tons of these fly poster sites which were all Peel’s say if you’ve got 200 poster sites that you are not selling for 3 months that is a huge whack that you don’t have to cough up ....’. This impression of well funded ‘No’ campaign was shared by the Deputy leader of the local council ‘there were very clear vested interests which is fine by me as long as people were aware of these interests. Peel Holdings funded the

\(^{10}\) http://www.peel.co.uk/aboutus/default.aspx
\(^{11}\) http://www.kelloggcompany.com/company.aspx?id=32
‘No’ campaign …and in terms of campaigning ….they ran a very expensive campaign...’.

Site optimisation is one example of well funded organisations increasing their web presence. The environmental campaigner who established the www.cleanairnow.co.uk site relates a story where, in his view, the offline economic weight of those behind the ‘No’ campaign was instrumental in diminishing the political significance of his web site.

‘There is whole other agenda.... you look at the number of affiliated organisations on the ‘CleanAirNow’ site you will find that there are less than there were for most of the campaign ............ I’m not sure if you are aware of this but Graham Brady who is the Conservative MP for Altrincham the only Conservative MP in Manchester put down an early day motion in parliament criticising CleanAirNow for misusing public money and listing a number of publicly funded organisations who had leant their support to the manifesto which we put forward for public transport... we never had any public money much less misused it neither did any of the organisations have any commercial relationship with us at all but unfortunately ..................given that they were publicly funded, they felt they had to remove their affiliation from us ...................... I actually met with Graham Brady ...and I get on very well with him ......and I can say this because it is on the record, I feel he was strongly mislead in terms of the briefing he was given to put down that early day motion’.

It is a matter of fact that Graham Brady proposed an Early Day Motion on CleanAirNow’s alleged misuse of public funds. It is of interest that the

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13 Early day Motion, EDM2457 proposed by G Brady on 10/11/2008 ‘That this House is concerned that the organisation Clean Air Now paid for an advertisement in the Independent newspaper on 20th October 2008 which criticised one of Greater Manchester’s oldest and largest employers, Kellogg, for its opposition to the proposed Manchester congestion charge; understands that Clean Air Now receives funding from a number of public bodies, including Manchester is my Planet, Manchester Arts Festival and Greater Manchester Centre for Voluntary Organisations; notes that these bodies are funded directly by a number of public sources, including the Association of Greater Manchester Authorities the Greater Manchester Public Transport Executive and Authority and Manchester City Council; is further concerned that acting in this way constitutes an inappropriate use of
company, Kellogg, whom Graham Brady appears to be proposing the motion on behalf of, was one of the businesses behind the establishment of the GMM Group, the group that led the ‘No’ campaign.

The ‘politics as usual’ scenario also implicates the traditional media in dominating online as it mediates the message offline. This is a scenario supported by the analysis of the hyperlinked network data. The narratives provided by both the print and television journalists revealed media organisations that appeared unrestrained by political notions of citizenship (see below) and any associated institutional anxiety over using the new social media to engage with their respective audiences. As such they successfully employed the new media to engage in different ways and, potentially, with new audiences. This is critical to them maintaining their traditional offline position online. Dutton (2009, 6), drawing on the Oxford Internet Surveys, states that “......in 2007 in the UK the Internet was the first or second most common place users would first choose to go for information across a range of tasks”. Couple this with the phenomenal increase in use of the new social media and it may be argued that this use of the new media, by the traditional media in this local context, is an example of technological ‘affordances’ at work. This concept, explained in more detail in Chapter Three, is promoted by Hutchby (2001, 453) who argues that the affordances of an artefact impose limits on how that artefact may be used but “by the same token, there is not one but a variety of ways of responding to the range of affordances for action and interaction that a technology represents”. In this way the print media’s blog and online discussion forum and the BBC’s interactive map provided some increased affordances for an online presence that was in all other respects very much Web 1.0 or broadcast technology.

Where the empirical evidence gathered here does not the support the ‘politics as usual’ discourse is in relation to the online activity of traditional public funds; and urges public bodies to take greater care with public funds particularly in the run-up to the forthcoming referendum on the proposed Manchester congestion charge’ (http://www.edms.org.uk/edms/2007-2008/2457.htm)
parties during this referendum. Particularly prominent by their absence from
the online network was the governing party nationally and, arguably, the
most influential locally, the Labour Party. The narratives yielded two
potential explanations for this absence. Firstly, the proposal to introduce a
congestion charge had divided the party, indeed two prominent local Labour
Party MPs were visibly active in the ‘No’ campaign. Moreover, the politically
mosaic pattern of local elected representation meant that a party political
campaign may have been counter productive. The Deputy leader, a Labour
councillor and supporter of the ‘Yes’ campaign, explained, ‘Put it this way
Richard Leese {Labour Leader of Manchester City Council} could have been
the leader of the ‘Yes’ campaign and Graham Stringer {ex leader of
Manchester City Council and current Labour MP for a Manchester
c constituency} the leader of the ‘No’ campaign………We did not want it to
become about leading politicians….and we did not want it to be seen as a
Manchester scheme because in reality it was wider than that ....we were
working through AGMA ...and also it was not a party political issue ....we
were working with some Lib Dem councils for example’.

The second explanation is provided by the campaign director of the ‘Yes’
campaign who established the wevoteyes.co.uk site. In his view there was a
‘lack of trust in the political class’. This perception led him to minimise the
visibility in the campaign of otherwise high profile local Labour politicians.
This theme was echoed by the Deputy leader explaining why he thought
they had lost the referendum ‘............we were asking people to take a leap
of faith ...but people did not want to gamble .... the trust had gone ...’. The
Labour Party blogger concurred with this view ‘..there was a question of
trust people didn’t believe it would work...’.

Interestingly, this lack of trust manifested itself online particularly in
relation to the information on the official GMPTE’s ‘gmfuturetransport’
website. The print journalist considered there were ‘trust’ issues with this
site as people had difficulty differentiating this from the ‘Yes’ campaign. This
had the effect of 'tainting' the information on the benefits of the TIF
package in the eyes of many people. He thought that the unfavourable
Ofcom ruling had cemented this impression in people’s minds. This was confirmed by the activist from the ‘No’ campaign. ‘The bottom line was that people felt that they couldn’t trust what was being said and then when the Ofcom verdict came in that was it ...bang, they gave up.....nobody believed it was neutral site anyway ..there was an awful lot of gerrymandered statistics’.

Of course there is nothing startling about the presence of this lack of trust amongst the public for the political class and its associated institutions. Declining levels of public trust in Government have been apparent for more than three decades according to Tolbert and Mossberger (2006). Pattie, Seyd and Whiteley (2004) demonstrated that lack of trust was particularly, and peculiarly associated, with representational government. More recently Dutton et al (2009) underlined that such lack of trust was evident amongst users and non-users of the internet. What can be argued from this evidence presented here is that during this civic issue there was a lack of trust in the local political class and local governance institutions which was reflected online and became a feature in the local online ‘politics as usual’ discourse. It may also be one explanation for the apparent lack of hyperlinks from the Web 2.0 applications to the governance sites and helped determine the homophily effect evident amongst Web 2.0 users in the online congestion charge network.

14 Ofcom received seven complaints about an advertisement broadcast on ITV1 (Granada) publicising a local poll being held in the Greater Manchester area. The poll seeks to gauge opinion on a proposed transport plan for the area, to be financed by funding from a central government Transport Innovation Fund (“TIF”). This transport plan includes the introduction of a congestion charging scheme. The advertisement featured a presenter in a studio referring to the poll and summarising the consequences of ‘yes’ and ‘no’ outcomes. During the advertisement a call to action to vote, the name and logo: Greater Manchester Future Transport (“GMFT”), and GMFT’s website address were all prominently displayed. Ofcom found this website to be ‘partial in respect of the transport funding bid and the prospective congestion charge .......’ In our view this advertisement therefore directed viewers to a website which contained information about a matter of political controversy which was partial in support of a ‘yes’ vote” (Ofcom, 2008b)
Evidence from the narrative analysis presented here militates against the notion that the Web, left to its own devices, will provide, in this context, a local networked public sphere. The structural analysis of the congestion charge network suggested that there were, in Benkler’s (2006) terms ‘good enough’ structural links in the congestion charge network connecting the individual citizen with the local public authority. However, the evidence of vested economic interests seeking, and possibly succeeding, to exert the same influence online as they do offline suggests, to paraphrase Hindman’s test (2009) for an effective networked public sphere, that the individual citizen’s voice was unlikely to be heard in this local context above those that traditionally dominate the political discourse.

It is possible that policy intervention, such as, for example, the online civic commons advocated by Coleman and Blumler (2009), could shape the structural contours of a local political sphere of influence. This, in creating an independent online space, might enable the influence of traditionally dominant economic and political interests to be kept at arms length. Such an online space may possibly more closely resemble Habermas’s notion of a public sphere in that it could transform individuals into citizens through the free and unmediated exchange of divergent views. However, it is also likely that issues particular to the local democratic use of the technology would have to be addressed. The next section illustrates how some of these issues were difficult for the actors involved in the online congestion charge network.

**Identity, civility and locality**

The narratives reveal that for the social actors interviewed here there were three inter-connected issues that were problematic when discussing the local democratic potential of the internet. Often remarked upon, particularly by local government officers and politicians, were the difficulties they had with the anonymity of online participants, their incivility and bounding a local political community online. As will be discussed, in point of fact, they
are all component parts of the problem of enacting local citizenship online in the context of an ICT enabled globalised networked society.

The nature of online discourse, the way in which the technology afforded anonymity and incivility, was a recurring theme amongst many of the narratives. The Labour Party blogger was very critical of this as he saw it ‘...most of them coming out to play were not using their real names they were all using tags and you couldn’t tell how many of them there where and I get the feeling it's a bit illusory the whole idea that web 2.0 had much effect on all this...’ Similarly the senior Deputy Chief Executive of Stockport Council thought that ‘it’s a new tool but ...the internet can be anonymous so in those {online} debates we were talking about do you have 200 people or 5 people under 20 different names? So it’s difficult to assess the importance of it or the audience you are reaching’. The Deputy Leader of a Manchester City Council thought that the technology engendered a very different debate to that which he experienced offline. ‘We’ve not got the maturity or opportunity or what have you to hold a sensible event on the internet...we have got the maturity or opportunity to hold a debate in other ways and this is because it’s anonymous because people can send quite vicious messages to each other without consequences ....and part of the debate is understanding that you might be hurting some ones feelings...and by and large people don’t want to do that.’

The problem for these social actors is that the nature of this online discourse was so asynchronous with normative views of what constitutes civic engagement within a local democracy that it was hard for them to assign, or quantify, any political or democratic value to this practice. Such normative views generally evoke classical Athenian forums where citizens of the polis were identifiable and engaged in a rational and civil debate. The Deputy Leader is invoking this ideal when he describes the nature of debate that he found online:

‘..I don’t know if there is a certain type of person who spends their night in their bedroom banging out the most wacky barking mad venomous emails ...the level of debate you want which is an exchange of ideas and the
majority of people engage in this as you don’t want to leave the room hating each other.....you don’t get that on the web ....they are nasty’.

This level of debate can be compared with the nature of the discourse on the local print journalist’s blog. What is significant about this blog is it had a particular importance in the online discussion of the TIF referendum. This was underlined by the Deputy Chief Executive who consulted ‘David Ottewell’s blog 2 or 3 times a day..’ and the leading activist of the ‘No’ campaign who considered ‘......Ottewell’s blog was informative and that’s where I went for hints as to what was going on....’.

This importance was a function of two inter-related factors. Firstly it was the blog of the Chief Political reporter of the largest local daily newspaper in the Greater Manchester sub-region and, secondly, contributors had to identify themselves. These factors lent themselves to the blog becoming an online space where considered comments were placed by the leading protagonists of the TIF referendum. As the journalist himself noted there was ‘a better more informed discussion on the blog’ than that on the paper’s hosted online discussion forum where comments ‘were of a low level and often offensive’. There were reasons for this which he articulated. Not only was it the senior figures in both the ‘Yes’ and ‘No’ campaigns who were mainly contributing to the discussion but there was also an awareness that it was read by other high profile political figures. To illustrate this he provided an example where he had posted a comment about Hazel Blears, a local Labour MP and Government minister, and shortly afterwards she posted a comment in reply. Here online identity is critical in defining this space as what can be described as an elite online discussion forum. It stands in sharp contrast to how social actors described the other, perhaps more popular and more plebeian, online discussion forums where the identity of the participants was, at best, fluid. The leading activist of the ‘No’ campaign described how he used to choose his moment for intervening into the online debate ‘........because to be honest it was like a football scrum in there.’ The environmental campaigner described how one post could lead to ‘....... a flame war .....and there could be anywhere between 30 or 40 up to 200 posts on that issue ....it got quite heated’. The PR executive responsible for
advising the GMPTE observed the ‘No’ campaigners ‘supporting each other online’ through endorsing each others comments and ‘harassing’ any ‘Yes’ campaigners who came online. He described this activity as akin to being ‘hunted down by a pack’.

However, what is interesting is that notwithstanding the ‘...low level and often offensive’ nature of the discourse it was acknowledged as a political space. This is a comment by the PR executive who advised the ‘Yes’ campaign.

‘...was it a political space? Highly!.....In the hurly burly of running this campaign which was incredibly heated and quite feisty the question of who was saying what online was a constant issue.......’

This was endorsed by the PR executive who had, through monitoring online traffic on behalf of GMPE, identified three online discussion sites that were most significant in framing the online discussion on the congestion charge, these were: the MENs online forum; David Ottewell’s blog; and, Skyscrapercity. He was confident that whatever was said on these sites would appear on other websites, he described this process as ‘a ripple effect’. These sites worked, in his view, to shape opinion elsewhere on the internet. This appeared to be very well understood by the ‘No’ campaigner connected with the manchestertolltax website.

Moreover, what is clear from these comments is that many of these social actors, particular those active in their respective campaigns, considered these spaces to be of sufficient political importance to merit their participation in them. Nevertheless, they were spaces that, in the view of one local government officer, were populated by ‘people who were aggressive didn’t show themselves......anonymous so easier to be aggressive’ and as such they did not conform to normative views of civic engagement.

Of course civic engagement is normatively understood to occur within either locally or nationally territorially bounded political communities. However,
the network society enabled by the new ICTs, as Castells has argued (see Chapter One), can privilege communities of interest over communities of place and in doing so may politically – and economically and culturally for that matter - marginalise geographical localities. As Polat and Pratchett (2009, 193) state,

New technologies threaten to create virtual communities on a global scale – communities that are linked less by geography and more by the shared interests, values or prejudices of individuals regardless of where they may live. Citizenship in this global context, in so far as it might exist at all, is unlikely to make much reference to place but will be premised on ways in which individuals have needs or interests in common. In the online world locality is arguably an irrelevance.

The challenges of enacting local citizenship online are illustrated by Oldham Council’s attempt to engage the local youth in a discussion on the benefits and disadvantages of the TIF package by using Facebook. The site was disrupted by ‘No’ campaigners who came, so it was claimed, from all over the region to talk about general issues and not specifically to address local ones.

The local Member of Parliament had a similar but less damaging experience with the global reach of the new technology. He had set up a website to communicate with his constituents and found that ‘what was interesting was that some of the stories that were on my website did generate quite a bit of email correspondence and not just from my constituents but from all over Greater Manchester so that's when I say anecdotally I know I had people from all over contact me because they had seen something on the internet – so certainly it played a role’.

It is instructive to compare this experience of attempting to be local in the online network society with that of the local media. The BBC had, during the referendum hosted an interactive map of the Greater Manchester region of the UK on their website.

The journalist responsible for the map was well aware that the site could have been subject to political gerrymandering by both sides during the
course of the referendum and because of this the BBC had placed health warnings on the site disclaiming it as a scientific exercise. Regardless of this, what is of interest here is the media’s freedom to innovate with the new ICTs unfettered by any notions of citizenship associated with bounded political communities.

It is such notions of citizenship that appear significant in determining institutional use of the new ICTs. For example, Polat and Pratchett (2009, 200), have noted that the potential for anonymity that the technology affords poses “....significant problems for citizenship” if citizenship is conceived of in a purely legal-judicial way which assigns status and defines rights and responsibilities in relation to the state. Of course what constitutes citizenship is fluid and contested and it is worthwhile considering these as they do inform the different views the social actors interviewed here have of the democratic potential of the new ICTs.

According to Coleman (2009) citizenship can be understood in at least three ways: as a legal-judicial conception; as a political citizenship with the emphasis on actively influencing fellow citizens as well as the state; and, as an affective citizenship which works to encourage feelings of civic belonging. Coleman argues (2009, 5) that these conceptions are not mutually inclusive and each can be given “...different degrees of emphasis depending upon the political model of democracy that gives rise to them”. He describes a passive citizenship that emanates from an ‘incumbent democracy’ which, in his view, is a state-centric model where citizenship is conceived of in terms of its relationship to the state. In this model political participation by the citizen is mainly managed by the state within agreed parameters: elections; referendums and consultations. He contrasts this with a notion of democratic citizenship which largely rejects existing institutions, traditions and values and “...assumes that the space of governance emanates from the demos rather than constituting it. That is to say, the practice of democratic citizenship by people regarding themselves as a collectivity precedes any notion of a bounded political space to which they belong” (2009, 6).
There is clearly a tension between the different practices of citizenship these models engender with the latter less likely to feel obliged to engage in formal participatory relationships managed by state institutions. It is this tension that is captured by the Director of Manchester Community Information Network (MCIN) rejecting the normative view of local government and promoting the ‘democratic citizenship’ potential of the internet,

‘...the interesting one for me is that the 5 people in a discussion forum have created a group which can carry on afterwards, what its doing, the internet and Web 2 is doing, is it allows people to create relationships. I’ve heard this argument all the time from local authorities and I just think it’s naïve ‘it’s only 5 people what does it mean?’ Well it’s a collective voice and you’re just using different tools and techniques to hear the collective voice, it’s just bullshit no they’re not representative of the whole of the community but it’s part of the process and more importantly they are trying to engage you in dialogue’.

It is this tension that perhaps describes the political fault line between those actors interviewed here who considered it is the technology that needs to change or those that argue the problem lies with the nature of local government institutions. This was the view put forward by this PR executive:

‘for big difficult city region wide issues like this....there would have to be a totally different mechanism in place because it’s simply not reliable as any kind of governance mechanism....its faceless, its anonymous you don’t have to register to post on these sites if you open up any online area for comments on an issue like you will get deluged by antis ..if you want to involve 2.6 million people making a decision...... if you are going cast that in anyway as something you can dump online that requires a lot more thought ...if you use anything like the environment we were using then it leaves it wide open for abuse...’

An opposing argument was advanced by the Director of MCIN:
‘The core of the problem is that they don’t really want to know and they use excuses like it’s only 5 people,...... the question is what do they want to hear it’s like the ladder of participation where do they come on that? The bulk of my experience is that they want to inform they don’t want to empower....... they are 19th century institutions working in the 21st Century and it’s very hierarchical.’

Whichever of these opposing views proves correct, and the next section will examine the narratives for evidence of the potential for institutional transformation, it is clear that, in one form or another, there exists a shared view of the political potential of the new ICTs. One of the issues preventing this potential from being realised is a contested view on how online citizenship should be enacted locally. The notion that citizenship might be enacted differently online than off is congruent with Beck’s theory of reflexive modernity where the process of modernisation causes consequences that could not be foreseen. Moreover, how aspects of citizenship were enacted online in the congestion charge debate was antithetical, or reflexive in Beck’s conception of the second modernity, to modernist sensibilities of citizenship.

This discussion has sought explanations for the hyperlinking behaviour exhibited in the online congestion charge network in three areas related to the posed research questions, namely: in the broad perceptions of the role of the internet held by the social actors interviewed who contested the referendum campaign; in the ‘politics as usual’ discourse; and, in the competing views on how local online citizenship can be legitimately enacted. However these themes did not specifically address the role of the local government institution in the online network which is a key component of the first research question. Moreover, one of the curiosities revealed by the structural analysis was the propensity for homophily in the hyperlinking behaviour of the local government websites in the congestion charge network. This is interesting in itself but is further underlined by the fact so much, certainly in the form of inward financial investment for the region, was dependent upon securing a ‘Yes’ vote in the referendum. This does
raise the question of why local government in Greater Manchester did not appear to better exploit the online sphere during the campaign.

Accordingly, the remainder of this chapter will now focus upon another emergent theme from the narratives that suggests the institutional culture of local government may explain their particular hyperlinking behaviour. Such a focus will address the transformative implications of conducting local politics online associated with local governance. In doing so it touches upon the broader question, posed by Beck and Castells in Chapter One: of what kind of institution is fit to govern in this emerging network society?

One of the values in qualitatively investigating social phenomena is the facility it affords in capturing social actors’ reflections upon social change. Their narratives are not temporally bound, their discourses may roam over the past, present and future prospects of the subject in question. In this way they may reveal not only prevailing, potentially explanatory cultural norms but if and how these may be changing.

This can be instructive, as Castells’ (2009, pg 300) argues it is

...the interaction between cultural change and political change produces social change. Cultural change is a change of values and beliefs processed in the human mind on a scale large enough to affect society as a whole. Political change is an institutional adoption of the new values diffusing throughout the culture of a society.

In other words an examination of the particular culture context suggested by these narratives may shed some light on the relationship between new ICTs and the political and social transformation process.

**Institutional culture**

If political change, in Castells’ formulation, manifests itself in institutional adoption of widespread cultural values then it may serve to examine, first of all, those narratives provided by actors within local government.
An analysis from this perspective provides some insight into the local government institutional relationship with the new technology and in particular the new social media.

There were a number of comments from the actors associated with the local government sites that could be read as either indicative of general levels of unease with the new technology or reflective of the wider prevalent institutional culture within local government. It is worth noting here that this is a culture shaped by a very particular institution as described by Copus (2010) in Chapter Two. It is an institutional culture unique to that of other institutions active in the local governance domain. Moreover it is a culture that has been confronted, over the period of the last government, with continuous pressure to modernise and employ new technologies to change its relationship with business, the third sector and citizens. Given this it might be tempting to only associate these actor narratives with particular aspects of the new technology.

However, this self-reflective comment from the Deputy Chief Executive of Stockport illustrates that there is an institutional culture that would apply to any potentially transformative innovation and not just new ICTs, ‘I’m fighting shy about taking comments on the website.....I’m nervous ....maybe I’m too risk averse.’

She also clearly viewed any adoption of the new technology by the council in a similar way to which they would view any other new ‘line of business’, claiming ‘.....it has to prove it’s worth... don’t want to dive in just for the sake of using a new tool’. When it was put to her and her colleague that there were one or two councils that had been successfully using the new technology her response was that her council was ‘different’ and therefore the lessons to be learnt from other councils’ experiences was limited.

Similarly, the Web manager from Trafford Council, describing the way in which his team had implemented an online residents’ discussion forum, pointed to a wider prevailing council culture: ‘This was the only way we could move ahead and take advantage of the new technology and was a
way of getting the round the lack of appetite for trying new things, for change’. They had been allowed to develop the forum on the basis that it facilitated resident to resident communication but explicitly not a dialogue between council and resident. Unfortunately further development of the forum was hindered by the fact that the ‘...politicians are not interested-they are not aware that it exists’. A further comment from this officer is redolent with a cynicism that has perhaps been moulded by experience: ‘...the Council won’t change as an institution the culture is rigid and infested with a language that ordinary people don’t understand’.

These comments are attributable to officers who had worked for their respective councils for a number of years so it was interesting to compare these with the narrative provided by a newly appointed, and with no previous experience of local government, Director of Communications Trafford Council. She saw the problem of introducing new ICTs as twofold. Firstly, she did see cultural problems with the council ‘... stuck in the culture of press releases,’ reflecting a ‘one size fits all’ mentality where newspapers served as an approach to communicating with residents. It was also a hierarchical culture where levels of trust were directly proportionate to levels of seniority within the organisation and as a Communications Director eager to exploit the new social media this was a problem as

‘... staff are not allowed access to Youtube, Twitter, Facebook and that's a problem, the comms team are, senior managers and councillors are but generally no.....and that to me sends the wrong message ..as if to say we don’t trust people to do the job.. we want to engage with residents and it should be controlled and done for a reason ..but this is a barrier ..it’s really frustrating ..’

Secondly, she argued that there were also aspects inherent to the new technologies that caused difficulties and she had found people within the council who were ‘......talking about these tool without understanding them ..they don't use them and they don't necessarily know what social networking means and what it means is that you have to engage ..its not a on- off.....its not like doing a poster.....and this is a resources issue. You
have to be really careful ….really ..you know people are really cynical about social networking..... people do set up these things... who get on the bandwagon to promote something but then don't engage and its not like that for users - it’s an engagement process .it’s a networking relationship tool....’

This was a view supported by the Director of MCIN who runs a local not-for-profit organisation specialising in using social media to empower local communities. He argued that this lack of understanding was'.... pretty standard across all public sector agencies ..........its our biggest battle, people are not seeing it all and if they do they see it they see it in terms of social marketing rather than engaging with communities ....we have people in statutory agencies who are blinkered in their perspectives about consultation they don’t understand web 2, how it operates they don’t get it’.

Another view is provided by the Communications Officer for the GMPTE who seems to be suggesting a level of denial within local government about the potential impact of the new technology. In his opinion it represented '...... an important channel, it’s not something you should ignore, its such a massive part of communication nowadays ...it such an important part of the media nowadays... it’s probably the biggest media but ....nobody wants to really admit that ..’

The interview with this officer was instructive. The officer was charged with intervening in a number of online discussion forums, directed by the PR advisor hired by the GMPTE to monitor online traffic and discussion related to the referendum, within a strict remit to correct factual errors or as he put it 'to inform and educate’. He described his task was to monitor on a daily basis the '......MEN message boards, Facebook groups and there were... social network sites such as skyscrapercity....I intervened as 'TIFspokesperson’ but I didn’t get into any debates didn’t want to be seen pushing a Yes vote , we are public body and had to be strict, we had to address factual errors.'
There were, however, real problems with the fast moving, dynamic nature of the medium that he simply wasn’t equipped to deal with ‘…one of the problems was because the debates moved so quickly on the message board ..if somebody wanted to know the specifics about something I would have to go and get the information and it could take me 1 or 2 hours to respond by which time I would be asking people to go back 2 or 3 pages in the thread’. This comment perhaps illuminates the dilemma for all the local governmental institutions participating in this referendum. On the one hand they recognise the local political potential of the new media and this can be measured here by the considerable resources the GMPTE have applied to engaging with it. Yet on the other hand they remain organisationally incapable of responding to the lively, fluid nature of the medium.

These observations point to a disconnection between a risk adverse, hierarchical, local government culture and that of the emerging culture associated with the new technologies. This is culture generally characterised by its emphasis on non-hierarchical networking and relationship building which poses a qualitatively different level of engagement with citizens and communities to that previously engendered by local governments’ reliance on traditional communication channels.

However, the picture presented here is still a static one, a frozen collision of two cultures with little evidence to suggest that wider political and social transformation is likely. This scenario is probably best illuminated by the Deputy Leader of a local council commenting on the significance of the new ICTs, 'there are more people using the internet.... but I will take more notice of my auntie telling me something than some blogger I don’t know..’

It is, of course, not static and a closer examination of some of these narratives is revealing of a more dynamic and fluid cultural environment within local government suggestive of change occurring at the interface of the social and the technological. This is illustrated by the narratives of some of the more senior, both in age and rank, local government officers reflecting on how the new technology had influenced, and was transforming, their working environment and professional culture.
This effect was attributed to the changing demography of the workforce. Reflecting upon how younger members of staff had started to change the ‘office culture’, one officer remarked, ‘we’ve got people here who watch all their tv programmes from the iplayer so the office culture of chatting about the tv we watched last night is gone’.

More significantly these younger people, representatives, perhaps, of Tapscott’s (2009) net generation, brought with them political sensibilities, shaped by internet use, that, in the opinion of these officers, were starting to impact upon the way the council were choosing to manage their communications with their wider public. The Deputy Chief Executive illustrated this point,

‘…..a newspaper comes out and traditionally a lot of political people would look to that and look to the letter pages and see whether if anything is written about them, these days with the younger generation they seem less bothered about anything negative being written about you ..you know they go on to one of these blogs and they say - well they would say that, and, it’s whether in the minds of some of the politicians they can accept criticism and say well that’s just part of it because the younger people who work here seem to think it’s just normal –whereas for older people who’ve worked here it would be - we demand an apology..’

Moreover, the Director of Communications at this council saw a cultural shift occurring in the way that younger people were choosing to valorise information. Opinion was now ‘...linked less to authority figures, just because they say something doesn’t mean that it is necessarily true .... people are trusting their own instincts now based on their own experiences, or that of their friends.... people make their own judgement as opposed to accepting authoritative third party experts on things.’

And, increasingly, as Deputy Chief Executive noted, the new technology has profoundly altered access to friends where the notion of ‘...asking your
mates is not about the six people you meet for coffee at your lunch-break but an entire Facebook community’.

Whilst these officers did not describe it as such these comments are suggestive of a paradigm shift occurring in the cultural values and attitudes held by members of the council workforce. The extent to which these cultural values are being adopted by the local government institution is not at all clear from this research. It is undoubtedly the case that the significance of this new culture is something that is being considered seriously at a senior level in at least one local council as the following comment made by the Deputy Chief Executive reveals, ‘…… at one level you can treat blogging as an important tool, or is it just the same as 3 people in a pub having a conversation - and we have not resolved this yet – so do we have to start monitoring everything or is some of it like pub conversations or graffiti on the walls and you tackle it where you can but don’t get hung up about it, as at the end of the day it’s about free speech’.

It is also the case that some councils were prepared to experiment with the new technology during the referendum - but only at ‘arms length’. Examples of this are the way that one council established a Facebook group but did not brand it as a local council site. Similar to this was the residents’ online forum established to facilitate resident to resident communication but explicitly not designed to open a conversation between council and resident. However, these really are examples of local government institutions ‘dipping their toes’ in this new culture rather than a wholesale adoption of it.

It may serve to contrast this level of institutional engagement with how other actors in different institutions prominent in the congestion charge network viewed their engagement with the new technology. Here it was the local newspaper and the BBC who successfully employed the new technology to create a different level of engagement with their public. The following comment is from the journalist responsible for the BBC’s interactive map discussing his thinking behind using the map,
‘….literally in new territory we did not know how people would respond to
the map or the potential for people to abuse the map …. from July once we
knew were heading towards the referendum we were looking for a way of
trying to engage people of Greater Manchester in a big news story ….and
this idea of using MapTube came from a conversation with Manchester
University’s Department of e-social science ….and this could be our way of
allowing people to use the internet to interact with the story .....and how
we could try and take the temperature of what people were feeling.’

Similarly the print journalist reflecting on the reasons he had established his
blog which, to be clear here, was not his personal blog but him blogging in
his capacity as chief political reporter for the local newspaper, considered it
enabled him to discuss and present things that he couldn’t get in the paper;
it had made him more accountable; and, had helped to ‘combat scepticism
of the media through increased transparency’. Moreover, he had noted, ‘a
better more informed discussion on the blog’.

The television journalist also demonstrated a clear view on how his
institution had made use of hyperlinks. This is not to say that this was
absent from local government. Indeed 2 out of the 5 local government
actors interviewed acknowledged that their sites had purposefully linked to
sites from both sides of the debate. This is, of course, the reason why their
sites were prominent in the rendered network maps. Nonetheless this
journalist was unique in articulating quite a profound understanding of how
hyperlinks could serve an institution in mediating the online discourse:

‘I think it’s the way the internet works .....I have seen other websites who
only link to their own content and I don’t think that’s right ....it’s an
interconnected network of web links and that’s how I’d like people to use
our site ....you don’t sit in judgement ‘.

What is interesting about these remarks is that there is little suggestion of
any sclerotic institutional anxiety associated with using the new ICTs. The
television journalist did participate in editorial policy conferences where the
risks involved in using the new ICTs were discussed. They clearly chose to
manage the risks. It could be argued that within these media organisations there exists a happy marriage between a commitment to increase the involvement of their respective audiences in what was, as one of the journalists stated ‘…….the biggest story that had effected this area in a long while almost everybody had an opinion…’ and an understanding of the potential of the new technology to enable this involvement.

This is in marked contrast to the narratives of local government actors which evoke a prevailing institutional culture serving as a brake to adopting and fully exploiting the potential of the new technology to engage their citizens. They do, however, suggest this is a culture that is being confronted by emerging and very different values held by younger members of the workforce. Moreover, these are values that have possibly been shaped by the new ICTs, a view strongly argued by Tapscott (2009). Does this suggest a local government institution in political transition, if not political transformation, and, moreover, a shift enabled by the new technology? Perhaps the last words here should be provided by the Director of MCIN:

‘At the moment I don’t think this kind of stuff has been around long enough to make an effect we are tiptoeing through it and from what I’ve seen it’s generally seen as ‘nice to have’ …….it’s them [local authorities] saying look what we have done and it’s not genuine from their point of view yet, but in 10 years time when more people are accessing it and see how powerful it can be then……..

Conclusion

The purpose of this chapter was to present an analysis of actor narratives to draw out institutional use of the online network and also to highlight any distinct usages of the network made by those contesting the campaign. It also revealed emergent themes which point to explanations not only for distinct structural characteristics in the online social relations described by the statistical model of the hyperlinked network, but also for the actor perceptions and uses of the online network as captured in the narratives.
The structural analysis revealed that there were structural links within the online network that were, in Benkler’s (2006) terms ‘good enough’ to link divergent views across the network. However the analysis also highlighted a distinct homophilly effect in online social relations. This effect was most pronounced within local governance websites, which were more likely to link to similar websites, and those websites deploying web 2.0 applications which were also most likely to link to sites with similar attributes. This analysis suggested two distinct online communities sharing information within but not between the communities. By contrast the websites most likely to link to sites dissimilar from themselves were the non-governmental and media websites.

A study of the narratives from social actors, identified as prominent in the online network, has revealed a number of candidate explanations for these particular online social relationships. Invariably the local government actors and those associated with the ‘Yes’ campaign displayed, at best, ambivalent attitudes towards the political significance of the internet and in particular the new social media.

By contrast the leading ‘No’ campaigners appeared to establish an effective online presence. This was done in two ways. Firstly, the business–led GMMGroup was able to draw upon resources to establish two websites, one for the business community and one aimed at a more ‘populist’ campaigning audience and significantly both were optimised for search engines. Both sites were very much Web 1.0 broadcast sites but the search engine optimisation is likely to explain the hyperlinking strategy of these sites and their links to other sites dissimilar from themselves. Secondly, the activist associated with the manchestertolltax website effectively used the new social media to disseminate their campaign information. He intervened into online discussion forums, described as significant by the PR executive who had monitored online traffic for the GMPTE, and a Facebook site comprising 17,000 members. He chose to strategically insert information, or as he described it ‘dropping hand grenades’, into these sites with a view to this having a ‘ripple effect’ across other social media sites.
Use and views of Facebook appear mixed. As acknowledged in the last chapter, the VOSON software used to capture the online network is likely to have underestimated the prominence of Facebook in the online network. Nonetheless, the narratives captured here do reveal that it was used to mixed results by the by the various stakeholders involved in the referendum campaign.

This No campaigner also put forward one potential explanation for why web 2.0 sites were unlikely to link to sites dissimilar from their own, and in particular governance sites. This was lack of trust in the information on governance sites such as gmfuturetransport.co.uk. "The bottom line was that people felt that they couldn’t trust what was being said and then when the Ofcom verdict came in that was it …bang, they gave up…..nobody believed it was neutral site anyway ..there was an awful lot of gerrymandered statistics’. This explanation was echoed by prominent ‘Yes’ campaigners who felt that ‘lack of trust in the political class’ was a factor that undermined the effectiveness of their campaign.

Trust, or lack of it, was also a component part of a likely explanation behind why local government sites were generally reluctant to engage with sites hosting web 2.0 applications. The anonymity, or fluidity of identity, of many participants in online discussion forums proved difficult for locally elected representatives or local government officers to assign political value or significance to this participation. This in turn suggested a conflict of views between local governance and proponents of a more ‘democratic citizenship’ over what constitutes a legitimate enactment of local online citizenship.

Of course local government is uniquely defined by its dual remit to promote local democracy and to deliver public services. Unfettered by the former, traditional media organisations, by way of contrast, made effective use of the interactive affordances provided by the new media to innovatively engage with their audience, possibly finding new audiences amongst the ‘net generation’ who are increasingly turning to the ‘space of flows’ for their information. In this way, and in the ways in which they translated notions of
balance into a hyperlinking strategy that seeks to engage all sides of the debate, they are possibly mediating the message online as they do off.

All this does amount to a ‘politics as usual’ scenario with the usual suspects, big business and the traditional media, dominating the online discourse. It is moot if the nationally governing political party, the Labour Party, would have made a triumvirate of the usual suspects had it not been for the localised, politically divisive nature of the referendum. The activists who most enjoyed the new media, those associated with the manchestertolltax campaign, possibly buck this scenario. The activist representing this campaign portrayed himself as an ‘ordinary’ citizen who had to climb a steep learning curve to familiarise himself with campaigning techniques in the media age. In this sense and the way in which he used the internet speaks to Norris’s (2001) view of the technology providing a ‘level playing field’ for those political activists who would not get the same access to the mainstream media as other more well established and resourced politicians. However, this view is strained by his own admission that he was supported by some of the business interests behind the GMMgroup and by the national drivers lobby, the Association of British Drivers.

While the evidence presented here does tend to point to ‘politics as usual’ prevailing in this local online congestion charge network it also suggests an ICT enabled change is occurring within the institutional culture of local government. Narratives from senior local government officers revealed a culture amongst the younger members of staff distinct from that of the senior – in age and rank- officers. This culture chimed with that of the ‘net generation’ characterised by Tapscott (2010) who argued that this generation, who had ‘grown up digital’ subscribed to a set of norms shaped by their use of ICTs. Whilst all the ‘net gen norms’ described by Tapscott were not present in the officers’ narratives it was apparent that their immersion in the new technologies meant that they had skills in evaluating online information and engagement that their seniors simply did not possess. All this points to the potential for greater ICT enabled transformation in the local governance domain should these cultural values of the net generation become those of the local government institution.
However, in Tapscott’s opinion this is only a matter of time and demographics before the net generation transforms society in a way that is more democratic, pluralistic and open. This linear and seamless transition fits uncomfortably within Bhaskar’s framework for transformation which suggests a dialectic interaction between agency and structure the outcome of which may well be transformative but cannot be guaranteed to lead to a more socially open and democratic society.
Conclusion

Introduction

This thesis was introduced by journalistic commentary reflecting upon the Internet’s potential to “…..revolutionise the very meaning of politics” (Freedland, 2007). If this is the case then due consideration must be given to the capacity of the World Wide Web, sitting on the Internet, that has enabled ordinary individuals to communicate and access a range of information which is historically unprecedented. Moreover, the Web remains non-proprietary and, setting aside issues of access to the technology, anyone can use the Web and put information on it. And they do - in vast numbers, in different ways and for different purposes (Hindman 2009, Dutton et al, 2009, Tapscott 2010). It is this quantity and type of usage that has fuelled expectations that the technology may, if not deliver then, make possible a transformation in the ways in which contemporary politics is conducted and managed. Such expectations have converged with a growing disillusionment and lack of trust amongst the general public, particularly in liberal democracies such as the UK, with the traditional political process and associated governance institutions (Stoker, 2006). In the accounts of those interested in democratic renewal (see for example: Castells 2009, Coleman, 2009, Benkler, 2006) the technology may provide a platform for a political transformation that permits the voiced concerns of the ordinary citizen to prevail over those of traditional political elites and vested economic interests that have historically combined to deliver ‘politics as usual’ (Margolis and Resnick, 2000). The conceit in these accounts is that the Web’s hyperlinked network may allow, with (Coleman, Hindman) or without (Benkler) policy intervention, the ordinary citizen’s voice to transcend this ‘politics as usual’ scenario and be heard by those in power. Utilising Habermas’s public sphere, as a normative concept, they argue that the Web can deliver a networked public sphere that not only serves to transform the private individual into a political actor but also provides a
technologically enhanced communication link to the public authority of the day.

Significant empirical research (Benkler 2006, Hindman, 2009) into the potential of the Web to aid democratic renewal through delivering a networked public sphere has produced contradictory results. Moreover, there has been no research, particularly at the local level, that attempts to empirically ground Coleman and Blumler’s (2009) notion that such a online networked public sphere could be developed within contemporary notions of networked governance. As such, this study has embarked upon an investigation into the prospects for an online networked public sphere enhancing the democratic relationship between the citizen and local governance in the UK.

This investigation is marked not only by its attempt to address this gap in empirical research but by its deployment of innovative techniques for research hyperlinked networks. In contrast to previous research (Benkler 2006, Hindman, 2009) into networked public spheres that have analysed the distribution of hyperlinks this study employs Relational Hyperlink Analysis (Lusher and Ackland, 2009). This is a technique that applies a statistical model associated with Social Network Analysis to the hyperlink network in question. Its particular facility is to foreground the hyperlink as a social connection and not just an indicator of visibility and popularity. In this way it may afford a greater political understanding of why the network is structured or linked as it is. To complement this statistical analysis a number of semi-structured interviews were conducted with a set of actors. These actors were associated with websites identified as prominent in the hyperlink network by drawing upon Howard’s (2003) Network Ethnography approach. The purpose behind these interviews was to provide a narrative which could explain not only why the network under investigation existed as it did but also provide an insight into the political constraints and opportunities associated with developing a local, online, networked public sphere.
This concluding chapter will summarise the research approach, answer the posed research questions and comment on the particular methodology and research methods that were applied in the course of this empirical investigation. Finally, as this study was located in the policy context of the UK Government’s relatively recent promotion of local e-government and e-democracy and the continuing emphasis on ‘localism’ it will comment upon the policy implications of the research findings.

**Research summary**

There is a social, political and economic context which illuminates the research question pursued by this thesis. This context is drawn from two of the leading theorists on societal transformation in the post-industrial age. It is, for the purpose here, immaterial whether one agrees with Castells’s theory of social change driven by an ICT enabled network society or Becks’ view that it is modernisation itself, which includes the adoption of new technologies, that is rupturing the social, political and economic certainties that characterised modern life in industrial society, or even Lash’s argument that the two theories are in fact congruent and that Beck’s theory of “...reflexivity in the second modernity is profoundly socio-technical”. The purpose here was not to offer a definitive proof of any these ideas rather it was to provide a narrative of social, economic and political transformation that captures not only the key concepts that occur in this thesis but registers the centrality of the role technology, namely the internet and more specifically the World Wide Web, may play in these changes.

Such meta-narratives often suffer from hyperbole so it was important to ground the theories in empirical evidence that sought to measure the scale of citizen disenchantment within contemporary liberal democracies and particularly that of the UK. These generally discounted the idea that there existed a crisis in this democracy but nonetheless there was cause for cause around the variable rates of citizen engagement with the political process. Alongside this a number of academic commentators considered ICTs, and by implication the network society, to be part of any potential policy solution to this problem.
There are also a number of ways in which the ideas of the political scientists resonate with the meta-theories of transformation. When Stoker (2006) describes the complexities and uncertainties of contemporary politics that serve to make politics difficult for the ‘amateur’ he is echoing Beck’s unanticipated consequences of modernisation. When Stoker also argues that this complexity is compounded by the shift in public authority from the Westminster model to one of governance by and through networks that serves to blur the distinction between public and private he is, again, reflecting Beck’s idea of a ‘de-normalisation’ of institutions where boundaries and regulations become hard to discern. The notion of a contemporary public sphere is interesting in this respect suggesting as Calhoun (1993) points out that it must address the problem of political identity or how a political community is constituted.

This chimes with how both Beck and Castells see the political significance of geographical localities being transformed by a globalised, networked society. This can, and indeed is, facilitated by the World Wide Web, the space of flows, which can privilege communities of interest over communities of place. Interestingly, as Polat and Pratchett (2009, 193) have observed “the technology is often enacted in ways that are explicitly local in their focus, with the potential to enhance rather than undermine localities”. Moreover, it is communities of place, national or local, and the public authority vested in these places that have historically defined, in Habermasian terms: ‘the public’. Furthermore, according to Habermas, it is the public sphere that served to transform members of the public into political actors or citizens or political communities. It is this politically transformative function of the public sphere that is, arguably, one reason why it survives as a normative concept, particular amongst those interested in democratic renewal.

One further reason is that a number of these commentators have recognised the potential in the new technology, and particularly the Web, for transforming democratic engagement by providing the structure for a new, networked public sphere. It is this potential that marks the research focus of this thesis.
The networked public sphere and Local governance

There is now, according to Dutton (2009), a critical mass of people using the internet the political implications of which are still to be fathomed if not contested. Dutton argues that this critical mass of users is politically significant in that this level of usage is the minimum required to support his conception of the Internet as a new political sphere of influence, a Fifth Estate in society distinct from the Fourth Estate traditionally provided by the mass-media. Whilst this research is pursuing a slightly different agenda to that of Dutton’s his argument around the significance of a critical mass of Internet users is empirically relevant. As also is the research presented by Benkler (2006) who contends that the Web is a vehicle for a networked public sphere which can challenge traditional sources of political authority and power.

Hindman (2009) on the other hand has presented evidence to the contrary, which shows, echoing Margolis and Resnick (2000), that the structure of the Web favours the political discourse of traditional elites and economic power. Nonetheless, research to date into the potential of a networked public sphere has ignored the potential of a local networked public sphere developing in the context of local government e-democracy initiatives and those promoted by local citizens themselves, particularly through the Web 2.0 applications. In other words there is a dearth of research at a local level that seeks to empirically ground Coleman and Blumler’s (2009) argument that a Web enabled networked public sphere might exist within the context of modern networked governance.

This posed a number of research question questions to be empirically investigated:

(i) Does such a local political online space exist as a Web enabled networked public sphere capable of facilitating communication or discourse on civic issues between local government institutions and the wider civic society?
(ii) How do local civic stakeholders view or exploit this space?
(iii) Are there transformative implications of conducting local politics in this space?

The working assumption being that for a local networked political sphere of influence to exist as a public sphere it should display the following characteristics:

- it will not exist as a single unified entity but as a number of interlinked politically relevant Web sites;
- there should be links to local government, the decision making process or the public authority; and,
- there should be links to opposing views to enable an informed discussion on the issue in question.

**Research philosophy and design**

A critical realist research philosophy permits a mixed method approach to be applied to this research question. It also enables alternative views such as technological determinism to be discounted in explaining how social change can occur as a consequence of the relationship between technology and society. A rare and unique opportunity, namely the referendum on the Manchester congestion charge, was presented as a single case study within which to investigate the online local networked political sphere of influence associated with this referendum. This case study is particularly relevant as it provides a context where local civic and political actors are contesting an issue developed and promoted by local government.

To address the stated research questions in this context a particular approach to researching the internet or more specifically the Web was required. An innovative variant of Hyperlink Network analysis, Relational Hyperlink Analysis (RHA), was the method chosen to research the Web in this instance. Unlike other methods, Webometrics or the network science approach as used by Benkler and Hindman, RHA allows hyperlinks to be viewed as social connections as opposed to just indicators of website
popularity or visibility. This technique can privilege the evaluation of links made as a consequence of website attributes. This may enable a greater understanding of why sites may be more prominent in the online network and, moreover, why sites with particular attributes may drive or inhibit the development of a local online networked public sphere.

RHA is presented as a particular technique to map and analyse the online network associated with the Manchester Congestion charge referendum. What it will not do is discern any offline influences, if any, on the online network. As such aspects of a Network Ethnography approach were chosen as a way of identifying subjects for a more qualitative investigation. Both of these methods draw upon Social Network analysis and one of the abiding methodological problems with network analysis is defining the boundary of the network under analysis. The approach adopted here is to conceptualise the network under investigation as a ‘network domain’ and define the boundary(ies) of the online network by both website attribute and actor narrative. This enabled the network to be explored, and evidence captured, the provided a deeper understanding of the influences that shaped or constrained the development of a local online networked public sphere.

**Applied research**

In exploring the political significance of the online network associated with the Manchester Congestion Charge referendum the utility of the particular software associated with RHA, that of VOSON and PNet, were highlighted.

The captured hyperlinked network was visually mapped at the beginning and close of the referendum and then graphically described on a range of Social Network Analysis measures. This analysis has revealed a dynamic and fluid network with some sites growing in prominence by the end of the referendum. Perhaps the most revealing insight presented by this mapping exercise was the existence of a range of different sites with divergent views on the congestion charge debate referencing or linking with more authoritative sites, particularly governance sites, on this topic. This, of course, suggested the possibility of a local online networked public sphere.
existing in this context. This networked data was subjected to Exponential Random Graph modelling, the results of which revealed a distinct homophily effect within the network particular in relation those sites with governance or Web 2.0 attributes. This finding tended to discount the possibility of individual’s private networks linking in a ‘bottom up’ fashion with the more institutional governance networks. However, the modelled data also revealed that sites with non-governance or media attributes were linking to other dissimilar sites suggesting some linking to divergent views on the congestion charge debate.

This analysis has revealed that this is a network where hyperlinking behaviour was more likely to have been driven by a desire to engage with site content rather than the particular structure of the network. What it has not done is explain why this should the case. Why, for example, are governance sites more likely to only link to other governance sites? What can explain, particularly in the context of many years of state subsidised e-government and e-democracy initiatives, such hyperlinking behaviour. Similarly, why would users of Web 2.0 enabled sites not, in the main, link to the governance sites? It was in the expectation of answering such questions that a method drawn from a network ethnography approach was applied to the network data to help identify key civic and political activists associated with this online network. This enabled semi-structured interviews to be conducted with these activists with the aim of gaining a greater understanding of why the network exhibited such structural properties but also the political constraints and opportunities associated with engaging in this online network.

Discussion

A study of the narratives from those social actors, identified as prominent in the online network, has revealed a number of candidate explanations for the particular online social, or hyperlinking, relationships described above. It was of interest, given the publicity afforded to Obama’s innovative use of the internet during his campaign for presidential nomination just prior to the TIF referendum, to discern how these actors viewed the role of the internet
in their respective campaigns. Invariably these actors displayed, at best, ambivalent attitudes towards the political significance of the internet and in particular the new social media. The internet was seen very much as ‘a secondary medium’ during the campaign with more traditional campaigning media: posters; beer mats even, being seen as more effective. Nonetheless, this prevailing attitude did not prevent leading ‘No’ campaigners, in particular, from establishing an effective online presence. This was done in two ways.

Firstly, the business-led GMMGroup was able to draw upon, allegedly significant, resources to establish two websites, one for the business community and one aimed at a more ‘populist’ campaigning audience and significantly both were optimised for search engines. Both sites were very much fashioned as Web 1.0 broadcast sites but the search engine optimisation is likely to explain the hyperlinking strategy of these sites and their links to other sites dissimilar from themselves. Secondly, the activist associated with the ‘manchestertolltax’ website effectively used the new social media to disseminate their campaign information. He intervened into online discussion forums, described as significant by the PR executive who had monitored online traffic for the GMPTE, and developed a Facebook site comprising 17,000 members. He chose to strategically insert information, or as he described it ‘dropping hand grenades’, into these sites with a view to this having a ‘ripple effect’ across other social media sites.

This activist also put forward one potential explanation for why web 2.0 sites were unlikely to link to sites dissimilar from their own, and in particular governance sites. This was lack of trust in the information on the main governance site, gmfuturetransport.co.uk, ‘The bottom line was that people felt that they couldn’t trust what was being said and then when the Ofcom verdict came in that was it …bang, they gave up…..nobody believed it was neutral site anyway ..there was an awful lot of gerrymandered statistics’. This explanation was echoed by prominent ‘Yes’ campaigners who felt that ‘lack of trust in the political class’ was a factor that undermined the effectiveness of their campaign.
Trust, or lack of it, was also a component part of a likely explanation behind why local government sites were generally reluctant to engage with sites hosting web 2.0 applications. The anonymity, or fluidity of identity, of many participants in online discussion forums proved difficult for locally elected representatives or local government officers to assign political value or significance to this participation. This in turn suggested a conflict of views between local governance and proponents of a more ‘democratic citizenship’ over what constitutes a legitimate enactment of local online citizenship.

Of course local government is uniquely defined by its dual remit to promote local democracy and to deliver public services. Unfettered by the former, traditional media organisations, by way of contrast, made effective use of the interactive affordances provided by the new media to innovatively engage with their audience, possibly finding new audiences amongst the ‘net generation’ who are increasingly turning to the ‘space of flows’ for their information. In this way, and in the ways in which they translated notions of balance into a hyperlinking strategy that seeks to engage all sides of the debate, they are possibly mediating the message online as they do off.

All this does point to a ‘politics as usual’ scenario with the usual suspects, big business and the traditional media, if not dominating, then mediating the online discourse. It is moot if the governing political party, the Labour Party, would have made a triumvirate of the usual suspects had it not been for the localised, politically divisive nature of the referendum. The activists who most enjoyed the new media, those associated with the manchestertolltax campaign, possibly buck this scenario. The activist representing this campaign portrayed himself as an ‘ordinary’ citizen who had to climb a steep learning curve to familiarise himself with campaigning techniques in the media age. In this sense and the way in which he used the internet speaks to Norris’s (2001) view of the technology providing a ‘level playing field’ for those political activists who would not get the same access to the mainstream media as other more well established and resourced politicians. However, this view is strained by his own admission that he was supported by some of the business interests behind the
GMM group and by the national drivers lobby, the Association of British Drivers.

While the evidence presented here does tend to suggest that it is ‘politics as usual’ prevailing in this local online congestion charge network it also hints at an ICT enabled change may be occurring within the institutional culture of local government. Narratives from senior local government officers revealed a culture amongst the younger members of staff distinct from that of the senior – in age and rank- officers. This culture chimed with that of the ‘net generation’ characterised by Tapscott (2010) who argued that this generation, who had ‘grown up digital’ subscribed to a set of norms shaped by their use of ICTs. Whilst all the ‘net gen norms’ described by Tapscott were not present in the officers’ narratives it was apparent that their immersion in the new technologies meant that they had skills in evaluating online information and engagement that their seniors simply did not possess.

All this points to the potential for greater ICT enabled transformation in the local governance domain should these cultural values of the net generation become those of the local government institution. However, in Tapscott’s opinion this is only a matter of time and demographics before the net generation transforms society in a way that is more democratic, pluralistic and open. This linear and seamless transition fits uncomfortably within Bhaskar’s framework for transformation which suggests a dialectic interaction between agency and structure the outcome of which may well be transformative but cannot be guaranteed to lead to a more socially open and democratic society. In this context it is worth noting that the leading ‘net gen’ company is Google who collaborated, until 2010, with the Chinese Government in restricting Chinese citizens’ access to information available on the internet.

**Response to the research questions**

To conclude then and highlight the academic contribution of this research by responding to the questions this research addressed. Firstly: does such a
local political online space exist as a Web enabled networked public sphere capable of facilitating communication or discourse on civic issues between local government institutions and the wider civic society?

In the light of the evidence presented here it is difficult not to be equivocal in answering this question. Whilst it would be tempting to accede to the binary opposition of cyber-pessimist or cyber optimist that have characterised much research into the relationship between the Internet and politics the results here do point to a more nuanced position. On the one hand the results from the quantitative analysis, the network maps in particular, suggest that the online congestion charge network structurally satisfied the defining characteristics for a networked public sphere, namely:

- it will not exist as a single unified entity but as a number of interlinked politically relevant Web sites;
- there should be links to local government, the decision making process or the public authority; and,
- there should be links to opposing views to enable an informed discussion on the issue in question.

The network maps (Figures 7 and 9, Chapter Four) show clear linkages between a number of politically relevant websites. These include links to governance sites. There are also links between sites of divergent views and of those with dissimilar attributes. Of particular interest here are the links between the sites with Web 2.0 applications, and the authoritative local governance sites. This suggests that the network is facilitating a connection with the public authority (Sparks, 2001) and private individual’s networks are linking to the more institutional governance networks (Hermida, 2010).

All this does appear to satisfy the above defining structural characteristics of a networked public sphere. However, it is likely that this is not a particularly robust network as is indicated by the measures of network density, closeness and betweenness (see Table 2, Chapter Four). These measures demonstrate that it is likely that the network is dependent upon on or two key sites for maintaining the linkage in the network. In other words if these key sites choose not to maintain certain links then the network could
fragment. The ERG modelling supported this view demonstrating that it was, in all likelihood, a small number of Media and NGO sites that linked the network together. Moreover, while one or two Web 2.0 sites did link to the authoritative governance site the overall tendency was for these sites to link to other similar like minded sites. Indeed, the model showed that this was also predominantly true for most governance sites. In other words characterising this network are two distinct online communities which, in general, do not link to each other. This function is served by one or two other sites not part of either of these communities. This can be seen as conforming to Benkler’s (2006, 239) account of the Web’s network topology yielding “... a more attractive democratic discourse...”. As you may recall in his view the ordinary citizen’s opinion could be filtered and refined through small online clusters of websites of like minded ‘communities of interest’. Importantly, the links provided by the overall network topology would be ‘good enough’ to ensure that there were links between such clusters and those sites attracting the most links in the network to enable this opinion to made more widely visible. From this perspective then it appears that the structure of this network might afford a local online political sphere of influence resembling a networked public sphere.

However, the response to the second question this research posed reveals a different picture. The narratives provided by the social actors associated with the online network revealed the extent of the role played by vested economic interests and the traditional media in the online congestion charge network. The extent of this influence on this online political sphere probably militates against a view being adopted that this sphere comprises a networked public sphere in the sense that it was envisaged by Habermas (1989) and, latterly, Coleman and Blumler (2009). In these accounts a public sphere, networked or not, should be independent of such influences if it is to function in transforming private individuals into political actors or citizens.

It is moot of course how idealistic this vision of a public sphere is and certainly Dutton (2009) has dismissed it as a ‘romantic’ ideal. However, it is the extent of the influence wielded here that is most problematic. The
narratives reveal how traditional media outlets such as the BBC which, notwithstanding its public service remit, actively sought to engage in the online debate on the congestion charge in ways that were contested by others activists. This was particular true of the interactive map the BBC ran. Similarly, the other significant regional media outlet the Manchester Evening News was also pro-active in the online debate – again in a manner that was contested by activists. Additionally the narratives revealed the extent of the economic interests supporting both the ‘No’ and the Yes’ campaigns. It appears from the evidence presented here that it was the business interests behind the ‘No’ campaign that perhaps had the most influence on the online network directly supporting two websites: the GMMgroup site and the ‘stopthecharge’ site and indirectly supporting one other, the ‘manchestertolltax’ site.

A counter weight to this influence might have been provided by the local governance sites. Apart from some notable exceptions the majority chose not to link to sites other than governance sites. In this way they were not seeking to engage their online traffic in the wider debate on the congestion charge and not exerting any real influence on the online network. Moreover, they had little awareness of the Web as a potential political network. When shown the network maps they were invariably surprised and or disappointed at their websites lack of prominence in the network.

This is a curiosity given the notion of legal balance they are expected to aspire to in such publicity campaigns and the extent of the policy and resource commitment expended by the UK government, certainly between 1997 and 2006, on the local e-government and e-democracy programme. There are a number of possible explanations for this. One, provided by Pratchett (1999, 2006) is that the e-democracy programme was a ‘poor relation’ to the e-government programme of electronically delivering mainstream public services. This manifested itself in the absence of bespoke local government strategies to deliver e-democracy. As Copus (2010) explains this is a function of the particular structure of English local government where its democratic remit has historically been subservient to its responsibility for public service provision. Another possible explanation
arises from the politically divisive nature of the congestion charge proposal and referendum. There was not a consensus amongst the ten local government authorities within the Greater Manchester sub-region. Nor was there a consensus of opinion within the Labour or Lib-Dem Parties, either locally or nationally. The Conservative Party appeared to be united in opposition to the proposal. In this context it was perhaps politically safer, as one council officer acknowledged, for their websites to engage as little as possible in the issue. The other, perhaps more convincing, explanation, arising out of the narratives is that local government was on the whole ill-equipped to engage in this medium. This was evidenced in two areas. The first is straightforward – there is a resource requirement for engaging meaningfully in online discourse. Many local government authorities did not have access to, or did not wish to find and this will lead us into the second area, such resources.

An example of what in hindsight was a half-hearted attempt to resource an online engagement with people discussing the congestion charge was provided by the communication officer at the GMPTE, the governance body charged with promoting the TIF proposal. This officer was tasked, as part of his job, to intervene into online discussions to ‘educate and inform’. However, by his own admission he often had to leave a discussion and search the GMPTE to uncover relevant facts to enable him to ‘educate and inform’. Of course by the time he had returned to the online forum the discussion had moved on three or four pages and his intervention was irrelevant. In other words the GMPTE had not really thought through or properly resourced this online engagement.

The second area where local government was ill-equipped was in its cultural empathy with the medium. It was apparent from the interviews with senior local government officer and local politicians that at best they were grappling with the political significance of online engagement and at worst they were dismissive of it as an ‘immature’ technology that privileged anonymous and abusive correspondence. Given this lack of empathy it is unsurprising that resources were not directed to support more online engagement.
So the narrative here is revealing. If such a networked public sphere exists in the sense that there were some structural links between governance sites and other dissimilar sites, including Web 2.0 sites and sites with divergent views, it is unlikely that the local governance authority, the decision making body, is really equipped to meaningfully exploit such links. In other words these are formal links that have little political relevance in this context.

The formality of these links is further underlined by narratives from those actors who were active in the online discussion forums, and Social network sites. These underline the distinct homophily effect between Web 2.0 sites found by the ERG model. They provide evidence that even where some links might have existed between different online communities and divergent views these activists tended to stay within those communities that reflected their interests. Indeed, venturing into communities with divergent views was problematic as one activist commented ‘I posted twice but they hunted in packs on there and you were never going to convince them of anything’.

Moreover, it should be emphasised that these online communities of interest were popular sites colonised as they were by supporters of one side or the other. The discussion thread on skyscapercity.com (see Appendix 5) a site colonised by supporters of the ‘Yes’ campaign had over 6,000 posts on the congestion charge by the close of the referendum. The Manchester Evening News site colonised mainly by supporters of the ‘No’ campaign was equally popular as one activist commented ‘the online responses to the MEN would kick off and go on for hundreds and hundreds of post and wouldn’t stop’.

The one online space that did offer some debate was that provided by the blog of the Chief Political journalist for the Manchester Evening News. This was something of an ‘elite’ space characterised as it was by participation from leading political actors from both sides of the campaign. The exclusivity of this site was enhanced, and the quality of the debate marginalised, by its low level of links to other sites - a shortcoming acknowledged by the journalist.
In sum then the evidence presented here describes an online local networked public sphere existing in a formal structural sense, that is, there may well be ‘good enough’ links between sites of divergent views and local governance sites. However, it is difficult to conclude from the narratives that it served as a networked public sphere for the actors associated with it. Private individuals did not as a rule engage with divergent views available to them and local government was ill-equipped to grasp and acknowledge the political significance of online engagement within the hyperlinked network.

The third and final research question queried what the transformative implications of conducting local politics in this space might be. The evidence provided by this study suggests that the major implication for conducting local politics in this space may flow from the requirement to address the question of what constitutes a legitimate enactment of local citizenship online.

This study revealed a tension around this issue between local government, who generally struggle with the anonymity and fluidity of identity associated with much online engagement, and civic actors who see the potential for the technology increasing political engagement with local government. This tension was best captured in the following comments.

This from a senior local government officer,

‘it’s a new tool but ...internet can be anonymous so in those {online} debates we were talking about do you have 200 people or 5 people under 20 different names? So it’s difficult to assess the importance of it or the audience you are reaching’.

And this from a local community activist,

‘……..the interesting one for me is that the 5 people in a discussion forum have created a group which can carry on afterwards, what its doing, the internet and Web 2 is doing, is it allows people to create relationships. I’ve
heard this argument all the time from local authorities and I just think it’s naïve ‘it’s only 5 people what does it mean?’ Well it’s a collective voice and you’re just using different tools and techniques to hear the collective voice, it’s just bullshit no they’re not representative of the whole of the community but it’s part of the process and more importantly they are trying to engage you in dialogue’.

This empirically underlines arguments made by Polat and Pratchett (2009, 204) who observed “there is a significant disjuncture, therefore, between the way in which local governments are seeking to enact citizenship and the ways in which citizens themselves are realising their own political efficacy online”.

This disjuncture, as has been demonstrated here, remains a real obstacle in using the technology for purposes of local democratic renewal.

The problem lies with the normative conception of citizenship held by local government and how this increasingly fails to acknowledge the extent and diversity of the local population and how this population may choose to enact their citizenship online. Leaving aside issues of multiple identities potentially claimed by transient and migratory workers there are those - 3.5 million according to the House of Commons Library (Stratton 2010) - who simply choose, for a variety of reasons, not to claim one dimension of this normative view of citizenship by not completing the electoral register.

This problem can be seen in the wider context of the emerging post-industrial society discussed in Chapter One. In the accounts presented there (Hirst and Thompson 1992, Urry, 1999, Beck, 1999, 2000, 2002,) one consequence of globalisation is that identity, belonging and, ultimately, citizenship have become uncertain in an age where national geographic borders are increasingly porous and the nation state struggles to remain sovereign over its economic, social and political affairs. This uncertainty, as Castells (1996, 1997, 1998, 2009) has argued, may be amplified or reconciled through social and political use of the new technology enabled informational paradigm that comprises the global network society.
Interestingly the ‘local’ - as opposed to the global- , has, for Castells and Beck, a particular significance. In their uncertain technologically enhanced post-industrial world, the ‘local’ appears to act as something of a democratic weathervane. If localities can become part of this globalised network society or take on a ‘rooted cosmopolitanism’ then society as a whole may avoid a dystopian future marked by increasing concentrations of wealth in global metropolises surrounded by a hinterland of economic and politically insignificant localities. The ability of localities to evade this dystopia may increasingly depend upon their capacity to democratically renew themselves and collectively engage their diverse local population in pursuing appropriate policies to strengthen their communities.

This is a complex task and local government in the UK has been assigned a leadership role in developing cohesive and politically engaged communities by successive governments (see Communities and Local government, 2008 and Pickles, 2010). However, there is an opportunity for local government to use the technology, the Web, to enable local democratic renewal and help retain the political significance of the local in this globalised context. This opportunity is evidenced by an increasing majority of people, certainly in the UK (Dutton et al, 2009) turn to the ‘space of flows’ for information on government service and policy. It is also evident in the development of community owned hyper-local websites (Tucker and Arnot, 2010).

There is, moreover, evidence presented from this thesis’s study and elsewhere that there is an institutional appetite, albeit tentative, for using the technology to engage with local populations. The current practice by some local government authorities (Azyan, 2010) to turn to engage with the hyper-local websites is one indication of this and potentially a recognition within local government that it may have to forgo a ‘top-down’ institutional approach to communicating with its population and participate in the virtual spaces already occupied by the communities.

It remains to be seen, and should be part of an ongoing research agenda, the extent to which these developments will lead to the re-conceptualisation of local online citizenship. From a local governance perspective the extent of
this re-conceptualisation will probably depend upon how it wishes to engage with its local population. As the community activist observed (see Chapter Five for full interview):

‘The core of the problem is that they don’t really want to know and they use excuses like it’s only 5 people,...... the question is what do they want to hear it’s like the ladder of participation where do they come on that? The bulk of my experience is that they want to inform they don’t want to empower...... they are 19th century institutions working in the 21st Century and its very hierarchical.’

If it is the case then that local governance is participating in these community virtual spaces with a view to inform and consult then they may be able to afford a broader conception of citizenship. If however they are intent on engaging these communities in a local democratic decision making process then issues of identity and citizenship must come to the fore. This is not an easy task but is one that needs to be resolved in such a manner that acknowledges the diverse and often transient nature of local populations but nevertheless preserves the integrity of a physical attachment to the locality. This is because localities, even in a globalised network society, remain significant, at least to the people who live there.

This can be seen in the local enactment of the global technology (Polat and Pratchett, 2009) and illustrated by the current proliferation of the hyper-local websites (see http://openlylocal.com/hyperlocal_sites). Nevertheless, the problem of enacting local citizenship via a global technology has been highlighted in this study. One example was provided by the local council who established a Facebook group to engage with the young people in its locality only to have it ‘ambushed’ by campaigners from all over the region participating in the site. Another example was provided by the BBC’s interactive map. Where it was acknowledged by the journalist responsible for the site that ‘..... the ABD [Association of British Drivers] could have had drivers in Cornwall mobilised to vote on the site and could have furnished them with Manchester postcodes to register their opinion and that’s the problem’.
This problem was also reflected upon by another interviewee:

‘for big difficult city region wide issues like this....there would have to be a totally different mechanism in place because it’s simply not reliable as any kind of governance mechanism....its faceless, its anonymous you don’t have to register to post on these sites if you open up any online area for comments on an issue like you will get deluged by antis ..if you want to involve 2.6 million people making a decision...... if you are going cast that in anyway as something you can dump online that requires a lot more thought ...if you use anything like the environment we were using then it leaves it wide open for abuse...’.

Of course if, as the above comment implies, formal identification is required to legitimate any participation in local online decision making then this may run the risk of marginalising significant groups of local people.

As regards what may constitute a suitable mechanism for conducting such online participation this research has focused upon the possibilities of a local networked public sphere. The section on the policy implications associated with this research will look at how this may developed in the context of the local governance process.

Comments on theory

The empirical evidence collected and analysed as part of this case study speaks to a number of theoretical points made in the opening chapters of this thesis.

The case study was theoretically located in, arguably congruent, ideas of societal transformation advanced by Castells and Beck. These contend that an emergent post industrial society is being shaped by the unintended consequences of industrial modernisation and a new socio-technical paradigm - a global, electronically networked society. In such a society
political and economic power is contingent upon a relationship with the dominant globalised hubs in the network.

If geographical localities are to retain a social, political and economic significance in this emerging society they must, according to both Beck and Castells, be linked to this new, global networked society. They must, maintains Beck, take on a ‘rooted cosmopolitanism’.

The captured online network associated with the congestion charge referendum found little empirical evidence to suggest the emergence of a ‘rooted cosmopolitanism’ in the geographical locality of Greater Manchester. Indeed, the core of this online network was characterised by its localism where most of the key sites – as measured by their network centrality – were established by local civic stakeholders. The exception to this was the one key website in the online network associated with the nationally based Association of British Drivers. Evidence collected from the actor narratives indicated that this site had mobilised supporters to intervene via the ‘space of flows’ into the local online network. However, this is still, at best, a national connection and falls short of the global connections that must be evidence of a ‘rooted cosmopolitanism’. Whilst it can be argued that the referendum on the introduction of a traffic congestion charging system was a particular local issue there are examples, Stockholm and Singapore to name but two, of such systems being introduced in other parts of the world that might have been referenced by the online network.

Moreover, the fact that an effective local, networked public sphere was not enacted in this instance makes, it less likely that such localities might interact on their terms with such a networked society. As was argued in Chapter One, for Beck, as with Castells, the challenge for local communities is to interact with an increasingly globalised society but if they wish to retain their distinctiveness of place they must, by implication, retain some power over this interaction. This suggests an invigorated and politicised local civic society – driven by a new public sphere - able to negotiate the terms of such interaction and realise a ‘rooted cosmopolitanism’.

242
Notwithstanding this, one of the issues found by this study to be impeding the development of a local networked public sphere was a contested view on how online citizenship should be enacted locally. The notion that citizenship might be enacted differently online than off is congruent with Beck’s theory of reflexive modernity where the process of modernisation causes consequences that could not be foreseen. Moreover, how aspects of citizenship were enacted online in the congestion charge debate was antithetical, or reflexive in Beck’s conception of the second modernity, to modernist sensibilities of citizenship.

The discourse on the potential of the Web to deliver a networked public sphere was presented from the perspectives of the cyber-optimists, championed by Benkler, and the cyber sceptics, cheered on by Hindman. Commentators such as Sunstein, arguably, had a foot in both camps. However, the empirical evidence here points to a more nuanced understanding of the potential of the Web to deliver a local networked public sphere.

On the one hand this study has provided evidence demonstrating that there were, in Benkler’s terms ‘good enough’ links within the captured online network to justify it being described as a networked public sphere. Unfortunately, evidence from the actor narratives suggest that the actors involved in the online network did not, or could not, use the online space as an effective public sphere. This was particularly true for local government institutions who, in the main, failed to link with the ‘bottom–up’ networks of private individuals enabling one of the measures for an online public sphere, namely, the link between citizens and the public authority of the day.

However, the narrative from the one of the actors campaigning for a ‘No’ vote suggested that the campaigners associated with the manchestertolltax site had used the online network, if not as a public sphere than as, in Dutton’s words, an online local political ‘sphere of influence’. This narrative provided evidence that these campaigners had used different aspects of the online network, for example: the ‘balkanisation’, Facebook groups, interactive maps, or the more elite blog of the local journalist, to mobilise
support for their position and influence the public sphere as represented by the traditional media.

Notwithstanding this, the fact that these ‘No’ campaigners were, according to these narratives, financed by dominant business interests opposed to the introduction of traffic congestion charging system does implicate them in Margolis’ ‘politics as usual’ scenario. This support arguably enabled their websites to have a more prominent position in the online network through site optimisation, support for online petitions and offline advertisement for their online presence.

Overall then the evidence gathered by this study is conditionally supportive of Benkler’s thesis that the Web might structurally deliver sufficient links to support a local networked public sphere. However, for an effective online networked public sphere to exist at a local level then policy intervention, as advocated by Hindman, Sunstein, Coleman and Blumler, is required.

Comments on Methodology and method

This study has addressed the challenge of researching online civic activity via hyperlinked networks through applying a distinctive mixed method approach within a conceptually defined internet mediated domain of local governance. Drawing upon Social Network Analysis theory, this method has applied Exponential Random Graph Modelling and elements of Network Ethnography to a case study of a UK local government referendum.

From a methodological viewpoint the philosophical approach adopted here, that of critical realism, worked to enable the deployment of mixed methods to uncover aspects of internet use in a complex localised context that may have remained hidden had the methods been applied in isolation. Moreover, within this approach the conceptualisation of the area of online political activity as a network domain proved useful in tackling the particular problem of bounding and then exploring the area under investigation. It is suggested that this approach is probably of most use when investigating an area of social activity the boundaries of which may difficult to pre-determine.
It is argued that this is the case when researching such social phenomena as local civic and political activity online.

In one way this mixed method approach fulfilled a very classical social science research function in that the quantitative analysis provided a description of what was happening in this area of social activity and the qualitative methods helped to explain why such activity was occurring. However, the particular methods adopted here did complement each other in this local context. An abiding problem with network analysis is one of boundary definition and selecting a ‘fit for purpose’ sample of the network for investigation. This problem is even more pronounced when researching online networks. It is likely this problem was compounded here by the initial choice of a small ‘seedset’ to underpin the Relational Hyperlink Analysis, of which more later.

However, utilising a Network Ethnography approach helped to offset some of these potential weaknesses in the quantitative approach. It did this by identifying subjects for interview that retrospectively validated sites that were identified as prominent in the quantitative analysis. Moreover, because the approach had conceptual permission to allow the narratives to extend boundaries – which would otherwise have been limited to the core of the network – then a seam of data, still associated with the network, was mined that would otherwise have been excluded. Conversely, the strength of RHA lies in its capacity of unlocking significance and meaning in the structural hyperlink networks. Its facility in identifying the distinct homophily effects in the network served not only as research discovery in itself but also as a subject for exploring with the interviewees. Likewise, use of the network maps as a discursive tool with the interviewees proved useful in determining a conscious recognition, or not, of an interconnected online network. Additionally, the combination of the targeting provided by the quantitative analysis and the narrative from the interviewees enabled identification of the potential ‘affordances’ offered by the Web 2.0 technologies to websites that were otherwise fashioned as broadcast sites.
In commenting on the utility of the RHA method it should, firstly, be noted that this research did not set to evaluate this method with other methods associated with hyper-link analysis, such as Webometrics and the analysis of hyper-link distribution associated with Benkler (2006) and Hindman (2009). Rather, RHA was showcased here as an alternative method for analysing hyperlink networks. Moreover, its particular utility, as Lusher and Ackland (2008) have claimed, is as a research tool for social scientists as opposed to computer scientists. It fulfils this function by viewing the hyperlink network as a social network and looking for similar processes that drive social relationships to explain hyperlinking behaviour. Notwithstanding this, it is the case that an application of either of the other two approaches for analysing hyperlinks in the congestion charge network would have revealed the distinct homophily effect between sites of certain attributes.

However, what these approaches would not have explained is whether such an effect was a consequence of those sites’ position within the network structure or of their particular attributes. This is an innovative contribution to researching hyperlink networks enabling the researcher to distinguish between random occurrences of hyperlinks and more purposeful links. In the online congestion charge network the homophily effect was, in all likelihood, driven by an intent to link to other similar sites. It is argued here that this serves as a useful insight into online political behaviour and moreover the policy context and implications. If these are purposeful links then it suggests that this is something that policy intervention might address.

In reflecting upon the application of the RHA method here it is possible that the precision of the results might have been enhanced in a number of ways. Firstly, it would have been interesting to run this analysis with a larger ‘seed set’ and then only analyse the hyperlinks between the sites in the ‘seed set’ as opposed to analysing the links between sites included by the kind of snowball sampling conducted in this research. This approach, in delivering a more ‘closed’ network as opposed to the relatively more open network analysed here, might have provided a more representative sample of hyperlinked sites associated with the congestion charge referendum.
Secondly, the sites in this research could have been assigned more politically precise attributes. For example, the NGO sites and the Web 2.0 sites could have been further identified as sites generally in favour or against the proposals to introduce a congestion charge. Given these attributes it would have been interesting to see if the homophily effect was still apparent. Also a different software package could have been chosen to run the ERG model. The problem with PNet is that it only delivers statistically significant results at the 95% confidence level. Moreover, this research collected a dynamic set of network data the original intention of which was to model the network configurations at different time points to explore how such a political network might have evolved over this time period. This proved impossible utilising LPNet, the software package designed to examine longitudinal data, it is believed the SIENNA software package, designed for similar purposes, might have proved more fruitful.

**Policy implications**

This study has shown that the political potential of the Web to transform private individuals into active citizens was not realised in the context of this local referendum. Some interviewees argued that this was due to the failings of the technology – it was too ‘immature’. Others claimed it was a consequence of local government’s abiding paternalism – they simply did not wish to hold a dialogue with local residents. It is possible the kind of policy intervention suggested by Coleman and Blumler (2009) might help to reconcile such views. Their notion was of an online civic commons, a networked space linked to but independent from the governance authorities, managed by an independent agency able to act as a trusted intermediary.

This might prove effective but only if such intervention addresses issues raised in this research. One such issue was the vexing problem of identity online. Local governance need to know that those they are engaging with online, if they are to involve them in the decision making process that will affect the locality, are part of the that locality. It may the case that someone in that locality, for very good reasons, wishes to remain anonymous to the public authority but have their say online. It should be
possible for the trusted intermediary to act as a gatekeeper and validate the identity of the individual thus enabling that individual to interact anonymously with the public authority. The other issue of concern to those observing the online political activity associated with the congestion charge referendum was the amount of at best misunderstanding, and, at worst mis-information circulating online. The communication officer for the GMPTF attempted to address these issues but he was speaking from an institutional position that was widely perceived as untrustworthy. Moreover, the institution in question was ill-equipped to engage effectively online. By definition the trusted intermediary could better fulfil the remit to ‘educate and inform’. By the same token the intermediary could manage the hyperlinking behaviour and promote links to sites with alternative or informative points of view on the particular issue in question.

It may also be the case that the appearance of hyper-local websites may present an opportunity for the development of this local networked public sphere. These sites could easily be linked together and serve as a base for a wider civic sphere linked to the local decision making institutions.

The research here also pointed to policy requirement to educate the local governing class in the political potential of the Web. Sunstein (2007) and Hindman (2009) have both argued for better education for Internet users in general around the use of hyperlinks. This is particular true for those responsible for the hyperlinking practices on local government websites. There is also a wider requirement to educate those in positions of power in the potential of the new media to enhance local democracy. Whilst it is true there are a number of such publications and initiatives (see, for example, Gibson, 2010, The Young Foundation, 2010) aimed at local government they remain rooted in the problem identified by Pratchett (1999, 2006). That is they promote the new technologies as ways of delivering more efficient services and enhancing local democracy.

In other words the prospect of enhancing local democracy can be seen as something to be done in addition to delivering mainstream public services. In such circumstances, as both Pratchett and Copus (2010) have argued, it
is the delivery of services that is prioritised by local government. In the absence of a dedicated and customised strategy for promoting local e-democracy it is likely given this age of austerity that this will remain the case.

This is not necessarily a pessimistic view. After all if meaningful empowerment of communities or localities is to be achieved then it is unlikely to be granted by local government. If it were this would serve as a novel historical lesson in widening the democratic franchise. Rather such empowerment is more likely to occur in the context where local communities are demanding greater levels of engagement. This is clearly a process within which a benign local government can assist with appropriate policy intervention and resources. If such policy intervention has to be motivated around utilising the new technology for the co-production of local public services then so be it. It may be the case that there is an irresistible democratising logic to this endeavour - one which means that paternalism is viewed as unacceptable in any local government function.

The point here of course is that it has to be viewed as widely unacceptable by significant sections, or a critical mass, of the local community. It is at this juncture that the transformative potential of the new technology can be realised. It can lower the cost of participation for individuals, it can increase the levels of social capital within communities and it can through increased information provision make politics more transparent and less difficult. Can it help transform private individuals into active citizens? This of course remains moot and requires more empirical investigation at the local interface of the social and the technological.

Further research?

There are a number of potential research areas prompted by this thesis. Firstly, there is further research to be undertaken on the empirical data captured by this investigation. The wider network data, mapped in Chapter Four, captured by the initial trawl from the ‘seedset’ remains unexplored. An examination of this might yield further information highlighting
influences on the local online network. One surprising aspect of this online network was how ‘local’ its frame of reference or links were. The exception to this was the website run by the Association of British Drivers which had a national if not international frame of reference. This localised character of the network may be a product of selecting the core of the network which, while serving the purposes of this research, might have eliminated from the network some potentially interesting and influential outlying websites. Framing such research would be Beck’s notion of localities taking on a ‘rooted cosmopolitanism’.

Moreover, as has been mentioned, the empirical data includes dynamic network data which has yet to be fully explored. Further research on this might reveal interesting temporal changes in the composition of the online network which if mapped against historical offline events may take on greater significance.

In terms of conducting research to unearth new data it is worth noting that the Network Neighbourhood Group (2010) has conducted preliminary research into the effects of hyperlocal websites on aspects of civic engagement with local government. Their results are generally positive on the effects of such sites. It would be interesting to conduct further more robust research into the potential of these sites forming component parts of a wider networked public sphere. It might be useful in this context to evaluate the effects of policy intervention along the lines suggested above and utilising a randomised control trial may be one way of undertaking this evaluation.

One further area of interest that possibly merits greater academic attention is the impact and effect of use of the new social media upon the local government institution itself. Can it help to transform local government into a more responsive, agile institution, with flatter, less hierarchical, management structures? Can it help to make the institution more effective and sustainable by capturing and deploying the ‘knowledge’ of employees? And ultimately can it help to turn the institution ‘inside-out’ making it more transparent, accessible and accountable?
Bibliography


Association of British Drivers (June 2007) Manchester against Road Tolls. Available from: 
http://www.abd.org.uk/pr/561.htm


BBC (June 2008) Internet key to Obama’s victory. Available from: http://news.bbc.co.uk/1/hi/technology/7412045.stm


DeFilippis J. (2001) Our resistance must be as local as capitalism Place, scale and the anti-globalization protest movement. *City: Analysis of urban trends, culture, theory, policy, action,* 5(3) 363-373.


Gibson A, (2010) Local by social. How local authorities can use the social media to achieve more for less. IDEA. Available from: www.idea.gov.uk/idk/aio/17801438


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http://www.archive2.officialdocuments.co.uk/document/cm54/5406/5406.pdf


Munro, H. (2007) When do community leaders make a difference? Sheffield stories. Presented at Interpretation in Policy Analysis conference, Free University of Amsterdam, Netherlands, 1 June


Ofcom (2008b) Greater Manchester transport plan – local poll advertisement
ITV1 (Granada), 6-13 November 2008, various times.
Broadcast bulletin issue no 123 -08|12|08.
Available from: http://www.ofcom.org.uk/tv/obb/prog_cb/obb123/


Sturke, J. (2008). Plans for Britain's biggest congestion charging zone were rejected in a city-wide referendum. Available from: http://www.guardian.co.uk/politics/2008/dec/12/congestioncharging-transport


Toynbee, P, (2005) *It is New labour, as much as the public that lacks trust*’ The Guardian, 22 Nov 2005 Available from: http://politics.guardian.co.uk/polls/comment/0,,1647719,00.html


BACKGROUND PAPERS:


The Executive and the PFA noted

1. The announcement of the Programme Entry Decision by the Secretary of State for Transport is noted.

2. The welcome of this announcement and its relevance to the continuing work of the GTA is noted.

3. The Clerk and the Finance Officer of the PFA and the Clerk Executive and the Finance Director of the GTA is noted.

The Taskforce Advisory Group (TAG) noted

The public consultation programme and the implementation of proposals for consultation.

The report explains the key elements of the announcement by the Secretary of State.

PURPOSE OF REPORT:

The Executive Transport Executive

REPORT OF THE CLERK TO AUTHORITY AND THE CHIEF EXECUTIVE OF THE

PROGRAMME ENTRY DECISION

TRANSPORT INNOVATION FUND (TIF):

GREATER MANCHESTER PASSENGER AUTHORITY - 27 JUNE 2008

- 27 JUNE 2008

ASSOCIATION OF GREATER MANCHESTER AUTHORITIES: EXECUTIVE

Appendix 1
INTRODUCTION

The DoT has a significant and crucial role to play in the economic development and growth of the country. The Department of Transport and Infrastructure Development (DoT) is responsible for the formulation and implementation of policies and programs related to transport infrastructure, including roads, bridges, airports, and ports. The DoT plays a vital role in ensuring the efficient and sustainable movement of people and goods, which is essential for economic growth and development.

The DoT is also responsible for the regulation of transport services, including road transport, aviation, and rail transport. This includes the licensing of transport operators, the enforcement of transport regulations, and the promotion of safety and security in transport operations.

In recent years, the DoT has been actively working towards improving the efficiency and effectiveness of transport infrastructure, as well as promoting sustainable transport solutions. This has included investments in new infrastructure projects, the modernization of existing facilities, and the promotion of innovative technologies and practices.

The DoT is committed to working closely with stakeholders, including government agencies, private sector companies, and civil society organizations, to ensure that the transport sector contributes effectively to the overall economic development of the country.
The DFR will implement these emergency measures to the most extent to prevent the
spread of the emergency. The DFR will ensure that the emergency measures are
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necessary resources to carry out their duties.
22 The PFA will need to continue to support and promote the work of the Taskforce and the PFA's role in the FTA to ensure that all parties are engaged in the development and implementation of the FTA. The PFA will continue to provide guidance and support to the FTA stakeholders and to work closely with the FTA team to ensure that the FTA is implemented effectively and efficiently.

23 The PFA will also work closely with the GMP to ensure that the PFA's role in the FTA is supported and that the PFA's contributions are valued.

Conclusions

24 The conclusions of the GMP's work are as follows:

- The PFA has contributed significantly to the development of the FTA and will continue to support its implementation.
- The PFA will continue to work closely with the GMP to ensure that the FTA is implemented effectively and efficiently.
- The PFA will also work closely with the GMP to ensure that the PFA's role in the FTA is supported and that the PFA's contributions are valued.

Findings for 2009/2010

The PFA has contributed significantly to the development of the FTA and will continue to support its implementation. The PFA will continue to work closely with the GMP to ensure that the FTA is implemented effectively and efficiently. The PFA will also work closely with the GMP to ensure that the PFA's role in the FTA is supported and that the PFA's contributions are valued.

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...The current situation is that the information gathered in the TT packages would be delivered directly to the

Commander in Chief, the necessary detail on how the databases are operated in the National TIC System will operate to be the standard at

Strategic FLS

(c) Add additional daily reports and monitoring of the TT system. (d) Add additional daily reports and monitoring of the TT system.

Real time scenarios

(c) Add additional daily reports and monitoring to meet increased demand.
29 May 2008

Dear Councillor

CONGESTION CHARGING FOR MANCHESTER – GREATER MANCHESTER MOMENTUM GROUP

As a newly elected member, I would like to take this opportunity to inform you of the formation of an alliance of businesses employing tens of thousands of people across Greater Manchester.

GMMG is a non-political alliance of international, national, regional and local companies that shares AGMA’s goal of promoting Greater Manchester’s growth. We believe that the introduction of the current congestion charging proposals would disadvantage business and that, working with AGMA, we should explore cost effective alternatives to deliver greater benefits for the community as a whole. Further information can be found on our website www.gmmgroup.co.uk.

GMMG currently has 115 business members, including businesses from a wide range of sectors and sizes and the Federation of Small Businesses which represents more than 210,000 businesses nationally, with approximately 21,000 in the North West. Our rapidly growing membership reflects the level of concern the business community has towards the congestion charging proposals.

Our members include for example: Agility Logistics, AG Parfett & Sons, AK Worthington Distribution, Bestway, Blue Water Shipping, Brabners Chaffe Street, Discount Plastics, The Emerson Group, Federation of Small Businesses, Goremead Ltd, Harvey Nichols, John Smiths, Joseph Holt, Hydes Brewery, Kellogg’s, Kerry Logistics, Learning for Living Ltd, Lookers, Makro Cash & Carry (UK), Nichirin Uk Ltd, Peel Holdings, Pets at Home, Punch Taverns, Qualifit Ltd, The Road Haulage Association, Rullion Ltd, Speedy Hire, Stax Trade Centres, Tyco Fire & Integrated Solutions, Unilever, United Biscuits, Weir Minerals, William Hare and Williams Motor Group.

We have come together to lend our expertise to the issue of congestion across the region and look at all alternatives to tackling this issue – including road user charging currently on the table as part of the Transport Innovation Fund bid.

Our pledge:
1. We will work with AGMA to look at alternative ways of tackling congestion and raising money for transport infrastructure that also meet our future environmental needs.

2. We will work with AGMA to assess best value for money for transport infrastructure improvements.

3. We call upon AGMA to allow GMMG and employers to study and comment publicly on the information it has used to develop its assumptions of success.

4. We will use our expertise to help AGMA address the flaws in the bid but if this cannot be done, we will lobby for its withdrawal.

Our concerns:

1. **Scale**: The proposed scheme goes overnight from zero to one significantly larger than any other scheme in the world. Therefore it is untested and a significant risk - the study of congestion within Greater Manchester will provide better insight over which areas need the greatest immediate and longer term investment.

2. **Imbalance**: The scheme will capture thousands of ordinary businesses and employees within the M60, but the expenditure on infrastructure for promised transport improvements is almost exclusively aimed at improving commuter journeys into Manchester city centre - the scheme should be developed to reflect the movement of people and goods within the Greater Manchester Region.

3. **Ignores movement of goods**: Businesses will pay significant road user charges yet all of the expenditure on infrastructure is on public transport to move people. None is directed at companies distributing freight or moving goods - a new infrastructure should focus on how to move the significant amount of goods made in Manchester for the rest of Britain and the world, with potentially huge benefits for the environment.

4. **A cost of employment**: Unlike in London, the charging zone covers many ordinary jobs with people on average wages who cannot afford to pay up to £100 per month. Inevitably employers will have to meet this cost or lose employees to firms outside the M60 - the charge should not be imposed on top of road tax, council tax, petrol tax and business rates already levied on individuals and businesses for infrastructural support.

5. **No way back**: If the economic assumptions that have been kept secret are wrong, Greater Manchester will be saddled with £1.8bn of debt over 30 years which means there will be no way of reversing a damaging scheme – an alternative solution for infrastructural changes over a period of time would have benefits for financing the debts. The past experience of investment in the Metrolink ran significantly over budget and time.

6. **One dimensional**: The proposals assume that no measures other than charging can reduce congestion. There appears to have been no work looking at other ways of easing traffic flow - there are many proven methods for tackling traffic in different scenarios.
7. **Isolated:** The Government and opposition have distanced themselves from a national road pricing scheme which means Greater Manchester will become uniquely a more expensive place to do business and work, thereby damaging future job creation and investment - we should use tried and tested schemes first.

8. **No guarantees:** There are no guarantees on future pricing, the zone covered, the time the charge applies or the actual public transport delivered. In addition there is no guarantee that if a national scheme (e.g. motorway scheme) is introduced we will not end up paying twice on top of existing road taxes.

9. **Technology:** No detail has been provided on the technology which will support the scheme and abundant experience suggests that large scale IT projects carry huge risks of failure - a tried and tested model should be put in place first.

We have, and continue to, engage with politicians from all political parties across Greater Manchester. I enclose a copy of a letter recently sent to Lord Peter Smith, Chairman of AGMA, (copies of earlier correspondence can be found at [www.gmmgroup.co.uk](http://www.gmmgroup.co.uk) under the correspondence section).

We believe that the economic success of Greater Manchester in recent years is due, in part, to the business community and local authorities working effectively together. Our members are keen for this to continue and to work constructively with AGMA and local members to address the strategic transport needs of Greater Manchester. Please contact GMMG on info@GMMG.co.uk if you would like to meet to discuss this in more detail.

Yours sincerely,

**Steering Group Members – Greater Manchester Momentum Group**

Mike Lyons  
Finance Director – AK Worthington

Paul Henly  
North West Policy Manager – Federation of Small Businesses

Chris Wermann  
Communications Director UK and Northern Europe – Kellogg’s

Andrew Simpson  
Group Managing Director - Peel Holdings
Danny Franks
Managing Director - SBS Networks
Consultation

Future Transport

Greater Manchester

Summary Report

About This Report

Appendix 3
Contents

Future Transport Proposals
What are the Greater Manchester
Transport Innovation Fund (TTF)?
How was the consultation carried out?
In recent years, the number of people visiting the 66
engagement and online shopping has increased, reaching
a peak of 1.74 million people in the year. As a result,
the government has been taking steps to improve
the experience for consumers and online shoppers.

The government’s efforts have included

- Making it easier for consumers to find what they're looking for online.
- Improving the speed and reliability of online transactions.
- Ensuring that online shopping is secure and trustworthy.
- Providing more information about products and services.

These efforts have helped to increase the number of people shopping online, but there is still room for improvement. The government is committed to continuing its efforts to make online shopping more convenient and enjoyable for all consumers.
What did people tell us?

There was a high level of interest in the proposals from businesses (35%) and residwnts (26%). However, there was also a high level of concern for the adequacy of the proposals, with 30% of respondents saying they were not confident the proposals would be effective.

In terms of specific proposals, the introduction of a congestion charge was the most popular (40%), followed by the introduction of a voluntary booking system (35%). However, only 25% of respondents said they would use the voluntary booking system if it were introduced.

The proposals were also discussed in terms of their impact on the environment, with 30% of respondents saying they would be more likely to use public transport if the proposals were introduced. However, only 15% of respondents said they would be more likely to use public transport if the proposals were not introduced.

In summary, the proposals were generally well received, with 40% of respondents saying they would support the proposals if they were introduced. However, there was a high level of concern for the adequacy of the proposals, with 30% of respondents saying they were not confident the proposals would be effective.

Opinion polls

There were 500 respondents to the opinion polls, with 40% of respondents saying they would support the proposals if they were introduced. However, only 15% of respondents said they would be more likely to use public transport if the proposals were not introduced.
SUMMARY OF THE CONSULTATION RESPONSE

The proposals were made so because the situation with business being going to pass, which would promote the concentration of the public transport, and other measures. These were carried out to improve the situation with the public transport in the area, which was the subject of the consultation. The proposals were made to promote the concentration of the public transport, and other measures, which would promote the concentration of the public transport. This would improve the situation with the public transport in the area, which was the subject of the consultation.

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SUMMARY OF THE CONSULTATION RESPONSE
What changes have been made to TID?
and emphasized the importance of
strategies to address these measures
and challenges. The study also
highlighted the need for improved
collaboration and coordination.

Macro-Changes

The study identified several key
changes that have impacted the
field, including:
- Increased use of digital and
  remote technologies.
- Changes in consumer behaviors.
- Evolution of the global economy.

Key Issues

- Transport fees
- Public transport
- Accessibility
- Transportation
- Public transport
- Accessibility
- Transport fees
- Public transport
- Accessibility
- Transportation
- Public transport
- Accessibility

Figurecaption:

Key changes include:

- Transport fees
- Public transport
- Accessibility
- Transportation
- Public transport
- Accessibility
- Transport fees
- Public transport
- Accessibility
- Transportation
- Public transport
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Figurecaption:

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- Transport fees
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- Accessibility
- Transportation
- Public transport
- Accessibility
- Transport fees
- Public transport
- Accessibility
- Transportation
- Public transport
- Accessibility
The paper focuses on the interaction between the freight industry and trade. It discusses the role of trade in the economy and how it affects the freight industry. The paper also examines the relationship between trade and economic growth, and how changes in trade policies can impact the industry.

The freight industry is a critical component of the economy, facilitating the movement of goods and services across borders. It is essential for trade and economic growth, enabling businesses to access new markets and expand their operations. The paper highlights the importance of maintaining efficient and reliable supply chains to support trade and economic activity.

Trade policies can significantly impact the freight industry. Changes in trade regulations, tariffs, and other barriers to trade can affect the cost and accessibility of goods, impacting the industry's profitability and competitiveness. The paper argues for the need for policies that support trade and facilitate efficient cross-border movement of goods.

In conclusion, the freight industry plays a crucial role in the economy, and policymakers must consider its needs when making decisions about trade policies. By promoting smooth and efficient trade practices, governments can help ensure the continued growth and prosperity of the freight industry and the economy as a whole.
Looking ahead

The future

Using the consultation data in the public consultation on the Tees Transport Links study, Amey will consider the outcome of the consultation, which includes feedback from businesses and stakeholders. The survey results will inform the design and construction of the Tees Transport Links project.

The Tees Transport Links project will provide better and more efficient transport links between Teesside and County Durham, connecting the region’s economy and helping to drive growth. The project will involve the construction of a new road, rail, and ferry route, which will improve connectivity and support economic development.

Looking forward, the project is set to deliver significant benefits to the region, including improved travel times, reduced traffic congestion, and increased accessibility.

The government has committed over £1 billion to the Tees Transport Links project, and work is expected to commence in 2023, with the first section of the road expected to be completed in 2025.
Appendix 4

Facebook sites on Manchester Congestion Charge - screen scrape of 1st page

Displaying 1 - 10 out of 66 results for: Manchester Congestion Charge
1
2
3
Next

Group:
Stop Manchester Congestion Charge
Network:
Manchester
Size:
1,695 members
Type:
Common Interest - Activities
New:
2 Fewer Members
Join Group

Group:
AGAINST THE CONGESTION CHARGE IN MANCHESTER
Size:
17,146 members
Type:
Common Interest - Current Events
New:
4 Fewer Members
Join Group

Group:
City congestion charge - MANCHESTER
Size:
51 members
### Appendix 5

**SkyscraperCity online discussion forum - screenscrape of 1st page**

http://www.skyscrapercity.com/showthread.php?t=660846

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#### View Poll Results: Will You Vote For Or Against The TIF/ Congestion Charge Proposal

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<td>For</td>
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<td>67.40%</td>
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<tr>
<td>Against</td>
<td>40</td>
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<tr>
<td>Undecided</td>
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Voters: **181**. You may not vote on this poll

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282
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<td>The whole C charge debate demonstrates just how out of touch and marginalised (not to mention embittered) people like Longford etc are.</td>
<td></td>
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<tr>
<td><strong>Ah the sweet smell of democracy (and Ofcom) and the end for the damned</strong>Congestion Tax in GREAT Britain!</td>
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<table>
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<td>Originally Posted by <strong>Jibber Jabber</strong> » Jets - Some of these idiots still cling to the fiction that the Con charge was just a minor part of the whole TIF package.</td>
<td></td>
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<tr>
<td>The whole C charge debate demonstrates just how out of touch and marginalised (not to mention embittered) people like Longford etc are.</td>
<td></td>
</tr>
<tr>
<td>Watch out for Jibber jabber and Jets at the end of the clip. (speakers on)</td>
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Appendix 6

Google

Congestion Charge Manchester

Search: the web pages from the UK

Web Results 1 - 10 of about 135,000 for Congestion Charge Manchester. (0.14 seconds)

Congestion in Manchester
www.gmfuturetransport.co.uk Let us know how congestion charging will affect you. Be involved

Manchester Congestion
www.stopthecharge.co.uk Pay up to £1200 a year to drive? Vote No! official website.

BBC NEWS | England | Manchester | City congestion fee plan unveiled
25 May 2007 ... Motorists face congestion charges of up to £5 to drive into central Manchester and out again on the busiest roads at the busiest times. ...
news.bbc.co.uk/1/hi/england/manchester/6691683.stm - 51k - Cached - Similar pages - Note this

BBC NEWS | England | Manchester | Congestion charge plans revealed
24 May 2007 ... The congestion charge system would target the 15 roads into Manchester with the greatest congestion. However, its introduction depends on ...
news.bbc.co.uk/1/hi/england/manchester/6687759.stm - 47k - Cached - Similar pages - Note this
More results from news.bbc.co.uk »

BBC - Manchester - Travel - Congestion charging: FAQs
How do you feel about a plan to introduce congestion charging in Greater Manchester? The controversial scheme could bring in almost £3 billion of ...
www.bbc.co.uk/manchester/content/articles/2007/01/24/240106_road_pricing_feature.shtml - 40k - Cached - Similar pages - Note this

News results for Congestion Charge Manchester
Manchester congestion charge divides business - 22 Oct 2008
By Andrew Bounds The battle over plans to introduce Britain's biggest congestion charge zone in Manchester began in earnest yesterday as opponents described ...
Financial Times - 3 related articles »

ABD - Manchester Congestion Charge - 13 Oct
Campaigning against the proposed congestion charge in Greater Manchester.
www.abd.org.uk/manchester_congestion_charge.htm - 23k - Cached - Similar pages - Note this

Congestion charge trial to hit city - News - Manchester Evening News
DRIVERS could be forced to fork out £1 per mile as part of a congestion charging trial scheme in Greater Manchester which was announced. ...
www.manchestereveningnews.co.uk/news/s/189/189227_congestion_charge_trial_to_hit_city.html - 35k - Cached - Similar pages - Note this

Congestion charge: The story so far - Community - Manchester ...
FOLLOW the ever-changing progress of the proposed congestion charge for Greater Manchester using our interactive timeline here. Click on an item to zoom in ...
www.manchestereveningnews.co.uk/community/s/1063096_congestion_charge_the_story_so_far - 30k - Cached - Similar pages - Note this
More results from www.manchestereveningnews.co.uk »

Manchester split over plan for commuter-only congestion charge ...
7 Jun 2008 ... Manchester is to be the testing ground for a new form of congestion charging that will
be aimed at people who commute by car but spare ...

The Big Question: Does Manchester need a congestion charge, and ...
10 Jun 2008 ... A Manchester Evening News poll found that 64 per cent of people were opposed to a congestion charge. But 59 per cent said it was "a price ...

MART - Manchester Against Road Tolls
Here at MART we firmly believe that congestion charging is wrong for Manchester. But we also believe that the public need the opportunity to debate discuss ...

Congestion charging in Greater Manchester - Wikipedia, the free ...
Proposals for congestion charging in Greater Manchester (sometimes called the Manchester Congestion Charge [1]) is part of a bid to the Government's ...

## Appendix 7

**Site attribute and SNA measures of centrality for congestion charge network at close of referendum**

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Matrix data file of Congestion charge network at close of referendum

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291


# Appendix 9

### Site attributes as binary variables

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Appendix 10

‘Goodness of fit’ statistics on converged ERG model for congestion charge network at close of referendum

Covered model for cchargeva10sel24deg

Arc: -3.790446, 1.37118, -0.02686*
  Rb for Attribute1: 2.612896, 0.37624, -0.05056 *
  Rb for Attribute2: -0.486992, 0.29966, 0.06168
  Rb for Attribute4: 1.759573, 0.40729, -0.08584 *
  Rs for Attribute1: 0.330068, 0.91134, -0.06169
  Rs for Attribute2: 2.246746, 0.86273, 0.04036 *
  Rs for Attribute3: 0.863368, 0.39672, -0.05817 *
  Rs for Attribute4: 1.511957, 0.85348, -0.06196
  Rs for Attribute5: 1.928126, 0.87747, 0.00334 *
  Rr for Attribute1: -0.286508, 1.07548, -0.01468
  Rr for Attribute2: 0.217595, 1.08902, -0.00215
  Rr for Attribute3: -0.849854, 0.94064, 0.03101
  Rr for Attribute4: -1.764049, 1.09309, -0.05715
  Rr for Attribute5: -1.319249, 1.08956, -0.00508

Arc: -5.581184, 1.10504, 0.01136 *
  Reciprocity: 0.995533, 0.28982, 0.00415 *
  Mixed-2-Star: 0.008043, 0.01115, 0.01193
  K-In-Star(2.00): 1.462419, 0.20774, 0.01016 *
  K-Out-Star(2.00): -0.794855, 0.34477, 0.01225 *
  AKT-T(2.00): 0.519459, 0.10203, 0.00839 *
  Rb for Attribute1: 1.989763, 0.33681, -0.03863 *
  Rb for Attribute2: -0.602915, 0.29595, -0.01491 *
  Rb for Attribute4: 1.602190, 0.38936, 0.03171 *
  Rs for Attribute1: 0.546630, 1.01899, -0.05944
  Rs for Attribute2: 2.385945, 1.01258, 0.00644 *
  Rs for Attribute3: 1.072248, 0.41823, 0.01573 *
  Rs for Attribute4: 1.972885, 1.00236, 0.02178
Rs for Attribute5: 2.410064, 1.02553, 0.04918  *
Rr for Attribute1:  -1.019224, 0.67169, -0.00509
Rr for Attribute2:  -0.511612, 0.69194, -0.00647
Rr for Attribute3:  -0.761509, 0.59066, -0.06854
Rr for Attribute4:  -1.740873, 0.70520, 0.03611  *
Rr for Attribute5:  -1.244588, 0.69469, 0.05255

* GOODNESS OF FIT

* Parameter Values:
  # Arc:    -5.58118
  # Reciprocity:  0.99553
  # 2-In-Star:  0.00000
  # 2-Out-Star:  0.00000
  # 3-In-Star:  0.00000
  # 3-Out-Star:  0.00000
  # Mixed-2-Star:  0.00804
  # T1:  0.00000
  # T2:  0.00000
  # T3:  0.00000
  # T4:  0.00000
  # T5:  0.00000
  # T6:  0.00000
  # T7:  0.00000
  # T8:  0.00000
  # T9(030T):  0.00000
  # T10(030C):  0.00000
  # Sink:  0.00000
  # Source:  0.00000
  # Isolates:  0.00000
  # K-In-Star(2.00):  1.46242
  # K-Out-Star(2.00):  -0.79485
  # K-In-Star(2.00):  0.00000
  # K-Out-Star(2.00):  0.00000
  # K-1-Star(2.00):  0.00000
  # 1-L-Star(2.00):  0.00000
# K-L-Star(2.00): 0.00000
# AKT-T(2.00): 0.51946
# AKT-C(2.00): 0.00000
# AKT-D(2.00): 0.00000
# AKT-U(2.00): 0.00000
# AKT-TD(2.00): 0.00000
# AKT-TU(2.00): 0.00000
# AKT-DU(2.00): 0.00000
# AKT-TDU(2.00): 0.00000
# A2P-T(2.00): 0.00000
# A2P-D(2.00): 0.00000
# A2P-U(2.00): 0.00000
# A2P-TD(2.00): 0.00000
# A2P-TU(2.00): 0.00000
# A2P-DU(2.00): 0.00000
# A2P-TDU(2.00): 0.00000
# Rb for Attribute1: 1.98976
# Rb for Attribute2: -0.60291
# Rb for Attribute3: 0.00000
# Rb for Attribute4: 1.60219
# Rb for Attribute5: 0.00000
# Rs for Attribute1: 0.54663
# Rs for Attribute2: 2.38595
# Rs for Attribute3: 1.07225
# Rs for Attribute4: 1.97289
# Rs for Attribute5: 2.41006
# Rr for Attribute1: -1.01922
# Rr for Attribute2: -0.51161
# Rr for Attribute3: -0.76151
# Rr for Attribute4: -1.74087
# Rr for Attribute5: -1.24459
# Rs for Missing Attribute1: 0.00000
# Rs for Missing Attribute2: 0.00000
# Rs for Missing Attribute3: 0.00000
# Rs for Missing Attribute4: 0.00000
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# Rr for Missing Attribute1: 0.00000
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# T2u11 for Attribute1:  0.00000
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* There are 30000000 proposed digraphs.
* Statistic samples are picked up at 1 per 30000 digraphs.
* Accepted 5010940 proposed digraphs.

observation, sample mean (standard error), t-statistic

\[ t = \frac{(\text{observation} - \text{sample mean})}{\text{standard deviation}} \]

# Arc: 292.0000 Mean= 293.6620 ( 111.5011 ) t = -0.0149
# Reciprocity: 39.0000 Mean= 39.4960 ( 24.9500 ) t = -0.0199
# 2-In-Star: 2839.0000 Mean= 1446.3250 ( 729.3677 ) t = 1.9094
# 2-Out-Star: 887.0000 Mean= 946.5660 ( 802.5132 ) t = -0.0742
# 3-In-Star: 27779.0000 Mean= 5184.1050 ( 3094.8790 ) t = 7.3007
# 3-Out-Star: 2194.0000 Mean= 2612.9120 ( 3368.2623 ) t = -0.0742
# Mixed-2-Star: 1975.0000 Mean= 1995.9680 ( 1453.2987 ) t = -0.0144
# T1: 3.0000 Mean= 8.5520 ( 7.9326 ) t = -0.6999
# T2: 50.0000 Mean= 94.9300 ( 86.6528 ) t = -0.5185
# T3: 101.0000 Mean= 180.0990 ( 167.4616 ) t = -0.4723
# T4: 130.0000 Mean= 122.5480 ( 93.5647 ) t = 0.0796
# T5: 75.0000 Mean= 99.1010 ( 93.8646 ) t = -0.2568
# T6: 140.0000 Mean= 130.2240 ( 126.5181 ) t = 0.0773
# T7: 1120.0000 Mean= 836.0300 ( 596.8901 ) t = 0.4757
# T8: 549.0000 Mean= 611.8060 ( 616.3950 ) t = -0.1019
# T9(030T): 537.0000 Mean= 515.6070 ( 414.0998 ) t = 0.0517
# T10(030C): 64.0000 Mean= 118.1750 ( 113.0438 ) t = -0.4792
# Sink: 2.0000 Mean= 0.2400 ( 0.5125 ) t = 3.4341
# Source: 16.0000 Mean= 20.4200 ( 6.6693 ) t = -0.6627
# Isolates: 0.0000 Mean= 0.4590 ( 0.7245 ) t = -0.6336
# K-In-Star(2.00): 449.0705 Mean= 452.1901 ( 193.9537 ) t = -0.0161
# K-Out-Star(2.00): 379.6182 Mean= 383.3171 ( 211.2363 ) t = -0.0175
# K-In-Star(2.00): 449.0705 Mean= 452.1901 ( 193.9537 ) t = -0.0161
# K-Out-Star(2.00): 379.6182 Mean= 383.3171 ( 211.2363 ) t = -0.0175
# K-1-Star(2.00): 350.2253 Mean= 412.5958 ( 241.9859 ) t = -0.2577
# 1-L-Star(2.00): 526.1373 Mean= 551.4701 ( 229.8609 ) t = -0.1102
# K-L-Star(2.00): 113.7742 Mean= 124.1929 ( 33.5191 ) t = -0.3108
# AKT-T(2.00): 318.9685 Mean= 322.6759 ( 209.1783 ) t = -0.0177
# AKT-C(2.00): 135.9805 Mean= 217.6000 ( 179.1032 ) t = -0.4557
# AKT-D(2.00): 181.4931 Mean= 278.1093 ( 201.7009 ) t = -0.4790
# AKT-U(2.00): 339.2188 Mean= 320.1419 ( 203.9292 ) t = 0.1087
# AKT-DU(2.00): 260.3559 Mean= 297.8586 ( 199.9450 ) t = -0.1876
# AKT-TDU(2.00): 279.8934 Mean= 306.1310 ( 202.9818 ) t = -0.1293
# A2P-T(2.00): 1479.0798 Mean= 1382.8558 ( 809.0841 ) t = 0.1189
# A2P-D(2.00): 468.5854 Mean= 586.2412 ( 437.0530 ) t = -0.2692
# A2P-U(2.00): 1806.3203 Mean= 1058.6620 ( 375.2869 ) t = 1.9922
# A2P-TD(2.00): 973.8326 Mean= 984.5485 ( 621.7570 )  t = -0.0172
# A2P-TU(2.00): 1642.7001 Mean= 1220.7589 ( 587.9976 )  t = 0.7176
# A2P-DU(2.00): 1137.4529 Mean= 822.4516 ( 399.2307 )  t = 0.7890
# A2P-TDU(2.00): 1251.3285 Mean= 1009.2530 ( 535.4500 )  t = 0.4521
# Rb for Attribute1: 51.0000 Mean= 50.9640 ( 16.5286 )  t = 0.0022
# Rb for Attribute2: 48.0000 Mean= 47.5280 ( 28.4546 )  t = 0.0166
# Rb for Attribute3: 0.0000 Mean= 0.0990 ( 0.2988 )  t = -0.3313
# Rb for Attribute4: 20.0000 Mean= 21.4930 ( 26.0435 )  t = -0.0573
# Rb for Attribute5: 0.0000 Mean= 2.1110 ( 2.5395 )  t = -0.8313
# Rs for Attribute1: 64.0000 Mean= 64.2140 ( 16.8260 )  t = -0.0127
# Rs for Attribute2: 107.0000 Mean= 106.5430 ( 48.0205 )  t = 0.0095
# Rs for Attribute3: 12.0000 Mean= 12.0910 ( 6.0517 )  t = -0.0150
# Rs for Attribute4: 76.0000 Mean= 77.8200 ( 46.0897 )  t = -0.0395
# Rs for Attribute5: 43.0000 Mean= 43.1110 ( 18.9210 )  t = -0.0059
# Rr for Attribute1: 121.0000 Mean= 121.1390 ( 30.3682 )  t = -0.0046
# Rr for Attribute2: 119.0000 Mean= 119.1500 ( 62.7815 )  t = -0.0024
# Rr for Attribute3: 4.0000 Mean= 3.9700 ( 4.8987 )  t = 0.0061
# Rr for Attribute4: 34.0000 Mean= 36.1520 ( 42.3801 )  t = -0.0508
# Rr for Attribute5: 15.0000 Mean= 14.3460 ( 14.1520 )  t = 0.0462
# Rs for Missing Attribute1: 0.0000 Mean= 0.0000 ( 0.0000 )  t = -1.#IND
# Rs for Missing Attribute2: 0.0000 Mean= 0.0000 ( 0.0000 )  t = -1.#IND
# Rs for Missing Attribute3: 0.0000 Mean= 0.0000 ( 0.0000 )  t = -1.#IND
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# T2u11 for Attribute1: 16.0000 Mean= 12.2070 ( 6.1136 )  t = 0.6204
# T2u11 for Attribute2: 7.0000 Mean= 9.0740 ( 7.8916 )  t = -0.2628
# T2u11 for Attribute3: 0.0000 Mean= 0.0000 ( 0.0000 )  t = -1.#IND
# T2u11 for Attribute4: 1.0000 Mean= 4.2840 ( 7.6549 )  t = -0.4290
# T2u11 for Attribute5: 0.0000 Mean= 0.1980 ( 0.5824 )  t = -0.3400
# T1u11 for Attribute1: 20.0000 Mean= 16.8560 ( 7.0023 )  t = 0.4490
# T1u11 for Attribute2: 20.0000 Mean= 21.8860 ( 18.4695 )  t = -0.1021
# T1u11 for Attribute3: 1.0000 Mean= 1.0420 ( 2.1300 )  t = -0.0197
# T1u11 for Attribute4: 6.0000 Mean= 9.1630 ( 14.3741 ) t = -0.2200
# T1u11 for Attribute5: 7.0000 Mean= 4.9540 ( 6.3612 ) t = 0.3216
# T1au14 for Attribute1: 1644.0000 Mean= 634.7870 ( 236.6882 ) t = 4.2639
# T1au14 for Attribute2: 1100.0000 Mean= 610.4310 ( 463.6985 ) t = 1.0558
# T1au14 for Attribute3: 3.0000 Mean= 13.8100 ( 24.9575 ) t = -0.4331
# T1au14 for Attribute4: 64.0000 Mean= 140.6910 ( 225.9451 ) t = -0.3394
# T1au14 for Attribute5: 28.0000 Mean= 50.2540 ( 71.0141 ) t = -0.3134
# T1au13 for Attribute1: 861.0000 Mean= 601.6790 ( 268.7518 ) t = 0.9649
# T1au13 for Attribute2: 847.0000 Mean= 921.2320 ( 799.1948 ) t = -0.0929
# T1au13 for Attribute3: 15.0000 Mean= 27.4160 ( 59.8394 ) t = -0.2075
# T1au13 for Attribute4: 173.0000 Mean= 335.2370 ( 547.9214 ) t = -0.2965
# T1au13 for Attribute5: 89.0000 Mean= 129.9160 ( 178.4605 ) t = -0.2293
# T1au12 for Attribute1: 172.0000 Mean= 145.4670 ( 75.5402 ) t = 0.3512
# T1au12 for Attribute2: 366.0000 Mean= 372.7030 ( 338.4083 ) t = -0.0198
# T1au12 for Attribute3: 46.0000 Mean= 62.9170 ( 69.3922 ) t = -0.2438
# T1au12 for Attribute4: 231.0000 Mean= 287.1110 ( 357.9370 ) t = -0.1568
# T1au12 for Attribute5: 117.0000 Mean= 139.2980 ( 134.4130 ) t = -0.1659
# Std Dev In-degree dist: 8.8082 Mean= 5.0228 ( 0.6174 ) t = 6.1315
# Skew In-degree dist: 2.7408 Mean= 0.7483 ( 0.5324 ) t = 3.7424
# Std Dev Out-degree dist: 3.2054 Mean= 2.7207 ( 0.9872 ) t = 0.4910
# Skew Out-degree dist: 1.2440 Mean= 0.7293 ( 0.3875 ) t = 1.3284
# CorrCoef In-Out-degree dists: 0.3560 Mean= 0.4553 ( 0.1160 ) t = -0.8567
# Global Clustering Cto: 0.3027 Mean= 0.2801 ( 0.0425 ) t = 0.5313
# Global Clustering Cti: 0.0946 Mean= 0.1570 ( 0.0456 ) t = -1.3668
# Global Clustering Ctm: 0.2616 Mean= 0.2458 ( 0.0303 ) t = 0.5187
# Global Clustering Ccm: 0.0935 Mean= 0.1552 ( 0.0407 ) t = -1.5151
# Global Clustering AKC-T: 0.2157 Mean= 0.2256 ( 0.0237 ) t = -0.4184
# Global Clustering AKC-D: 0.1937 Mean= 0.2405 ( 0.0304 ) t = -1.5438
# Global Clustering AKC-U: 0.0939 Mean= 0.1378 ( 0.0371 ) t = -1.1830
# Global Clustering AKC-C: 0.0919 Mean= 0.1400 ( 0.0348 ) t = -1.3832
Appendix 11

Ranking on SNA centrality measures for network at close of referendum

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### Appendix 12

#### List of interviewees (anonymised)

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<th>Title</th>
<th>Organisation</th>
<th>Associated with website</th>
<th>Site attribute</th>
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<td>Communication officer</td>
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* not in selected core of network but in wider network
Appendix 13
Interview schedule

Introduction: explain the nature of the research, how the interviewee has been identified as a research participant and emphasise that interviewees’ names will not be used in the report of research.

The following is a guide to topic areas for the interviewer to cover. The specific questions for the interviewee varied according to that individual

1. Start by showing the network maps and asking for interviewee comment
   
   What did they think about their position in the network
   Did the interviewee see their website as part of a wider network
   What did they think about the composition of the network

2. Move on to discussion about the referendum
   
   How had they got involved in the referendum
   What role had you/council/organisation played during the referendum
   Were they surprised by the outcome of the referendum
   Why do you think it was defeated so heavily

3. Move on to the role of the Internet in the referendum
   
   How did the you/council/organisation use the Internet during the referendum
   What status/priority was given to campaigning/communication via internet compared to other offline media
   Why was this
   Was your website optimised for search engines

   How aware of online information/traffic/sites/comment were you/your council/your politicians
What was your attitude/response to this online information

What difference do you think the online campaigning/activity made to your campaign
  Can you explain why this was/provide examples
What difference do you think the online campaigning/activity made to the overall result
  Can you explain why this was/provide examples
Would you use the Internet differently the next time