

THE POLITICS OF OPEN GOVERNMENT DATA: A NEO-GRAMSCIAN ANALYSIS
OF THE UNITED KINGDOM'S OPEN GOVERNMENT DATA INITIATIVE

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Abstract

Since the mid-2000s, the idea of Open Government Data (OGD) has emerged in the United Kingdom as a strong demand for the free and unrestricted re-use of data produced by public bodies. This thesis aims to better understand the social forces and interests that have been working to shape the UK's Open Government Data (OGD) initiative and to what ends. It focuses on the period 2010-2012, when OGD was adopted as a core policy objective by the new Coalition (Conservative-Liberal Democrat) government that came to power in May 2010.

Through analysis of interviews, observations and online documentation, and the adoption of a neo-Gramscian analytical framework to guide the data collection and analysis, the thesis produces an explanatory framework for better understanding and conceptualising the development of the OGD initiative in the UK during this period.

Contextualising the emergence and development of the UK's OGD initiative within the contemporary political and economic crises of the neoliberal project, the thesis adopts the neo-Gramscian concept of *trasformismo* to explain the domestication of the OGD agenda into a project - counter to many of the initial civil society OGD advocates intentions - which is aimed at the reproduction of the UK's neoliberal state. In particular, it highlights how OGD policy is being used with the intention of leveraging the full marketisation of public services and the further expansion of capitalism into the exploitation of societal risks, and to help rebuild the fracturing consent for the neoliberal project.

It is shown that whilst a radical, and potentially counter-hegemonic, political energy exists within sections of the civil society OGD community within the UK, these OGD advocates are necessarily restricted by both the structural conditions of OGD's emergence and tactical decisions taken by OGD advocates. The thesis concludes with a number of suggestions for those aiming to direct the OGD initiative in a more egalitarian direction, counter to neoliberal hegemony.

The thesis's contribution to Information Science can be understood as providing a deeper critical understanding of the political economic domain which structures the discipline and its subject of interest at the most fundamental levels. The thesis's contribution to Political Science is to utilise ideas developed in neo-Gramscian International Political Economy to draw insight into the complex political processes that have unfolded around OGD. In particular, it is the first neo-Gramscian analysis that considers the adaptation of neoliberal capitalism to the logic of 'openness'.

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List of Acronyms

BIS	Department for Business, Innovation and Skills (UK)
CDPPDC	Consultation on Data Policy for a Public Data Corporation
DSB	Data Strategy Board
EU	European Union
FOI	Freedom of Information
FOIA	Freedom of Information Act
F/OSS	Free and Open Source Software
MODR	Making Open Data Real Consultation
NSM	New Social Movements
OGD	Open Government Data
P2P	Peer 2 Peer Production
PDC	Public Data Corporation
PDG	Public Data Group
PSI	Public Sector Information
UK	United Kingdom

CHAPTER 1: INTRODUCTION

1.1. OGD in the UK: Background and Context

Open government data (OGD) has emerged as one of the latest in a series of initiatives that have drawn on a developing logic regarding the socially progressive potential of 'open' models of information production and distribution. Open initiatives, through breaking down knowledge to the raw data and code, and abandoning models of false scarcity that restrict access, interpretation, and re-use, suggest the possibility of a significant reconfiguration of modes of understanding and production that have previously been shaped by dominant interests. However, open initiatives such as OGD develop within a historical process, not a neutral terrain. Within the UK the convergence of a range of political, commercial and civil society networks engaged in the shaping of OGD marks a fruitful site for beginning to explore the interaction of neoliberal capitalist ideas and institutions with modes of production and citizenship that potentially contest key parts of its logic.

The notion of Open Government Data began to gain ground around 2005, and draws on ideas developed across a range of established communities including those engaged in the fields of Public Sector Information Re-use,

Free and Open Source Software, Open Access, Freedom of Information and Open Government. The demand of the growing community of civil society OGD advocates is for the online publishing of:

- Unrefined or raw public datasets
- in an open, non-proprietary, technical format
- licenced for use, re-use and re-distribution without discrimination
- at marginal cost (which for digital resources is generally equal to or close to zero)

Whilst governments' interest in the re-use of public sector information has been an ongoing and important, if relatively arcane, policy domain since the 1980s, by 2009 *Open Government Data* was becoming a key national policy initiative in both the USA and the UK. In the USA this shift was heralded by the inauguration of President Barack Obama and his efforts to push back the attacks on state transparency that underpinned the Bush era. In the UK there was a broadening of interest in the charging and licensing models for Public Sector Information, and the potential social and economic benefits that could be gained from changing the distribution model. Research commissioned by government departments around this period included *The Power of Information Review*, by Tom Steinberg and Ed Mayo (2007), and *Models of Public Sector Information provision via Trading Funds* (Newbery et al. 2008).

Two authors of these reports – Rufus Pollock and Tom Steinberg – were also highly active in civil society promoting ideas about Open Data (Pollock) and Digital Democracy (Steinberg) through the organisations they had each founded. The Open Knowledge Foundation co-founded by Pollock in 2004 and MySociety founded by Steinberg in 2003 became critical to the development of the civil society push for OGD that strengthened in the UK during the period 2009-2012.

As interest was growing in the UK about how data produced by public bodies could be re-used by third parties, the UK Government in May 2009 was hit by a major political crisis - the MPs Expenses Scandal - in which evidence emerged of widespread and in some cases illegal abuse of the expenses system by Members of Parliament. Further, the impact of the 2008 financial crisis on the UK economy was still being felt across the country even as economic growth temporarily moved into positive territory. As trust in government further declined and consent for the neoliberal economic model began to fracture, the government looked to OGD as a partial solution. In June 2009, Sir Tim Berners Lee (inventor of the World Wide Web) and Professor Nigel Shadbolt both innovators in the field of Web Science and strong advocates of OGD, were appointed as Information Advisors to the UK Government. By the end of the summer, these appointments had led to a beta interface for data.gov.uk – the UK’s new OGD portal – being produced and shared with developers. Data.gov.uk was publicly released in January 2010, alongside the London Datastore - a similar OGD portal run by the

Greater London Authority. This shift to an OGD model was discussed in the Labour Government's White Paper Putting the Frontline First: Smarter Government (HM Government 2009), which was published in December 2009. This White Paper set out key principles for the release and reuse of Government's non-personal data, including a commitment to release certain key datasets about weather, transport and health, and a consultation on freeing up key data from Ordnance Survey. It was argued that such a policy would both enable local public service users to make informed demands for service improvements - as opposed to the earlier Labour government emphasis on top-down target driven improvements (p. 25). Further, it was perceived that opening data could contribute to economic growth by "releasing untapped enterprise and entrepreneurship" (p. 26). During the first half of 2010, the OGD initiative went live and developers began to engage with the datasets being released. Then in May 2010 UK voters ousted the Labour Government from power, and a Coalition government made up of the Conservative Party (majority) and Liberal Democrats came to power. Within days of the formation of this new government a new "Transparency Agenda" with OGD at its core was announced. This new agenda included the launch of a new Public Sector Transparency Board comprised of Sir Tim Berners Lee, Nigel Shadbolt, Rufus Pollock and Tom Steinberg, which met for the first time in June 2010, and the release of a stream of large and significant datasets.

In terms of academic research very little has been published on the Open Government Data initiative, particularly in the UK context. That which has been published has tended to be supportive and relatively uncritical in nature (e.g. Janssen, 2011). Whilst the dominant narrative of OGD is guardedly optimistic with regard to its progressive impact on society, some critical studies on OGD have, however, begun to emerge. Longo (2011), for example, attempts to unpack the relationship between New Public Management and the OGD initiative in the UK. Benjamin et al (2007) and Wright et al (2010) have examined cases in India where opening access to some data has resulted in the “empowering [of] the empowered” at the expense of marginalised groups; and, Gurstein has also discussed the issue of which social groups are actually empowered to make “effective use” of OGD. McClean (2011) has also made the argument that the expected benefits of OGD are being overstated by advocates and policy makers, and a recent article by Janssen (2012) has questioned the relationship between OGD and Freedom of Information, in light of recent political attacks on the UK’s Freedom of Information Act.

What is missing from this body of critical research, however, is a thorough analysis of what precisely OGD is, and which political economic interests are shaping it and to what ends. Initial questions emerging from the introduction above include why, specifically, has support for OGD expanded to such an extent during the last 5-6 years? Why was the new centre-right Coalition Government so keen to adopt OGD as a core policy initiative? What is the

relationship between OGD and the broader neoliberal agenda of the Coalition Government? What is the relationship between civil society OGD advocates, government, and other vested interests? In short: why Open Government Data and why now?

1.2. Aim of the Research

In order to begin to address some of the gaps in our knowledge about the UK's Open Government Data initiative, this thesis addresses the following aims and objectives.

Aim:

To better understand the social forces and interests that have been working to shape the UK's OGD initiative and to what ends.

Objectives:

1. To review the academic and policy literature on the political economic issues relevant to OGD including commercial re-use of public sector information, state transparency, informational capitalism and commons based production;
2. To undertake exploratory observations of the OGD community in order to inform empirical data collection;

3. To adopt a neo-Gramscian analytical framework through which empirical data gathered can be thematically analysed;
4. To design and undertake a case study of the UK's OGD initiative which applies relevant methods of data collection in order to provide data to analyse:
 - a) The efforts of civil society OGD advocates to build capacities such as tools and communities to promote OGD;
 - b) The governance and organisational forms of the OGD initiative, and how these impact on the shaping of the initiative;
 - c) The ideas and intentions of civil society OGD advocates in relation to neoliberal capitalism;
 - d) The relationship between civil society OGD advocates, state based OGD advocates and the PSI re-use industry;
 - e) The ideas and intentions of OGD advocates in UK local and national government and the PSI re-use industry;
 - f) The materialisation of OGD related government policy in the UK;
5. From the results of the empirical research, to draw on the neo-Gramscian analytical framework to provide a new conceptual understanding of the relations between the various social forces and interests attempting to shape the OGD initiative, and offer suggestions for potential counter-hegemonic responses to these developments.

1.3. Scope of the Research

This thesis is focused on the national context in the UK with a particular emphasis on developments during the period 2010-2012. This period is a key phase in the development of OGD policy in the UK. It focuses on the period of the adoption and development of the policy by the new Coalition government from May 2010, and the OGD advocates' initial responses to the government's adoption of the OGD agenda. It is important to recognise, however, that these developments are taking place alongside advances in the PSI re-use domain in other countries and at the international level. It is evident that competitive and regulatory pressures outside the national arena have significant impact on the UK's policy development, and where relevant these are flagged in the body of the thesis. In general, the UK has been an early mover in some of these international developments; most recently in efforts to establish a new international organisation - the Open Government Partnership launched in September 2011 - which aims to promote OGD and transparency internationally, and of which the UK Government is currently co-Chair from September 2012 - September 2013. It is recognised that these developments are significant; however, they are outside the scope of this thesis and are recommended as sites for further research. Further, it is proposed that as a global leader in the field of OGD, it is critical that the specificities of what is occurring in the UK are better understood before moving the research agenda to the international level.

1.4. Theoretical Framework

As mentioned in the objectives listed above, a neo-Gramscian theoretical framework was selected in order to achieve the aim of the thesis. The thesis aims to be a piece of research embedded in critical political economy and with the general intention of contributing to a better understanding of contemporary patterns of political economic power. The neo-Gramscian approach, therefore, with its roots in a Marxist critique of capitalism and an emphasis on social struggle was perceived to be a potentially useful analytical framework to adopt. In particular, the thesis draws upon developments in the field of neo-Gramscian International Political Economy in recognition that the social forces aiming to shape the OGD initiative are acting within the context of a globalised political economy in which power is concentrated amongst a political and economic elite that strongly favours the neoliberal model of capitalist accumulation which is currently in crisis. It was perceived that positioning OGD within this context was critical to better understanding the shaping of the initiative.

1.5. Methodology

The empirical data that the thesis is based upon, and which aims to satisfy the requirements of meeting objective 4, includes interviews with OGD advocates based in civil society, the state and business; analysis of a

key OGD mailing list; observations of OGD events; and, desk research. The majority of the empirical data collection took place during 2011, although desk research was continued into 2012 in order to follow the developing OGD policy domain. The analysis of the data collected was primarily based upon a thematic analysis of the qualitative data. Further, a quantitative content analysis of the mailing list was undertaken and social network graphs were produced based upon interview and observational data. This methodological approach aimed to get a deeper understanding of the ideational constructs of those advocating OGD, and to understand better who or what, in particular, was attempting to shape the OGD domain and how they were connected to other interests within the OGD policy development space.

1.6. Thesis Outline

The rest of the thesis is structured as follows. The following chapter reviews the literature on the various topics which frame the development of the OGD initiative. This chapter begins by situating OGD within the macro context, discussing it in relation to debates about the nature of information in the contemporary political economy and the development of open production as a challenge to the proprietary excesses of early neoliberal capitalism. Moving to the meso-micro level, OGD is then discussed in relation to the policy literatures around Re-use of Public Sector Information and Freedom of Information, before shifting focus to the small amount of recent literature that has emerged on the topic of Open Government Data.

The third chapter then moves on to introduce the neo-Gramscian analytical framework, outlining the research philosophy of the neo-Gramscian approach which is rooted in historical materialism, and some of the key conceptual tools developed in neo-Gramscian International Political Economy such as *hegemony*, *passive revolution*, *organic intellectuals* and *trasformismo*. It is argued that the current political and economic crises in the UK have led to a fracturing of consent for the neoliberal project, and therefore a range of political processes aimed at absorbing and adapting potentially counter-hegemonic tendencies into elite led projects which aim to reassert the hegemony of – or, consent for – neoliberal capitalism are likely to be in play. The fourth chapter then moves to discuss the research methods applied in the collection and analysis of the empirical data.

The following four chapters then present and discuss the empirical research. Chapter 5 focuses on the civil society OGD advocates' efforts to build an OGD infrastructure, with a particular emphasis on their efforts to develop an active community of OGD advocates and produce shared technical and informational resources around OGD. This chapter also offers a critique of the governance of the civil society community, evidencing the reproduction of significant socio-cultural inequalities in its power structures. Further, it begins to offer a critique of how participative technologies being developed using OGD might work to generate consent for the neoliberal project.

The sixth chapter then moves on to discuss the ideational constructs of the civil society OGD advocates, with a particular emphasis on their relationship to the neoliberal project. This chapter presents the OGD advocates - in neo-Gramscian terms - as a collective of 'organic intellectuals' with a complex and differentiated relationship to hegemonic neoliberal capitalism. In particular, themes emerging from the research data suggest an emphasis on the promotion of collective social ends, democratisation, overcoming political and economic crises, improving public sector governance, promoting innovation and promoting equality of access to the domain of economic production through instituting a data commons. Further, this chapter evidences an underlying, although not always publicly articulated, political struggle amongst civil society OGD advocates between those with more reformist intentions with regard to neoliberal capitalism, those more critical of the neoliberal project and those with less fully articulated political intentions.

Chapter seven shifts focus to the activities and ideas of the incumbents within the re-use of PSI domain: the policy makers and the commercial re-users of PSI. The chapter begins by examining the interrelations between civil society OGD advocates and a range of government bodies engaged in developing policy around the OGD initiative. It then moves on to analyse key themes articulated by these incumbent actors regarding their support for OGD. These include advocating OGD due to its potential for developing citizens' trust in the state including through

enabling citizen participation and engagement, enabling choice in public service provision and liberalising the PSI re-use markets. A comparison of the broad ideational constructs of civil society OGD advocates and incumbent state and business actors is then articulated.

The final empirical chapter, chapter eight, takes this process forwards to examine the actualisation of OGD into the policy developments of the Coalition government during the period May 2010 to August 2012. It is shown that OGD is being drawn on as a foundational policy to a raft of neoliberal policies including the comprehensive marketisation of public services, an economic growth model which empowers elite economic and other favoured interests, and a transparency initiative which aims to generate consent for the government's neoliberal framework for action.

The penultimate chapter of the thesis, chapter nine, draws together the analysis from the empirical chapters to develop a neo-Gramscian explanatory framework which aims to provide a better understanding of the political processes and structural forces OGD advocates encountered during the development of the initiative in the UK. It argues that those OGD advocates who are more critical of the neoliberal project, and who are promoting OGD as a challenge to neoliberal capitalism, are open to significant co-optation. The neo-Gramscian concept of *trasformismo* through 'ideational distortion' and 'absorption' of civil society actors into elite institutions is adopted to explain the restrictive and co-optative structural forces encountered by OGD advocates in the UK. Policy suggestions which

aim to challenge the neoliberal shaping of OGD are put forward, and suggestions for the future direction of those OGD advocates attempting to struggle against the neoliberal project are suggested.

CHAPTER 2: BACKGROUND AND REVIEW OF THE LITERATURE

2.1. Introduction

This chapter draws together a range of literatures that underlie the OGD initiative, prior to reviewing recent research on the OGD initiative itself. The chapter is organised as follows. Firstly, a review of macro level social theory on the relationship between information and capitalism is introduced, and brief definitions of capitalism and neoliberalism are offered, prior to a review of key literature in the field of social and commons based production. These early sections aim to provide context for the following section which moves into the micro-meso policy focused literature on the commercial re-use of PSI and state transparency. In these sections, key debates in the academic and policy literature are outlined and analysed. The final section brings the review into the present considering recent developments in the field, including the convergence of the access and re-use debates, the interest in the Semantic Web and the development of the Open Government Data initiative within this broader context. The chapter aims to provide a background to the themes and debates in relevant fields that will be taken forward into the following chapters.

2.2. Social Theory: Information and Capitalism

Foundational to an analysis of the development of an informational social phenomenon such as the Open Government Data initiative is a critical overview of the macro level social theory of information and capitalism that has been produced throughout the twentieth century. Beginning with Machlup's (1962) findings regarding the emergence of the 'knowledge industry' in the USA, theorists began to discuss the growing informationalisation of economies and societies coining a variety of terms including 'the knowledge society' (Drucker 1969), 'post-industrial society' (Bell 1973), and 'informational capitalism' and 'the network society' (Castells 2010). Whilst differences emerge between these theorists, they have tended to stress the idea of a period of discontinuous change from industrialism to informationalism, even whilst recognising that information has been important to all former societies. Thus, core to theoretical debates that have evolved around such theories is the question posed by Webster in his analysis of information society theory: has some sort of new society emerged from the old, or regardless of the importance of information to contemporary society is the "form and function" of information "subordinate to long-established principles and practices"? (Webster 2006, p. 7).

Breaking away from a Marx inspired historical emphasis on the changing mode of production (e.g. slavery, feudalism, capitalism), information society theorists have tended to focus on the changing mode of development,

defined by Castells (2010) as the “technological arrangements through which labour works on matter to generate the product, ultimately determining the level and the quality of the surplus” (p. 17) (e.g. agrarian, industrial, informational). Whilst Castells (2010) positions informationalism and capitalism on different analytical-historical axis, Webster (2006) recognises them as directly intertwined, arguing the 1970s economic crisis “impelled a restructuring of relationships which inevitably resulted in upheaval and instability...and absolutely axial to these developments, and to the handling of change itself, was information” (p. 96-97).

The connection that Webster (2006) makes between the 1970s economic crisis and growing informationalisation is critical, and it is a point that is not lost on Castells who recognises that post-crisis restructuring would not have been as effective without information technologies (Castells 2010, p. 19). This connection between capitalist restructuring in the 1970s and 1980s and informationalisation has been analysed by other theorists. Schiller (2010), drawing on a relatively orthodox Marxist analysis, argues that information commodification was chosen by corporate elites as the “new basis for profitable growth” following the 1970s ‘overproduction crisis’ (p. 39). Moving away from the economism of Schiller, Harvey (2007) recognises in the growth of informationalisation the ideological backdrop of nascent neoliberalism as a response to the crisis. The neoliberal belief that became increasingly dominant that “social good will be maximised by maximising the reach and frequency of market transactions”, he argues, led to it becoming

increasingly necessary to develop “technologies of information creation and capacities to accumulate, store, transfer, analyse, and use massive databases to guide decisions in the global marketplace” in order to actualise the neoliberal ideology (p. 3). Despite the differences, what is critical in these analyses is the connection that is drawn between the increasing proprietisation and commodification of informational resources, ICT proliferation, and both the structural and ideological demands of post-1970s capitalism.

2.2.1. Defining Capitalism and Neoliberalism

It is important here to specify how neoliberalism and capitalism are defined within this thesis. The term capitalism is used to refer to a mode of production, or to cite Castells (2010, p. 16), “rules for the appropriation, distribution, and uses of the surplus”. Within the Marxist tradition, the dominant features of a capitalist system are understood to be private ownership and accumulation of productive resources, profit orientated investment by private interests, the extraction of surplus value from wage labour, and a tendency to cyclical crises. However, whilst capitalism defines the economic structure at the deepest level, there are different means of organising a capitalist mode of production. This is the question of Regulation School theorists: “How is *capitalist accumulation* secured?” (Webster 2006, p. 63, original emphasis). The period prior to the 1970s economic crisis, variously described as Fordist and/or Keynesian, was based in many Western countries on a mixed economy focused on mass production for

mass consumption, managed through a process of tripartite (state-industry-labour) corporatism (Webster 2006). This economic model resulted in decreasing rates of economic inequality (or, a reduction in the relative wealth of economic elites); however, beginning in the late 1960s a structural crisis began to take hold in many of the core economies resulting in a period of deep economic crisis throughout the 1970s.

This structural crisis led to increasing interest in the economic ideas of neoliberalism as developed by economists such as Friedrich von Hayek and Milton Friedman, and whose intellectual base was located at the University of Chicago. In 1973, a US backed coup of the Allende government in Chile resulted in a group of Chicago trained economists establishing the first neoliberal economic regime under the dictatorship of General Auguste Pinochet. Following which, within the space of a few years during the 1970s, the neoliberal ideas of these economists began to draw more widespread support as an answer to the perceived failings of the Keynesian model in institutions such as the OECD, World Bank, IMF, and the governments of the UK and USA (Crouch 2011, p. 15-6). From these early beginnings, the ideas of neoliberalism began to be transformed into a political project whose adherents had universal aspirations. This context of neoliberalisation, the thesis will demonstrate, is crucial to understanding the development of the UK's OGD initiative. The following paragraphs will therefore outline some of the key defining characteristics of neoliberalism and its actualisation over the last 30 years.

The key proposition of a neoliberal framework is a preference for market forces over other, particularly state based, forms of economic organisation and management. As Crouch (2011, p. 7) argues,

“There are now many varieties and nuances of neoliberalism, but if we stay with that fundamental preference for the market over the state as a means of resolving problems and achieving human ends, we shall have grasped the essence”

Neoliberal economists are interested in increasing the overall level of wealth in an economy via these market forces, but are “explicitly uninterested in the distribution of this wealth” (Crouch 2011, p. 61). If questioned on the issue of wealth distribution, the general proposition is that the resulting economic ‘growth’ will enhance the general level of wellbeing in society as a whole due to “trickle-down” effects. In actuality, the neoliberal project has led to deepening economic inequality (Harvey 2005, p. 17) combined with intractable poverty at both national and global levels (Johnson 2005); a pattern which has been more deeply entrenched during the current sustained crisis of the neoliberal economic model (Wren-Lewis 2013).

Recent research has provided evidence that this lack of focus on distribution has had a significant negative impact on many apparently wealthy societies. Wilkinson and Pickett (2010) have shown the critical importance of wealth distribution for wellbeing by demonstrating that in richer countries higher levels of economic inequality result in lower levels of general wellbeing for all income groups across a range of criteria including physical and mental health, child well-being, education, imprisonment, violence, social

mobility, trust and community life. These findings suggest serious failings in the basic propositions of the neoliberal economic model in terms of the generation of wellbeing.

Despite these weaknesses in the basic propositions of neoliberalism, the principle of market expansion has been critical to economic governance in the UK (and elsewhere to a greater or lesser extent) over recent decades. This process has been actualised in a variety of ways, explored in more detail below, including, but not limited to, the deregulation and subsequent growth (and collapse) of the financial services industry; the introduction of New Public Management practices to the public sector; efforts to harmonise Intellectual Property regulations at the international level; a reduction in state involvement in welfare and development; and, a hollowing out of democracy in favour of technocratic decision makers.

Whilst often framed as an agenda of 'de-regulation' premised on the exclusion of state intervention, neoliberalisation has in practice been highly interventionist in relation to securing the conditions for market expansion. As Saad-Filho and Johnson (2005, p. 4) argue,

“neoliberal globalism is not at all a model of ‘economic deregulation’, and it does not promote ‘private initiative’ in general. Under the ideological veil of non-intervention, neoliberalism involves extensive and invasive interventions in every area of social life”

In the financial services industries significant de-regulation of markets and conditions for product development were created by state activity, leading as Duménil and Lévy (2005, p. 10) observe to “the dramatic growth of financial institutions” and “the implementation of new relationships between financial and non-financial sector, to the benefit of the former”. Such relationships include the development of financial products such as derivatives and futures that have proven highly unstable during the recent financial crisis, and which are dependent upon a range of data in order to model prices and calculate risks.

Supporters of the neoliberal project have also been keen to deepen and harmonise the market logic in relation to information and cultural production, as well as expanding proprietisation into the “blueprint of life” through the patenting of seeds, plants, and genes. One key example of these efforts is the TRIPS agreement negotiated through the World Trade Organisation (WTO) which aims at global harmonisation of firms’ Intellectual Property protections, resultantly limiting opportunities for international technology transfer to developing countries in areas such as medicines and software (May 2006). Whilst the deepening commodification of information and cultural production through developments in Intellectual Property law has been a key aspect of neoliberal globalisation, in recent years the perceived value of some forms of ‘open’ production in parts of the information economy has increased as it became apparent that some forms of IP could restrict firms’ ability to innovate (Jaffe and Lerner 2004; Hargreaves 2011)

Beyond financialisation and proprietisation of knowledge and culture, a further neoliberal development has been the implementation of New Public Management practices in the governance of the public sector. In line with the neoliberal predisposition to the market form, New Public Management (NPM) aims to bring the competitive logic of the private sector into the governance of the public sector. For NPM advocates, such practices should 'modernise' public services that are deemed unresponsive to and remote from users and dominated by the interests of public sector workers who are producing inefficient and sometimes unneeded services at a high cost to the tax-payer (Crouch 2011, p. 77). It is proposed by advocates of NPM that market-orientated management will lead to higher levels of quality and efficiency in public service provision (see Le Grand 2007).

In the case of the UK, ideas about New Public Management have been realised in a number of ways, including the increasing fragmentation of public service provision through outsourcing, privatisation and other forms of decentralisation, and the institutionalisation of competitive processes both within public bodies and between a variety of providers in the public, private and third sectors. Further, the users of public services have been increasingly constructed as 'citizen-consumers' requiring a range of information on the quality of the services in order to enhance their position in the market, and the driver of quality service production has shifted away from the notion of professional and public service ethics to targets and financial incentives (Crouch 2011, p. 71-96). Whilst some have argued that New

Public Management has been replaced by a form of “Digital Era Governance” (Dunleavy et al 2006), recent developments in the UK around the Open Public Services Agenda suggest that New Public Management thinking is still strong within the current government.

Certain elements of New Public Management, particularly its distrust of public sector employees, are also reproduced in a further theoretical intersection with neoliberal thinking - Public Choice Theory. Public Choice Theory holds that public officials should be theorised as primarily self-interested, rather than, for example, their actions being motivated with regard to normative constructions of the public interest or other politico-ethical ends (Crouch 2011, p. 62). The result of such theorising, as in the public sector as a whole, has been a shift towards more technocratic forms of governance, shifting power away from the supposedly ‘self-interested’ politicians, bureaucrats and the electorate. An explicit example of technocratic governance is the “economic restructuring” of peripheral economies during the 1990s enforced by International Organisations such as the IMF, World Bank and WTO, and, more recently, similar restructuring being directed at a number of European national economies by the IMF, European Commission, European Central Bank (“Troika”). However, more general trends towards technocratic, rather than values driven, public policy can be seen across areas where New Public Management has become dominant and where regulatory bodies have replaced direct provision in relation to the public governance of some privatised goods and services.

The sites of some of these technocratic policy spaces also point to the global aspect of the development of neoliberal practices. As argued above the neoliberal drive has generally been for the universal application of its propositions. In practice this has frequently been achieved through the empowering of networks of global economic elites at the expense of local polities (Saad-Filho 2005). The empowerment of large corporate interests within this broader context of neoliberal globalisation has often led to regulatory capture of many of these ‘technocratic’ decision making processes through the lobbying efforts of powerful global firms. At the level of global governance, Murphy (2000) argues that an anti-democratic and wholly “inadequate global governance” has been developed in recent decades centred on a combination of

“neoliberal ideology with its worldwide significance, a growing network of both public and private regimes that extend across the world’s largest regions, the system of global intergovernmental organizations, some of which are relatively autonomous and powerful, and transnational organisations both carrying out some of the traditional service functions of global public agencies and also working to create regimes and new systems of international integration” (Murphy 2000, p. 796).

It is these combined factors of New Public Management and technocratic forms of governance that have led many to mount a critique of neoliberalism as being a process of “hollowing out the state” and its potential for instituting

democratic and values driven forms of governance, in favour of a form of governance driven by an austere market logic.

2.2.2. The Counter Trend of Social Production and Commons Licensing

In relation to the production of informational resources, as across the rest of the economy, whilst the dominant logic of the neoliberalism has been one of proprietisation and commodification, this logic has not become total. As Schiller (2010) argues “informationalized capitalism has been neither completely nor securely established”, and a range of initiatives have been developed pinned on “the hope of developing information and culture as shared resources essential to democratic reconstruction” (p. 55). Schiller highlights an array of struggles against the expansion of private property rights in information including Creative Commons, Open Access, and Open Source among others, arguing there is reason to think that these initiatives will converge with “shared purpose and organisational resolve” (p. 56). May (2008) similarly highlights the struggle against information proprietisation perceived in initiatives such as Open Source and Open Access. Drawing on Mumford’s model of democratic and authoritarian technics, May recognises that whilst both ‘open’ and ‘closed’ systems can co-exist, “the ability to be able to choose freely between them is becoming in itself a transformational dynamic in the global system” (p. 91). What is critical to unpack in this review are the contrasting analyses of the relationship between capitalism and commons type licensing (e.g. Open, Free, Creative Commons) and social

modes of production and reproduction (e.g. peer production or p2p) offered by a range of theorists.

Benkler (2006) argues that these new modes of production have developed in spite of dominant assumptions regarding economic behaviour (p. 59); and, in a significant claim from a liberal scholar, he goes so far as to argue that:

“If we are indeed seeing the emergence of a substantial component of nonmarket production at the very core of our economic engine – the production and exchange of information, and through it of information-based goods, tools, services, and capabilities – then this change suggests a genuine limit on the extent of the market” (Benkler 2006, p. 19).

Also coming from a liberal perspective, Lessig (2009b) – one of the founders of Creative Commons – argues that between the commercial economy and the sharing economy, a third sector is being created: the hybrid economy. The hybrid, he argues, “is either a commercial entity that aims to leverage value from a sharing economy, or it is a sharing economy that builds a commercial entity to better support its sharing aims” (p.177). In order for the value of the hybrid economy to survive, there must remain a distinction between the two foundational economies. This distinction, he argues, is critical in order to prevent sharers coming to perceive themselves as tools of the commercial economy and resultantly growing reluctant to engage, and to prevent commercial companies losing their focus on economic reward. Similarly recognising the appropriable value being generated by sharing

economies, Tapscott and Williams (2008), in their best-seller Wikinomics book, claim that a new “mode of production is in the making” and aim to open the minds of business to the logic of engaging with, and appropriating value from, these new forms of “mass collaboration” and “self-organisation” (p. ix-xii).

It is clear, therefore, that this new method of production is not wholly a threat to the capitalist logic of appropriating surplus value. Indeed, as Jessop (2002) argues, one of the functions of the capitalist state is,

“securing the fictitious commodification of land, money, labour-power and knowledge and modulating their subsequent de- and recommodification in the light of changing forms of appearance of capital’s structural contradictions and strategic dilemmas and of the changing balance of forces contesting the extent and consequences of such fictitious commodification” (p. 45).

The autonomist school of Marxist thought has produced critical work on the new modes of appropriation being developed around social/non-market production (Terranova 2003; Arvidsson 2005). However, solutions to private appropriation of social production are no easy task. As Kleiner (2010) argues, whilst non-commercial licence terms (see Appendix 1) might create a barrier to capitalist appropriation of the commons, such measures also prevent the development of commons based economies. The Peer Production Licence that he proposes in opposition to Creative Commons licences, allows for productive commercial re-use for other commons based producers, emphasising a freedom that promotes freedom from exploitation,

as well as freedom to use, study, modify and redistribute. Further, Moore and Taylor (2009) question the relation between Free and Open Source Software (F/OSS) as a radical new mode of production, and its intersection with “pressures for conformity of international norms toward what are now seen to be ‘employable’ skills...reminiscent of...an exciting but Darwinian site of social struggle” (p. 109). The ‘meritocratic’ aspect to this struggle, or competition, has also been questioned in relation to the governance of such ‘networked’ or ‘distributed’ production communities. In the case of Wikipedia, for example, governance has been analysed as a range of “ideal types of traditional governance...[including] democracy, oligarchy, monarchy or autocracy, anarchy, bureaucracy”, as well as a self-managing form of organisation – “adhocracy” – as elaborated by Konieczny (2010, p. 264).

There are, therefore, many critical questions to be asked of these ‘open’ and ‘social’ modes of production. As Bauwens (2009) argues, whilst ‘digital utopians’ have tended to “ignore the constraints of the current political economy”, analysis on the “radical left” has tended to “stress that peer production is already adapted and co-opted into the capitalist system” (p. 122). In opposition to both these analyses, Bauwens (2009) argues for an “an integrative position” which recognises that “peer production is both immanent, i.e. part and parcel of a new type of capitalism, and also transcendent: i.e. it has sufficient post-capitalist aspects that can strengthen autonomous production communities in building an alternative logic of life

and production, that may, under certain conditions, overtake the current system” (p. 122).

It is within this macro context of neoliberalisation and informationalisation that an analysis of the Open Government Data (OGD) initiative must be positioned. The following sections will now move into the meso and micro level, drawing out key issues in the literature that converge upon OGD: commercial re-use of public sector information and state transparency.

2.3. Public Sector Information

Public Sector Information can be defined as “any kind of information that is produced and/or collected and held by a public body *as part of its public task*” (emphasis added) and covers both information “directly generated by public institutions” and “information and content held by cultural establishments, archives, and the like” (Vickery 2011, p. 6). This ‘public task’ based definition is similar to the UK’s Re-use of Public Sector Information Regulations 2005 which were transposed from Directive 2003/98/EC on the Re-use of PSI [2003] OJ L345/90EU. However, the EU Directive and UK Regulations do not apply to public service broadcasters and their subsidiaries, educational, research or cultural establishments. Pollock (2009) offers a further definition omitting the ‘public task’ delimiter: “information held by a public sector organisation, for example a government department or, more generally, any entity which is majority owned and/or controlled by government” (p. 1-2). Yet, he goes on to clarify that “while public sector

information could, in theory, include any piece of 'information' produced or held within the public sector it is usually taken only to encompass relatively large and coherent sets of data" (p. 1-2). Further, it should be stipulated that this body of research is generally interested only in non-personal information, with research into personal data belonging to a further body of literature. Whilst privacy and personal data are an important consideration in relation to OGD - for example, see O'Hara's (2011) discussion about the risk of anonymised personal data being deanonymised through various techniques - these considerations will not form part of this study.

Whilst authors and policy makers may set differing limits to the scope of PSI which they deem relevant, PSI clearly covers a wide range of informational resources, many of which in the UK are covered by Crown Copyright or Crown Database Rights. Table 1 below, adapted from an OECD report on PSI, whilst not comprehensive, highlights some of the wide range of subject matter that PSI covers (OECD 2006). These PSI resources are assumed by many to be complete, reliable and without bias (Burkert 1992); however, such assumptions are open to critique. For example, Screene (2005) questions the records management of UK public bodies in preparation for the Freedom of Information Act, highlighting issues around reliability and comprehensiveness of some records. Similarly, Shepherd et al. (2010) highlight that record management quality has contributed to doubt amongst public bodies that "they had fully replied to requests or had even supplied inaccurate information" (p. 344). Further, research in the field of critical

Table 1 - Non-comprehensive list of types of Public Sector information. Adapted from OECD (2006, p. 12)

Geographic Information	cartographic information
	land use info (cadastral data)
	spatial data/geographical coordinates
	administrative and political boundaries
	topographical information
Meteorological and Environmental Information	elevation data
	oceanographic data
	hydrographic data
	environmental (quality) data
	atmospheric data
Economic and Business Information	meteorological (weather) data
	financial information
	company information
	economic and statistics
Industry and Trade Information	industry and trade information
	demographic information
	attitude surveys
	data on health/illness
Traffic and Transport Information	education and labour statistics
	transport network information
	traffic information
	transport statistics
Tourist and Leisure Information	car registration data
	hotel information
	tourism statistics
Agricultural, Farming, Forestry and Fisheries Information	entertainment (local and national)
	cropping/land use data
	farm incomes/use of resources
	fish farming/harvest information
Natural Resource Information	livestock data
	biologic and ecologic information
	energy resource/consumption information
Legal System Information	geological and geophysical information
	crime/conviction data
	laws
	information on rights and duties
	information on legislation
	information on judicial decisions
Scientific Information and Research Data	patent and trademark information
	university research
	publicly-funded research institutes
	governmental research

cartography recognises that “mapping throughout its history has been continually contested” (Crampton & Krygier 2006, p. 12), highlighting the biases that can emerge in apparently neutral scientific data collection and information production processes. It is therefore important to appreciate in discussions about PSI that data and information are collected and stored (or, not) by public bodies for a purpose, and that has consequences in terms of completeness, reliability and bias.

2.3.1. The Market for Commercial Exploitation of PSI

PSI is a significant economic resource and use is made of it by both the public and private sectors. What is critical to appreciate regarding the commercial exploitation of PSI, is that it is not simply access to data and information which is important, but the rules regulating the re-use of it, i.e. using it to produce new resources. It is estimated that 15-25% of information products and services currently depend on re-use of PSI (The National Archives 2010). The business model for PSI holders tends to be sales of information products and re-use rights on large datasets to both public and private sector organisations. An Office of Fair Trading survey estimates that 78% of these sales are of refined (value-added) data (Office of Fair Trading 2006, p. 75). It is further estimated that of those businesses that purchase PSI (unrefined and refined), 28% are using PSI to create consumer products, 44% to create products for industry, and 39% for their own business purposes (Office of Fair Trading 2006, p. 28-9).

The economic significance of PSI re-use is a relatively recent phenomenon, and has grown in importance since the 1970s as capitalism became increasingly informationalised. An early example of the increasing significance of the commercial re-use of PSI is the development in the 1970s of “demographics” as a method of business research and planning used by American businesses (Russell 1984). Since this time, the private sector has come to rely increasingly on PSI for its business functions. By the 1990s, commercial re-users, particularly in the USA, had significantly raised their awareness of the value of PSI and had become increasingly “aggressive in attempting to get data for free”, often via the conduit of the US-based Information Industry Association (IIA) which by 1995 had 650 for profit members (Grupe 1995). Further, during this period states were finding increasing needs to develop new and more complex databases, for example, land information databases. In making such decisions, governments were advised to factor in the future private sector usage of such PSI in producing a cost-benefit analysis of these expensive new assets (McKay & Giffen 1990), highlighting the way in which potential private sector demand might shape data collection and information production.

Today, businesses use PSI for a range of purposes, including:

- developing business strategies (Burkert 1992; European Commission 1999)
- developing marketing strategies (European Commission 1999; Office of Fair Trading 2006)

- developing export and investment plans (European Commission 1999)
- assessing business relations (Burkert 1992)
- assessing credit risks (Burkert 1992; Office of Fair Trading 2006)
- understanding the rights, duties and procedures they must operate in (European Commission 1999)
- developing just-in-time ordering systems (Office of Fair Trading 2006)
- trends analysis (Office of Fair Trading 2006)

A vibrant market in value-added information products has also been developed. This market includes, for example, industries which add value to legal, meteorological, geographical, environmental, cadastral (land ownership) and administrative information, often in competition with states' own value added information production.

2.3.2. PSI Policy Developments

The PSI policy domain has had a significant impact on the development of the commercial exploitation of PSI over the last three decades. Sulzer (1992) argues that the 1980s in the USA was the decade of shift from PSI dissemination policy being based on “social and democratic concepts, to one which has a primarily economic perspective” (p. 119). Similarly, Smith (1985) argues, “[f]or the first time in American history, government information is being treated as a commercial, rather than a social, good” (p. 45). However, a bygone era of “social and democratic” shaping of PSI policy is perhaps

more apparent in the US than the UK context. Whilst the USA had implemented a Freedom of Information Act in 1969 and Federal agencies claimed no copyright on their information resources, the UK was still dominated by government secrecy. For example, Prime Minister Margaret Thatcher in 1986 declared Freedom of Information both “inappropriate and unnecessary” for British people (Birkinshaw 1997).

Whilst the regimes governing access to government information differed between the USA and the UK, a similar process of commercialisation was underway. The US Federal government was increasingly, under pressure from the information industry, treating its PSI as a commercial good (Smith 1985). In the UK meanwhile, the neoliberal Thatcher government, in 1981, adopted the ‘Rayner Doctrine’ of full cost recovery for PSI (Sutherland & Blakemore 2005). This approach resulted in government mandates throughout the 1980s for the growing commercialisation of a range of public information assets including Ordnance Survey - the UK’s Mapping Agency (Evans 2006). The UK’s Department for Trade and Industry in its 1985 guidelines stipulated that Government Departments were expected to charge a “reasonable market price” for PSI, although there were exceptions for newly exploitable PSI (European Commission 1999). The developments in the 1980s thus align with the broader imperative to generate economic value from information through proprietisation and commercialisation.

The ‘full-cost recovery’ model stayed in place throughout the 1980s until the adoption of a “public-need approach” in 1992, which aimed to enable

public bodies to cope with changes in market demand and reprioritise activities without being dependent on having to continually renegotiate budgets with the Treasury (Sutherland & Blakemore 2005). Nevertheless, this 'public-need approach' was far removed from the "new consensus" for a market orientated re-use policy gaining ground in the USA which argued "information developed by the federal government should be disseminated...in its original form and...enhanced by the private sector" (Kahin 1991)¹. In particular, the 1990s also saw the spread of the Trading Fund model within the UK; a model which diverges significantly from the US Federal model. The Trading Fund model is based wholly on the commercial exploitation of PSI by the public sector, since a Trading Fund must gain at least 50% of its revenue from the commercial exploitation of the goods and services it produces. Many of these newly established Trading Funds were based on the commercial exploitation of PSI including Companies House (est. 1991), Land Registry (1993), Meteorological Office (1996), Ordnance Survey (1997), United Kingdom Hydrographic Office (1996), and Driver Vehicle Licensing Agency (2004).

Whilst developments in the commercial exploitation of PSI by both public and private bodies had been ongoing throughout the 1980s, Burkert (1992) cites 1989 as the year that the European Union made "the discovery of

¹ The distinction between US Federal policy and US state and local policy should be noted here. As Clark (2006, p. 130) points out whilst US Federal government has adopted an 'open access' policy, at the state and local level government bodies are "as driven by the profit motive as any private sector business".

Public Sector Information” (p. 484). PSI was brought to the attention of member states by a set of guidelines issued by the Commission of the European Community in 1989 to improve information market relations between the private and public sectors (Burkert 1992). This led to the PUBLAW I study on the effect of copyright, competition, secrecy, data protection and access to documents regulations on the commercialisation of PSI (Burkert 1992). The results of this study highlighted the issue of exclusive agreements between public bodies and private sector partners. Such agreements often resulted from an agreement for a private sector company to upgrade a technological system for a public body in return for distribution rights on any information involved, and were deemed problematic under competition law (Burkert 1992).

During the 1990s a range of studies were undertaken within the EU, which led to the 1999 Green Paper, Public Sector Information: A Key Resource for Europe (European Commission 1999). The Green Paper highlighted a range of benefits that access to PSI could contribute to labour markets, consumer markets and overall market competitiveness (European Commission 1999). Then, in 2000, PSI re-use was discussed by the European Parliament as part of the effort “to stimulate the development and use of European digital content” (European Parliament 2000), and the oft-cited PIRA study (PIRA 2000) on the commercial exploitation of PSI, commissioned by the European Commission, was published. The PIRA study compared the market for PSI use and re-use in the EU to that of the

USA, and found the EU had significant room for growth. Further, it was the first study to suggest that whilst a US style policy of not charging for PSI would lead to a loss of income from commercial licence fees, such a model would at least double the PSI re-use market resulting in enough additional tax revenues to offset the loss (PIRA 2000, p. 6). This growing awareness of the economic value of PSI re-use at the EU level eventually led to the Directive 2003/98/EC on the Re-use of PSI [2003] OJ L345/90EU, which stipulated that PSI produced by public bodies (other than public service broadcasters and their subsidiaries, educational, research or cultural establishments) as part of their public task, must be available for re-use non-exclusively and without discrimination, although charging was to be allowed.

In spite of the growth of Trading Funds, the UK had evolved its PSI re-use policy somewhat between the 1980s and the coming into force of the new PSI re-use regulations in 2005. In the 1990s, for example, guidelines were developed stating that public bodies should not aim to compete with private sector providers (European Commission 1999). Further, the Cross-cutting Review of the Economy (HM Treasury 2000) in 2000 recommended that whilst Trading Funds should continue charging for PSI under an improved system, there should be an immediate policy move to marginal cost pricing outside the Trading Funds. This recommendation was followed by the development of the 'Click-Use' licence, which re-users had to register for in order to re-use certain types of Crown Copyright PSI at marginal cost. In relation to the Trading Funds, however, competition concerns were, and

are still, perceived, due to the Trading Funds taking advantage of their monopoly role in data collection in the market for value-added information products. This issue was addressed by the Office of Fair Trading in its 2006 report on the commercial re-use of PSI (Office of Fair Trading 2006) and in the Cabinet Office commissioned Power of Information Review (Mayo & Steinberg 2007). The 2008, 'Cambridge Study' (Newbery et al. 2008), commissioned by the Department for Business, Enterprise and Regulatory Reform and HM Treasury, took forward these issues and made the argument for marginal cost charging for Trading Funds' 'unrefined' data i.e. that which is uncompetitive to produce in the market, whilst leaving intact the charging regime for 'refined' data i.e. that which can be produced in a competitive marketplace.

2.3.3. Key Arguments and Debates in the PSI Literature

Emerging from this brief history of the PSI policy environment in the UK, EU and USA are a number of critical arguments and debates. The first group of these are the differing distinctions made between types of PSI and how these have developed in accordance with the developing neoliberal market logic. Secondly, there are debates in relation to the role of the state with regard to PSI. Thirdly, there are the perceived barriers to commercial exploitation of PSI that have been identified in the literature. And, finally, the debate over charging for PSI re-use and whether some PSI should be available for re-use at marginal cost (i.e. the cost of inputs required for a further unit of output to be produced once the original unit has been

produced, which for digital resources tends to equal zero, particularly if the infrastructure required to make the resources available online is not factored into the calculation).

2.3.3.1. Distinctions between Types of PSI

Whilst a number of distinctions are highlighted between different types of PSI e.g. personal v non-personal (European Commission 1999; Pollock 2009), administrative v non-administrative (European Commission 1999), a critical distinction is related to the value of data, and how this has shifted within the UK context from a distinction based on usability to one based on market value.

In the Cross-cutting Review of the Economy (HM Treasury 2000), the Treasury made the distinction between 'raw data' and 'value-added information'. This distinction draws on the reasons for data collection and processing. The term 'raw data' is used to define data that are collected because they are central to government's core responsibilities, and the term 'value-added information' is used to identify when the use value of 'raw data' has been enhanced through, for example, manipulation, analysis, summarisation, or making it easier for end-users to use. A similar distinction, although further broken down, is made by Clark (2006) in his classification of PSI into the categories functional data, regulatory data, reference data, adding value by processing and adding value by joining up. This distinction between 'raw data' and 'value-added' information has overlaps with the

Information Science literature, in that it highlights both structure and meaning as important areas of distinction (see Rowley 2007).

In contrast to the distinction between ‘raw data’ and ‘value-added information’, however, a market-driven distinction has become increasingly dominant in the UK PSI literature during the last five years. The market-driven distinction draws on concepts such as market failure, public goods and competitive markets and tends to use the terms ‘unrefined’ versus ‘refined’ or ‘upstream’ versus ‘downstream’. The Office of Fair Trading (2006, p. 53) proposed that PSI is ‘unrefined’ if the public authority is the sole supplier of data as it would be uncompetitive to produce it commercially, whereas PSI is ‘refined’ if its supply would attract competition in the market. This distinction is taken forward, with reservations, in The Cambridge Study (Newbery et al. 2008). However, it is adapted by Pollock (2009, p. 7) into the categories of ‘upstream’ and ‘downstream’, as a result of drawing on the “more usual terminology within the competition literature” and because ‘unrefined’/‘upstream’ PSI may have undergone processing to make it useable and thus the term ‘unrefined’ is confusing (Pollock 2009, p. 7). Regardless of terminology, the distinction is still based on the fact that ‘upstream’ information cannot be sourced from anywhere other than the public body, whereas ‘downstream’ information could be provided by another organisation if that organisation had access to the relevant ‘upstream’ information.

Thus, within these more recent, and more frequently referenced, classifications the only distinction being made is whether the production of the PSI product is possible within competitive markets, or whether it should be classified as an uncompetitive 'public good' to be produced by the state. It is important here, of course, to also consider the earlier discussion on social production i.e. the growth of 'sharing' economies and their intersection with 'commercial' economies. Whilst the market-driven distinction is problematic, it is too simplistic to argue against it under the assumption that it would generate an entirely profit driven model for the production of 'downstream' PSI. This is because if 'upstream' PSI was available equally across the range of sharing and commercial economies, 'downstream' information could also be produced by those engaged in non-commercial 'sharing economies', which could potentially ease some of the power concentrations resulting from commercial and state monopoly in the interpretation of 'upstream' data. Nevertheless, the power of such production to generate impact in a competitive market is far from guaranteed, and the uneven social distribution of resources, skills and time required to contribute in sharing economies must also be considered.

A further distinction becomes relevant here, one based on the users and benefactors of PSI re-use. Such a distinction is articulated, among others, in the EU Green Paper which specifies a distinction between PSI which is "relevant for a general public" and that in which there is "a very limited set of persons that have a direct interest" (European Commission 1999, p. 11). A

similar distinction is made by Clark (2007) when he makes the argument that if society at large benefits from re-use the taxpayer should pay, however if a small number of organisations benefit the re-user should pay. It may also be possible to make a distinction between PSI which is of value to commercial re-users and that which is of value to citizens. However, it is problematic to draw these into a binary distinction since some data are both commercially and democratically valuable (e.g. business data, environmental data etc). As Longhorn and Blakemore (2004) point out, a PSI resource can be both a public good and commercially valuable. It is this overlap which marks a site of convergence between commercial re-use of PSI and the democratic right to access and manipulate government information.

2.3.3.2. PSI and the Role of the State

A significant feature in the PSI literature is the prevalence of ideological assumptions regarding the role of the state, and in particular its bias towards liberalised, competitive markets, and the withdrawal of the state as market participant in favour of its role as market regulator and producer of uncompetitive 'public goods'. This school of thought is articulated most strongly in the reports on the commercial PSI markets commissioned by the EU and UK government (e.g. PIRA 2000; Dekkers et al. 2006; Newbery et al. 2008; Office of Fair Trading 2006; Vickery 2011); private sector reports (e.g. CBI 2006; MICUS Management Consulting GmbH 2009); information industry representatives such the Information Industry Association (e.g. Smith 1985; Grupe 1995); individual contributions (e.g. Weiss 2002), and

Table 2 - PSI literature assumptions about the role of the state

Role of state	Arguments/Claims	Origin
Enable competitive markets	It is now possible to produce and distribute government information competitively (Information Industry Association, USA – reported by Smith (1985))	USA
	The public sector should not develop or produce things already available in the private sector (Information Industry Association, USA – reported by Smith (1985))	USA
	If budgets are cut public sector monopolisation risks data being eliminated (Information Industry Association, USA – reported by Smith (1985))	USA
	Monopolisation risks censorship, manipulation of information, and increased prices (Perritt Jr 1997)	USA
	Government should be focused on what is “inherently governmental” (Weiss 2002)	USA
	“Providing public data and information is a proper governmental role... The government should exercise caution in adding specialized value to public data and information... The government should exercise substantial caution in entering markets in which private-sector firms are active” (Stiglitz et al. 2000)	USA
	The government should open data underlying its websites rather than producing websites, and “rely on private parties in a vibrant marketplace of engineering ideas to discover what works” (Robinson et al. 2008)	USA
	PSI pricing should be non-discriminatory (Information Industry Association, USA – reported by Grupe (1995) - and Directive 2003/98/EC on the Re-use of PSI [2003] OJ L345/90EU)	USA/ EU
	PSI can inform all market participants so as to reduce the competitive advantage of local or incumbent market participants (European Commission 1999)	EU
	PSI can enable informed choice for consumers and workers’ mobility (European Commission 1999)	EU
	Competition distortions in value-added PSI products are a concern when the public sector is the holder of a monopoly, uncompetitive asset such as raw/unrefined/upstream PSI (Office of Fair Trading 2006; Pollock 2009; Newbery et al. 2008)	UK
	A level playing field in access to PSI may help overcome competition issues in the delivery of public services where a purely regulatory approach is not very effective (CBI 2006)	UK
Ensure public good	If society at large benefits the taxpayer should pay, if a small number of organisations benefit the user should pay (Clark 2007)	UK
	The agenda should be based on citizens’ and consumers’ needs (Longhorn & Blakemore 2004)	UK
	A focus on “rights and obligations would seem to steer us toward rights that are articulated by many more sectors than just data users or producers, to include all the stakeholders in an open and transparent manner” (Blakemore & Craglia 2006, p. 21)	UK

within some of the academic literature (e.g. Pollock 2009). In a critique of these assumptions, a number of authors have called for a ‘public interest’ role for the state when making decisions on PSI policy (Clark 2007; Clark 2006; Blakemore & Craglia 2006; Longhorn & Blakemore 2004). These debates are summarised in Table 2 below.

A further argument has more recently been articulated in relation to PSI and markets beyond the PSI specific market regarding the role of PSI in ensuring “competitive neutrality” in public service provision as a whole. In a 2006 report on “competitive neutrality in UK public service markets”, the Confederation of British Industry (CBI) argued:

“Information that may not be available to third parties in the same form as it is to government—such as personal files, property information or geological data—should not be used by a public undertaking operating in a commercial market” (CBI 2006, p. 30).

Such arguments take discussion about re-use of PSI and the role of the state as a provider of public services into a domain not yet addressed critically in the literature, and will be discussed in the forthcoming chapters.

2.3.3.4. Perceived Barriers to Commercial Exploitation of PSI

Within the literature that is concerned with the state’s role in fostering the commercial exploitation of PSI in competitive markets, the issue is frequently raised that the European PSI market is not fulfilling its potential (PIRA 2000; de Vries 2011; Dekkers et al. 2006). A key focus of this literature has

therefore been to identify and resolve barriers to the commercial exploitation of PSI. Key areas identified as presenting problems to commercial exploitation include competition distortions in PSI markets, issues regarding regulatory compliance, the cost of re-use, the availability and accessibility of PSI, and public sector cultural and organisational issues. These issues are outlined in more detail in Table 3 below.

2.3.3.5. Marginal Cost Pricing of PSI

Whilst the OFT report deemed that customers would be largely unresponsive to price changes, particularly where there are limited alternative sources (Office of Fair Trading 2006, p. 118-9), the issue of charging has nonetheless been a critical issue in the literature and in practice (see Table 4 below for some of the arguments for and against marginal cost pricing). A range of economic arguments have been made for marginal cost pricing of at least 'upstream' or 'raw data' within the academic community (Lopez 1996; Pollock 2009; Newbery et al. 2008; Saulles 2007; Alani et al. 2007), the policy community (Weiss 2002; PIRA 2000) and the information industry (see Grupe 1995). A recent contribution to this literature has been the mathematical economic modeling of Pollock, which argues that 'upstream' data should be made available for re-use at marginal cost (Newbery et al. 2008; Pollock 2009; Pollock 2010), should be funded through a mixture of direct state-subsidy and 'updater' charges (Pollock 2009), and doing so could potentially contribute £1.6-6 billion a year (dependent on the demand it generates) in "gains" to the UK economy. Such "gains" include

Table 3 - Perceived barriers to commercial exploitation of PSI in Europe and the UK

Restrictions	Key issues
Distortion of competition in refined PSI markets	The Office of Fair Trading estimate that distortion of competition as a result of inadequate availability, overly restrictive terms, and inadequate service contributed to a £140 million annual loss for the UK's PSI sector (Office of Fair Trading 2006, p. 118-9).
	Exclusive licensing (PIRA 2000; de Vries 2010). The EU PSI Directive gave until 31 st December 2008 for exclusive contracts to come to an end.
	Government/public sector claiming copyright on databases and information it produces (PIRA 2000; de Vries 2010).
	Restrictions on re-use (PIRA 2000; MICUS Management Consulting GmbH 2009; Office of Fair Trading 2006). The UK's Open Government Licence (2010) removes most restrictions on re-use for the PSI it is applied to. Remaining restrictions include a mandate to acknowledge the source, not to suggest the data provider endorses the work, not to mislead or misrepresent the data, to obey data protection and privacy regulations
	Discrimination i.e. the same conditions are not applied to all re-users, including the unrefined PSI holder, equally (Dekkers et al. 2006). Non-discrimination is now regulated for in the EU PSI Directive
	Incumbent PSI re-users discouraging PSI holders from complying with regulations (de Vries 2010)
	Financial targets imposed on Trading Funds in the UK (Saulles 2007)
Regulatory compliance	Transparency: is it clear what conditions apply to re-use? (Dekkers et al. 2006; de Vries 2010; MICUS Management Consulting GmbH 2009)
	Accountability of supplier in adhering to conditions of re-use (Dekkers et al. 2006; de Vries 2010)
	The legal complexity around PSI re-use due to it existing at the intersection of Freedom of Information, ICT, IPR and Competition law (de Vries 2010)
	PSI holders not applying the EU Directive/national regulations properly (de Vries 2010)
Cost of re-use	Charging above marginal cost (PIRA 2000), unduly high pricing (Office of Fair Trading 2006; MICUS Management Consulting GmbH 2009). The OFT estimated unduly high prices contributed a £20 million annual loss in value for the PSI sector. However, it was deemed that customers would be largely unresponsive to price changes, particularly where there are limited alternative sources (Office of Fair Trading 2006, p. 118-9).
Availability and accessibility of information	Availability of information (Dekkers et al. 2006; Office of Fair Trading 2006)
	Failure of the PSI holder to exploit the PSI through not making it all available for use/re-use (Office of Fair Trading 2006). The OFT estimated failure of the PSI holder to exploit PSI contributed a £360 million annual loss in value for the UK PSI sector (Office of Fair Trading 2006, p. 118-9).
	Accessibility: ease of requesting, delivery, discovery and getting translations (Dekkers et al. 2006; de Vries 2010; MICUS Management Consulting GmbH 2009)
	Weak Freedom of Information law (PIRA 2000). In the UK the Freedom of Information Act (2000) came into force in 2005. An amendment to add a 'right to data' has recently gone through Parliament.
Public sector management/ culture	PSI holders taking a micro perspective focused on short term cost recovery (de Vries 2010)
	PSI holders reluctant to support the idea of commercial re-use of PSI (de Vries 2010)

Table 4 – Marginal cost pricing of PSI

Arguments for marginal cost pricing of PSI	Double taxation: taxpayers have already paid for data collection, why should they pay to re-use it (Information Industry Association, USA reported by Grupe 1995)
	Make the EU information market competitive with the USA where Federal PSI is available for re-use at marginal cost (PIRA 2000; Weiss 2002)
	Grow information intensive industries (Weiss 2002)
	Stimulate innovation (Weiss 2002; Lopez 1996); enable scientific research (Weiss 2002); fuel development of the Semantic Web (Alani et al. 2007)
	Aid the shift to the information economy (Saulles 2007)
	Resultant sector growth will generate adequate tax revenues to cover short term losses of PSI holders (PIRA 2000; Weiss 2002)
	Charging could lead to information haves and have-nots (Grupe 1995), which would exacerbate the digital divide (Longhorn & Blakemore 2004)
	Mathematical analysis suggests that making digital upstream information available for re-use at marginal cost pricing is the most socially beneficial option (Newbery et al. 2008), it should be funded by 'updater' fees and direct govt contributions (Pollock 2009), and could contribute £1.6-6 billion a year in gains to the UK economy (Pollock 2010)
	It's a "benign form of information socialism" (Boyle 2005)
Criticisms of free/marginal cost model	It is potentially a subsidy to commercial re-users (Grupe 1995)
	Once the private sector is in the market it might be more difficult to ensure access for all citizens (European Commission 1999)
	Commodification can build trust and an institutional capacity to serve users (Longhorn & Blakemore 2004)
	Unrecognised costs: PSI costs to produce, it costs more to disseminate than putting on a website due to the need to create metadata and assist users, and it creates a dependency relationship between the provider and user which costs to service (Longhorn & Blakemore 2004)
	No cost can lead users to under value PSI and lack discipline in requesting it (Harris 1997, p. 111)
	A taxation based model assumes there is enough taxation to cover costs (Longhorn & Blakemore 2004)
	Assumes allocators of tax income understand strategic needs of data producers (Longhorn & Blakemore 2004)
	If society at large benefits, the taxpayer should pay, if a small number of organisations benefit the user should pay (Clark 2007)
	Unrealistic to expect government to provide unlimited funds to resource all present and future PSI demand (Blakemore & Craglia 2006)
	Conflict of interest with the financial targets imposed on Trading Funds in the UK (Saulles 2007)
	Barriers to re-use are exaggerated: the EU already has lots of businesses re-using PSI (Clark 2006)

new information products and services, the development of complementary products and services (e.g. software tools and consultancy), reduced transaction costs for PSI re-users, and increased public sector efficiency due to improved access to timely information (Pollock 2010). Whilst Pollock acknowledges the contingency of such arguments since they are based upon “evidence [that] is currently limited” (Pollock 2009, p. 36), the translation of this research into the frequent claim that ‘opening’ PSI will add £6 billion to the economy - see for example the Conservative Party Manifesto and Conservative Party Technology Manifesto (The Conservative Party 2010a; The Conservative Party 2010b) - has been critical in the push for OGD (a critical analysis of the £6 billion calculation is provided in Appendix 3). Pollock’s research marks a critical development in the literature since earlier contributions have tended to draw on comparisons between the US and European markets, and more overtly politicised arguments, for example Weiss (2002). Pollock’s mathematical arguments thus appear to neutralize the debate, giving it a scientific edge. However, as Mosini (2011) points out such economic positivism is a distinctly neoliberal phenomenon, and a critique is warranted of economics being accorded scientific status at the same time as its normative framework has been eroded.

Further, the case for marginal cost pricing has been made in terms of a democratic logic which recognises that charging could create barriers to access and contribute to the ‘digital divide’ (Grupe 1995; Longhorn & Blakemore 2004). Indeed, Boyle argues that the US Federal system of

marginal cost pricing is a benign form of information socialism (Boyle 2005). However, there are also significant critiques of applying marginal cost pricing policies which take into account the broader political economic context (Grupe 1995; Blakemore & Craglia 2006; Saulles 2007; Clark 2007), arguments in favour of the commodification of PSI (Longhorn & Blakemore 2004), and a different normative framework (Clark 2007) (see Table 4).

Whilst some of the arguments against marginal cost pricing highlight public benefit limitations due to the current economic structure and fiscal policy, other claims are made that are based on an assumption that commercialisation of PSI is socially beneficial. It is important here, therefore, to cast our overview of the analysis back to debates in the USA as commercialisation began to take hold there in the 1970s and 1980s (see Smith 1985; Sulzer 1992; Schiller 1991). In his discussion of the increasing privatisation of the US Federal information system, Schiller points out how the principle of free access to information:

“is being steadily weakened [and] ability to pay increasingly has become the organising mechanism for acquiring, processing, and disseminating governmental and all other kinds of information...As the idea of information as a good for sale, a commodity, advances, the idea of information as a social good, the cornerstone of democratic life, recedes” (Schiller 1991, p. 44).

It is with this thought in mind that this review will now move on to consider the literature around access to government information, open government and transparency.

2.4. Access to Government Information

Whilst state transparency and access to government information has been legislated for in Sweden since 1766 and the United States since 1967, it is only within the last two decades that it has become a legal requirement in growing numbers of countries. By the mid-1980s, only 11 nations had FOI laws, yet, by the end of 2004, 54 did (Bertot et al. 2010). The UK's Freedom of Information Act 2000 (FOIA) came into effect in 2005, the same year as the Re-use of Public Sector Information Regulations, the replacement of the Environmental Information Regulations (1992), and the UK's ratification of the Århus Convention - a UN Convention giving citizens rights to access environmental information, participate (as organised NGOs) in environmental decision making, and access to justice in environmental matters (Parliamentary Office of Science and Technology 2006). Prior to 2005, UK citizens only had rights to access environmental information via The Environmental Information Regulations 1992 transposed from the European Council Directive 90/313/EEC on the freedom of access to information on the environment [1990] OJ L158/56.

2.4.1. Explaining Transparency

A number of different explanatory frameworks have been suggested for why this recent expansion in transparency and accountability initiatives has occurred. Bennett (1997) argues this expansion of Freedom of Information (FOI) should be analysed alongside the “diffusion” of two other “instruments of accountability”: Data Protection and the Ombudsman (p. 213). Advocates of such “innovations”, he argues, tend to recognise them as solutions to their perception of “big government” (p. 222). Perceptions of “state growth, unaccountability and intrusiveness”, he argues, “are apparently necessary...but...certainly not sufficient conditions” for the development of FOI, and other instruments of accountability (p. 221-2). Bertot et al (2010) instead focus on the impact of information and ICT on cultural attitudes to state transparency, considering the factors that may impact on “the extent to which ICTs can create a permanent culture of transparency” (p. 268). McClean (2010), on the other hand, draws on comparative politics to develop a political economy based explanation which argues, “the more highly coordinated a country’s economy, the less transparent it is likely to be”, since “representative bodies” in their ongoing negotiations with the state have privileged access to information, and public access would weaken this privileged position (p. 392). In more liberal economies, firms are less likely to have privileged access to information, and thus, “are likely to favour access laws as a partial substitute” (p. 392). Such an explanation is developed drawing on a comparison of the USA and Germany; however, as McClean

points out, by drawing the UK and Sweden into the comparison, the explanatory model is weakened suggesting “historical sequences and classic political variables” (p. 392) need to be factored into the analysis as well.

What is critical about all of these explanations is that they highlight a contemporary ambivalence about informational power, state-citizen relations, and democratic decision making, in the context of changing forms of state governance, technological development and capitalist economies. Braman (2006) goes as far as to describe this context as the “informational state”; a “change of state” from the “bureaucratic welfare state”, to a form of state in which “governments deliberately, explicitly, and consistently control information creation, processing, flows, and use to exercise power” (p. 1). Whilst the diffusion of FOI might suggest a counter argument to Braman, it is critical to appreciate the barriers to the free flow of information from state to citizen. Some of these barriers are built into the legislative framework for FOI. For example, the FOIA in England and Wales does not cover information accessible to the applicant by other means, if it is commercially sensitive or might prejudice economic or financial interests, if it relates to policy formation, ministerial communications, or legal advice, or if it threatens national security, international relations or national relations in the UK, among other restrictions. There has also been much critique of the reduction in US state transparency due to national security reasons following 9/11 (Herrick 2009; Halchin 2002; Strickland 2005; Pozen 2005; Kirtley 2006). Most recently, the limitations of state transparency, and the “long simmering

problem” of overstretch of the classified category, has, in the guise of Wikileaks, Brian et al. (2011) argue, been turned into a crisis as a result of the enabling technology of the internet.

However, many of the barriers to accessing state information are less obvious. One critical limit to access to information is the political economic context. As discussed above, McClean (2010) highlights the potential impact of the level of co-ordination in a nation’s economy on the likelihood of FOI legislation. Added to this insight, Roberts (1997) discusses the impact of New Public Management - in the Canadian context - on access to information. As he points out, the dominance of New Public Management as a mode of public governance over the last three decades has led to “the aggressive pursuit of new sources of nontax revenue” (p. 315), privatisation of government functions to suppliers not required to comply with FOI, public spending reductions, and commercialisation of government information as all having a detrimental impact on FOI. Whilst FOI was not implemented in the UK until 2005, similar processes of New Public Management were and still are active. In a further article, Roberts (2005) also highlights the “two contrary pressures” within the UK during the Blair government of a move towards the “centralisation of control over communications” as counterweight to the increasing liberalisation of access to information. Further, problems with the management of public information are highlighted, for example by Screene (2005), Shepherd et al. (2010) and Worthy (2008) as creating barriers to the accurate and full disclosure of information (see Section 2.3).

2.4.2. Making the Case for Access to Information

Within the literature a number of different arguments are made for the importance of Freedom of Information and state transparency. At the highest level these can be separated into political and economic reasons, the separation largely emerging from the heavy influence of liberal political theory within this domain. Within the political domain, the reasoning can be further broken down into what might be called ‘top-down’ and ‘bottom-up’ forms of transparency. A traditionally liberal (top-down) model of enabling citizens’ “informed consent” (Brito 2007; Herrick 2009) and building “trust” in state institutions (Burt & J. Taylor 2009; Meijer 2009) is therefore distinguished from the more participatory model that is articulated in some definitions of “open government” (e.g. Lathrop and Ruma 2010). This more participatory model tends to emphasise the state’s trust of the people (Birkinshaw 1997), self-governance (Halchin 2002), “collaborative democracy” (Novek 2009) and “enabl[ing] citizens, individually and collectively, to understand and protect themselves against the risks and threats that they face” (Fung 2011).

In terms of the UK objectives regarding FOIA, Worthy (2010) cites the core objectives as “increasing transparency and accountability”, and the secondary objectives as “improving decision-making by government, improved public understanding, increased participation and trust in government” (p. 561). He argues that increased transparency has been achieved, as has increased accountability in “particular circumstances”;

however, the “overly ambitious” secondary objectives have not been achieved (p. 561). Regardless of the success of the FOIA in achieving its objectives, what is critical is that these FOIA objectives fit within the more traditionally liberal idea of ‘top-down’ transparency, and declarations of promoting citizen participation should be contextualised within this overriding logic. As Birkinshaw (1997) argues in his analysis of the potential for “open” participative governance in the EC/EU,

“There are dangers of abuse if open government duties were present. These could include domination by elitist groups, vociferous and unrepresentative minorities, and self-interested groups... The Community, as presently structured, is not built for participatory democracy” (p. 45).

Further, these objectives need to be contextualised within the increased breakdown in citizen’s trust in government and the democratic process across a range of countries (Dalton 2004; Bannister & Connolly 2011, p. 20), an issue recently exaggerated in the UK as a result of the expenses scandal and the financial crisis (United Nations 2010; Miliband 2012).

Whilst the political arguments for FOI tend to draw on varying notions of informed trust, consent, participation and/or agency, there is also a strand of liberal transparency literature that draws on economic arguments in support of access to information. These tend to focus on the role of information in “efficient, well-functioning markets, both economic and political” (Islam 2006, p. 121), and thus this literature has some similarities with the PSI literature outlined above. In such frameworks, an increase in information, including

government information, is perceived to enable “better analysis, monitoring and evaluation” of opportunities and risks, thus enhancing the “possibility that decisions in economic and political markets will enhance social welfare” (Islam 2006, p. 121). This line of thought can be traced back to the US Supreme Court Justice Louis Brandeis, who argued that access to information (or “publicity” in early twentieth century parlance) was critical to the effective function of markets as it gave the consumer the ability to judge quality and make better decisions (Lessig 2009a). In Brandeis’ construct, therefore, individual choice and market forces, rather than the state, were empowered via information to regulate the market. Further, this economic literature makes reference to the work on “information asymmetries” in markets, which some economists have argued act to make markets function inefficiently - see, for example, Akerlof (1970) - thus refuting the free market idealists claim of the ‘invisible hand of the market’. In an effort to promote the efficient functioning of markets, therefore, access to government information, among other information sources, is promoted.

2.4.3. Questioning the Limits of State Transparency

In tension with these arguments for increased transparency, there is a range of literature which either questions the arguments of the transparency literature, whether in terms of the ideal scope and management of state transparency, or as critical analyses of the emancipatory claims made on behalf of state transparency.

Bannister and Connolly (2011), for example, argue that transparency activists overstate their case, and that in actuality there are significant issues in terms of cost, the potential for “blame and hassle avoidance strategies” amongst state employees, and the public “misinterpretation and misunderstanding of information” (p. 23-24). Such issues, they argue, pose risks in terms of citizens coming to expect a level of transparency that is “not in the interests of best government”, and that governments may suffer “damage [to] their reputation” (p. 24). Further, Halstuk and Chamberlin (2006) highlight the tension between two fundamental democratic values in the transparency debate: an individual’s right to privacy and the public’s right to access government information.

With regard to the “misinterpretation and misunderstanding of information” (Bannister & Connolly 2011, p. 23-24), research undertaken by Fung et al (2007) suggests that transparency initiatives which aim to enable citizens to make better decisions are limited to the extent that the information provided “from the tug and pull among many interests is incomplete, inaccurate, obsolete, confusing or distorted” (p. 7). Not only is the process of information being released into the public sphere problematic, much of this government information is also highly complex. Taking these arguments further, Herrick (2009) therefore argues that citizens’ right to know cannot be satisfied by raw data, rather it “requires active facilitation on the part of the government” (p. 201). Further, in terms of the release of both raw data and value-added information, Jaeger and Bertot (2010) are critical of the way

new methods of transparency frequently require access to, and skills in using, ICTs.

Lessig (2009a) draws on such ideas to dispute the positive societal benefits of 'total transparency', arguing that whilst transparency undoubtedly has benefits, "the 'naked transparency movement'... is not going to inspire change", but rather risks complete loss of trust in the political system. Lessig's particular concern is around "projects that are intended to reveal potentially improper influence, or outright corruption"; projects that turn "the panopticon...upon the rulers". Lessig argues that the data and information generated by such transparency must be considered in relation to Fung et al's (2007) work on the usability of information and how it enters "complex chains of comprehension, action, and response" (p. 53). Primarily, Lessig (2009a) is concerned that public interpretation would be based upon underlying assumptions, biased by the widespread "judgment that Washington is all about money", and resulting in conclusions about causality being made that ignore all possible explanations other than those framed by popular assumptions. Lessig's perception that "total transparency" could contribute to citizens' decreasing trust in the US political system, thus potentially contributing to its breakdown, leads him to conclude that such a model of transparency is a threat to the ideal of the liberal state.

2.5. Recent Interest in Public Sector Information: the Convergence of Access and Re-use

The convergence of the commercial re-use of PSI and state transparency literature, and the communities engaged in research, advocacy, and lobbying around these issues, is a critical aspect to recent developments in the field of Open Government Data. Whilst the relevance of both democratic access and economic re-use have been brought together previously in some PSI documents, for example the EU Green Paper in which access and exploitation of PSI were discussed (European Commission 1999), the literature and practice has frequently moved down two separate paths.

By 2007, however, the nascent 'open data' community was active, and increasing understanding of the overlap between access and re-use of PSI began to be articulated in documents such as the UK government commissioned Power of Information Review, which drew out the link between new social media and citizens' re-use of PSI (Mayo & Steinberg 2007). As Saxby (2011) comments, prior to this point "it is fair to say that government had not fully understood that the link between PSI and its exploitation went beyond its economic benefits into social and political consequences too" (p. 4). A 2010 report, published in collaboration between Access-Info and the Open Knowledge Foundation, focused on moving beyond the access argument to emphasise the importance of re-use of data for state transparency (OKFN & Access-Info 2010). However, the convergence of these fields has not been without issues. As the same

Access-Info/OKFN report argued, improving the possibilities for collaboration between the “rights-based approach” of the access movement, and the “economic and social benefits” arguments of the OGD advocates was a key issue. It was highlighted that the two communities did not “talk the same language” and that “further training and networking is needed for these two communities to be able to define common strategies and advocacy goals” (OKFN & Access-Info 2010, p 4).

A convergence of the transparency and PSI re-use debates is also apparent in the academic literature. Cerrillo-i-Martinez’s (2011) recent analysis of changes in the regulatory environment for PSI “diffusion” in Spain, for example, is discussed in terms of “transparency [being] one of the main challenges for public administrations in the information society to bring the public administrations closer to citizens and finally, to improve their democratic legitimacy” (p. 188). As Janssen (2011a) argues,

“the open government data movement is demanding more data based on both democratic and economic reasons, the principles of freedom of information and re-use of PSI are melting together, putting more pressure on governments and public bodies to answer the call for data” (p. 447).

Further, she argues that the “economic objective” of the EU’s PSI Directive is not always understood in Member States, resulting in confusion about the difference between re-use and access legislation (p. 446-7). Such confusion, she argues, means that states are not properly taking the relationship between FOI and PSI re-use into account when drafting open data policies.

Moving these arguments forwards, Cerrillo-i-Martinez (2012) has recently argued for regulatory convergence of access and re-use legislation, on the grounds of “inefficiency arising from the distinction [between different legal frameworks for access and re-use] and the inconsistency involved” (p. 218).

2.6. The Semantic Web

Not only has the domain of PSI witnessed increasing convergence of the access and re-use policy domains, it has also experienced growing interest from the computing and information science communities. In particular, this has been related to developments with the Semantic Web - “a common framework that allows data to be shared and reused across application, enterprise, and community boundaries” (W3C 2011) - and the perceived benefits of access to re-usable PSI for leveraging the development of the Semantic Web. Not only is it proposed that opening up public data will lay the foundations of the Semantic Web, it is also argued that development of Semantic Web technology will further enable the commercial re-use of PSI (Alani et al. 2007). In their much cited paper, Alani et al (2007) propose that it will “open[] up countless opportunities for the development of new information products and services, driving forwards and accelerating the development of the knowledge economy” (p. 13). Whilst this thesis is not dealing with the issues around the development of the Semantic Web as a technology, it is proposed that much of the interest in Semantic Web development (beyond the scientific curiosity of some of those involved in

developing it) is located within the trend that Harvey (2007) highlights for the pressing need to develop information technologies and databases with increased capacities to drive decisions and innovations in the global marketplace (discussed in section 2.2. above). In other words it is economic interest, rather than Enlightenment principles, that is driving the political interest in Semantic Web technology - as elsewhere across the research domain.

2.7. The Open Government Data Initiative: a review of the brief literature

Only as recently as 2006, Clark (a former expert member of the UK Government's Advisory Panel on Public Sector Information (APPSI)), somewhat presciently, argued that public sector information would bring no headlines or votes for politicians, "unless a *cause célèbre* emerges from some politico-commercial activity related to it" (Clark 2006, p. 133). Yet, only four years later 'Open Data' was a manifesto promise of the two leading parties in the UK - Labour and the Conservatives - and vibrant 'Open Data' communities were visible in the media, business, policy, academic and activist circles. As Saxby (2011) comments, the period 2007 to 2011 was a "very active period of scrutiny within the government of the UK's national information policy" (p. 1). Yet, with a new Coalition government coming to power in 2010, he also perceived "the fragility" of policy developments and a need to exert national information policy as a critical foundation of the

“knowledge economy ... better policies ... social reform and ... smarter government” (p. 1).

Very little academic research has been undertaken on the development of the UK's OGD initiative during this time. Of the research that has been undertaken on OGD, much of it is unpublished theses and conference papers. Further, there is a body of technical literature, focused on topics such as 'linked' OGD, which will not be reviewed here. Davies' (2010) MSc thesis on the use of open government data via the data.gov.uk website highlighted that data.gov.uk users were overwhelmingly male (6:1), and based in the private (micro and SME) sector, local and national public sector, and academic institutions, with only a very small number from the voluntary sector. They were using the data for a range of ends including identifying facts; producing information including visualisations; developing interfaces for interactive representation of data; combining datasets for download or access via API; and, developing services using data. These users were motivated by a range of desires including understanding government and promoting efficiency and accountability; developing technological innovations; seeking recognition or profit; attempting to digitise government functions; using OGD to solve problems; or, providing services in or to the public sector. Further, in terms of civic re-use the data was being used to promote political participation, collaborative and community participation, and individual choice.

Hogge (2010) further reports that in both the UK and USA a three-tiered approach was central to the success of OGD initiatives. She highlights three key groups of actors that have pushed forward the OGD initiative:

“Civil society, and in particular a small and motivated group of “civic hackers”; an engaged and well-resourced “middle layer” of skilled government bureaucrats; and, a top-level mandate” (p. 3).

Whilst Davies’ (2010) and Hogge’s (2010) research is high in empirical content, Tinati et al (2011) offer a more theoretical analysis of the OGD community in the UK. They draw on Actor Network Theory (ANT) to examine the adoption of Linked Open Data within the UK Public Sector, identifying academics as a ‘focal actor’ or ‘obligatory passage point’. Beyond the weaknesses of ANT and its proposition that “it is only in the context of the network that actors gain agency and action occurs” (p. 1), Tinati et al’s (2011) research has two further issues that make their findings questionable. Firstly, their analysis is confused as a result of them making the PSI community synonymous with the linked data community, the latter being only a partially overlapping subset of the former. These confused distinctions perhaps lead to an over prioritisation of academics, many at the authors’ own institution (University of Southampton), as the ‘obligatory passage points’ in this field. Secondly, the data to which their ANT framework is applied, and from which their findings are drawn, is based on only three documents (an academic article on e-government institutionalisation, the Alani et al (2007) Semantic Web paper, and an OGD timeline produced by Tim Davies). The

reasoning behind this choice of data collection is not evident, and therefore methodological weaknesses also make their arguments questionable.

Whilst Hogge (2010), Davies (2010) and Tinati et al (2011) focus on the communities promoting and using OGD in the UK, literature published since this research project started has begun to consider the ideas that are engaging and motivating OGD advocates within different sectors in the UK. This body of research tends to focus on specific aspects of the ideational frameworks of the OGD advocates and position them in relation to a dominant paradigm the advocates are argued to be aiming to transform. Halonen's (2012) report for the Finnish Institute in London on the UK OGD initiative, for example, argues that there is a strong technological innovation and economic aspect to the ideational framework of the OGD initiative, yet there is also "a strong political side to it, which dates back to the long development process of governmental transparency in the UK" (p. 10-11). Coleman (2011), formerly Director of Digital Projects at Greater London Authority and now Deputy Director of Digital Engagement at the Cabinet Office, in an unpublished MSc thesis, focuses on the relationship between "open governance" in contrast with specific features of incumbent New Public Management models of governance, notably New Labour's Best Value framework for public sector 'modernisation'. Her interview and survey data suggested that OGD advocates were "broadly positive in relation to the transformative possibilities of open governance" (p. 48). Yet, she highlights that aspects of the Coalition's transparency agenda seem to "echo back to

previous concerns for Best Value and performance relative to spending” (p. 20), and that OGD may “suffer the same fate as performance management...reverting to a NPM rather than open governance model” (p. 48-9).

Whilst the above literature discusses supporters of the OGD initiative, Peled (2011) focuses on the state actors in the USA who are creating barriers for the OGD advocates. He argues that in relation to Obama’s ‘Open Data’ programme, “most federal agencies have adopted a passive–aggressive attitude toward this program by appearing to cooperate with the program while in fact effectively ignoring it” (p. 2085). However, Peled’s focus on the ‘passive-aggressiveness’ of state employees regarding this initiative verges on being reductive in scope since it decontextualises organisations and individuals from deeper structural processes that they exist within. Longo (2011), in contrast, aims to contextualise OGD squarely within the governance framework of New Public Management, arguing that,

“Some elements of the open data advocacy coalition originate in the NPM reform agenda and seek to revive it... From this perspective, support for more open data aims at building coalitions of citizen consumers who are encouraged to use open data to expose public service decisions, highlight perceived performance issues, increase competition within the public sector, and strengthen the hand of the citizen as customer” (p. 39-42).

Longo’s critical stance complements work by Gurstein (2011) who argues for more focus on the “effective use” of OGD, and research in India which

has highlighted OGD's potential role in "empowering the empowered" based on the case of the 'Bhoomi program' and the digitalisation of land records in and around Bangalore (Benjamin et al. 2007; Wright et al. 2010). Whilst these authors have questioned the impact of OGD initiatives in some developing countries, Hogge (2010) instead looks to the potential of exporting OGD to developing and middle income countries. In a rather top-down fashion, her report seeks,

"to identify the strategies used in the US/UK context, and [propose] a set of criteria to guide the selection of pilot countries, criteria which in turn suggest a template strategy to open government data in a middle income or developing country" (p. 47).

The interconnection between citizen participation and OGD has also had some nascent interest within the literature. Saxby (2011) argues that,

"Opening up access to raw public sector data is a further sign of change. This is because it shows that the government has begun to move beyond the conventional rationale of releasing PSI, i.e., to better inform the public or to stimulate economic activity in the value added products that emerge, but to invite broader public participation in delivery of policy that greater access to raw data offers" (p. 4).

Literature that has been published after this research project began has also drawn on this notion of citizen participation in policy development. For example, in his recent report Halonen (2012) argues that the OGD initiative, with its emphasis on engaging civil society advocates and developers in the

policy development process, represents the potential for a wider move “from reactive freedom of information to participative transparency” (p. 34), in which a “creative destruction of existing policy frameworks and interest-group structures” (p. 52) is the desirable result. Yet, he also argues that the relationship between OGD and democratic participation is “far from clear” (p. 64) and there is a “danger of the policy initiative getting stuck in a rut” (p. 81). Questioning recent OGD policy further, a recent paper by Janssen (2012) problematises the relationship between OGD and political attacks on the UK’s Freedom of Information Act. Further, Yu and Robinson (2012) warn of an “ambiguity” around OGD, as the concept of ‘open government’ morphs into something signifying “the right kind of website”, whether or not this is accompanied by increased government accountability and transparency. This “shift in vocabulary”, they argue, is making it more difficult for “policymakers and activists to articulate clear priorities and make cogent demands” (p. 178).

2.8. Conclusion

As this review of the literature highlights, there is little research that has been undertaken on the UK’s Open Government Data initiative; and that which has been published suggests a lot of uncertainties about the development of the initiative and its relationship to the broader political economic context. The OGD initiative did not emerge from nowhere, of course, and there are significant literatures in the fields converging on this

initiative, namely the literature on commercial re-use of PSI and state transparency. Further, it is argued that these micro-meso level literatures must be contextualised by macro level discussion regarding information in the neoliberal form of contemporary capitalism and the development of 'open' production methods. This thesis aims to address both the gap in knowledge in the area of OGD, and also broaden our theoretical understanding of the OGD initiative; the intention being to illuminate the social forces shaping the OGD initiative, thus informing those actors working to shape the OGD initiative and related policy areas.

CHAPTER 3: ANALYTICAL AND METHODOLOGICAL FRAMEWORK

3.1. Introduction

The aim of this thesis is to understand better the social forces and interests that have been working to shape the UK's OGD initiative and to what ends. In order to achieve this aim a theoretical framework through which to guide data collection and analysis, and the development of an explanatory framework, is required.

As Moore (2011) points out, with regard to the Free/Open Source Software community, with which the OGD community overlaps, it is possible to define the Free Software community as a social movement and Open Source as more of a "development method". In this sense, even though the two overlap, we can understand Free Software to be more rooted in an ethico-political rejection of intellectual property in software code as outlined by Richard Stallman (2007), and Open Source as a more pragmatically driven "development method" aimed at economic efficiency and innovation (see Weber 2001). This is a useful distinction as it highlights the importance of both political struggle and production relations in developing an understanding of "open" modes of informational production.

This chapter begins by discussing two potential approaches to the analysis of the development of the OGD initiative: the first emphasises the social movement aspect of the initiative, whilst the second emphasises OGD's relation to the development of 'open' and peer production relations in, primarily, the information economy. In order to integrate these two approaches, a neo-Gramscian framework is then proposed. The framework that is developed draws on Gramsci's concepts of *hegemony*, *organic intellectuals*, *passive revolution*, and *trasformismo* which he, and others in the neo-Gramscian school of International Political Economy, have drawn together as an analytical construct for thinking about the process of social struggle and change. Further, in order to provide a framework for interpreting the agency of OGD advocates and the idea of OGD within the structural context of global capitalism, the methodological aspects of a neo-Gramscian approach are addressed, drawing primarily on the work of Bieler and Morton (2008; 2003; 2001), to outline the neo-Gramscian interpretation of the historical role of ideas and the relationship between structure and agency.

3.2. OGD Advocates as a Social Movement

Davies (2010), drawing on his empirical research into OGD re-use in the UK, highlights that many OGD advocates are motivated to digitise government processes and tend to focus on computer based systems as instruments of societal change. Such motivations, he argues, bring the OGD community into the domain of a computerisation movement as defined by

Kling and Iacono (1994). A computerisation movement tends to be driven by “strongly committed advocates” who,

“communicate key ideological beliefs about the favorable links between computerization and a preferred social order which helps legitimate relatively high levels of computing investment for many potential adopters. These ideologies also set adopter’s expectations about what they should use computing for and how they should organize access to it” (Kling & Iacono 1994, p. 121).

However, whilst the notion of a computerisation movement might be a useful analytical framework for some tendencies within the OGD community (for example, those who draw on such notions as Tim O’Reilly’s (2010) concept of ‘Government as Platform’), it risks erasure of the less ICT orientated parts of the initiative. A broader social movement perspective is, therefore, potentially more useful.

The development of new social movements (NSMs) over the last 30-40 years has drawn substantial academic interest. These NSMs encompass a range of causes, including identity based movements such as those dealing with gender, racial and sexual injustice, environmental movements, and movements against “market-led globalisation” (Castells 2004).

Social Movement Theory has developed a number of analytical strategies for explaining the development of such social movements. Early studies of the NSMs tended to draw on a social psychology approach, focusing on the “frustrations or grievances” of social movement actors due to the assumption

that shared grievances combined with shared interpretations of their causes and shared strategies for resolution were the key precondition for the development of a collective social movement (McCarthy & Zald 1987, p. 15). During the early 1970s, however, this approach was challenged by resource mobilisation theorists who drew more on political sociology and economic theory to explain the development of social movements.

Resource mobilisation theory recognised that the “aggregation of resources (money and labor) is crucial to an understanding of social movement activity”, and that such “resource aggregation requires some minimal form of organisation” (p. 18). Not only did resource mobilisation theory critique the focus on the social psychology of movement supporters, it also questioned the emphasis on movement actors at the expense of an examination of “the processes by which persons and institutions from outside of the collectivity under consideration become involved” (McCarthy & Zald 1987, p. 17). Beyond resource mobilisation theory, the study of social movements has also developed two further paradigms: political process theory and cultural theory (Klandermans & Staggenborg 2002).

Political process theorists argue that focusing on resource mobilisation diverts attention from the fact that the development of a social movement is within a political arena that itself shapes the movement. In different contexts and times, these theorists argue, movements have different political opportunities, which can help explain differing outcomes. Cultural theorists in turn critiqued the structuralism evident in both resource mobilisation and

political process theory, instead focusing their analysis on aspects such as identity, the impact of discourse on protest, and the emotive aspects of movement development (Klandermans & Staggenborg 2002).

All these approaches to the study of social movements offer useful insights. However, as the resource mobilisation and political process theories argue, the allocation of resources and political opportunity is likely to favour some groups of political actors over others, and resultantly these are critical factors in analysing the development of social movements. Thus, some types of social movement, and some groups within a movement, will have more immediately favourable structural conditions in relation to their ability to become visible in the public sphere and to shape political outcomes. To draw attention to the context, issues and actors beyond the boundaries of the specific social movement is therefore a critical aspect of these approaches, and is vital in analysing the development of an initiative such as OGD.

Social movements have also been analysed in relation to the professionalisation of political struggle. As Everett (1992) argues, it is common for social movements to become professionalised over time. This notion of professionalisation is an important issue to factor into contemporary notions of resource mobilisation and political process. This is due to civil society political actors, or 'movements', becoming increasingly dependent upon (and thus shaped by) philanthropic foundations, state funding, or attempting to sustain themselves via the market through sale of assets (i.e. knowledge or information) and provision of services. Further, this notion of

professionalisation must also take into account the role of think tanks - see Stone (2000) - as political actors with often significant resources and political access comparable to many grassroots social movements. These patterns of professionalisation thus highlight the importance of drawing analytical attention to the governance of social movements and the organisational forms that they create, in particular consideration of their relations with social groups that are in some way marginalised within the public sphere.

Social movement theory can therefore offer some useful insights in the construction of a framework for analysis. However, to conceptualise the OGD initiative solely as a social movement would be problematic due to the mix of actors engaged in it. Whilst some aspects of the initiative might be comparable to a form of social movement, others are more readily defined as state based actors, a range of commercial interests from independent developers to transnational corporations, and a range of actors more organically tied to neoliberal capitalism than a social movement lens might permit. This broader conceptualisation of the OGD initiative therefore draws attention to developing production relations within the relevant sectors.

3.3. 'Open' Production as a Nascent Mode of Production

Bauwens (2011), a leading theorist of commons-based sharing economies, argues that Kondratievan long wave theory suggests that a form of "green capitalism" with a significant commons of shared resources has the

potential to emerge in the next 10-15 years following the current crisis of capitalism. Further, recognising the impossibility of the infinite economic growth required by capitalism, he also posits that such a 'green capitalism' would also enter crisis at some future point offering the potential for the commons-based production logic (discussed in more detail in section 2.2.2 above) to become the dominant mode of production (Bauwens 2009). Whilst recognising that capitalist interests have adopted certain types of commons based production methods, he argues that this is not simply a process of co-optation, but acts to strengthen collective forms of production and thus can be perceived as sufficiently post-capitalist to be part of the transition to a new mode of production in the same way that feudalism and capitalism overlapped during their transition (Bauwens 2009).

Whilst Bauwens does establish the need for social struggle, and thus agency, in the development of new modes of production and social relations, his theoretical stance still betrays a deterministic bias towards the eventual emergence of a commons-based mode of production, whether that is by the high road of purposeful action or the low road of crisis and necessity:

“We are only at the beginning of this massive shift towards a new political economy and civilisational format based on the non-reciprocal logic of peer production, but the signs of it are everywhere” (Bauwens 2009, p. 137).

However, there are significant risks in drawing on an analytical framework that tends towards the notion that society is on a journey to some predefined goal (e.g. in this case a form of communism). Most critically, it reduces the

perceived need to act in the present. However, the framework is also potentially flawed in the way that it possibly betrays a perception that production methods in the domain of information are at the vanguard of a new mode of production across the whole of economic production. Whilst developments in open hardware, fabrication labs and 3D printing suggest nascent commons production in the realm of material resources, this is not yet developed enough to take its sustainability or impact for granted. The framework also seems to underemphasise the role of emerging economies such as China in the short-term establishment of green, 'open source' capitalist political economies. Further, there is little analysis of the broader integration of information production and distribution within the rest of the economy, including the often acute forms of capitalist exploitation which provide the material networks, hardware, and raw materials that enable open forms of information production to occur in the first place.

In relation to the potential for commons-based production methods to become an established mode of production, it is also important to remember the flexibility of capitalist interests in developing new methods via which to secure the accumulation of capital (see section 2.2.2 above). Rather than having a rigid definition of what specifically capitalist social relations are, capitalism might instead be imagined as an experimental process working to achieve the greatest rate of capital accumulation. In terms of intellectual property relations this might involve a necessary flexibility in order to find the most lucrative balance between restrictive proprietarisation to protect

information assets and resource sharing which encourages innovation and the opening up of new investment opportunities. As Jaffe and Lerner (2004) claim, intellectual property laws have increasingly become too restrictive for capitalist innovation, and various adaptations to overly restrictive production models have been observed including Hippel & Krogh's (2003) 'private-collective' model of 'open' innovation, and Lessig's (2009b) conceptualisation of 'hybrid economies'. However, there is no reason to assume this process should eventually lead to the sharing aspects of such an economy overcoming the structural barriers of capitalism to expand throughout the entire economy. It is important, in other words, not to over depend on a simplified Marxist critique of private property ownership in the analysis of capital accumulation in the information economy. Further, as Bauwens (2011) acknowledges in relation to gender, racial and other social factors, commons based modes of production are not in themselves essentially universally emancipatory or egalitarian. Indeed, centres of power are frequently generated within such communities which tend to find an over representation of highly educated, white men who are only accountable via informal, ad-hoc modes of community governance. Again, this draws attention to the governance and organisation of such production communities, as attention was drawn to the organisation of social movements.

Whilst there are problems in over relying on an interpretation of 'open' modes of production and ownership that draw too heavily on an economically deterministic analytical framework, it is critical nonetheless to ground the

analysis in developments in production relations. Such grounding in production relations avoids an idealist interpretation of historical development that remains disconnected from material processes, and unaware of the limits of the current political economic structure and the impossibility of infinite economic growth. Further, an awareness of the significance of shifts in production relations draws analytical attention to the response of institutions attached to the incumbent mode of production, in particular the interests of both transnational (TNCs) and national firms and the governing institutions of neoliberal capitalism, including nation-states, international organisations and regulatory bodies.

3.4. Towards a neo-Gramscian analytical framework

Sections 3.2 and 3.3, therefore, highlight the relevance of approaches that draw attention to developments in the economic structure such as production relations, property relations and innovations in surplus generation, as well as social movements attempting to shape collectively social and political processes in their own and other citizens' favour. What is important at this stage is to be able to reconcile the two approaches into a singular analytical framework. May (2008) suggests that a Gramscian analytical framework might be applicable to the rise of 'open' initiatives, arguing that they could be perceived as part of a reformist, yet counter-hegemonic, movement against the authoritarian and monopolising aspects of the current

intellectual property regime instituted as part of the liberal democratic hegemony. Within such a construct, a Gramscian framework therefore begins to draw together the social movement and production relations approaches. Further, as Bieler and Morton (2003) highlight, a common neo-Gramscian International Political Economy (IPE) approach is to begin by observing the formation of a group of actors within the sphere of production, prior to moving on to an analysis of social and political struggle. However, as May (2008, p. 91) elaborates the 'open initiatives' as counter-hegemony thesis has limitations, since 'open initiatives' are dependent upon Intellectual Property regimes "to reinforce openness" and should be understood as a "localised action rather than top-down macro-level political change" as one might expect of a significant counter-hegemonic project. Further, an OGD as counter-hegemony approach would also be limited due to its restricted perception of actors within the initiative.

Whilst these are critical arguments, 'open initiatives' are often constructed as a radical response to neoliberal Intellectual Property regimes, and, therefore, the application of some form of Gramscian framework might allow for significant unpacking of such a construction. Further, it is proposed that conceptual frameworks developed in neo-Gramscian IPE offer significant analytical and explanatory scope for better understanding the social forces and interests that have been working to shape the UK's OGD initiative and to what ends. Whilst these neo-Gramscian frameworks have been developed within the field of IR and IPE they are nonetheless appropriate to this study

of the development of the OGD initiative in the UK, due to the growth of the initiative within the context of the global political economy and the transnational class interests that neo-Gramscian theorists train analytical focus on.

The neo-Gramscian focus on the internationalisation of the state was the crucial differentiating factor between a Gramscian and neo-Gramscian approach within political economy. More recently, however, there has been developing understanding about “variegated capitalism” (Jessop 2012), and the evolving responses within core global economies to economic and political crisis. It is therefore argued that, it is a worthwhile endeavour to consider the utility of neo-Gramscian concepts for understanding and explaining the development of innovative political economic projects at the national level within core global economies, without retreating to methodological nationalism. This is particularly so in the case of OGD in the UK, because this initiative might also be understood as a nascent phase in the proposal to internationalise OGD policies through new international organisations such as the Open Government Partnership, and existing international organisations such as the World Bank. A detailed examination of the developments in the UK (which is a leading nation in OGD policy development) is, therefore, a worthwhile neo-Gramscian task in its own right, and might contribute understanding to future research into OGD developments at the international level.

It is only by positioning the OGD developments in the UK within this international context, that a deeper understanding of the social forces shaping the initiative can be captured. Whilst a Gramscian approach would recognise the agency of the nation-state and other UK actors, to rely on the more nationally orientated Gramscian approach would risk missing significant international actors and social forces shaping the initiative, and would be to incorrectly define the object of study (Thomas 2011) - or, structural context - of the case of OGD in the UK: “variegated” neoliberal global capitalism (Jessop 2012). A neo-Gramscian analytical framework is, therefore, perceived to offer significant potential for achieving the aims of the thesis. The specific neo-Gramscian analytical and methodological approaches to be drawn on in the collection and analysis of empirical data, and construction of the explanatory framework, will be discussed in the following sections.

3.5. Neo-Gramscian Historical Materialism

Prior to outlining the neo-Gramscian analytical concepts, it is useful to overview some of the methodological specificities of a neo-Gramscian approach in contrast to other social theory approaches that attempt to analyse incumbent and emerging social forms, such as social constructionism, post-structuralism, and structuration theory.

Central to a neo-Gramscian framework is its interest in the role of ideas as a historical force. Historical events, Gramsci (1992b) argues, should be understood in terms of their “general...political and intellectual rather than directly economic character” (p. 183). However, Gramsci (1992b) criticises idealist philosophy, recognising that in the last instance this political process, must always refer back to the economy: “hegemony is political but above all economic, it has its material base in the decisive function exercised by the hegemonic group in the decisive core of economic activity” (p. 183). For Gramsci this focus was central to his methodological shift away from the economic determinism of Orthodox Marxism, and is the reason for him being hailed as one of the key figures in the development of the Western Marxist tradition. More recently, neo-Gramscians have taken a similar approach to avoid not only the economic determinism of some Marxist accounts of social change, but also to critique neorealist and liberal institutionalist approaches to the study of International Relations (IR) and International Political Economy (IPE) (Bieler & Morton 2008). Such approaches, it is argued, externalise the role of ideas in their analysis of the development of states’ interests and interactions (Bieler & Morton 2008).

Significant work in the articulation of a neo-Gramscian methodological position has been most thoroughly developed by Bieler and Morton (2003; 2008; 2001; Morton 2003). Their work in the field of historical materialism makes an important contribution to outlining the differences between a neo-Gramscian approach and other attempts to engage the ideational in the

analysis of social relations such as social constructivism and poststructuralism. The key to the particularity of the historical materialist approach is, argue Bieler and Morton (2008), its focus on the who and why of social relations, ideologies and practices, and its philosophy of internal relations with respect to ideational and material forces.

Bieler and Morton (2008, p. 114) argue that it is not appropriate to separate ideas from the material as social constructivism tends to; rather, it is better to recognise “ideas as material social processes”. They draw on Harvey’s (1991) work on the “internal relation of the material structure of ideas” in his analysis of the built environment, arguing that ideas don’t work as an external controlling force over production, rather they act as a framework and justification for the practical activity that engineers, politicians, developers etc are engaged in through economic, political or social necessity (Bieler & Morton 2008, p. 118). Ideas don’t externally shape these material forms; rather, ideas “tak[e] on substance through practical activity bound up with systems of meaning embedded in the economy” (Bieler & Morton 2008, p. 119). Thus, ideas can be found embedded within all products of practical activity including for example information systems, consumer goods, architecture etc. Ideas thus intersect with the social realm primarily as material processes, rather than as abstract constructs. Therefore, the ideal and the material should be seen not as two separate entities, but as internally related.

Further, Bieler and Morton (2008) critique the poststructuralist emphasis on “total contingency” in its understanding of the role of ideas (p. 113). The poststructuralist argument tends to be based on the claim that it is the discursive which surrounds the political, shaping the conditions of possibility; a conditioning which is not separate or secondary to the material. This discursive space, however, is claimed by the poststructuralist approach to be essentially contingent and temporary, not manifesting itself as an ontological structure (Bieler & Morton 2008). Thus, the poststructuralist approach tends to overemphasise the fluidity of historically constituted structures which social agents confront. As Fairclough (1995) also argues in his critique of social constructivist discourse analysis:

“We need to distinguish ‘construction’ from ‘construal’, which social constructivists do not: we may textually construe (represent, imagine, etc) the social world in particular ways, but whether our representations or construals have the effect of changing its construction depends upon various contextual factors – including the way social reality already is, who is construing it, and so forth” (p. 8-9).

For Morton (2007) and others in the neo-Gramscian school of IPE - for example, Moore (2007) - Cox’s construction of historical structure underpins their analysis of structural conditions and opportunities for social change. Cox (1981) argues that the “framework for action”, or “historical structure”, whilst not determining action, “imposes pressures and constraints” on social agents. Further, he argues that this “historical structure” is made up of three

interacting forces: material capabilities, ideas and institutions (p. 135-6). “Material capabilities”, he argues, exist both dynamically, as “technological and organizational capabilities”, and in accumulated form, as “natural resources ... stocks of equipment ... and the wealth which can command these” (p. 136). Ideas exist both as a more coalesced form of “intersubjective meanings” (or, “shared notions of the nature of social relations”) and as a more diverse form of “collective images of social order held by different groups of people...differing views as to the nature and the legitimacy of prevailing power relations, the meanings of justice and public good, and so forth” (p. 136). Finally, the process of institutionalisation, he argues, is “a means of stabilising and perpetuating a particular order” (p. 137). However, Cox warns that institutions “may be out of phase” with developments in the domains of ideas and material capabilities, and thus advises against prioritising institutions as the primary site of analysis (p. 137).

Bieler and Morton’s critique of the post-structuralist approach is crucial since it marks a significant split within the neo-Gramscian camp: that between the Cox inspired historical materialists in the field of International Political Economy, and the Laclau and Mouffe (2001) inspired post-structuralist radical democratic theorists. Laclau and Mouffe (2001) are critical of Gramsci’s (1992b) argument that “hegemony...has its material base in the decisive function exercised by the hegemonic group in the decisive core of economic activity” (p. 183). They critique his definition of the hegemonic groups as being one of the two fundamental classes - the

bourgeois or the proletariat - who, he argues, must be at the heart of a national-popular collective will. Gramsci's thought, they argue, is tainted by its reliance on a "naturalist prejudice" which understands the "constitutive logic of the economic space [as] not itself hegemonic" (2001, p. 68). However, Laclau and Mouffe's poststructuralist reinterpretation of Gramsci is problematic, since, as Bieler and Morton argue, for Laclau and Mouffe, "hegemony becomes rendered as a constant interplay between autonomous and indeterminate discourses rather than linked to specific social interests and class identities" (Bieler & Morton 2008, p. 122).

However, whilst the fundamental classes are recognised within neo-Gramscian approaches, in the analysis of historical situations the approach is more interested in the specificities of class factions rather than abstract class categories. Thus, in a critique of Blyth (2002), Bieler and Morton (2008) argue that in his identification of capital, labour and the state as the collective actors, a "corporatist understanding of agency" (p. 108) is implicitly and externally drawn on. In this particular case, it meant that Blyth, who was researching the emergence of neoliberalism in Sweden, missed the importance of not only capital in general in the spread of neoliberal ideas, but Swedish transnational capital in particular in its threat to transfer production abroad. Thus, a neo-Gramscian perspective necessitates, not only the use of abstract categories of collective action, but the uncovering of particular groups of collective actors specific to the empirical case.

A further aspect of the particularity of the neo-Gramscian methodological approach is the relation of structure and agency. Debates around the primacy of either structure or agency, or the relationship between them, have played a significant part in methodological debates within the social sciences. Giddens' (1986) theory of structuration is a much cited attempt to overcome disconnection between structuralist and voluntarist accounts of the social world. Giddens conflates structure and agency, so as they are "not two independently given sets of phenomena, a dualism, but... a duality" (p. 25) - two sides of the same coin. However, whilst neo-Gramscians, as discussed above, recognise the historical importance of both structure and agency, they do not simply conflate the two due to the time differential between the two concepts and the differing levels of embeddedness between different structural properties. Bieler and Morton (2001, p. 8) argue that Giddens does not acknowledge that some structural elements are more resistant to change than others, and that social institutions are what agents confront, rather than something they simply produce. They go on to argue that Giddens does not solve the problem of structure and agency by relating the two together in a new way, rather, he redefines them; and, drawing on Hay's (1995) argument, he simply creates a new dualism between agency and system.

In relation to Giddens' conceptualisation of time within his notion of structuration, Bieler and Morton (2001) argue that structuration theory "does not provide the scope to acknowledge that structure and agency work at different time intervals" (p. 8).

“Time is crucial as a factor, since it helps us to realise that while there are no social structures without people, it does not follow that there are particular social structures only because of the people present at a particular point in time...a dualistic separation of structure and agency explains then why actors encounter social structures as objects, although they are made by human beings” (Bieler & Morton 2001, p. 9).

Further, as Bieler and Morton (2001) establish, at any single point in time there are overlapping structural properties. The most deeply embedded ones “which provide the overall framework of action during a historical period” are the least likely to change (p. 10). Therefore, even if we argue that every action in some way modifies the structure, “we would have to distinguish between changes of deep structural properties, that are important for the conditioning of action, and changes in micro-structural properties, which have no, or a less, significant impact on the framework of action” (Bieler & Morton 2001, p. 10). Bringing the notion of the ‘historical structure’ (or, as discussed above, the combined forces of ideas, material capabilities and institutions) of specific eras into the debates about agency and structure, a neo-Gramscian account of structure and agency attempts to “find the connections between the mental schema through which people perceive action and the material world that, in turn, both constrain what people can do and how they think about action” (Bieler & Morton 2001, p. 17).

In terms of the overarching objective of a neo-Gramscian approach, therefore, Bieler and Morton (2001) argue that it is important to move away from the separation between explanation and understanding. Critiquing,

along with others, the positivist bias that explanatory paradigms can be based upon, they argue for a “historicist method that attempts to both *understand* the intersubjective making of the social world...and *explain* how such structures are materially experienced by individual and collective agency, as both enabling and constraining properties” (p. 14). The ‘external story’ and the ‘internal story’ are, they argue, intertwined. This methodological insight leaves open a space for resistance and political struggle to develop at the site of confrontation and interpretation of historical structures.

3.6. A Neo-Gramscian Analytical Framework: Hegemony, Organic Intellectuals, Passive Revolution and Trasformismo

Moving back to the development of the analytical framework of the thesis, this section will now outline a neo-Gramscian analytical framework with reference to Gramsci’s key concepts of *hegemony*, *organic intellectuals*, *passive revolution* and *trasformismo*.

The concept of hegemony is a Gramscian term that has been drawn on by a range of critical scholars, and is therefore the most useful place to begin outlining a neo-Gramscian analytical approach. Gramsci describes the process of gaining hegemony in the following terms:

“The most patently political’ phase [of hegemony occurs when the social group’s] own ‘corporate’ interests...go beyond the confines of the economic group – and they can and must become the interests of other subordinate

groups...it is the phase in which previously germinated ideologies come into contact and confrontation with one another, until only one of them – or, at least, a single combination of them – tends to prevail, to dominate, to spread across the entire field, bringing about, in addition to economic and political unity, intellectual and moral unity, not on a corporate but on a universal level: the hegemony of a fundamental social group over the subordinate groups” (Gramsci 1992b, p. 179-80).

Morton’s (2007) work on this “moment of hegemony” offers a strong elaboration of this idea. He discusses how, in a neo-Gramscian framework, the term is used to describe a political situation in which there is general consent within a population for the ‘framework for action’ articulated by the political and economic elite: “the citizenry come to believe that authority over their lives emanates from the self” (p. 93). As Femia (1981) articulates, the form of consent drawn on by Gramsci is one of “*conscious attachment to, or agreement with, certain core elements of the society*”, rather than fear of non-conformity (p. 38). The process of gaining, and renegotiating, consent is channeled through many avenues, including media, cultural and other intellectual production, which converge with the material capabilities and institutions of a social structure to produce an overarching *framework for action*. Critically it is in the realm of civil society that consent to such a framework is manufactured, whilst political society (the state apparatus) is the realm of more coercive processes. Thus, in a country such as the UK – a liberal democracy with a strong civil society – hegemony is constituted primarily through civil society and the market, rather than the domination of a

state apparatus. In Gramscian terms, it is this combination of civil society and political society which make up the notion of the “integral state” (Gramsci 2011c, p. 9 & 75). Thus, it is important not simply to reduce the analysis to a struggle between civil society and the (neoliberal) state, but to unpack the *organic* ties of civil society activities to hegemonic and/or counter-hegemonic tendencies. That said, in order to ease understanding and to observe the relations between social forces embedded in differing parts of the “integral state”, within the thesis the terms “civil society” and the “state” will be used based upon their common usage to describe the sites in which the various social actors are engaged.

The key social agents in the unfolding of these historical processes were, for Gramsci, “organic intellectuals” connected to developments in the domain of economic production. Gramsci perceived that a social group connected to changes in economic production,

“creates together with itself, organically, a rank or several ranks of intellectuals...at least an elite among them must have the technical capacity (of an intellectual nature) to be organizers of society in general, including its whole complex body of services right up to the state” (Gramsci 1992b, p. 199).

Such *organic intellectuals* are observed in the development of hegemonic projects such as Fordism and neoliberalism; however, they are also observed in potentially counter-hegemonic projects which resist unequal social relations, and aim to engender egalitarian forms of social change. As

Morton articulates, *organic intellectuals* should be understood as “mediat[ors]” within the social realm; their ideas and activities “organically tied to particular social classes” (Morton 2007, p. 8).

Femia (1981, p. 46-7) highlights that Gramsci articulates three different levels of hegemony: integral, decadent and minimal. An “integral hegemony”, is perhaps – at its extreme – the most abstract of the three levels within conditions of modern global capitalism. In periods of “integral hegemony”, there is substantial unity and consent within the population, and the relationship between rulers and ruled is “organic” in nature: “without contradictions or antagonisms on either a social or ethical level” (Femia 1981, p. 46). In such conditions “widespread opposition” would be absent or discredited. Such conditions of “integral hegemony” are not often apparent, and further, as Femia points out, they are not present in modern capitalist society since the rulers are not “capable of representing, or furthering, everyone’s interest” within the class based capitalist system (p. 47). In contemporary conditions, therefore, “widespread cultural and political integration is fragile”, and has generally been representative of the second level of hegemony: “decadent hegemony” (p. 47). At this level, the *common sense* of the people is not in full alignment with the ruling classes and social tensions exist just below the surface. A breakdown in consent beyond this level would result in the most restricted form of hegemony: a “minimal hegemony”. In such conditions, hegemony would be based upon the ideological unity of elites (economic, political and intellectual) in combination

with distaste for popular participation and a lack of broad based consent for the agenda of the ruling classes (p. 47).

It is the notion of hegemony that is most broadly applied within research applying a Gramscian framework; however, significant work has been undertaken in the field of neo-Gramscian International Political Economy (IPE) which draws on the work of Cox (1981; 1983) to develop this analytical model to illuminate processes of *hegemony* and *passive revolution* during the era of neoliberal globalisation (e.g. Morton (2007); Bieler & Morton (2001); Moore (2007); Paterson (2009)). In situations of hegemonic crisis, or when there has been a failure of elites to gain popular consent (i.e. a *minimal hegemony*) these neo-Gramscian theorists argue that conditions of *passive revolution* can ensue. Drawing on Gramsci, Cox argues that if new social relations are not fully “worked out” a situation of *passive revolution* occurs (Cox 1983, p. 165-6) in which changes are implemented in a top down fashion with no “arousal of popular forces” (p. 166) and “without the old order having being displaced” (p. 166). Such conditions, he argues, lead to stalemate between new and old forces, with both failing to achieve hegemony.

Moore (2007) similarly describes *passive revolution* as “a function of unstable elites who seek to consolidate and perpetuate hierarchies that capitalism requires” (p. 2). She stipulates two conditions: firstly, economic development must be elite led and involve the exploitation of workers in production relations; secondly, institutions and “elite-generated activities” are

present that enable a political strategy of *trasformismo*, or adaptation and co-optation of the population to new capitalist norms. As Femia (1981) and Cox (1983) elaborate, *trasformismo* frequently involves the incorporation of leaders (or, *organic intellectuals*) of potentially counter-hegemonic forces into the institutions of the ruling class – thus “decapitating” the popular forces and restricting their ability to build their grievances into a coherent, counter-hegemonic project (p. 47). Further, as Paterson (2009) discusses, these processes of *trasformismo* often go much further than the incorporation of leaders into elite institutions, to also involve processes of “ideational distortion” in which, citing Cox, elites engage in the “domesticating of potentially dangerous ideas by adjusting them to the dominant coalition” (Cox 1983, p. 166-7). This “ideological strategy”, Paterson (2009) argues, aims to “win over the protesting popular movements as a whole so they come to consent to the dictates of existing political institutions” (p. 47). The political activities of elite groups within conditions of *passive revolution* and *minimal hegemony* should, therefore, be understood as a restorative, top-down form of social change, aimed at (re)generating consent for reconstituted capitalist social relations, but without realistically embracing the interests of non-elite classes and social groups (Morton 2007, p.64).

These notions of *passive revolution* and *trasformismo* have most commonly been utilised within neo-Gramscian IPE to analyse the adoption of neoliberal capitalism within peripheral economies (e.g. Moore 2007; Morton 2007) and in relation to the institutions of global capitalism (Paterson 2009).

However, the concepts are also useful for analysing political processes within a core global economy enduring a period of crisis that could potentially lead to a deepening breakdown in consent for the hegemonic political economic project. The current financial and economic crises that have engulfed neoliberal capitalism and the UK Government's response to these issues can be perceived as disruptive to the base of consent for neoliberal hegemony in the UK (see United Nations 2010). More broadly, the longer-term breakdown in trust for neoliberal democratic political systems is well documented (see, for example, Dalton 2004). In the UK, such issues are also exemplified in relation to the public's response to specific political crises, including anger regarding the invasion of Iraq (2003) and ongoing war in Afghanistan (2001–), the MPs Expenses Scandal (2009), and the relations between political, police and media elites that surfaced in the phone hacking scandal and Leveson inquiry (2011–2012). Combined, these factors can be argued to risk a significant fracturing of consent for the UK's neoliberal hegemonic project, in which popular consent for the neoliberal framework for action constructed by the combined forces of political, economic and media power within the UK could unravel.

Coming back to Femia's categorisation of integral, decadent, and minimal forms of hegemony, on the continuum between integral and minimal hegemony, the situation of the neoliberal project in the UK shows signs of moving in the direction of a minimal hegemony. Such an observation is supported, if in less theoretical terms, by a range of commentators including

Ed Miliband (2012) leader of the opposition Labour Party. What is not claimed by this assertion is that there has been a broad critical political response to this fracturing of consent; rather, beyond the obvious disengagement, there appears to be a tendency to engage in productive (rather than political) activity in an attempt to move beyond these multiple crises (see, for example, Lowndes and McCaughy's (2012) recent research on institutional redesign in conditions of austerity). It is argued, nonetheless, that in periods of fractured consent, conditions of *passive revolution* and strategies of *trasformismo* are likely to ensue in order to simultaneously push forward elite agendas and reconstitute some level of consent within the population for a restored neoliberal project.

Whilst the neo-Gramscian position does emphasise co-optation in its analysis of political processes, it also creates a space for counter-hegemonic political agency. In relation to social change, Gramsci perceived that a new social structure - where structure refers to the most deeply embedded "overall framework of action" (Bieler & Morton 2001, p. 10) - must emerge from within the structure it is to replace. Further, as Marx also argued, this process could not be completed until the initial structure had fully exhausted its productive potential (Cox 1983). The role of counter-hegemonic social agents within such conditions, he thus argued, was to engage in a long term social struggle known as a "War of Position", defined by Cox as a form of activity which "slowly builds up the strength of the social foundations of a new state" (Cox 1983, p. 165). In order to ensure the counter-hegemonic

nature of such an initiative, it was critical that those ‘organic intellectuals’ engaged in such a *war of position* were *organically* tied to the collective interests of the people, rather than the ruling class.

3.7. Theoretical Framework for Data Collection and Analysis

It is proposed that a neo-Gramscian analytical framework is, therefore, able to draw together key themes of relevance to better understanding the social forces and interests that have been working to shape the UK’s OGD initiative. In particular, the interest of OGD advocates in participation in political processes (discussed in section 2.7 above), as well as the uncertain relations between OGD advocates and different collective interests within the structural conditions of neoliberal global capitalism can be accommodated. This chapter has highlighted the importance of an emphasis on the following theoretical proposals, which will be drawn upon in the collection and analysis of empirical data and the development of an explanatory framework:

- The *historical structure* (or, *framework for action*) is the interrelated forces of material capabilities, ideas and institutions;
- Social structure is perceived as a series of differentially embedded structures which agents confront, and agency is perceived to be limited by historically constituted foundational structures and the continued productive capacity of capitalist social relations;

- Ideas tend to become actualised in material forms (e.g. systems, architecture); it is important to consider why (in relation to the structural conditions) some ideas are actualised and others are not;
- 'Hegemony' – consent to the *historical structure* or *framework for action* – has three levels: Integral (full), decadent (fragile) and minimal;
- In situations of minimal hegemony, conditions of *passive revolution* can occur which aim at a 'top-down' restoration of an elite agenda;
- In conditions of *passive revolution*, elite-led strategies of *trasformismo* (co-optation, adaptation, domestication and ideational distortion of potentially counter-hegemonic elements) tend to be generated;
- The identification of collective actors, whilst taking into account the fundamental capitalist classes, should be drawn from the empirical context rather than only abstract categorisations;
- The ideas and activities of those engaged in civil society 'movements' are important to understand in order to appreciate to which social classes they are organically tied;
- The governance and organisation of civil society 'movements' are important, and democratic governance is normatively preferable to elite or technocratic governance.

Bieler and Morton (2003) distinguish two broad approaches to neo-Gramscian research: those which focus on the ideas and activity of the

forces of transnational capital and those which focus on the 'subaltern'². From this distinction they offer two models for neo-Gramscian empirical research. The first of these is based on analysing interrelations between historical structures at Cox's (1981) three levels of activity - social relations of production, forms of state, and world orders, and the second is focused on "subaltern" resistance and the "socio-cultural interplay between ruler and ruled within state struggles over hegemony" (Bieler & Morton 2003). It is proposed that a convergence of the two approaches is most beneficial for analysing the development of the UK's OGD initiative, and is possible without resorting to defining the OGD advocates as 'subaltern'. Therefore, drawing on the two models offered by Bieler and Morton (2003), the following is proposed as a framework to guide the data collection and analysis in this research:

- Observation of the 'objective' formation of a new productive group (OGD advocates) through analysis of developments within the sphere of production (objectives 1 and 2);
- Investigation of the production structure to identify the key collective actors attempting to form a hegemonic project regarding ideas about public data, and more broadly information production and distribution (objectives 1 and 2);

² Subaltern is a Gramscian term that has been adopted in the field of Post-Colonial Studies. It refers to those social groups that exist outside, or have very limited access to, hegemonic institutions and constructs, thus having no recourse to political participation within dominant political structures (see for example Guha (1997)).

- Identification and analysis of the organisational forms that the OGD advocates have produced in order to press their claims (Objectives 4a and 4b);
- Investigation and analysis of the ideational constructs of the civil society OGD advocates (Objective 4c);
- Investigation of the efforts of transnational and national capital to internalise its interests regarding OGD within the UK state, and investigation of any resistance to this (Objective 4d and 4e);
- Analysis of the relations between the OGD advocates and incumbent social forces and interests (Objective 4e).

It is also proposed, drawing on the above overview of the neo-Gramscian framework, that in the case of the OGD initiative it is important to add an analysis of the efforts of OGD advocates to produce commons-based technological capacities for an OGD infrastructure (objective 4a), and to analyse the materialisation of the idea of OGD into new government policy and nascent institutions (objective 4f). Further, in order to produce a detailed examination of the UK case, the analysis of attempts to internationalise the OGD agenda to the level of world order, as suggested by Bieler and Morton (2003), will not be taken up in this research project. Developments in OGD internationalisation will, however, be highlighted and a focus on this aspect of the OGD initiative is suggested as a worthwhile topic for further research. The following chapter will outline in more detail the specific research

methods implemented in the collection and analysis of the empirical data of this research.

CHAPTER 4: RESEARCH METHODS

4.1. Introduction

This chapter describes in detail the research methods used in this research to collect and analyse data on the OGD initiative. The chapter begins by outlining the case study approach chosen for the research, before discussing issues regarding research quality. It then moves on to an overview of the methods of data collection and analysis, which involved collecting data via interviews, mailing lists, event observation and online documentation, and analysing them using thematic analysis combined with content analysis of an OGD mailing list. The chapter ends with a consideration of ethical issues in the data collection and analysis.

4.2. Research Approach: Case Study

Yin (2003) argues that the case study as a research strategy is a preferable choice for research projects which aim to “investigate contemporary phenomenon within a real-life context especially when...the boundaries between phenomenon and context are not clearly evident” (p. 13). The case study is, therefore, an appropriate research approach for this study. Thomas (2011) suggests that a case study must comprise two

elements: the subject of the case study, or the “unit of analysis” (Yin 2003), and an object of study which frames the context of the case study. Within this study, therefore, the object of study can be defined as “variegated” global capitalism (Jessop 2012) experiencing a period of hegemonic crisis in core economies; and, the subject of the study, or the ‘unit of analysis’ (Yin 2003), is the Open Government data initiative in the UK where there is a distinctly neoliberal variation of global capitalism.

Yin sets out the following key factors in the design of a case study (Yin 2003, p. 21 – 27):

- “Form of the question” (p. 21): a neo-Gramscian analysis places emphasis on the questions of how, why and in whose interest? It is interested in understanding and explaining, and therefore is suited to a case study approach. In terms of this study the primary research question is: which social forces and interests have been working to shape the UK’s OGD initiative and to what ends?
- “Study propositions” (p. 22): As Yin highlights, the form of the question does not establish specifically what needs to be studied in order to answer the question, and therefore something needs to be proposed about the topic to frame the study. In this case the propositions and framework outlined at the end of the neo-Gramscian framework chapter shape the study and outline where to look for evidence.

- Define the “unit of analysis” (p. 22): the unit of analysis is drawn out of the research questions and reasons for case selection. In this case the Open Government Data initiative in the UK is the primary unit of analysis. In terms of the specific delineation of this unit of analysis, account needs to be taken of overlapping and prior initiatives around commercial re-use of PSI, state transparency, and ICT mediated state-citizen interaction. However, the OGD initiative as a site of political and social struggle is demarcated by the fact that a group of people have formed under the banner of Open Government Data, and act in the name of ‘opening up’ government data. Therefore, the initiative is here defined as those ideas, activities and communities which have a specific identification with the label OGD, although it is situated within a context and overlaps with these prior initiatives.

Further, an embedded, rather than holistic, case study design (Yin 2003, p. 42-45) has been selected to take into account the different collective actors struggling to shape the outcome of the initiative. The definition of these embedded units of collective actors was informed by the analytical framework, and they were identified through a review of the literature and early exploratory surveying of the field. The embedded units are defined as UK based peripheral and core civil society OGD advocates (where core advocates are those that at some point have undertaken official advisory roles to government on OGD or PSI), UK local government employees, UK

civil servants and commercial re-users and their representatives. Although individuals' membership of these units did overlap the breakdown is still perceived to be analytically useful, and frames the presentation of the empirical chapters.

- “Linking data to propositions” (p. 26): although this component is relatively undeveloped in case study research (Yin 2003, p. 26), the aim is to define the technique for relating the data collected back to the theoretical/analytical framework. Yin (2003) highlights three general strategies: relying on theoretical propositions, thinking about rival explanations, and developing a case description (p. 111-115). Due to the fact there is very little research on the OGD initiative, some descriptive analysis of the data is required. However, the main focus in linking back the data is to draw on the theoretical propositions developed in the neo-Gramscian framework. This guides the analysis, and focuses attention on certain data e.g. the ideas of advocates, efforts to generate material capabilities, differing interpretations, struggles between different groups.
- Defining “criteria for interpreting findings” (p. 27): this aspect aims to define how closely matched a finding must be to a pattern or other finding in order to be relevant (Yin 2003, p. 27). Since the interpretation of findings in this study is located within the nuances of political power, strategy and ideology and how this is elaborated, it is difficult and potentially restrictive to define such criteria upfront, and

therefore will not be attempted. Instead, any potential limitations on the interpretation of a particular finding will be discussed in the analysis.

Although not always explicitly stated, single case design is a common approach in neo-Gramscian IPE research. For example, the case might be defined as a national political economy in the context of neoliberal globalisation in Worth's (2005) research on post-Communist Russia, Moore's (2007) on South Korea, and Morton's (2007) on Mexico; or, it might be a study of an International Organisation, such as Paterson's (2009) study of the World Trade Organisation. A single case design was selected as opposed to a comparative case study, for a number of resource and methodological reasons. Yin (2003) stipulates that for a single case design to be selected the rationale must be based on the case being "the critical case in testing a well-formulated theory", an "extreme" case, a "typical" case, a "revelatory" case, or a "longitudinal" case (p. 40-42).

The rationale for this single case study could therefore be based on the 'OGD initiative' being perceived as an "extreme" or rare case in terms of the engagement of neoliberal state institutions with open or commons based production methods, although that would ignore engagement with Open Source Software and Open Access publishing. It might also be considered as a critical case for testing neo-Gramscian theory; however, the aim here is not to scientifically test the theory, rather it is to illuminate processes in the development of the initiative, and potentially adapt the theory if necessary. It

is, therefore, proposed that the “revelatory” case, in which the research observes and analyses a phenomenon which has not previously been accessible for analysis is the most appropriate rationale for utilising a single case design in order to research the UK’s OGD initiative.

4.3. Research Design Quality: bias, validity, generalisability and reliability

The critical paradigm adopted in this research recognises that knowledge is not value-free and, therefore, bias is inherent in all research design. The analytical and methodological frameworks adopted in this research are ones that are critical of neoliberal capitalism as a means of satisfying human and broader ecological needs, and that recognise the structural weight of neoliberalism in the United Kingdom and globally despite its current conditions of crisis. The approach adopted thus holds a bias towards critically examining the development of the OGD initiative relative to hegemonic neoliberalism, and presenting arguments that aim to carve a path beyond neoliberalism towards a more egalitarian and democratic form of political economy.

Acknowledgment of these forms of research bias, however, does not undermine high quality research design. There are generally three key tests for the quality of a research design: validity, generalisability and reliability. Table 5 below provides an overview of Yin’s (2003, p. 33-39) breakdown of

Table 5 - Validity, Generalisability and Reliability - adapted from Yin (2003)

Quality issue	Description	Recommended strategy for case studies	Strategy in this case study
Construct validity	Ensuring what is recorded is a genuine reflection of critical events, rather than being based on the researcher's subjective opinion. Ensuring that the sources used are a good source for meeting the research objective (p. 35-6).	<p>In the data collection phase use multiple sources of evidence and different methods which converge to support the interpretation or reporting of events or facts as this provides "multiple measures of the same phenomenon" (p. 99)</p> <p>Establish a chain of evidence</p> <p>Have a draft case study report reviewed by key informants.</p>	<p>Multiple sources and methods of data collection were used including interviews with key informants, direct observation, online documents, and an OGD mailing list. The analysis drew on all of these sources combined to generate findings.</p> <p>Transcripts were sent to all interviewees for checking.</p> <p>A journal article (Bates 2012) was submitted on the basis of initial findings (the guest editor was a key informant). An advisory report was produced for a further key informant at the end of the data collection period. Both were received favourably.</p>
Internal validity	More important for studies looking for causality, although it can also relate to inferences about unobserved events based on interview or documentary evidence	<p>In the data analysis stage undertake:</p> <p>pattern-matching (comparing an empirically based pattern with a predicted one p. 116);</p> <p>explanation building (requires multiple cases p. 122);</p> <p>address rival explanations;</p> <p>use logic models (when looking for causality).</p>	The research project was not looking for causality; however, in order to avoid problematic inferences about unobserved events data was integrated from various sources in order to support inferences.
External validity (generalisability)	Whether the findings are analytically (not statistically) generalisable to	In the research design phase use theory in the development of	The research design was developed drawing on the neo-Gramscian framework e.g. it contributed to the identification of collective

	other cases i.e. can the findings of a particular case be generalised to a broader theory. If so, this should be tested using further cases.	single case studies	actors (embedded units), and the research aim, objectives and questions, and, thus, the data collection.
Reliability	Checks whether the same results would emerge if a later investigator repeated the study. The aim is to minimise error and bias by documenting procedures.	In the data collection phase use a case study protocol Develop a case study database	Some of the interpretive elements of the study would be dependent upon the researcher's own interpretive framework for analysing the data. However, to ensure a suitable level of reliability, research methods are presented thoroughly and a database of the mailing lists analysis was developed using Excel.

these key research design tests, and the approaches taken in this study to ensure that relevant standards of research design were met.

4.4. Data Collection Methods

Neither the neo-Gramscian nor the case study approaches stipulate that specific data collection methods must or should be used. However, Yin (2003) does argue that since case studies tend to have “many more variables of interest than data points”, multiple sources of evidence should be used and “triangulated” together (p. 13-14), i.e. they should converge in the analysis and not be reported separately.

The selection of data collection methods then, as discussed above, must be contingent on the subject of interest, the research objectives, and the

analytical framework. In order to decide on the research methods to be adopted in the main phase of data collection, initial observations of the OGD community were undertaken during 2010 via online research, attendance at the FutureEverything 2010 event which had a significant Open Data stream, and informal discussions with two local OGD advocates. These initial observations evidenced that the OGD advocate community was active in both online and offline environments, and across a range of sectors e.g. national government, local authorities, civil society groups and the private sector. Civil society groups such as the Open Knowledge Foundation, Open Rights Groups, Open Data Manchester, and MySociety were identified as key sites of activity within the UK. Further, a number of early adopting local authorities were identified, as were the relevant government departments and regulatory bodies. In terms of communications, a key online mailing list was identified – open-government@lists.okfn.org – founded by the Open Knowledge Foundation, as well as other modes of online communications including a local Open Data Manchester mailing list, and social networking activity e.g. via Twitter. Further, it was observed that advocates came together at a range of meetings including conferences, local ‘meet ups’, seminars/workshops and ‘hackdays’ in order to discuss OGD.

The research methods were selected with the purpose of collecting data relevant to the research objectives. Such data comprised evidence of:

- 4a. The efforts of civil society OGD advocates to build capacities such as tools and communities to promote OGD;

- 4b. The governance and organisational forms of the OGD initiative, and how these impact on the shaping of the initiative;
- 4c. The ideas and intentions of civil society OGD advocates in relation to neoliberal capitalism;
- 4d. The relationship between civil society OGD advocates, state based OGD advocates and the PSI re-use industry;
- 4e. The ideas and intentions of OGD advocates in UK local and national government and the PSI re-use industry;
- 4f. The materialisation of OGD related government policy in the UK.

In the light of these early observations and the aims and objectives of the study, it was decided that data would be collected through interviews, event observation, online documentation, and the 'Open-government' mailing list. The interpretation of these data was then informed by the propositions emerging from the neo-Gramscian framework whose parameters were found to be compatible with the research objectives listed above, and the wider context of developments in the commercial re-use of PSI and state transparency outlined in the literature review. Importantly, this framework focused interest on both interpretive issues around OGD, but also who the key actors are and in whose interests they are acting.

4.4.1. Timeline for Data Collection

- Initial observations and desk research began at the beginning of 2010;

- Interviews with OGD advocates were conducted in the period January 2011 – June 2011;
- OGD community events were attended during the period May 2010 – October 2011;
- The OGD advocates' mailing list was observed from February 2010 – June 2011 (i.e. since it was established until the end of the interviewing period);
- Online documents were collected up to July 2012.

4.4.2. Data Collection: Interviews

Key research objectives were to understand better the ideas and intentions of OGD advocates, the governance and organisational forms of the OGD initiative, and the relations between civil society and state based OGD advocates and the PSI re-use industry. Research interviews were a primary mode of data collection in the achievement of these objectives.

As Kvale and Brinkmann (2009) state, “the qualitative research interview attempts to understand the world from the subjects’ point of view, to unfold the meaning of their experiences, to uncover their lived world prior to scientific explanations” (p. 1). Whilst Kvale and Brinkmann (2009) approach social science from an interpretivist perspective, this definition of the qualitative interview nonetheless fits within the neo-Gramscian desire to “find the connections between the mental schema through which people perceive action and the material world that, in turn, both constrain what people can do

and how they think about action” (Bieler & Morton 2001, p. 17). In order to achieve this data collection objective, interviews were perceived to be the most forthcoming method of engagement with OGD advocates. Further, interviews were perceived to be a fruitful method for gathering data on the other empirical research objectives.

Focus groups were also considered; however, it was perceived that some topics might be discussed more freely in a private, rather than a group context, particularly since the interviews were undertaken confidentially. Further, although focus groups might have resulted in interesting data to compare with interview data, it was perceived that to undertake both interviews and focus groups would be too heavy a burden on the OGD advocates’ time.

Interviews were conducted during the period February to July 2011. Thirty-three potential interviewees were contacted between January and May 2011 through a process of purposive sampling. This sampling method aimed to select key informants from a cross section of people and groups engaged in shaping the initiative, and it was informed by event observation and desk research. Two interviewees were also self-selecting in response to a message about the research to the ‘open-government@okfn.org’ mailing list. The framework for selecting interviewees covered peripheral and core participants active within civil society OGD initiatives (where core civil society advocates are defined as those who have at some point undertaken official advisory roles to government on the topic of OGD/PSI), as well as key

players in local authorities, the civil service, and the private sector. Interviewees were further categorised by gender, race, native language, and whether they had a background of elite education or success in business. Unsuccessful attempts were also made to interview politicians engaged in shaping OGD. In total, twenty-one interviews were completed.

The interviewing process began with those with more peripheral engagement before moving closer towards key advocates active at the national level. The early and more peripheral interviews were semi-structured, and generally based on an interview template which aimed to gain understanding of participants' activity, ideas and intentions regarding their engagement with OGD, and tasks were used to engage and focus the interviewee (see Appendices 2.1 and 2.2). In order to make the interviews more flexible in relation to meeting the objectives of the research, as the interviewing process began to engage more senior personnel and more active OGD advocates, the structure of the interviews was adapted for each interview so as to take into account the time availability, background and experiences of interviewees (see Appendix 2.3). Whilst still exploring participants' ideas, intentions, and activity around OGD, these later interviewees were also increasingly used as 'expert informants', particularly in relation to policy issues and internal state politics. All interviews except one were recorded and transcribed, and photographs were taken of the tasks completed by some interviewees. The reason one interview was not

Table 6 - Matrix categorising interviewee by role

Core civil society	Interviewee18 Interviewee21				
Peripheral Civil Society		Interviewee2 Interviewee12 Interviewee14 Interviewee4			
Local Government		Interviewee3 Interviewee5 Interviewee9	Interviewee6 Interviewee7		
Civil Service		Interviewee11		Interviewee16 Interviewee17 Interviewee20	
Business interest	Interviewee8 Interviewee19	Interviewee13 Interviewee10 Interviewee1			Interviewee15
	Core civil society	Peripheral Civil Society	Local Government	Civil Service	Business interest

recorded was the interviewee, a civil servant, offered a more honest and subjective interview on that condition. This seemed a reasonable negotiation and notes were taken during the interview and filled out immediately afterwards.

As highlighted above, the approach taken to interviewing was quite flexible. The reasoning behind engaging a variety of approaches resulted

from necessity (e.g. being offered a 20 minute phone interview with a key informant), increasing experience and comfort with the interviewing process, and recognition of the need to construct the interview with the interviewee. Despite the flexibility afforded to the interview process, the interviews can be claimed as reliable since they all placed emphasis on gathering data relevant to the objectives: the ideas and intentions of OGD advocates, the governance and organisational forms of the OGD initiative, and the relations between civil society and state based OGD advocates and the PSI re-use industry.

Kvale and Brinkmann's (2009) insight that different interviewing techniques can be broken down into the "miner approach" and the "traveller approach" is useful for thinking about the semi-structured interviewing process (p. 48). The "traveller", they argue, "wanders through the landscape...explores the many domains", whereas the "miner" approaches the interview as a site of "buried...valuable metal [data]" which it is their role to "unearth" (p. 48). These metaphors are useful for describing the approach to interviewing undertaken in this research. Interviews were approached largely as a 'traveller', but with a switch to 'mining' at crucial points which related back to the analytical and methodological frameworks; for example, 'mining' to ascertain the details of key events or discussions that were mentioned by interviewees. Some interviewees, for example, were particularly knowledgeable about the relations between civil society OGD advocates and the commercial PSI lobby. Once this was uncovered, more

specific questions were then asked in order to get a more precise understanding of these relationships.

As Kvale and Brinkmann (2009, p. 112) highlight, the process of interviewing can lead to new insights and understanding being developed by the interviewer. Whilst integrating this increasing awareness and knowledge into future interviews might cause problems with some methodologies such as “comparative hypothesis-testing”, it was decided that, similar to exploratory studies, it was important to bring this new knowledge - for example, increasing knowledge about the PSI industry and the governance of the OGD communities - into the interview questioning as the study progressed.

Power relations between interviewer and interviewee were also important to take into account in this study. For each interview, it was necessary to make a judgement of the power relations at work and construct the interview with due regard to this. For example, some of the interviewees had little, if any, experience of being in such a position and their ideas about ‘the academic researcher’ or assumptions about the interviewer’s knowledge on the subject may have made them uneasy in sharing their thoughts. In such interviews it was important to relax the interviewee and make them comfortable with the experience. In order to do this communications were kept informal, interest and openness to their ideas and interpretations was demonstrated and tasks were sometimes used to engage the interviewee and take their minds off the interview process. There was also an increased

responsibility to these interviewees. For example, one interviewee enthusiastically disclosed a number of closed internal organisational decisions which, although the interviews were anonymised, would easily have traced back to the interviewee and could have put their employment at stake. Concern regarding this was raised by the interviewee on being shown the transcript, and it was therefore decided not to use these disclosures as sources, and where necessary attempts were made to source the information from elsewhere.

In contrast, a number of interviews were also undertaken with 'elites', whether in terms of professional or social position, or both. A further number of interviews that might be deemed 'elite' were with those with a vast technical knowledge whether in relation to policy or ICT. It was crucial to enter these interviews confidently as an equal, interpreting the power cues in these interviewees' communication patterns without becoming intimidated by them. Most of these 'elite interviews' were left to the end of the interviewing cycle, thus allowing the researcher's knowledge of the subject matter and technical language to be as developed as possible prior to engaging with these interviewees. As Kvale and Brinkmann (2009) highlight, in the case of 'elite' interviewing "demonstrating that [the interviewer] has a sound knowledge of the interview topic will gain respect and be able to achieve an extent of symmetry in the interview relationship" (p. 147). The questioning style directed at some of the 'elite' interviewees also differed from the 'non-elite' interviews. In particular, it was possible to ask more direct, specific

questions regarding particular issues that had emerged in earlier interviews and desk research, in comparison to the more open methods utilised with more inexperienced and peripheral interviewees. In this sense, the interview style involved more 'mining' than in earlier interviews. Further, due to the "secure status" (Kvale & Brinkmann 2009, p. 147) of these interviewees it was feasible to challenge their responses. For example, whilst interviewing a civil servant based at BIS, the issue of tax revenue from OGD and skills development was pushed and questioned beyond the interviewee's original comments.

4.4.3. Data Collection: Observations

As Yin (2003) claims, "observational evidence is often useful in providing additional information about the topic being studied" (p. 93). Whilst in ethnographic research, participant-observation may form the core of data collection, in this study observations were a complementary method of data collection to provide additional information and context alongside interview, documentary and mailing list data. Observation as a method of data collection is useful because it allows the researcher to gain access to phenomena that there is no other way of collecting evidence of, and it allows the researcher to perceive the phenomenon from the perspective of someone inside, rather than external to, the case (Yin 2003, p. 94). However, problems can arise with the type of role a researcher ends up taking on e.g. if they have to take up positions or offer advice which detract from good research practice, if they are drawn into and become a supporter of a group,

and if there is too much emphasis on participation instead of observation and recording (Yin 2003, p.94-6).

The observations focused on the public meetings and activities of OGD advocates. These events were organised by civil society advocates, but sometimes attended and funded by state and private sector organisations. Observation was perceived to be an important method of data collection since early exploratory observations highlighted that the community is relatively action-orientated, and both small meet-ups and larger events are important aspects of the community's calendar, generating a lot of interest and enthusiasm. These observations were, therefore, useful for understanding how different parts of the community fit together, the roles of different groups and individuals within the community, the articulation of debates, political struggle and consensus formation within the initiative, observing the governance of the initiative in practice, and the public declaration of ideas, beliefs, intentions and activities. Further, some observations allowed insight into corporate and state interests and activities, and advocates' interpretations of this broader context. Some observations also highlighted potential interviewees, and allowed the opportunity for informal discussions with people in addition to, or instead of, interviews.

The following events were attended:

- FutureEverything 2010 Conference, Manchester, 13-14th May 2010

- 3rd Free Culture Research Conference: Free Culture between Commons and Markets: Approaching the Hybrid Economy?, Berlin, 8-9th October 2010
- Open Government Data Camp, London, 18-19th November 2010
- Open Government Data Conference, Wellcome Trust, London (organised by the Cabinet Office and Open Knowledge Foundation), 19th November 2010
- “Open Data: What, Why, How!” seminar by Rufus Pollock at the Institute for Social Change, University of Manchester, 25th January 2011
- Making (and Saving) Money with Open Data workshop, Birmingham (organised by Birmingham City University), 13th April 2011
- FutureEverything 2011, Manchester, 12-13th May 2011
- Open Knowledge Conference (OKCon 2011), Berlin, 30th June - 1st July 2011
- Open Data Manchester – 30th November 2010, 27th January 2011, 31st May 2011, 27th September 2011, 29th November 2011
- Open Data Consultations and Policy Workshop, London (organised by Open Rights Group), 3rd October, 2011

Spradley (1980) notes that participant observation involves the researcher entering a social situation with two objectives: “to engage in activities appropriate to the situation” and “to observe the activities, people, and physical aspects of the situation” (p. 54). However, there are five

different levels of participation that can be utilised in observation based data collection: nonparticipation, passive, moderate, active and complete (Spradley 1980, p. 58-62). In this study, the level of participation in events, which were usually open public meetings, conferences and seminars ranged between moderate and active. In the majority of cases moderate participation, which attempted to “maintain a balance between being an insider and an outsider”, was involved i.e. being an audience member, and at times engaging in conversations with other attendees as familiarity with some of the community members was established. In smaller groups the level of participation was sometimes more active in the sense that “the active participant seeks to do what other people are doing” (Spradley 1980, p. 60-61), for example, on some occasions questions were asked after presentations. and on one occasion a social activity after a meeting was attended. The higher level of activity was not the dominant mode of participation, as the intention was to have as little impact on the field of study as possible. It was decided that this was a reasonable level of engagement, since the behaviour was appropriate to the situation, however, any increased level of engagement would have increased the risks implicit in participation highlighted above: overemphasis on participation rather than observing, becoming an active supporter resulting in increased bias in data collection and analysis, and taking on positions which detract from good research practice. Further, it was recognised that an increased level of participation might lead to the development of personal relations which could lead to difficulties and conflicts of interest in the analysis and presentation of data.

Spradley (1980) states that “communicating the aims of the research must often become a process of unfolding rather than a once-and-for-all declaration” (p. 22); however, the researcher must decide who specifically needs to know the research aims, and there is no necessity to announce to everybody in the vicinity of observation the aims of the research even though “their behaviour certainly enter[s] the study” (p. 22). In this research, the observations of key participants often overlapped with potential interviewees, and, therefore, individuals had been contacted and often met with on an individual basis at which time the research was openly discussed. In many of the smaller meetings attended, everybody introduced themselves and their role prior to the start of the meeting. Further, the research was introduced on the mailing list of a regular local meeting prior to beginning attending, and also on the ‘Open-Government@okfn.org’ mailing list, which included a link to the researcher’s blog which included a statement of the research aims and objectives. At larger meetings and conferences, the research project was discussed with those individuals the researcher spoke to; however, no formal announcement was made to everybody at the event. Observations were recorded in a notebook and covered the following themes:

- Basic descriptions of attendees e.g. gender, age, number of attendees
- Basic description of the location e.g. equipment, decor, size, owners
- Note of any sponsors, funders, organisers
- Content of discussion e.g. notes on presentations, questions asked

- Format of the discussion e.g. scope for discussion, openness to contributions, who contributes, how are decisions made?
- Roles of attendees e.g. who are the speakers, organisers, observers?

4.4.4. Data Collection: Mailing list

Exploratory observations highlighted that a significant amount of communicative activity amongst OGD advocates was done online via mailing lists and social networking sites such as Twitter. In particular, one key mailing list was identified: the international 'Open-Government@okfn.org' mailing list founded by the Open Knowledge Foundation in February 2010. Analysis of this mailing list was particularly useful for understanding aspects of the governance of the initiative in the online context, individuals' discussions about ideas, intentions, activities, interpretations, struggles and efforts at consensus formation, and drawing awareness to the activities of state institutions and corporate interests within a civil society context. Contributions from this mailing list were archived online at <http://lists.okfn.org/pipermail/open-government>. Text files of contributions for each month February 2010 to June 2011 were downloaded, and each unique contribution was copied and pasted into an Excel spreadsheet. Each row of the spreadsheet contained an entry for the contributor, date, subject, and the full message. The data was cleaned so that each user had a unique identifier (e.g. one single email address), and the data was then analysed as discussed below. This mailing list was also followed as a passive observer in order to keep up to date with developments in OGD and within the

community, which could then be followed up in interviews and event attendance and observation.

Consent was sought from the mailing list members to undertake this analysis via two direct emails to the list. The first was sent on the 27 April 2011, and the second on 26 September 2011. The messages explained the objectives in researching the mailing list, and invited people to get in touch if they had any questions or problems with this. Only positive responses were received. The ethical considerations section below discusses this approach in more detail.

4.4.5. Data Collection: Online documentation

Similar to the complementary role of the observations, online documents were used to build contextual awareness and undertake background research on interviewees and events. A wide range of sources were observed including blog posts of key informants and organisations, key websites such as data.gov.uk and okfn.org, and mailing lists were followed such as the Open Data Manchester mailing list, open-government@okfn.org mailing list and mySociety-developer mailing list. These sources provided a range of contextual information, links to activity within the field, and an understanding of who is active within the field. Generally speaking, data was collected from this online environment as a non-participating observer in order that the research was contextualised by an immersion in the unfolding events. Important sources were bookmarked using Diigo.com (<http://www.diigo.com/user/J0bates/%22open%20data%22>), and were used

as a reference source and easily accessible narrative of unfolding events. As Yin (2003) states, “for case studies, the most important use of documents is to corroborate and augment evidence from other sources” (p. 87), thus some of these online sources were used to corroborate and add context to interview and observational data. Online documents were also used for researching the policy environment. For example, relevant reports, consultation documents, minutes of meetings, green papers, and white papers are available online and were downloaded for analysis. Further, online documents were used for researching corporate interests with respect to OGD including company websites, annual reports, and published research reports.

4.5. Data Analysis

As Yin (2003) comments “the analysis of case study evidence is one of the least developed...aspects of doing case studies” (p. 109), there are therefore no specific strategies that must be adopted. A combination of thematic analysis, content analysis and an informal social network analysis were therefore selected. Thematic analysis was selected as it was deemed most flexible and fitting with the neo-Gramscian analytical framework. However, the content analysis was selected as it allowed for a more concrete analysis of the contributors to the OGD community. It, therefore, enabled a more systematic examination of the ‘who?’ question that arises in the neo-

Gramscian framework, which due to the size of the mailing list would not have been possible drawing solely on the thematic approach.

4.5.1. Data Analysis: Thematic Analysis

Thematic analysis was the sole qualitative method of analysis. Yin (2003) argues that the preferable strategy for analysing case study data is a thematic analysis that draws on the “theoretical propositions that led to [the] case study” (p. 111). The idea therefore is to “trace” the basic proposition in the case study data: the “theoretical orientation guid[es] the case study analysis...and helps to organize the entire case study” (p. 112). This kind of thematic analysis is similar to the one outlined by Kvale and Brinkmann (2009), when they highlight that many “interview analyses do not apply specific analytic procedures, but rest on a general reading of the interview texts with theoretically informed interpretations” (p. 233). In such cases analysis can be highly unsystematic, involving multiple readings, theoretical reflection on specific themes, and the writing of interpretations (Kvale & Brinkmann 2009, p. 236).

Whilst Kvale and Brinkmann (2009) are wary of critical approaches, they highlight how a critical reading of an interview text attempts to “demystify via a hermeneutics of suspicion; it seeks a deeper truth underlying the hegemonic discourse of the texts” (p. 236). They also highlight some perceived issues in thematic analyses, including “theoretical bias”, or, “only noticing those aspects of the phenomena that can be seen through their theoretical lenses” (p. 238). Further, they argue, theoretical readings might

restrict thinking, preventing the researcher from seeing new, previously unrecognised aspects of a phenomenon (p. 239); and, finally the theoretical reading heightens the importance of the researcher in terms of the sensitivity of the researcher to the subject and their conceptual mastery of the theoretical lens (p. 239). Effort was taken in the analysis, therefore, to avoid these potential issues through keeping an open mind to alternative explanations and patterns in the data, and to spend time attempting to achieve a deeper understanding of both the context of the case and neo-Gramscian framework.

The original intention was to use a qualitative analysis programme, Atlas.ti, to loosely code the data and, thus, assist the analysis process. However, after doing a pilot coding of half of the interviews, it was perceived that this method of analysis was restrictive and resulted in problems due to interviewee statements being removed from their context. This method was, therefore, abandoned and interview data was analysed manually, reading through the interviews multiple times and annotating documents based upon a thematic reading.

4.5.2. Data Analysis: Content Analysis

Krippendorff (2004) highlights that content analysis is a research technique that aims to produce inferences from a text to the context of the text's use. Of central importance in the application of content analysis is to establish how one defines and understands content. Krippendorff (2004)

highlights three paradigms that content analysts tend to assume. Firstly, that the content of the text is “*inherent* in a text”; secondly, that it is “*a property of the source* of a text”; or, thirdly, that content “*emerge[s] in the process of a researcher analysing a text* relative to a particular context” (p. 19, original emphasis). These definitions, thus, map onto discussions in literary theory about the properties of text, the latter highlighting a poststructural turn in the field of content analysis. In accordance with the neo-Gramscian framework, therefore, whilst it is appreciated that there are significant interpretive processes at work in the reception of texts, it is also important to draw attention to the source of the text: in this case the contributor to the open-government@okfn.org mailing list. The focus of the content analysis, therefore, is related to the question of the source of the contribution to the mailing list and the attributes of individuals making certain types of contributions. Thematic analysis of relevant mailing list contributions was also undertaken, in order to develop a qualitative understanding of the content of the contributions.

4.5.2.1. Open-government@okfn.org Mailing List Database

The mailing list data was analysed in Excel. Each month from February 2010 – June 2011 was stored in a separate worksheet, and each message to the mailing list was coded with a ‘relationship’ code and a ‘topic’ code (see Appendix 2.4). A decision was made to code for the type of communicative contribution (relationship code) as it was important to be able to distinguish contributions that simply reported and provided information regarding

something OGD related, those that were highly activity related i.e. project development, and those that were more analytical discussions aimed at shaping the decisions and development of the initiative. Further, it was important to analyse which contributors were engaged more in analysis and shaping discussions, as opposed to simply sharing information. It was important to make these distinctions in order to drill down into the mailing list in order to focus on the more analytical discussions for thematic analysis alongside the interview, documentary and observational data.

Topic codes were also selected as it was deemed important to be able to follow trends regarding the interests and needs within the community as the initiative unfolded, and to analyse which contributors were engaged on specific topics. Once the two areas of coding were decided, the codes were then selected through an open coding process, with codes being added as necessary until all the following contributions fitted within an existing code. This open coding process was selected because it was a dynamic medium and topics were likely to change over time, and because prior to beginning the research there was only a limited knowledge of how OGD advocates used the list.

4.5.2.2. Analysis of the open-government@okfn.org Mailing List

In order to undertake the thematic analysis of discussions within the OGD community that took place on the open-governmnet@okfn.org mailing list, filters were applied to worksheet headings to draw out those contributions

with a relationship code of 'community discussion'. A topic filter was then used to draw out relevant discussions which were used to elaborate on and corroborate the analysis of interview data. A final overview of the 'community discussions' was undertaken to ensure themes were not ignored that were not present in the interview data.

Quantitative content analysis of the mailing list was undertaken to analyse the proportion of contributions per user over time and the proportion of the type and topic of contributions by user over time. In order to undertake the quantitative analysis, the following columns for each month were copied into a further worksheet: name, date, subject, relationship code, topic code (see Table 7).

Table 7 - Example section of worksheet used for extracting data for quantitative analysis (names anonymised)

Name	Date	Subject	Relationship code	Topic code
B*****	12/02/2010	No subject	Sharing information with the list (unsolicited)	Policy/legal
j*****	12/02/2010	No subject	Sharing information with the list (unsolicited)	OGD literature
S*****	15/02/2010	[open-government] Call for OKF Newsletter items/info	Request for contributions to the community	Community Communications

To analyse the proportion of contributions made by individuals over time a pivot table was produced based on the name and date fields (see Figure 1).

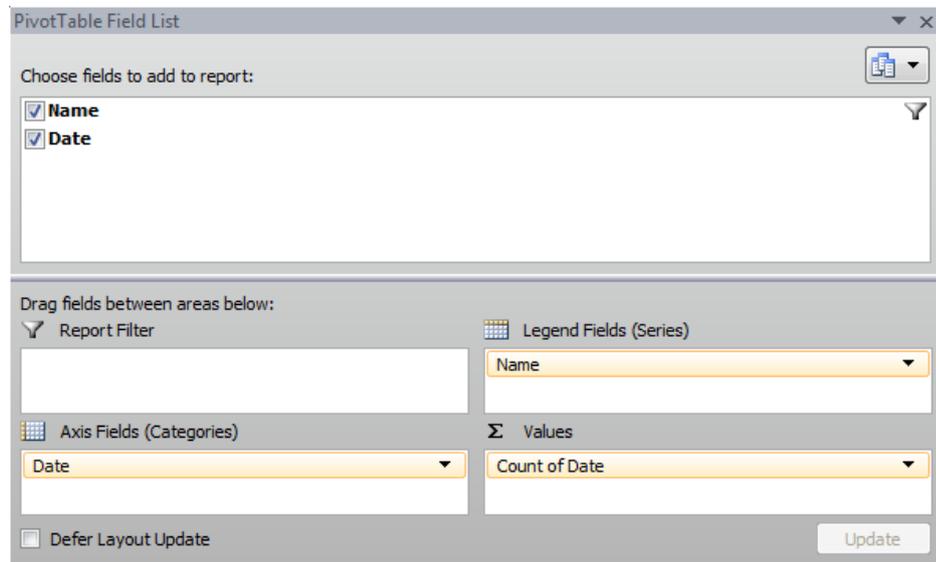


Figure 1 - Pivot table fields for analysing the proportion of contributions made by individuals

Value filters of the top 10, 25, 50, 75 and 90% of contributors by 'Count of Date' were then applied to the name field in order to focus in on the most active contributors to the list. PivotCharts (type - Area: 100%) were then produced of the resulting data in order to demonstrate how the most active 10, 25, 50, 75 and 90% of individuals' proportion of contributions changed over time.

To analyse the proportion of users' contributions by topic over time, a pivot table was produced based on the name, date, relationship code and topic code fields (See Figure 2).

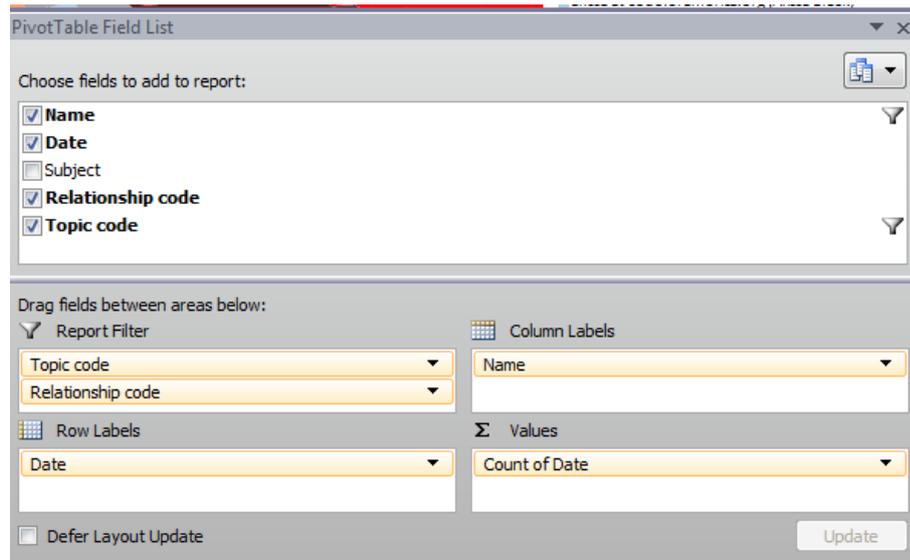


Figure 2 - Pivot table for analysis of the proportion of the type and topic of contributions by user over time

Value filters of the top 10, 25, 50, 75 and 90% of contributors were then applied to the name filter, and at each of these levels the topic code was filtered to “strategy” OR “framing the OGD community’s position”. This process of filtering aimed to examine which contributors were most active in engaging in discussions that might be defined as ‘leadership’ discussions about the OGD advocates’ strategy and position on key issues. PivotCharts (type - Area: 100%) were then produced of the resulting data in order to demonstrate how the most active 10, 25, 50, 75 and 90% of individuals’ proportion of contributions to ‘leadership discussions’ changed over time.

Each of the top 75% of contributors was then colour coded according to continent of residence (or, country in the case of the UK). The codes used were UK (grey), rest of EU (blue), North America (red), Australasia (green), South America (pink). Further, female contributors were given a purple border on the pivot chart. This was done in order to gauge visually the

gender and continent of residence of the most active contributors (see Figure 3 below for an example of a 100% area PivotChart).

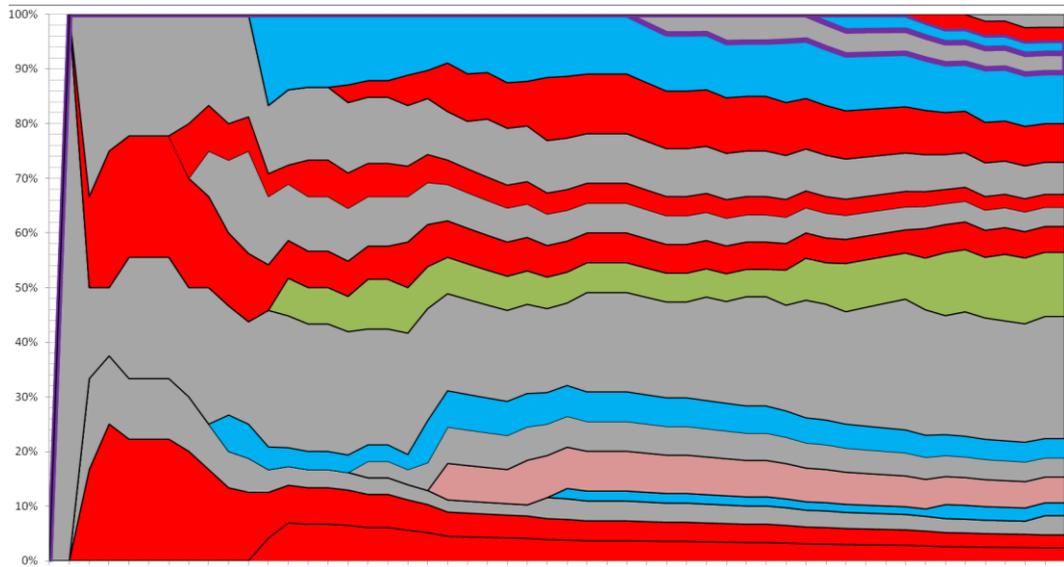


Figure 3 - Example of a PivotChart colour coded by continent and gender of contributor

4.5.3. Data Analysis: Social Network Analysis

Whilst social network analysis was not initially intended to form part of the data collection and analysis, some interesting findings about the relationships between civil society actors and the state did emerge naturally from the interview and observational data. However, it was perceived that this “relational data” (Scott 2000) was difficult to present to the reader without some form of visualisation. It was, therefore, decided to draw on the methods of Social Network Analysis to produce a visualisation of the connections and influences discussed by, and observed of, OGD advocates between civil

society and the state. This visualisation was produced using NodeXL. For every interviewee, simple relational data between the interviewee (in column 1) and other interviewees and state institutions were recorded (in column 2) that emerged in interviews and through observation. A network visualisation of these data was then produced. Whilst not a rigorous social network approach (i.e. see Scott 2000 or Freeman et al (1992)) – for example, the collection of data and the boundaries of the network are relatively ad hoc – the objective was solely to help the reader visualise some of the relationships that emerged from interviews and observations, not produce a definitive network graph of OGD advocates in the UK.

4.5.4. Data analysis: Conclusion

The methods of data collection and analysis were selected in the service of the research objectives, rather than a philosophical paradigm (Morgan 2007). Similarly, the data arising from the different sources were integrated in a pragmatic manner, guided by the research objective in question. Whilst for many objectives interviews provided the richest source of data, these data were generally integrated with data from other sources in order to provide a more robust account. For example, the data sources and analytical techniques referred to in Table 8 (below) were drawn on in order to fulfill objective 4.

Table 8 - Application of methods to research objective 4

a) The efforts of civil society OGD advocates to build capacities such as tools and communities to promote OGD	Qualitative: Thematic analysis of, and information gathering from, interviews, online documentation, observations
b) The governance and organisational forms of the OGD initiative, and how these impact on the shaping of the initiative	Qualitative: Thematic analysis of interviews, online documentation, observations Quantitative: Content analysis of Open-government mailing list
c) The ideas and intentions of civil society OGD advocates in relation to neoliberal capitalism	Qualitative: Thematic analysis of interviews, online documentation, observations
d) The relationship between civil society OGD advocates, state based OGD advocates and the PSI re-use industry	Qualitative: Thematic analysis of, and information gathering from, interviews, online documentation, observations Quantitative: Informal social network analysis
e) The ideas and intentions of OGD advocates in UK local and national government and the PSI re-use industry	Qualitative: Thematic analysis of interviews, online documentation, observations
f) The materialisation of OGD related government policy in the UK	Qualitative: Thematic analysis of, and information gathering from, interviews, online documentation, observations

4.6. Ethical Considerations

The following section will outline the ethical considerations in relation to the different means of data collection: interviews, online research and observations. The ethical guidelines of relevant research bodies were followed to ensure that the data collection and analysis was undertaken ethically.

4.6.1. Interviews

At the beginning of each interview, the interviewee was reminded of the intention of the research and the interview. Further, a statement was made that the interview was confidential, nothing would be attributed to named individuals, and that data would be stored securely and confidentially, that the interviewee was free to withdraw from the research project at any point, offer any feedback or clarification after the interview was finished, and that an interview transcript would be sent for checking by the interviewee once completed. All data referring to interviewee names was secured using two high strength passwords, all other data was secured using one high strength password.

4.6.2. Event Observations

In relation to gaining informed consent for the observations, most of the observed events were deemed to be public spaces and, therefore, the guidance of the American Sociological Association was followed: “sociologists may conduct research in public places or use publicly available information about individuals (e.g., naturalistic observations in public places, analysis of public records, or archival research) without obtaining consent” (American Sociological Association 2005). The advice of the ASA was followed since no direct comment on observations in public spaces was made in the British Sociological Association statement of ethical practice (British Sociological Association 2002), and the data collection did not

conflict with any of the BSA's other guidelines. In some of the smaller meetings, the dividing line between private and public space was less obvious; however, at all these meetings the sessions began with everybody introducing themselves and, thus, the research project was briefly introduced to the group. Further, due to contacts developed in the field, many of the key participants at these events had already been met in person, and thus they were aware of the research project. Further, those engaged in informal conversations with the researcher were made aware of the research and the reasons for the researcher being at the event.

4.6.3. Mailing List Analysis

The Association of Internet Researchers has produced advice regarding ethical issues in online research (Ess 2002). These guidelines stipulate that, beyond legal concerns and standard ethical frameworks, the researcher should consider what the expectations of the environment are, who the contributors are, and how consent should be gained. The open-government@okfg.org mailing list was publicly archived online, and no reference was made to expectations regarding the use or re-use of this archive. The mailing list is a public list which anybody is able to join, and, therefore, one can assume that participants have limited privacy concerns relating to the material they post to the list. The users of the list are all assumed to be adults with a professional and/or political interest in open data and with an above average level of awareness and reflexivity about their interactions in online environments. Their interest in opening up data for re-

use also suggests their openness to re-use of online information for research purposes; in fact, many of the contributors apply licences allowing re-use of other material they post online such as blog posts.

It was, therefore, deemed ethically reasonable to analyse contributions to this mailing list without risk of harm or offense to list members. Nonetheless, it was deemed ethically appropriate to inform the list members of the researcher's intentions prior to data collection in order to check these assumptions. As explained above, messages were sent to the list on 27 April 2011 and 26 September 2011. The messages explained the objectives in researching the mailing list, provided a link to the researcher's blog which had more information about the research, and invited people to get in touch if they had any questions or problems with this. Only positive responses were received, and therefore the research was undertaken as planned.

4.7. Conclusion

This aim of this chapter was to outline the research design and methods to be adopted in achieving the objectives of the research. It was argued that a single case study design, in which methods of data collection and analysis were pragmatically selected in service of the research objectives, was most suitable to this study. The data sources (interviews, observations, a mailing list and other online documentation) and analytical techniques (thematic analysis, quantitative content analysis of the mailing list and an informal

social network analysis) were then presented and rationales for their selection were provided.

The following chapters will present and discuss the empirical data collected via the methods overviewed above, beginning with a chapter which presents the efforts of civil society advocates to build communities and technologies to support the development of the OGD initiative.

CHAPTER 5: OGD ADVOCATES: BUILDING CAPABILITIES AND INSTITUTIONALISING OPENNESS

5.1. Introduction

Drawing on Cox's neo-Gramscian framework outlined in section 3.6, Morton (2007) describes material capability as the "accumulated resources" which "reciprocally combine" with ideas and institutions "to constitute a historical structure" (p. 115). As Cox (1981) elaborates, however, beyond "accumulated resources" these material capabilities also refer to the more "dynamic form[s]" of "technological and organizational capabilities" (p. 136). Moore (2007) goes on to argue that these material capabilities, both dynamic and accumulated,

"refer to society's infrastructure and thus hold the potential for reinforcing a particular economic model" (p. 11).

It is recognised that OGD, and other models of open production, have the potential for significant impact on the accumulation of informational resources by state and/or private interests. However, this chapter will focus more on the dynamic aspects of material capability - technological and organisational. Specifically, it will focus on how civil society OGD advocates have worked to develop their capabilities in each of these areas. In considering the organisational aspects of the civil society community,

attention will also be drawn to the production of leadership, norms and institutions by OGD advocates.

No research has so far been undertaken on the efforts of civil society based OGD advocates to develop infrastructural capabilities. Where researchers have made reference to the community or tools that advocates have been developing, their articles have either been technical in nature and thus not relevant to this thesis, or relatively descriptive accounts of the economic sectors and social groups which makeup the OGD community, for example Davies (2010) and Coleman (2011).

This chapter aims to offer a better understanding of the formation of the UK's OGD advocates as a new group of political economic agents active within the sphere of production, identify and analyse the organisational forms that they have produced in order to press their claims, and identify and analyse some of the value-added information resources that have been produced by OGD advocates. That is, it aims to analyse their efforts at adapting and transforming an aspect of the material conditions that form part of the historical structure they encounter. This chapter, therefore, aims to meet subsections a) and b) of Objective 4. That is, it will analyse:

- a) The efforts of civil society OGD advocates to build capacities such as tools and communities to promote OGD;
- b) The governance and organisational forms of the OGD initiative, and how these impact on the shaping of the initiative.

The data analysed in this chapter is drawn primarily from desk research and interview data and is complemented by mailing list and observational data. The chapter begins by focusing on the organisational capabilities of the OGD advocates. The collective activities and efforts at community building around OGD are discussed, as are the forms of governance observed within the OGD community, and attempts at institutionalisation of key principles. The chapter will then move on to discuss some of the technological capabilities (both infrastructural and value-added information resources) that have been produced by OGD advocates.

5.2. Building an OGD Infrastructure: The OGD ‘Community’

To understand better the agency of OGD advocates in their attempts to shape the UK’s OGD initiative, an analysis of their efforts to develop organisational forms of dynamic material capabilities for OGD advocates to work through is critical. Central to the civil society push for OGD in the UK has been an organisation called the Open Knowledge Foundation (OKFN). The Cambridge (UK) based Open Knowledge Foundation was founded in 2005, by, amongst others, Rufus Pollock (co-author of the Cambridge Study (Newbery et al. 2008) discussed in section 2.3). The aim of the organisation is to “build tools and communities to promote open knowledge” (<http://okfn.org> - date accessed: 05/04/12) and more specifically Open Government Data. Whilst the term ‘community’ is open to contestation, it is used by OGD advocates and, therefore, the language of ‘community’ will be

taken forward in this section without significant critique. In order to accomplish their community building mission, the OKFN have developed a strong online presence. They host over 100 mailing lists where Open Knowledge advocates are able to connect and discuss a range of issues including Open Government Data. A key means of communication for OGD advocates has thus become the OKFN hosted Open-Government mailing list, whose subscribers are defined by the OKFN as the “Working Group on Open Government Data” (http://wiki.okfn.org/Working_Groups/Government - date accessed: 05/04/12). The organisation also has a website (<http://okfn.org>) and hosts the Open Government Data website (<http://opengovernmentdata.org>) and the Open Definition website (<http://opendefinition.org>).

A further aspect of their work to develop communities around Open Government Data is through the organisation of OGD focused events including Open Government Data Camps (London, 2010 and Warsaw, 2011) and annual Open Knowledge Conferences. Since 2012, these two event strands have been merged into a single annual Open Knowledge Festival. These events, whilst organised by civil society OGD advocates, have been part sponsored by key industry actors including Google and Microsoft and civil society organisations such as Open Society Institute, Wikimedia and Sunlight Foundation (See for example <http://ogdcamp.org/about/who> - date accessed: 16/07/12). Observations indicate that these are international events, and draw a range of experts and activists in OGD and related topics.

Attendees are drawn from a cross-section of sectors across industry, the state and civil society. The Open Government Data Camp 2011 in Warsaw drew over 400 attendees from 40 countries (<http://ogdcamp.org/about> - date accessed: 23/03/12). Smaller local OKFN chapters are also beginning to be created, including a regular London meet up since June 2011, and chapters in a range of EU countries including Belgium, Germany, and Finland (<http://okfn.org/chapters> - Date accessed: 05/04/12). This recent expansion has been partially funded by a grant for \$750,000 from the Omidyar Network (a “philanthropic investment firm” established by eBay founder Pierre Omidyar - <http://www.omidyar.com>), to expand the OKFN community and improve their technological capacities (<http://blog.okfn.org/2011/09/19/omidyar-network-support-okf-to-go-global> - date accessed: 23/03/12). Prior to this grant, their activities have otherwise been supported through a mixture of volunteering, consultancy, competition winnings from the UK government’s 2008 Show Us a Better Way competition³ and seed funding from Channel 4’s former digital innovation fund 4IP⁴ (Interviews: Core Civil Society).

The OKFN can be perceived as an umbrella organisation in a network of related OGD projects and groups in the UK and further afield. The work of

³ The Show us a Better Way competition was run by the UK government and aimed to generate ideas for how public information could be better communicated. The Open Knowledge Foundation won a prize for their work on the application Where Does My Money Go?

See <http://webarchive.nationalarchives.gov.uk/20100402134053/showusabetterway.com>

⁴ 4IP was a £20million digital innovation fund run by Channel 4 (a public service commercial TV station in the UK). See <http://www.channel4.com/programmes/4ip/articles/4ip>

the OKFN has significantly advanced the material capabilities of OGD advocates, and helped them to build alliances with political-economic actors across a range of interest groups, as will be further explored in the following chapters. As one UK-based OGD civil society advocate stated:

“The OKF - Open Knowledge Foundation - are very good at...integrating different groups into what they're doing they provide a space, and some of that's just simply providing a mailing list - you know, they're very clever at - put up a website, called it something - the url is a powerful thing in digital campaigning terms” (Interviews: Peripheral civil society).

In the UK, therefore, the OKFN has tended to function as a hub for a community of OGD advocates and re-users. It is focused on “build[ing] tools, projects and communities” (<http://okfn.org/about/>, date accessed: 31/07/12), rather than advocacy and campaigning in the traditional sense, although a number of OKFN core members do function as advisors and consultants to government and other public bodies.

Beyond the OKFN in the UK, the Open Rights Group, a London based digital rights organisation founded in 2005 which has strong links to the OKFN, has developed a more advocacy based approach to policy change within the domain of OGD, particularly since late 2010 (<http://www.openrightsgroup.org/campaigns/opendata> - date accessed: 05/04/12). This advocacy work has included attempting to engage civil society OGD advocates in discussion about government policy consultations via public events and a wiki (

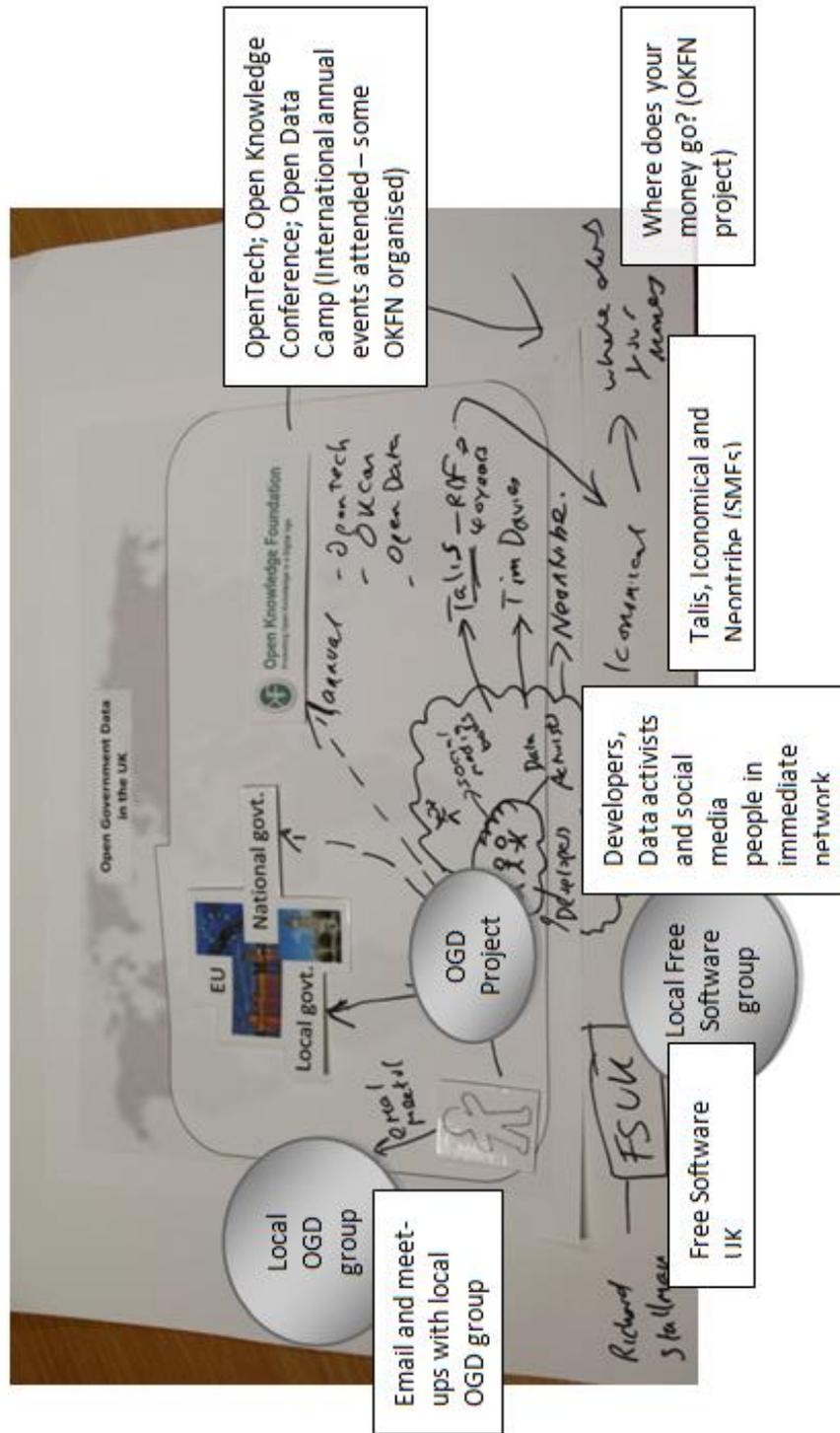


Figure 4 - The anonymised OGD network of a peripheral OGD advocate (Interviews: peripheral civil society/business interest)

[http://wiki.openrightsgroup.org/wiki/ Public_Data_Corporation](http://wiki.openrightsgroup.org/wiki/Public_Data_Corporation) - date accessed: 05/04/12), and a campaign to 'open' genealogical data funded by the pressure group FreeBMD (Free Births, Marriages and Deaths - www.freebmd.org.uk) (Observations & Interviews: Peripheral Civil Society).

Beyond these critical national level spaces that have been developed by key organisations for UK based OGD advocates to join together, interviews and observations evidenced that civil society advocates were also engaging with each other about OGD in a variety of other spaces. These included generic online spaces such as Twitter, but also within those communities where OGD has become an important issue including the MySociety⁵ developer community and around technical innovation orientated 'unconferences' such as BarCamps and UKGovCamps. Further, a number of regional Open Data groups, such as Open Data Manchester, have been formed which use a combination of mailing lists and regular meet ups to discuss OGD relevant issues, and bring together OGD 'stakeholders' at a local level. This range of spaces from where the OGD advocates have emerged is well represented in the above social network map (Figure 4) which was produced by a peripheral civil society interviewee.

⁵ MySociety is an active online community that promotes citizen empowerment, e-democracy and state transparency. It was founded by Tom Steinberg, who was the co-author of the government commissioned Power of Information review which recommended introduction of non-commercial licences for public sector data and information (Mayo and Steinberg 2007), and who now sits on the government Transparency Board.

In relation to the neo-Gramscian framework, therefore, these civil society OGD advocates can be observed as a coalition of actors working to deepen their organisational capabilities at local, national and international levels and to expand the appeal of their demand for OGD through a range of activities and communicative engagements which aim to draw people into their community.

5.2.1. An Action-Orientated Community

The OGD community is one that, despite its at times strong ethico-political underpinnings (discussed in Chapter 6), has a strong action orientation that is rooted in developments in the sphere of production. This action orientation was observed at many of the OGD events, and was also reported by some interviewees:

“It is an action focused group and that’s probably a positive side of it”
(Interviews: Peripheral Civil Society);

“We’re not too philosophical about it all, we’re a bit more, not more - we take a sort of - just get on with it - JFDI [just fucking do it] approach...” (Interviews: Peripheral Civil Society/Business Interest);

“There really was no political prong in the whole thing. But I think it’s more a matter of practice rather than deliberating. That people are - I mean there you walk with your feet. I mean what you are doing all day is workshops instead of writing to politicians” (Interviews: Peripheral Civil Society).

Embedded in this action orientation there is a strong element of material capability building, both at the 'dynamic technologies' level and in terms of promoting the collective accumulation of data and other information resources through the 'commons'. Also, significant attempts to strengthen the abilities of interested people to contribute to these capability building efforts through skills and knowledge sharing are observed. Analysis of the open-government@okfn.org mailing list highlights that between Feb 2010 and June 2011 just less than one quarter of contributions to the list involved the community engaging in discussion and deliberation about OGD, with the remaining three-quarters tending to be a form of information sharing or project initiation and development.

Often messages to the list were about upcoming events or projects that aimed to create spaces for people to come together to work with data and, resultantly, develop skills in the retrieval, analysis and re-use of OGD. Further, in terms of the development of an OGD 'community' such events can be seen as complementary to the larger scale OGD events discussed above. The types of events that aim to foster and incentivise skills development in this field are broad, and they are supported and organised by a range of different actors from grassroots groups to national governments and large commercial interests (See Table 9 below). These events aim to enable and encourage developers, and other interested parties, to use Open Government Data and develop their skills in this area. Access is theoretically open to everyone who is either able to attend events or able to connect to

Table 9 - OGD skill and knowledge sharing activities and events

<p>Hackdays</p>	<ul style="list-style-type: none"> • OGD Local, National and Global day or weekend long events • Attended by a mixture of developers, OGD advocates, researchers, NGOs, government employees • Outputs have included data visualisations and tools such as public transport timetable applications • Some peripheral interviewees reported a social, as well as skills and knowledge sharing, aspect to the hackdays • Some peripheral interviewees reported that some government sponsored hackdays have now begun to pay developers for their time, as concerns were raised about the 'free labour' model: <ul style="list-style-type: none"> • "Emma Mulqueeny ... she runs Rewired State and the sort of network around that, and she vents on the fact that people are coming in expecting them just to be building them [apps and visualisations] for free. And, actually that's not what it's about - you do need to pay developers, so there has been an interesting shift into a lot of paid hackday type models now" (Interviews: Peripheral Civil Society) • Criticisms by interviewees included the superficial nature of developments that are produced in just one day, with reports that hackday organisers had also begun articulating frustrations: <ul style="list-style-type: none"> • "they're sort of saying well we get all these very fancy visualisations built, but actually we want proper apps now - we want things that really work and do stuff, rather than just look all pretty" (Interviews: Peripheral Civil Society) • Examples: Rewired State, Young Rewired State, Open Data Hackathon, Random Hacks of Kindness, Hacks and Hackers
<p>OGD conferences and meet ups</p>	<ul style="list-style-type: none"> • OGD Local, National and Global events • Attended by a mixture of independent developers, OGD advocates, researchers, NGOs, SMEs, transnational corporations, local government, national government and EU employees. • Mixture of skill sharing sessions and presentations. Presentation themes included uses of data by business and civic developers, business strategies around public data, data journalism, data policy developments (local, national, EU, international organisations). Since summer 2011 there has also been a more critical strand at some events with topics such as the data/digital divide and barriers to open data being discussed. For example, see the 'Challenging Openness' session in May 2011 at the FutureEverything Conference in Manchester (http://vimeo.com/25652682) and a small number of presentations at the Open Knowledge Conference in Berlin, June 2011 e.g. Chris Taggart, 'Global open data: a threat or saviour for democracy?' (http://vimeo.com/26390698) and Michael Gurstein, 'Open Data – Louder Voices?' (http://vimeo.com/26414945). • Examples: Open Data Camps, Future Everything, Open Knowledge Conference, Open Data Manchester
<p>Competitions</p>	<p>Competitions have become popular amongst a range of government, NGO, corporate and international organisations in order to draw developers' attention to OGD and incentivise them, through use of cash prizes, to come up with innovative ideas for re-use of OGD. Examples of competitions of interest to UK developers include:</p> <ul style="list-style-type: none"> • Show us a Better Way (2008) – UK government (£20,000 prize fund) • OpenUp (2010) - organised by TSO – a leading provider of information management and publishing solutions to the UK public sector (£50,000 development fund) • Hack Warwickshire (2010) – Warwickshire County Council (camcorder prize) • Open Data Challenge (2011) – European Union (€20,000 prize fund) • Apps for Development (2011) - WorldBank (\$55,000 prize fund) <p>(Partially sourced from: http://opengovernmentdata.org/data/competitions/)</p>
<p>Guides</p>	<p>There have been a number of collaborative efforts amongst OGD advocates to produce online guides to Open Government Data. These include:</p> <ul style="list-style-type: none"> • Open Data Manual – a guide aimed at public sector data holders (http://opendatahandbook.org/en/) • Data Journalism Handbook – a guide for journalists wanting to use open public data (https://docs.google.com/document/d/18YOaGi0LyRn6x1tcCH2wIWHYqwnMiDCGlnbVHe21OrM/edit?authkey=CLrotIQH&hl=en_US&authkey=CLrotIQH&pli=1#heading=h.yrfmd11hnic) • Open Data cookbook – a wiki developed by Tim Davies which is aimed at those wanting to use open data (http://www.opendatacookbook.net/wiki/start)
<p>Courses</p>	<p>The Open Knowledge Foundation announced in February 2012 a new joint venture with the Peer 2 Peer University. The new School of Data aims to help remedy the lack of supply of effective "data wranglers". Learners will be guided through a course of 'task based' and collaborative learning, supported by the online community and School mentors. A collaborative effort is currently underway to develop course content and put in place support structures for students. (http://blog.okfn.org/2012/02/08/announcing-the-school-of-data/)</p>

resources and community members online. One can understand these processes as an attempt to widen the numbers of skilled individuals and organisations able to contribute to material capability building in the domain of OGD, i.e. increase the number of people who are able to use the data and develop applications that help others to engage with it, whilst simultaneously developing stronger organisational foundations for the community.

5.2.2. OGD Community Governance

It is clear that the OGD advocates are engaged in efforts to develop their material capabilities at the organisational level. In line with the neo-Gramscian framework this section will therefore analyse in more detail the forms of governance that are structuring these new communities as they work to adapt the structural conditions that they encounter.

As will be discussed in Chapter 6, the OGD ‘community’ is made up of a broad range of ideological positions. As these peripheral advocates observed:

“On the political spectrum they’re coming from radically different positions - there’s the far left in there, there’s the fars of the economic right, there’s all sorts of different ideological commitments, but they’re unified in ‘we want some more data, so we’re going to have this shared movement’” (Interviews: Peripheral Civil Society);

“I mean you need to see open data as a family - there are people... people with a political agenda of - it's not privatisation, because the thing is now it's a bit more complicated.... But, even if - it should also be used by people who propose more participation. So it's going to be a contested space, you know”
(Interviews: Peripheral Civil Society).

Whilst the action-orientation discussed above creates a space to avoid significant amounts of ideological conflict within the OGD community, interviews and observations did point to a range of power-based governance issues. These issues include the public presentation of a non-critical discourse, restricted transparency and participation, the promotion of a 'meritocratic' governance structure in which social power relations were embedded, and forms of consensus building and institutionalisation around key issues. The following sections (5.2.1.1 – 5.2.1.4) will discuss each of these features in turn.

5.2.2.1. Presenting a Non-Critical Discourse

A key theme that emerged in interviews (undertaken February - June 2011) was the sense of a need to present a non-critical public discourse around the OGD community. When interviewees were asked about critical dialogue within the OGD community many reported that whilst private discussions were taking place, there was a fear of making these discussions public and harming the momentum of the movement:

“So it would be - the sense I've got is they would talk about it [political differences and commercial interests] informally at the edge of

conversations, but they won't - people avoid bringing it all up, avoid, I think you'll find. Because my feeling at the Open Government Data camp was there were constructive critical voices, but who were terrified of speaking up, because they didn't want to harm the movement or undermine the movement, or split something that still has a long way to go to get to the shared point of 'we want more data'" (Interviews: Peripheral Civil Society);

"There are some people that have a very clear understanding of it [about political differences and commercial interests]... but what they say is 'oh, well, let's talk about that later - I mean let's concentrate now on making the data available then we'll worry about...'. They know they have to worry about that, but say let's worry about that later. It's tactical.... If you start a discussion by saying there are lots of problems with privacy, there is an argument against opening. If you start a discussion by saying - oh, we want data to be open but there is a problem of privatisation of services - then there's going to be an argument against it. So, the tactical line and we are more or less part of that by not banging too loud on the issues, is to say well let's get the data open, be aware of the problems that are there, and then either parcel them or engage slowly and start moving consensus around those things. But not discussing - not making those things big issues right now" (Interviews: Peripheral Civil Society).

These discursive norms produced by community members, evidently resulted in a much more restrictive environment for some types of ideas to be articulated publicly by OGD advocates, thus generating barriers for the actualisation of some ideas into practice, and opening the way for others. By

early 2011, however, a small number of OGD advocates began to sense that there was an increasing need for more critical dialogue in public forums:

“I think there should be more [debates...over what specifically it is that people want and why], because I think we are in a new area where the consequences are difficult to engage, and the implications are unclear. And, I would welcome more disagreement as a way of testing your own argument, your own position - so that Socratic dialogue type thing” (Interviews: Core Civil Society/Business Interest);

“We need to be a bit more critical...We need to have that conversation, find a way of having that conversation that recognises where those groups come from, recognises where different groups are coming from” (Interviews: Peripheral Civil Society).

The summer of 2011, therefore, began to see the articulation of some more critical dialogue within OGD events, with topics such as the data/digital divide and barriers to open data being discussed (see Table 9 - OGD Conferences and meet ups row - above). Nevertheless, in general the OGD community both online and offline still tend to present a non-critical public discourse, although policy developments such as the Public Data Corporation (discussed in Chapter 8) and the Open Government Partnership have drawn some advocates into a more critical public discourse than during the initial stages of the OGD initiative. Further, an Open Data special issue of the Journal of Community Informatics (<http://ci-journal.net/index.php/ciej/issue/view/41>, date accessed: 05/05/12), published

in April 2012 and guest edited by UK OGD advocate Tim Davies, further inspired the development of a more critical public discourse around OGD within the UK.

5.2.2.2. Transparency and Participation

The tactical necessity perceived by some OGD advocates to present a united front and to avoid critical public dialogue during key periods of the OGD initiative's early development was not consented to by all OGD advocates however. One peripheral interviewee complained of contradictions between the ideal of transparency and democratic participation presented by the OGD advocates, and practices within the community:

“You see how these organisations [e.g. OKFN] are run, and they are not run democratically... their logic is totally contrary to the logic that they're professing... And I say this is the way that things are done by the establishment, and now they are selling it to me as Open, Democratic and Network run and I say 'no it ain't'. It looks like you're doing exactly the same things as been done always - pretending to people that they get a voice, and most importantly I'm interested in the decision making processes, obviously” (Interviews: Peripheral Civil Society).

This OGD advocate in particular had been made somewhat of a pariah within the OGD community for asking questions regarding the management of OGD organisations -- “they started becoming very irritated that I was asking these questions” (Interviews: Peripheral Civil Society) -- suggesting a coercive aspect to the governance of some parts of the community that is

typical of efforts to form a hegemonic project. There was, therefore, a feeling within some sections of the OGD community that some individuals and organisations were more privileged in their access to information and decision making processes than others. Indeed, there were significant difficulties in getting key OGD advocates based at the OKFN to agree to be interviewed for this study, with only one person in the end agreeing to a short interview. Further, similar concerns have been articulated with regard to the government Transparency Board, on which key civil society OGD advocates (Rufus Pollock, Tom Steinberg, Tim Berners Lee and Nigel Shadbolt) sit. Complaints regarding a lack of transparency from this Board were heard during event observations (e.g. the Open Data Consultations and Policy Workshop organised by Open Rights Group, London, 3rd October, 2011), and were expressed by interviewees:

“The Transparency Board - exactly the role they are playing isn't entirely transparent at the moment! ... There's a lot of insider conversations going on, a lot of - it's not made it transparent, but it's politics going on. So, you don't always get to see exactly who's had what conversations with whom”
(Interviews: Peripheral Civil Society).

Thus, there was a sense within parts of the community that an elite core of OGD advocates had evolved, and even those with significant interest in the political issues around OGD were at times cut off from the decision making processes, and were not able to access key information. Whilst one advocate suggested that “people negotiate” these power concentrations

“diplomatically” (Interviews: Peripheral Civil Society), at times they were the cause of distrust and uncertainty for peripheral OGD advocates:

“What their [OKFN] goal was with things like Open Government Data Camp, and how proactive or reactive their agenda is I haven’t worked out as yet” (Interviews: Peripheral Civil Society);

“I tried to say ok, who decided this and when, and again zero, total silence. And then you realise that there is Rufus [Pollock] who is the guy who makes decisions and he takes orders from somebody else for sure. Someone who has given him the - who has put him into that place to serve some strategic purpose” (Interviews: Peripheral Civil Society).

These findings suggest that consent for the ‘leadership’ of the OGD community was in some cases relatively fragile, with significant tensions existing just beneath the surface.

5.2.2.3. Meritocracy and Power

These issues around restricted critical dialogue, transparency and participation within the ‘community’ need to be contextualised within the stated governance principles of the OKFN, which are Open Discussion, Meritocracy and Tolerance (<http://wiki.okfn.org/Handbook/Governance> - date accessed: 06/04/12). Some of the comments above are suggestive of a reality which is in contradiction to these ideals of open discussion and tolerance. Further, analysis of the leadership structure also suggests significant issues arise with regard to the practice of meritocracy within the civil society OGD community, an issue which exaggerates those concerns

highlighted above and acts to privilege particular voices within the community.

As articulated by one core OGD advocate, in a meritocratic community individuals appear to organically assume leadership roles based upon their previous work:

“Nobody elected him [Tim Berners Lee], he didn’t have any democratic mandate, and he wasn’t sort of raised as a head of something, but nevertheless - and maybe because of that - it was just on what he’d done, same as Linus Torvaldes as well - what they’ve done gives them power. But, you need that. Ultimately it comes down to individuals, who’s going to put their head above the parapet? Who’s going to do this? Where do they get their mandate from? Often it’s a mandate from what they’ve done in the past and that people recognise it and take notice of what they’ve done. And if they diverge from what the community think then they’ll start to lose that mandate, and so on. So, I think it’s a complex thing - I think it’s, I think there are relatively few people who have the ability to do that” (Interviews: Core Civil Society/Business).

The OGD community might, therefore, be understood as aspiring to an organic, rather than bureaucratic, form of governance based upon community recognised merit. However, interviews and observations suggest that social power relations still play a critical role in establishing perceptions of merit and, thus, leadership positions within the community. The following tables present analysis of interviewees’ unprompted articulation of concerns regarding unequal social relations within the OGD community, alongside a

Table 10 - Breakdown of OGD advocates' subject positions and articulation of concerns about unequal social relations within the OGD community

Interview or informal conversation	Socially elite (Oxbridge education, wealth from business)?	Male/ Female	White & Native English speaker?	Core or Peripheral Advocate?	Concerns brought up without prompting during interviews and conversations	Quotation code (see below for quotes)
Interview	Oxbridge	M	Y	C		
Interview	Oxbridge	M	Y	C		
Interview	Wealth from business	M	Y	C	Ideas were dismissed at first – but not bothered by it	1
Interview	?	M	Y	C		
Interview	Oxbridge	M	Y	P		
Interview	Oxbridge	M	Y	P	Perceived inequalities/power issues	2
Interview	No	M	Y	P	Being ignored/patronised/class issues	3
Conversation (with interviewee)	No	M	Y	P	Perceived “posturing” of some key advocates	
Conversation (with non-Interviewee)	No	F	Y	P	Class/privilege issues	4
Interview	No	F	N	P	Being ignored/intimidated	5
Interview	No	M	N	P	Communications being ignored at times	6
Conversation (with non-Interviewee)	No	F	N	P	Perceived gender inequalities, aggression and efforts to build political careers by some key advocates, patterns of exploitation	
Interview	No	F	N	P	Being ignored/made a pariah	7

Code	Quotation
1	“I mean their first reaction was - no we don't think it's a good idea - it's not doable, it's not how we would do it.... I mean my background is business.... So, it was more the perspective of - I mean had I been some sensitive person... I might have been offended , but it's just like you just get on with it ...You know, you just - sometimes you just get on with it” (Interviews: Core Civil Society/Business)
2	“The Open Government Data Camp which was a fascinating gathering of unfortunately a lot of white, male geeks , and I think there has to be a - there's probably quite a strong feminist or at least equality critique of this movement. It isn't the most inclusive movement culturally or demographically ” (Interviews: Peripheral Civil Society)

3	<p>“Because the community is very focused on - [posh voice] We must open up the very central system for everyone’, and [my subject matter] are not the central system.... But I think that’s my frustration with Open Knowledge and partly Open Data, is that....oh, [my subject matter], well done, that’s all very nice isn’t it. Oh, the [application] looks nice. Right, yeah, shall we talk about the meaty stuff now, the meaty data that we need to work on? Well, actually if you listen to the lessons we’re trying to explain we might get somewhere, but I don’t know” (Interviews: Peripheral Civil Society/Business Interest)</p>
4	<p>The OKFN was ruled from the outset by a few dominant personalities who have had all the privileges in life [indirect quote] (Informal conversation: Peripheral Civil Society/Business)</p>
5	<p>“It’s all very technical which frustrates me sometimes, but if that’s the trend I would still like to be a part of it and just see how much we can get involved because if no-one gets involved and then it’s always those programmers who think they can do research, and who think they can do everything.... Yeah, and also because I think they know everything, you know. They know the licence, they know the legal issues - they know everything. So, sometimes I just feel like oh, maybe it’s just better if I just sit quietly in a corner and just to observe it, and make sense of it, and conceptualise everything I observe. Although sometimes if I can’t bear it anymore, I will speak something, although I don’t think it makes much difference. Yeah...” (Interviews: Peripheral Civil Society)</p>
6	<p>“All the people that are really doing things in the open data [named key OGD advocates] – say, oh you know...replying to an email ... and then I get something at 12 o’clock - like something really in the last minute, so You have to chase them...” (Interviews: Peripheral Civil Society)</p>
7	<p>“They started becoming very irritated that I was asking these questions [about the OKFN and asking her friends] ‘why are you listening to this woman’... they told me that ‘you are a nasty piece of work’... So I said ok no worries, because people are entitled to their opinions, but obviously they couldn’t back it in any way” (Interviews: Peripheral Civil Society).</p> <p>“You feed in some figures and it [Where Does My Money Go? – see below] visualises how these figures are allocated to different [spending categories]...but it doesn’t really drill down into - Who? Why? What? When? And when you say let’s find out the specifics they’re no longer talking to me. They don’t answer their emails. It’s not that they say no we are not interested - it’s just that things don’t happen anymore” (Interviews: Peripheral Civil Society).</p>

breakdown of their own subject positions within social relations, and their role as a core or peripheral civil society OGD advocate.

The relationship between an individual’s perceived merit and power within the community therefore appeared to be strongly tied to their level of social

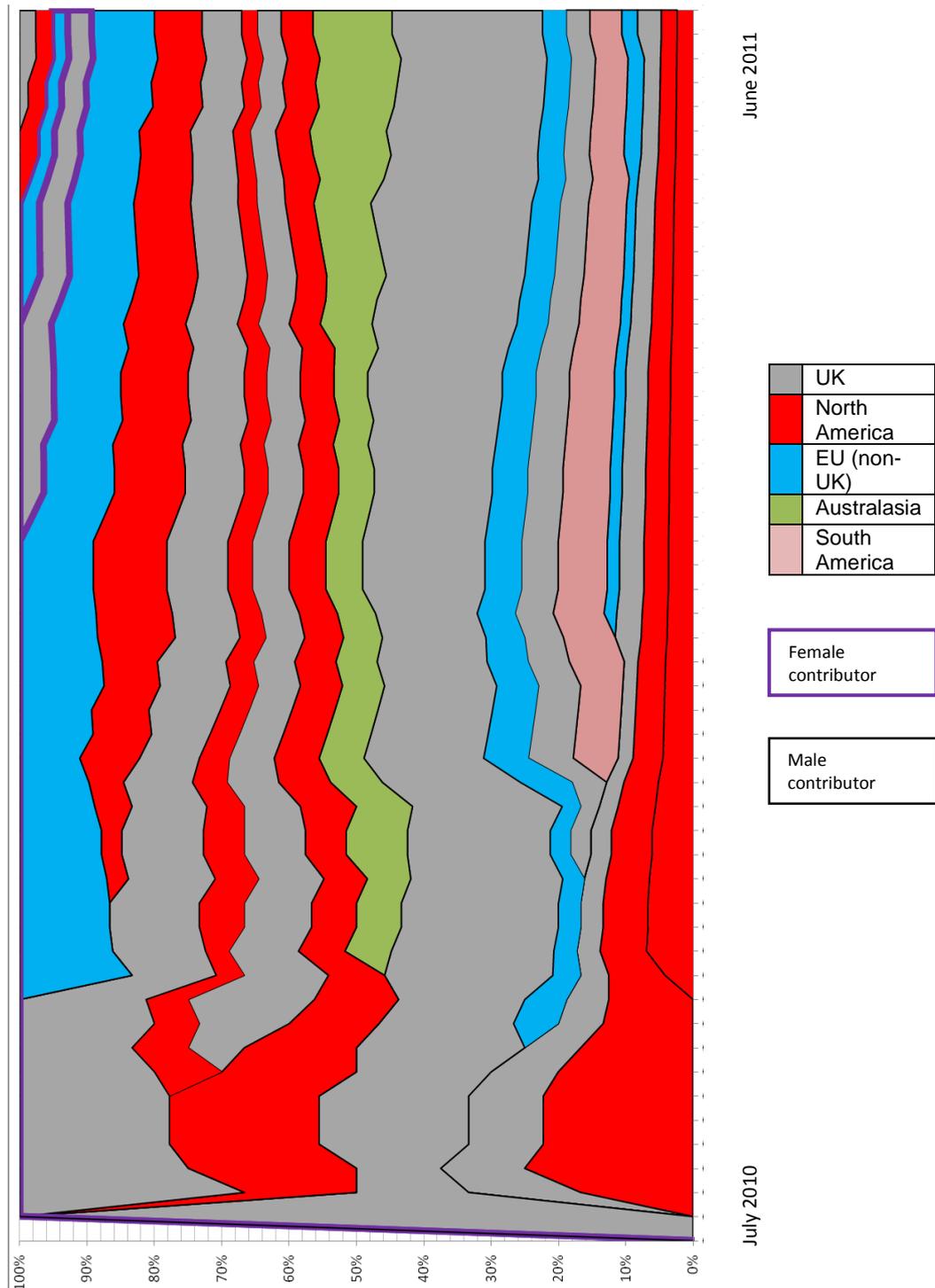
privilege across a range of factors, including advocates' success at Oxbridge (Oxford and Cambridge Universities, whose graduates tend to dominate political culture in the UK) or in business, as well as their gender, race, and native language. Core advocates (i.e. those that had been invited to advise government) were overwhelmingly in positions of social privilege across the range of indicators, and thus the recognition of merit by government bodies and their commitment to more participative forms of policy development should be called into question. Further, comments by more peripheral advocates suggest that those assuming leadership positions more broadly within the community were also those with higher levels of social privilege. These socio-cultural power issues were perceived by a number of peripheral advocates, although articulation tended to be subtle rather than a fully elaborated critique of community power relations. Nevertheless, the correlation between those reporting a sense of being ignored, patronised or intimidated in their efforts to participate in the community and those having less privileged subject positions was very high. For example, both the female civil society interviewees perceived that their contributions had been ignored by the community, and one explained how she was resultantly reluctant to participate in discussions. Further, some men from non-socially elite backgrounds also reported a similar sense of being ignored by some core advocates.

Similar leadership patterns were also observed in the analysis of the Open-Government@okfn.org mailing list. For example, analysis of who was

contributing to discussions about the community's strategy and position (i.e. leadership discussions) were heavily dominated by men from English speaking countries, with only two women (one from the UK and the other from Poland) making small contributions to discussions in this area (see Figure 5). Further, whilst by June 2011 there were over 500 subscribers to the Open-Government list (Tim McNamara, Open Government mailing lists - 02/06/11, lists.okfn.org/pipermail/open-government/2011-June/001167.html, date accessed: 14/07/11); analysis of the contributors highlights that by June 2011 only 14 individuals were responsible for 50% of the contributions. Of these 14, only two were women, and a number of the contributions made by one of these women were challenging the democratic governance of the community (see Figure 6 below). Further, event observations also reflect these patterns with male community members being more heavily represented in the running order of presentations and workshops, with female advocates more often undertaking organisational roles such as running the registration desk and refreshments.

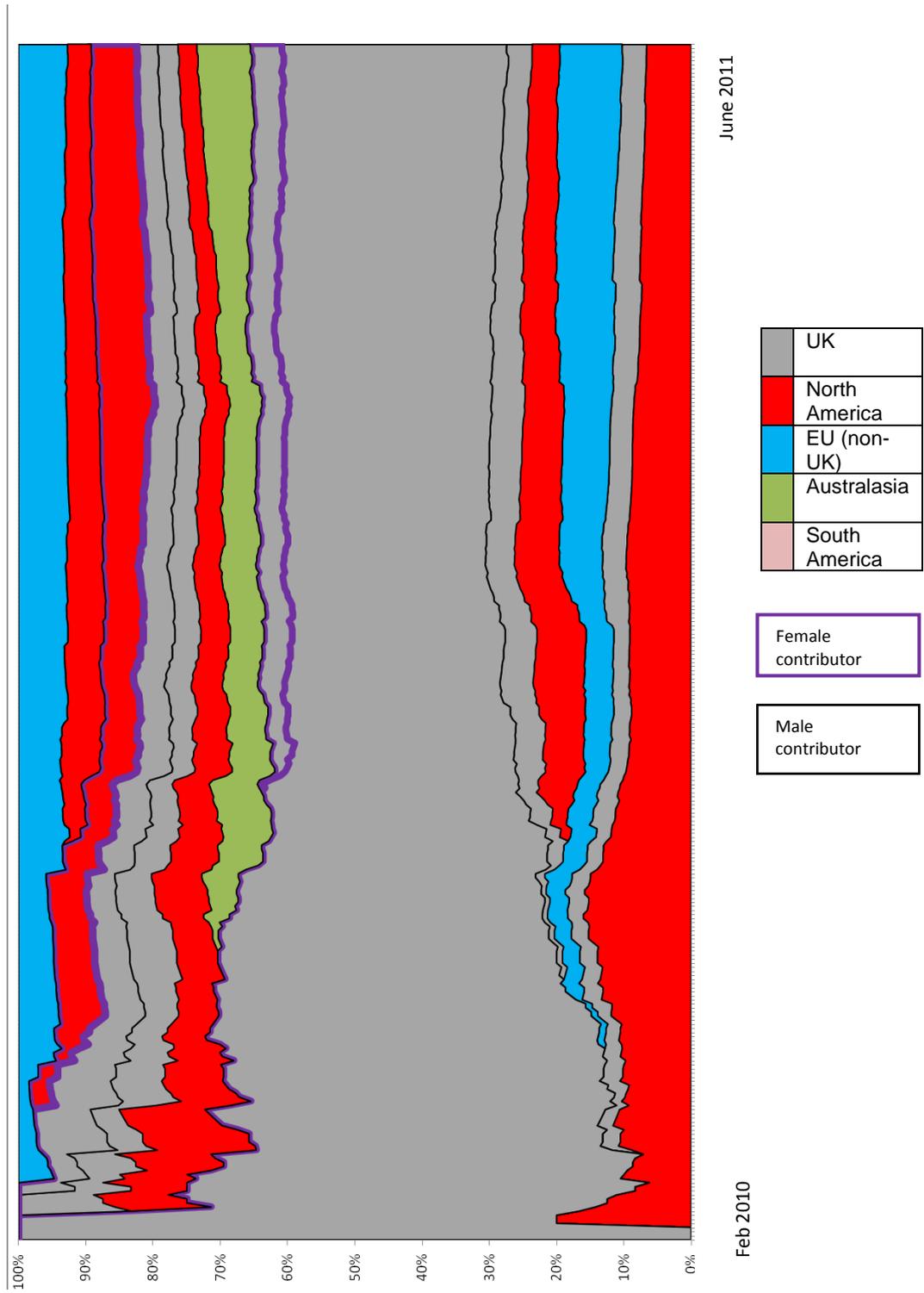
These findings represent serious contradictions with regard to the participatory and meritocratic ideals of the community. Social inequalities and elitism appear to be unquestioningly reproduced, and even exaggerated, within the OGD community's form of governance, which at times appears to resemble a form of Social Darwinism rather than participatory democratic governance. As one advocate expressed, these issues are significant since they result in the shaping of the community being dominated by a subset of

Figure 5 - Top 75% of contributors to the open-government@okfn.org mailing list in discussions coded as 'strategy' OR 'framing the OGD community's position' (July 2010 to June 2011)



Each horizontal strip represents an 'Open-Government' mailing list contributor. The width of the strip at any given point represents their proportion (amongst the top 75% - fig.5, or 50% - fig. 6) of contributions to the mailing list up to that point. The number of horizontal strips at any point on the x-axis indicates the number of contributors that made up 75% - fig. 5 or 50% - fig. 6 of contributions up to that point. Each strip is also colour coded to indicate the contributor's continent of residence and sex (see key above). See research methods section 4.5.2 for a full overview of the methods.

Figure 6 – Top 50% of contributors to the open-government@okfn.org mailing lists (Feb 2010 to June 2011)



individuals with a very “particular set of experiences” rooted in high levels of social privilege and detachment from broader social experience and needs (Interviews: Peripheral Civil Society).

5.2.2.4. Building and Institutionalising Consensus: the “orthodoxy” of commercial re-use

Issues around the governance of the community, their intersection with the articulation of a non-critical public discourse and efforts to build alliances across a range of hegemonic political economic interests, thus points to limitations on the potential of the organisational capabilities being generated by some sections of the community to have a significant transformative impact on the already existing historical structure.

A key example demonstrating how these different elements of community governance (i.e. presenting a non-critical public discourse and questionable practices of transparency, participation and meritocracy) come together to shape the community’s demands has been through the consensus built around commercial re-use of OGD within the UK. Charging commercial bodies to re-use public data is a key issue (see section 2.3.3.5) discussed within parts of the OGD community. In some countries the issue of commercial re-use of OGD is one that is openly discussed:

“On a global scale, have you seen the Open Government Data in India report, the draft from Centre for Internet and Society - it’s really good, it’s very, very good, and if you want to get a sort of sense of the politics beyond the UK... what they very explicitly say actually, and on mailing lists he’s been

... saying actually this non-commercial term isn't one that - allowing commercial use term shouldn't be accepted just as an ideologically neutral term, that's a loaded criteria for public data. So that is interesting" (Interviews: Peripheral Civil Society).

However, as this advocate went on to argue, "in the UK... it's become part of the orthodoxy that you should allow commercial re-use" (Interviews: Peripheral Civil Society). The development of this "orthodoxy" within the UK has tended to emerge from efforts to define the "open" in OGD. The OKFN have taken a lead in this area through their work on, and publication of, the 'Open Definition' and high levels of engagement in any discussions that arise around commercial re-use within the community. The OKFN's position is that data should only be classed as 'open' if commercial re-use is allowed. Jonathan Gray (OKFN Community Co-ordinator) offered a justification for this position on the Open-Government mailing list, arguing that:

"This is really important for an interoperable data commons (e.g. combining things with Wikipedia, Open Street Map, etc). Otherwise we have a two tier eco-system: one tier for commercial operators and one for everyone else. Also if companies have to pay for data licences for 'open government data' are they going to be inclined to share back their modifications with everyone else?"

(Jonathan Gray, Open Government mailing list - 20/10/10,

<http://lists.okfn.org/pipermail/open-government/2010-October/000324.html>,

Date accessed: 14/07/11).

Efforts are routinely made to build consensus around and ensure compliance with this definition of 'open' by public bodies and civil society advocates:

“In order for the data to be fully open you have to publishing [sic] it with a licence or legal tool which is compliant with the Open Definition”

(Jonathan Gray, Open Government mailing list - 27/4/11, <http://lists.okfn.org/pipermail/open-government/2011-April/001035.html>, Date accessed: 14/07/11);

“Does anyone know whether the UK Government are calling the new NC [non-commercial re-use] licence an 'open' licence? It certainly isn't open as per OpenDefinition.org” (Jonathan Gray, 2/8/11)

(Jonathan Gray, Open Government mailing list – 02/08/11, <http://lists.okfn.org/pipermail/open-government/2011-August/001386.html>, Date accessed: 30/08/11).

Others within the community have, however, engaged in more nuanced public discussions about the complexities around commercial re-use. One advocate, Tim Davies, in a mailing list discussion entitled “Defining Open Government Data?” argued for consideration of moving “from [a] single unified definition [of openness] more towards [a] ‘framework’” in which a “distinction between ‘civic openness’ and ‘commercial openness’” is made. This, he argued, would allow releases of free, machine readable public data for non-commercial re-use by citizens to be “recognised as an open data policy”, even if it failed to be a fully open policy due to charging for commercial re-use (Tim Davies, Open Government mailing list - 20/10/10,

<http://lists.okfn.org/pipermail/open-government/2010-October/000321.html>,

Date accessed 14/07/11). His rationale was based on a democratic argument:

“Fully open data’ should allow commercial use; but there is a form of democratic openness which doesn’t require commercial re-use rights, and that surely has some place in an open government data definition?”

(Tim Davies, Open Government mailing list – 21/10/10,

<http://lists.okfn.org/pipermail/open-government/2010-October/000327.html>,

Date accessed: 14/07/11).

However, whilst he received some support - e.g. “Tim - very well put” (Javier Ruiz Diaz, Open Government mailing list - 21/10/10, <http://lists.okfn.org/pipermail/open-government/2010-October/000329.html>,

Date accessed: 14/07/11) - the discussion moved on and his arguments were not taken on board within the community which has followed the OKFN lead in only defining data as ‘open’ if commercial re-use is allowed.

This position is also institutionalised in point 8 (“No Discrimination against Fields of Endeavour”) of the Open Definition:

“The licence must not restrict anyone from making use of the work in a specific field of endeavor. For example, it may not restrict the work from being used in a business, or from being used for genetic research.

Comment: The major intention of this clause is to prohibit licence traps that prevent open material from being used commercially. We want commercial

users to join our community, not feel excluded from it” (The Open Definition, <http://opendefinition.org/okd> - Date accessed: 14/07/11).

This institutionalisation of the ‘definition of openness’ by the OKFN and their advisors, marks an interesting case of how consensus around key issues has been built within the UK’s OGD community. As one peripheral advocate argued:

“Things like Open Knowledge Foundation sort of getting up there - and that’s fascinating actually, if you look at the Open Knowledge definition, a small group of people putting a web page online and calling it the Open Knowledge definition, yet the pure act that people start referencing it, people start adopting it. You know the Open Knowledge Definition says for commercial use ... they’ve got a justification in there in terms of the idea of the commons” (Interviews: Peripheral Civil Society).

Thus, the OKFN and their advisors who began working on the Open Definition in 2005, appear to have gained consensus around the necessity for allowing commercial re-use, in part, through processes of first mover advantage, even though the issue is still debated within some sections of the community.

Whilst the above sections have detailed some of the processes and issues apparent in the OGD advocates’ efforts to build their dynamic material capabilities around OGD in the form of organisational strength, the following section will move on to discuss some of their efforts to generate technological capabilities for use within this community and beyond.

5.3. Building an OGD Infrastructure: producing shared technical and information resources

Beyond efforts to build the organisational capabilities of the OGD community, a further area that needs to be highlighted when considering the community's development of infrastructural capabilities is the commons based technological infrastructure which OGD advocates are attempting to develop in order to enable both their own and others' re-use of data (see Table 11). Through the development of resources such as data management software, data sourcing and data cleansing tools, OGD advocates can be understood as engaging in a critical production process which is attempting to develop the core infrastructure for a more open information economy. As Moore (2007, p. 11) argues, technological capabilities can "hold the potential for reinforcing a particular economic model"; therefore, it can be argued, that the development of a commons-based infrastructure around OGD is potentially disruptive to aspects of the proprietary model of the neoliberal information economy. However, it is also important to remember Kleiner's (2010) insight that capitalist interests have been relatively favourable to commons-based production in the realm of capital production (infrastructural tools and resources) in the information economy, for example in the adoption of Open Source software development methods (see literature review - section 2.2.2).

Beyond the development of common infrastructural resources (shared capital production), OGD advocates have also been active in the development of value-added information resources (consumer/content

Table 11 - Infrastructural resources developed by OGD advocates and others to enable re-use of OGD

<p>Data management</p> <ul style="list-style-type: none">• One of the critical elements of the OGD infrastructure was developed by the Open Knowledge Foundation in 2007. CKan is data management software: people can use it to catalogue, store and access datasets. It also has a rich user interface, an API for the data and catalogue, and data visualisation tools. Unlike other similar software, CKan is free software licenced under the copyleft GNU Affero General Public Licence. Development of the CKan software is supported by an active developer community, and support is provided for users who need it on a consultancy basis. Ckan is now used as the software infrastructure behind a number of government data portals including the UK's data.gov.uk portal, and the Greater Manchester Data store (DataGM). Ckan is also the software behind datacatalogs.org, a searchable catalogue of open data portals launched in 2011 at the OKFN's Open Knowledge Conference. <p>Data Sourcing</p> <ul style="list-style-type: none">• Data portals have been developed by public bodies and include sites such as data.gov.uk, London Datastore and DataGM (Greater Manchester). These portals allow users to search for and download datasets that have been published by public bodies.• The DataHub is a catalogue of datasets available on the web, including some Open Government Datasets. It is run by the Open Knowledge Foundation, using the Ckan data management software. The catalogue is managed as a wiki, and is therefore editable by anybody.• Although over the last 2-3 years many public bodies have released a variety of data sets under an Open Licence, there is still a significant amount of data that is online but not available in a machine-readable format e.g. it is published as a PDF. Scrapperwiki is a small start-up, seed funded by Channel 4's 4IP project, to build a collaborative online community of developers and data users who 'scrape' web documents that contain data and convert them into machine-readable formats that can be queried by both human users and computer programmes via the Scrapperwiki interface. Whilst not solely interested in government data, scrapes of government websites have been produced through the Scrapperwiki infrastructure. In 2012, Scrapperwiki received a \$1million investment from venture capitalists Enterprise Ventures and Blue Fountain (http://blog.scrapperwiki.com/2012/02/09/1-million-to-build-a-data-platform-2, date accessed 01/07/12).• Get the Data provides a question and answer service for those wanting to find, cleanse, query, and visualise data. It aims to connect experts with less experienced users. The site was set up by Rufus Pollock (co-founder of the Open Knowledge Foundation). <p>Data cleansing</p> <ul style="list-style-type: none">• Google Refine is an Open Source project, launched in 2010, and licenced under The BSD 2-Clause Licence. Google Refine is a powerful data management tool which allows users to clean messy data and change data formats. It has been used by developers working with 'big' OGD such as NHS data, and at least one key OGD advocate is registered as a contributor to the Google Refine project.• LinkedGov is a UK government backed project, funded through the Technology Strategy Board. It aims to make government data usable through cleaning data and converting it into a machine readable format. LinkedGov's idea is to create an "online factory" through which anybody can complete simple online tasks to match and clean data. The tasks will be organised as a competitive game in order to incentivise contributors.
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production) using OGD and the shared data infrastructures that they have developed. Whilst, as Kleiner (2010) argues, capitalist industry has responded relatively favourably to open production methods in the sphere of capital production (i.e. tools and infrastructure), it has been less enthusiastic in the domain of consumer content. Observations suggest that this pattern repeats to some extent within the OGD domain, with some firms (e.g. Spikes Cavell, IConomical) who are generating added-value resources using OGD being reluctant to 'open' up these value added resources since their business model depends upon their proprietisation. Nonetheless, some innovations are taking place in the realm of generating value from OGD using an (at least partially) 'open' business model for value-added resources. For example, Chrion Ltd publisher of Open Corporates has developed a business model based on providing services around Open Corporates as an open, 'share-alike' resource, but also charging firms for licences to re-use the database on a non-share alike basis (Chris Taggart, presentation at 'Creating a co-operative Open Data standard', Manchester, 22/5/12).

The range of value-added applications that have been reported as being developed in the UK using OGD based on a sample of cases logged in the data.gov.uk library, UK based OGD re-use competition winners, and interviews & events observations, as Table 12 demonstrates, appears to be concentrated in a few key categories: environmental, leisure, public services, transport and better understanding political and economic processes. The types of resources represented in this sample should not be perceived as the

Table 12 - Value-added Information Resources using OGD (sources: data.gov.uk/library, UK based Open Data Challenge & Apps for Development competition winners, interviews & observations)

Subject of resource	Examples of value-added applications	Description
Environment	<ul style="list-style-type: none"> • Europe's CO2 Emissions http://data.gov.uk/library/europes-co2-emissions • Energy Consumption in the EU http://data.gov.uk/library/energy-consumption-in-the-eu • Love Clean Streets http://data.gov.uk/library/love-clean-streets • Blossom Bristol http://data.gov.uk/library/blossom-bristol 	<p>These resources include a combination of large scale information visualisations on CO2 emissions and energy consumption at the EU level, and local applications aimed at engaging citizens in reporting environmental crime to local councils, better understanding environmental processes and making better decisions regarding their environmental impact.</p>
Leisure	<ul style="list-style-type: none"> • iCoast http://data.gov.uk/library/icoast • Blue Plaque Guide http://data.gov.uk/library/blue-plaque-guide • Plings www.plings.net/ • Boredometer www.boredometer.org.uk/ 	<p>These resources provide information on a range of leisure activities including the Dorset coast, heritage and activities for young people.</p>
Public Services Information	<ul style="list-style-type: none"> • Which? Informed Student (in development) http://data.gov.uk/library/which-informed-student • RM School Finder http://data.gov.uk/library/rm-school-finder • Placr School Browser http://data.gov.uk/library/placr-school-browser • myhealthlondon (NHS) http://data.gov.uk/library/myhealthlondon • Dr Pocket [no longer available] http://data.gov.uk/library/dr-pocket • Manchester Amenity Maps http://data.gov.uk/library/manchester-amenity-maps 	<p>These resources provide information about public services.</p> <p>In general, these resources are aimed at enabling a citizen-consumer model of engagement allowing users to compare, for example, the schools or health services in their locality based upon a range of 'performance indicators' that have been published as OGD.</p>
Transport	<ul style="list-style-type: none"> • Mapnificent http://data.gov.uk/library/mapnificent • London's cycle accident blackspots http://data.gov.uk/library/londons-cycle-accident-blackspots 	<p>These resources provide information about transport. Other than the rail services applications most of them provide information about</p>

	<ul style="list-style-type: none"> • trains.im • Live Tube Maps • Redspottedhanky • Parkopedia • BUSit • East of England Transport Information • CycleStreets • Barclays Cycle Hire Scheme • Popular bicycle routes in London 	<p>transport in London. Some provide real time data.</p> <p>In general, these resources are aimed at the commuter and business travel market, although they may also be of use to tourists and other local transport needs.</p>
<p>Understanding political and economic processes</p>	<ul style="list-style-type: none"> • Where Does My Money Go? • UpNorthAuditor • I heart my city • Armchair Auditor • OpenlyLocal • Open Spending • Open Data Communities • OpenCorporates • It's Your Parliament • OpenCharities • Who Owns My Neighbourhood? • Trafford Polling Stations • Funding Scotland • Yourtopia 	<p>These resources aim to provide information to enable users to understand political and economic processes. Topics include information on public spending, local authorities, planning applications, companies, charities, democratic processes, land ownership, funding for voluntary services, and international development.</p> <p>The combined aim of these resources can be understood as informing people about the functioning of different political and economic processes. Some resources promote participation (e.g. YourTopia), and others promote participation in the development of the resource (e.g. Who Owns My Neighbourhood? and Open Corporates)</p>

only re-uses of OGD, however. As will be discussed further in section 7.4.4 there are a range of transnational corporate and financial interests that are also interested in re-using public data, including corporations such as Google and Lexis Nexis, and financial markets such as Lloyds of London. These economic interests use, or would like to use, a range of public data, in particular, geographical, transport and meteorological data. Although these uses of public data are not represented in this sample, the products they generate - from transport and mapping services (Google) to weather derivatives (financial and insurance markets) - should also be recognised as potential, and actual, sites for the re-use of OGD.

In terms of this sample, however, a number of points can be made. Observations suggest that civil society OGD advocates (who in some cases are acting commercially) are heavily represented in the development of resources in the understanding political and economic processes, environment, transport and leisure categories; however, they are also represented in the public services category which has a higher representation of larger, non-OGD specific firms (e.g. Which?, RM Education). Further, whilst some of these applications use national or international level data, it should be noted that many of the local applications are London based, particularly in the case of transport. Overall, across all the categories of value-added resources, the needs developers are attempting to meet with OGD based resources are relatively limited. The consumer information resources (e.g. journey planning, leisure information and public

services comparisons) are very much geared towards a middle class and/or urban (London) market. In terms of the resources aimed at providing information to understand better political and economic processes, however, more careful analysis is required. Three projects from this section will therefore be explored in more detail. The projects selected have all received acclaim within the civil society OGD community, they have been recognised and awarded prizes by institutions including the EU, World Bank and UK Cabinet Office, they were all developed by key OGD advocates or organisations in the UK, and are all openly licenced resources. The projects to be explored are:

- YourTopia (3rd prize in World Bank's 'Apps for Development' competition)
- Where Does My Money Go? (a winner in the UK Cabinet Office's 'Show Us a Better Way' competition)
- Open Corporates (3rd prize in the EU's Open Data Challenge)

5.3.1. Yourtopia

The Yourtopia project (yourtopia.net - date accessed 05/02/12) was developed by the Open Knowledge Foundation, and it won third prize in the World Bank's 'Apps for Development' competition. The application aims to empower users, relative to economists, in the production of indices of global development and engage them in the realisation of the Millennium Development Goals (an aim partially framed by the World Bank's terms of

reference for the competition (<http://appsfordevelopment.challengepost.com/rules>, date accessed: 18/07/12). The application attempts this by allowing users to “construct a measure of social progress world-wide based on [the participant’s] preferences for development”, in a laudable attempt to engage people in moving beyond crude GDP measures. Through their engagement with the application, users are asked to weight a series of development indicators, in a process that aims to be “participative and fun”. As of 1st August 2012, 5015 people have completed the quiz (<http://yourtopia.net>, date accessed: 01/08/12), and the results provide both individual and combined snapshots of the most desirable countries according to user preferences, and a breakdown of the combined preferences of users in the three key categories of economy, education and health. The application uses categories of development produced by the UNDP’s Human Development Index, and users are initially presented with the official weightings for each category before they adjust them to their own preference (<http://yourtopia.net/how>).

Whilst the overall idea behind the application is interesting, its design and the context that it exists within are open to critique. Most critically, the phrasing and terminology of questions that users are asked are both confusing and contain a significant amount of economic jargon, for example participants are asked to weight how much preference they give to “GNI per capita PPP (constant 2008 PPP \$US)” relative to other economic indicators (see Figure 7 below). This issue immediately causes significant concerns

regarding the potential for non-expert participation, and raises the question of whether usability and non-expert participation were even considered in the design of the application. The presentation of the combined results as a 'WorldTopia' (i.e. the results are presented as representative of the views of the global population - see Figure 8 below) is therefore misleading. Rather, it needs to be questioned whether the types of respondent able and willing to contribute to such an initiative are representative of the global population and whether they might be biased in favour of the dominant economic paradigm.

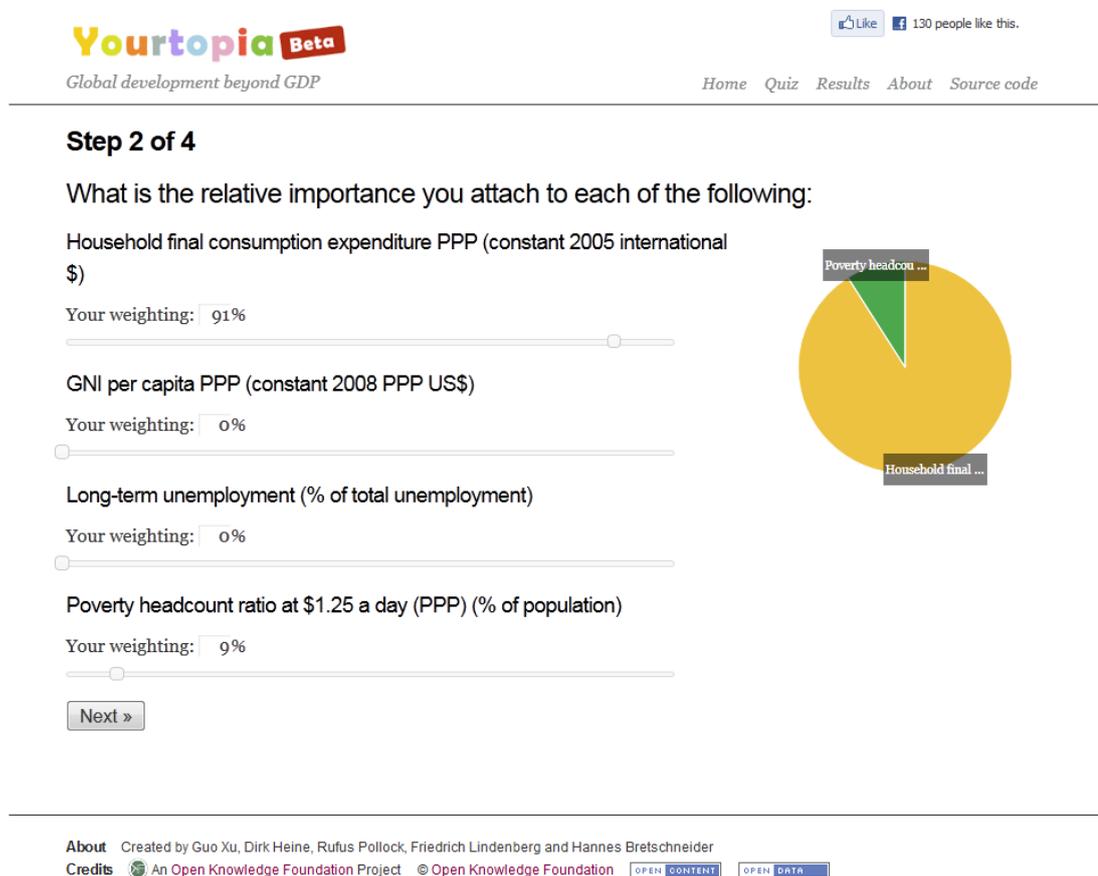


Figure 7 - Screenshot of YourTopia.net application question 2 (yourtopia.net, date accessed: 05/02/12)

Importantly, it should also be questioned to what extent the structure of the application (i.e. the framing of the options) is rooted in relatively uncritical assumptions about global capitalism, and thus the options are limited to the framework provided by the logic of contemporary capitalism and those that govern it. In terms of thinking about participatory mechanisms this is critical, particularly since 'participation' is increasingly perceived by the key

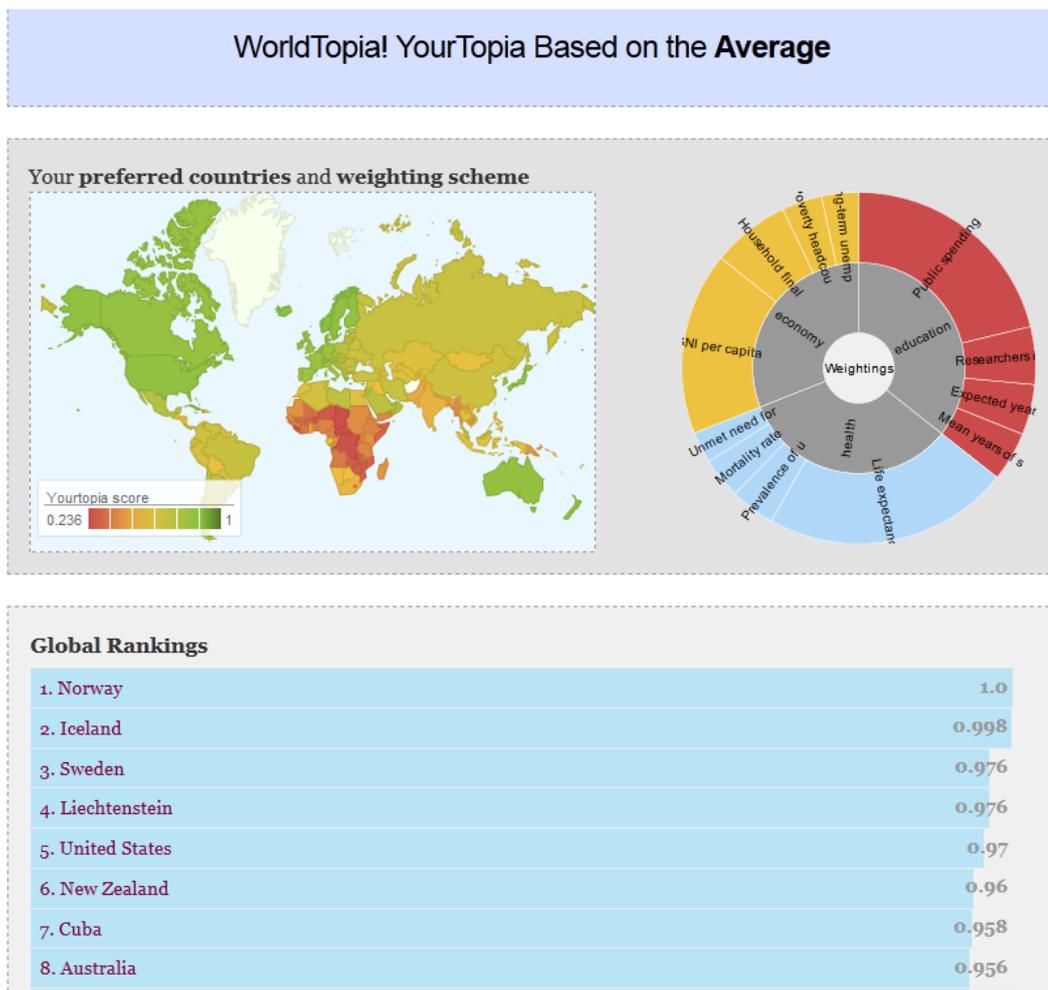


Figure 8 - YourTopia.net application: average results of all users (http://yourtopia.net/result, date accessed: 05/02/12)

governing institutions of global neoliberal capitalism, in particular the World Bank, as an important strategy in building legitimacy. Participation in this context is the basis not for empowerment of the grassroots against corporate and neoliberal state and regulatory power, but as a legitimising mechanism which seeks to consolidate consent across civil society and the state. On the continuum between empowerment and legitimation, therefore, in its current design and usage the YourTopia application appears to function more as a tool of legitimacy rather than grassroots empowerment.

5.3.2. Where Does My Money Go?

A further Open Knowledge Foundation project which has won both government backing as a competition winner in the 2008 Show Us a Better Way apps contest and also has received seed funding from Channel 4's 4IP fund is the 'Where Does My Money Go?' application (wheredoesmymoneygo.org, date accessed: 05/02/12). The application aims to inform people about taxation and public spending within the UK, offering individual tax and departmental spending breakdowns. This application has some potential for informing users about state taxation and spending; however, it also has a number of significant issues. Importantly, the tax calculator appears to be incorrect and there is a lack of transparency with regard to how the figures are calculated. Indeed the calculation of a £4000 a year tax payment for an individual earning only £10000 (see Figure 9

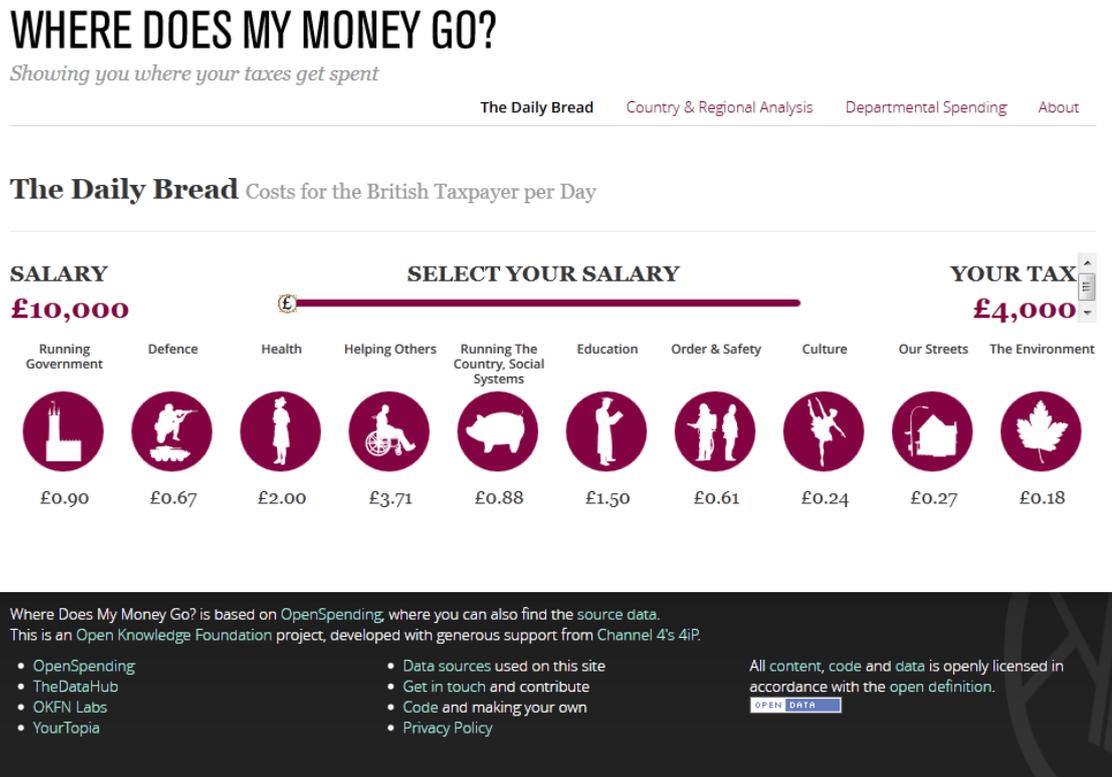
spending visualisations give an interesting snapshot of the proportion of spending across various categories, there is a sense that the social function of the application is again a legitimating one, rather than enabling critical investigation into specific spending patterns. The announcement of the government in March 2012 that it would from 2014 be giving taxpayers a breakdown of where their tax money is spent each year suggests that the current government is also aware of this legitimising function of public spending visualisations (<http://www.guardian.co.uk/money/blog/2012/mar/20/income-tax-statement-government-spending-scrutiny>, date accessed: 18/07/12).

) is almost double what one might expect (see Figure 10), and further does not take into account entitlement to Working Tax Credits.

Particularly in the context of current government attacks on welfare spending, the presentation of highly disputable 'evidence' that somebody living on a poverty wage of £10,000 a year is "helping others" to the extent of £3.71 a day could have significant political repercussions. Indeed, it could lead to the manufacturing of consent amongst the working poor for the government's programme of welfare cuts. This is not an overstated concern, since the work of the OKFN is well known and held in high regard. For example, in April 2011 a BBC journalist sought advice from the OKFN regarding how to generate a tax paid calculation for a BBC programme called Tax and Spend (<http://lists.okfn.org/pipermail/openspending/2011-April/000923.html>, date accessed: 05/02/12). Such inaccuracies, therefore,

have the potential to reach a much wider public than those that might use an application such as ‘Where Does My Money Go?’ Further, whilst the public

Figure 9 - Where Does My Money Go? - Daily Bread calculator



spending visualisations give an interesting snapshot of the proportion of spending across various categories, there is a sense that the social function of the application is again a legitimating one, rather than enabling critical investigation into specific spending patterns. The announcement of the government in March 2012 that it would from 2014 be giving taxpayers a breakdown of where their tax money is spent each year suggests that the current government is also aware of this legitimising function of public

spending visualisations (<http://www.guardian.co.uk/money/blog/2012/mar/20/income-tax-statement-government-spending-scrutiny>, date accessed: 18/07/12).

Figure 10 - Tax calculation for an individual living alone earning £10,000 a year

<p>In tax year 2011/12 an individual living alone and earning £10000 would pay in tax approximately:</p> <ul style="list-style-type: none">• £42/month income tax• £25/month National Insurance• £55/month Council Tax • Rent approx. £400/month (no VAT)• Food approx. £60/month (no VAT)• Utilities approx. £100/month (0-5% VAT) = £3 VAT • Other approx. £150/month (full 20% VAT and other indirect taxes) = £30 - £50 <p>Total taxation is therefore likely to be around £155-175/month = approximately £1900-2100 a year.</p> <p>---</p> <p>In the case of an individual earning £10,000 a year and with no living costs (i.e. living with parents and charged no board) then total tax = £220/month (£2640/year) prior to non-VAT indirect tax (e.g. alcohol, cigarettes)</p> <p>---</p> <p>Such individuals working over 30 hours a week should also receive enough Working Tax Credit to offset a significant amount of their tax contribution.</p>

5.3.3. Open Corporates

Open Corporates (opencorporates.com, date accessed: 05/02/12) is a more recent initiative developed by Openly Local founder Chris Taggart and MySociety developer Rob McKinnon, and in 2011 it won 3rd prize in the EU's

Open Data Challenge. The aim of the project is to create a URL for every company in the world, thus generating an openly re-usable identifier for every company, counter to the proprietary identifiers that currently exist. The database, as of 1st August 2012, has data on over 43 million companies in 52 jurisdictions, including a number of known tax havens such as Luxemburg, Panama, Bermuda, Jersey, and the Isle of Man (opencorporates.com, date accessed: 01/08/12). These data have been collected by various means, including using the tools developed by Scaperwiki (discussed in Table 11 above) which enable the scraping of data from websites. The Open Corporates team is currently working to link up companies in the database that form a corporate grouping. Recently updated corporate groups include Capita, Serco, Santander, Barclays, Southern Cross Healthcare UK – corporate groups which leverage significant amounts of power within the UK as a result of their financial power or through providing services to the UK state (see Figure 11 below). The database aims to be a collaborative effort; users can add further information to company records in order to supplement the basic data that has been gathered in the early development of the project.

Whilst in relatively early stages, this project offers the potential for significant collaboration amongst those seeking or holding information about companies, including both commercial interests and those more critical of corporate power. As Neelie Kroes, Vice-President of the European Commission, recently articulated: “This is the kind of resource the (Digital)

Single Market needs” (<http://opencorporates.com>, date accessed: 18/07/12). Whilst being of use to potentially counter-hegemonic projects, therefore, the value of the resource for business is also firmly embedded within the current hegemonic framework.

The business model being developed by Chrion Ltd, publishers of Open Corporates, is also interesting in its relation to hegemonic frameworks for action. Open Corporates is one of the few resources that are developing an open (share-alike) value-added information model on top of the OGD (and other public data) being used. The project is currently sustained via personal investment from founder Chris Taggart, as well as an emerging business model based upon providing services to firms using the data and selling non-share alike re-use rights to the database. The company was set up as a private, profit making firm to give the project “a fair degree of freedom”, the ability to “accept investment” and not be dependent on “the vagaries of grants or government funding” (<http://blog.opencorporates.com/2012/04/12/announcing-the-opencorporates-advisory-board-governance-with-teeth>, date accessed: 18/07/12); however, being open, it is not dependent upon the types of property relations generally assumed to be necessary within a capitalist mode of production.

In order to counter some of the risks in this model, the company is based upon three core governing principles: to act in the public interest in opening data about companies, to become sustainable, and to develop a successful business model that “could help make the open data world a first-class

player in the business community”. In order to keep priority on the first principle, an advisory panel has been brought in which has the right to go public if it feels the project heads in the wrong direction and has the ability to “fork” the project if it “veer[s] sufficiently from acting in the wider public interests” (<http://blog.opencorporates.com/2012/04/12/announcing-the-opencorporates-advisory-board-governance-with-teeth>, date accessed: 18/07/12).

It is too early to offer a full analysis of such a business model. However, how it evolves in terms of both sustainability, balancing the need for profitability and acting in the public interest, and the labour processes (both free and paid) that develop around the construction of the database will be an interesting area of research in the future, as will the re-use patterns that emerge around Open Corporates.

Figure 11 – Open Corporates listing for the Serco Corporate Group

The screenshot shows the Open Corporates website interface. At the top, the logo "opencorporates" is displayed with the tagline "The Open Database Of The Corporate World" and a search bar. Below the search bar, the page title is "SERCO corporate grouping *". A sidebar on the right contains a "Support OpenCorporates" button and social media sharing options. The main content area lists "41 Companies in this corporate grouping" and provides details for several companies, including their names, dates, and details links. A sidebar on the right provides additional information for these companies, such as telephone number, website, environmental statement, VAT number, trading address, and government supplier status.

5.4. Conclusion

The aim of this chapter, as discussed in the introduction, was to meet subsections a) and b) of Objective 4. That is, it aimed to analyse:

- 4a. The efforts of civil society OGD advocates to build capacities such as tools and communities to promote OGD, and
- 4b. The governance and organisational forms of the OGD initiative, and how these impact on the shaping of the initiative.

The empirical evidence presented in this chapter suggests that the civil society OGD advocates have made concerted efforts in attempting to build material capabilities around OGD in terms of the development of communities, technical infrastructures, and value-added resources using OGD. Further, there are signs of institutionalisation of the key demands of some advocates, such as non-discrimination against commercial re-use as stipulated in the Open Definition.

Significant effort has been expended, particularly by the OKFN and the core members of some other national (Open Rights Group) and local (e.g. Open Data Manchester) groups to build a community of OGD advocates within the UK. This has included the development of online spaces and a range of regular events where those interested in OGD from across the various sectors (civil society, business, public sector and government) can come together to discuss and collaborate on OGD projects. Notably, these

events were also often sponsored by public funds and corporate sponsorship, evidencing support for, or interest in, the initiative across a range of sectors.

However, as a civil society community that often claims to be grounded in the desire to empower democratic and civic participation, the governance of the OGD civil society community is an interesting case. The evidence suggests that significant social inequalities – across lines of gender, class, nationality and native language are (re)produced, and perhaps heightened, within the ‘meritocratic’ governance framework of the OGD community. This appears to have generated a disconnection between parts of the ‘leadership’ of the OGD community and its broader base.

Further, as an action based initiative, the OGD community has invested significant effort in developing both a shared data infrastructure around OGD and value-added information resources using OGD. Concerns in this domain include the sustainability of such projects within the capitalist market and it is proposed that a fruitful area of further research will be around the evolving business models around OGD. Further, in relation to the participative nature of some resources, such as YourTopia, significant attention needs to be paid to both their design and the context of their development as participative mechanisms become increasingly important institutional processes for attempting to generate legitimacy for the broader neoliberal framework for action. In the design of participative resources, it should always be questioned whether they aim to reproduce and legitimise dominant

institutions, or whether they aim to empower grassroots decision making and challenge the logic of hegemonic global capitalism. Further, more attention than is currently in evidence must be paid to accuracy and non-expert understanding when developing resources aimed at empowering grassroots social actors.

In conclusion, an analysis of OGD advocates' efforts to develop their dynamic material capabilities in terms of organisational and technological capacities points to a number of significant issues which could impede the transformative potential of the UK's OGD community, and encourage it to develop within a more restricted framework amenable to a range of interests favoured by the current structural conditions. The following chapter will analyse the ideational constructs of civil society OGD advocates which are shaping their production of these organisational and technological capabilities and which underpin their support for OGD.

CHAPTER 6: THE IDEATIONAL TERRAIN OF UK BASED OGD ADVOCATES

6.1. Introduction

Whilst the OGD community in general is highly action-orientated, analysis of the ideational terrain of the OGD advocates is critical in order to better understand them as a social force. As Gramsci (1992b) argues, historical events should be understood in terms of their “general...political and intellectual rather than directly economic character” (p. 183); and, as Cox (1981) goes on to elaborate, “historical structure” – or, the framework for action - should be understood as being made up of the intersecting domains of the ideational, material capabilities, and institutions. Whilst the previous chapter focused on the OGD advocates’ efforts to build material capabilities and nascent institutions around OGD, this chapter focuses on the intersecting ideational terrain of OGD advocates, paying particular regard to their relationship with hegemonic neoliberal capitalism. As discussed in section 3.5, Cox (1981) argues that this ideational terrain is formed of two main components: “intersubjective meanings” and “collective images of social order” (p. 136). The intersubjective domain represents shared ideas about the “nature of social relations”; it tends to “perpetuate habits and

expectations of behavior” and is often relatively unitary across a culture. “Collective images” on the other hand represent the “differing views [“held by different groups of people”] as to both the nature and legitimacy of prevailing power relations, the meanings of justice and public good and so forth” (p. 136). The interview data presented below suggests that OGD advocates share a relatively stable, intersubjective space, but a differentiated collective imaginary.

This chapter, therefore, aims to meet subsection c) of Objective 4. That is, it will analyse:

4c. The ideas and intentions of civil society OGD advocates in relation to neoliberal capitalism

The data analysed in this chapter is drawn primarily from interviews with civil society OGD advocates undertaken during the period February to July 2011. The chapter begins by positioning the civil society OGD advocates as a collective of Gramscian “organic intellectuals”. It then goes on to illuminate the ideas of these ‘organic intellectuals’, both in terms of their critique of the structural conditions they encounter in the UK, and their construction of ideal frameworks for political economic development. It is argued that a range of reformist and potentially ‘counter’-hegemonic responses to the structural conditions of neoliberal capitalism are evident amongst OGD advocates.

6.2. OGD Advocates as ‘Organic Intellectuals’

Coleman (2011) argues that OGD advocates are part of a new “Goverati”, drawing on Drapeau’s (2010) concept to position them as “a new class of influencers [that] has risen from the bureaucratic ‘ooze’ networking and partnering with experienced and prominent leaders” (p. 23). Drawing on this conceptualisation and the previous chapter’s examination of the material capabilities being produced by the OGD advocates, it is argued that the Gramscian notion of the ‘organic intellectual’ is a useful concept to understand the social relevance of the OGD advocates. The definition of the ‘organic intellectual’ is based on the observation that every social group emerging due to a change in economic production, such as the shift away from proprietary forms of ownership witnessed in the open forms of production in the information economy,

“creates together with itself, organically, a rank or several ranks of intellectuals...at least an elite among them must have the technical capacity (of an intellectual nature) to be organizers of society in general, including its whole complex body of services right up to the state” (Gramsci 1992b, p. 199).

The OGD advocates, it is argued, constitute such a force. They are a technical elite attempting to organise information production specifically, and society more generally, within the framework for action being generated within the communities they are producing. It is argued that the OGD

advocates constitute a collective of intellectuals organic to a potentially more 'open' form of governance and information production than the closed governance and proprietary information production relations which expanded during the earlier stages of neoliberal capitalism.

It is critical to appreciate the functioning of such collectives of intellectuals as "mediat[ors]" within the social realm, with their ideas and activities "organically tied to particular social classes" (Morton 2007, p. 8). As discussed in the previous chapter, some of the governance practices within the OGD community evidence the reproduction of significant social inequalities, and some of the community's outputs evidence a potential legitimising function with regard to the institutions of neoliberal global capitalism. This suggests that at least some of the OGD advocates are potentially aligned to relatively narrow and privileged social interests. It is therefore important to gain a better understanding of the 'common sense' ideas of the OGD advocates, and explore any contradictions between this ideational space and the material capabilities that the OGD advocates are producing. The following sections will move on to discuss the ideational constructs of the OGD advocates in the UK. In particular, attention will be paid to their critique of the structural conditions they are active within and their ideational constructions of what transformative social structures they are attempting to produce.

In undertaking a neo-Gramscian thematic reading of the civil society OGD advocates' ideational constructs, attention is first drawn to readings of

Gramsci's own work. In reading and understanding both Gramsci's own writings and the interview and observational data collected during this research project, an acknowledgement of the fragmentary and, at times, contradictory nature of the texts is critical. Whilst Gramsci's writing represents the intellectual project of a single individual, the empirical data presented here represents a partial account of the collective intellectual project of the OGD advocates. Nevertheless, Morton's (2007) advice for reading the fragmented texts of Gramsci remains relevant to illuminating the intellectual project of the OGD advocates:

“Rather than attempting to uphold a representative interpretation of the texts, based on revealing an essential meaning, the reader instead acknowledges their fragmentary and open nature...Despite the apparent disorder and incongruities evident in Gramsci's writings, a rich vein of novel ideas and insights may be traced which contains themes indicative of a consistent intellectual project” (p. 23).

6.3. OGD Advocates' Ideational Constructs

The following section examines civil society OGD advocates' interpretation of, and grievances with, the neoliberal structural conditions (introduced in section 2.2.1) they find themselves in within the UK and their ideational constructions of what transformative social structures they are attempting to produce. It draws attention to both public data specific issues and broader structural issues interviewees expressed as relevant to opening

up government data. Six political economic thematic areas emerged relatively strongly within the discourse of the civil society OGD advocates – social and economic ends, democratic participation, political crises, public sector management, enabling innovation and equality in the information economy. These are each discussed in turn in the following section.

6.3.1. Social and Economic Ends

As Pollock states in a blog entry for the Open Knowledge Foundation, “Openness for data and content is **not** an end in itself, it’s a means to an end” (<http://blog.okfn.org/2011/09/15/open-data-a-means-to-an-end-not-an-end-in-itself>, date accessed: 03/0212). A similar sentiment was also articulated by an interviewee:

“I think if you *really* ask members of the movement, particularly about what is the most important value... open data wouldn’t necessarily be the top” (Interviews: Peripheral Civil Society).

Amongst those actively engaged in OGD advocacy there was a strong sense that the ends to which advocates were collectively working prioritised a social, rather than individual, form of benefit. This notion of social benefit varied between advocates; however, in most cases it encompassed an end of collective political economic benefit of some form or another, thus challenging some of the more cynical interpretations of political activity proposed by some neoliberal theorists.

The specific form that this end of collective political economic benefit should take was generally left open, particularly by core OGD advocates (i.e. those who at some point have acted as advisors to government or public bodies on OGD or PSI re-use). This finding also triangulates with event observation data and online documentation. The articulation of overall ends by core advocates was, in general, vague, with statements such as “bettering our lives and the world around us” (Rufus Pollock, <http://blog.okfn.org/2011/09/15/open-data-a-means-to-an-end-not-an-end-in-itself>, date accessed 03/02/12); “maximising the social and economic benefit” (Interviews: Core Civil Society/Business Interest); and, “make the world a little less shit” (Interviews: Core Civil Society/Business Interest). The vagueness of such statements in many ways reflects the political environment that these core OGD advocates are engaged in, in terms of the erosion of publicly articulated normative ideals, in favour of more general ends which could be claimed as an objective for almost any political economic project.

Amongst peripheral advocates some more specific overall ends were articulated, some of which challenged the neoliberal disinterest in questions of economic distribution. Social justice and economic equality, for example, were articulated by some. One advocate indicated how his support for OGD was premised on his desire to “create a basis for a more equitable society” (Interviews: Peripheral Civil Society/Business Interest), and another cited

“social justice [and] equality” (Interviews: Peripheral Civil Society) as a primary objective. More strongly, one peripheral advocate argued that:

“The way I see it obviously the economy is wrong, the way the economy is set up is not to work - dysfunctional - but to work to serve the subset of people. And the moment you say ok I have a different economic system that could work, and make everybody equally wealthy - they’re not going to want that!” (Interviews: Peripheral Civil Society).

A further group of peripheral advocates, however, tended to articulate ends more rooted in the ideology, if not the actuality, of neoliberal capitalism. One, for example, argued, “It’s about libertarianism, freedom, anti-trusts, yeah, anti-monopoly etc” (Interviews: Peripheral Civil Society/Business Interest), and another positioned “economic competitiveness” between companies as a core objective (Interviews: Peripheral Civil Society). However, one of these advocates also articulated strong support for some of those OGD advocates with more explicitly egalitarian ends: “[x] always speaks sense [laughs]... So, just ask [x] [laughs]” (Interviews: Peripheral Civil Society/Business Interest). Indeed, some of these advocates tended to exhibit uncertainty about modes of economic production, and therefore might be perceived as simply more rooted in the ‘common sense’ concepts and discourses of neoliberalism even though they broadly favoured the more egalitarian approach of some of their co-advocates:

“Erm, to be honest, I’ve not really fully thought it through, or looked at it - it’s a hazy thing for me... in our happy go lucky world, so we’re not too

philosophical about it all, we're a bit more, not more - we take a sort of - just get on with it - JFDI [just fucking do it] approach..." (Interviews: Peripheral Civil Society/Business Interest).

It is therefore evident that there are mixed and contradictory overall social and economic ends amongst OGD advocates, a finding which was also apparent in event observations and confirmed in interviews:

"The open data movement has got a bit of everything... I mean that is one of the things that makes it very interesting. You have like sometimes - almost in the same person, or at least in the same room ... there is this very strange hybrid - there is really a very, very strange socio - social economic and political space out there" (Interviews: Peripheral Civil Society).

Nevertheless, in many cases, these advocates were able to find some common foundation from which to work together, whether purposefully or through lack of awareness of significant ideological differences. Amongst those aware of the differences, discussion within the community has tended to be limited. As one peripheral advocate pointed out:

"if I say I'm going to put this social outcome [social justice] above openness of data I am going to provide some reasons why even you should hold back on open data in order for my social outcome, or you might have a different social outcome that you think is important. Suddenly, we're providing lots of arguments not to move forward. So, the compromise, sort of seemingly best position, is to advocate for more openness, and then work that out ourselves later on" (Interviews: Peripheral Civil Society).

This notion of compromise and a reticence towards some types of discussion within the OGD community was also highlighted and discussed in section 0, with regard to the desire to present a united, non-critical public discourse amongst OGD advocates. Whilst the political pragmatism of the strategy is understandable, drawing on the previous chapter it is argued that there is also a sense of elitism present in how norms are being established not to address key issues within the broader community. Such a process can result in some advocates being divested of the opportunity to develop a deeper understanding of the agenda which they are promoting, and vulnerable to their ideas and activity being co-opted into a political project counter to their intentions by socially elite and dominant groups within the community.

6.3.2. Democratic Participation

As Gill (1992) argues, one key aspect of neoliberal globalisation has been a “new constitutionalism” in which “market rationality is seen as preferable to the vagaries of political discretion and/or the collective will of the polis” (p. 178); or, in Morton’s (2007) words, the “hollowing out of democracy” (p. 126). During the neoliberal era (1980s to present) the political sphere became increasingly restricted at the local and national levels as critical decision making capabilities became dominated by transnational economic interests, international organisations and those powerful nation states that were able to exert greatest influence over them (Murphy 2000); a grouping of political actors that Cox (1996) terms the “nebuleuse”:

“the unofficial and official transnational and international networks of state and corporate representatives and intellectuals who work towards the formulation of a policy consensus for global capitalism...something which has no fixed and authoritative institutional structure, but which has emerged out of bodies like the Trilateral Commission, the World Economic Forum meetings in Davos, the regular meetings of central bankers of the OECD, IMF, World Bank and WTO, and the G7 and G8 summit conferences and their preparatory meetings” (Cox & Schechter 2002, p. 33).

He argues that beginning in the period 1968-75, states “became more effectively accountable to a *nebuleuse* personified as the global economy” (Cox 1996, p. 298). Further, as Morton (2007) points out, at the level of the nation-state, power became centralised within those institutions most closely linked to these new global power structures: “those state agencies in close contact with the global economy – offices of presidents and prime ministers, treasuries, central banks ... gained precedence over those agencies closest to domestic public policy” (p. 125).

Some civil society interviewees tended to recognise the anti-democratic and restricted nature of contemporary political governance:

“Citizens should be in charge and they’re not at the moment... It’s out of our hands. This is what I worry - I worry that everything that is happening about government is not in our hands at all” (Interviews: Peripheral Civil Society).

More broadly, however, many OGD advocates perceived citizen empowerment and enabling popular democratic participation as key factors motivating their activity:

“We think of ourselves as being about empowering people” (Interviews: Core Civil Society).

Observations and informal conversations suggest that this empowerment tended to be regarded as empowering individual citizens with respect to the state for some advocates, and thus was based on a liberal notion of democratic governance. However, others were engaged directly with disenfranchised groups and collective organisations such as Trade Unions, community projects and migrant organisations suggesting a more communitarian notion of empowerment.

Some of the advocates held potentially radical positions with regard to enabling democratic participation:

“What I’m really interested in, in the long term, is in participation. For example, having mechanisms for citizens to be able to make real decisions, possibly more at the local level, using real data” (Interviews: Peripheral Civil Society).

Ideas such as participatory budgeting, popular in Brazil and being developed elsewhere (see Avritzer 2009), were also articulated by this interviewee, and such models of participation have been discussed favourably at some of the international OGD events (e.g. OKCon 2011). There is, therefore, a strand of thought within the OGD initiative that holds a potentially disruptive position

with regard to incumbent forms of neoliberal governance, in that it aims at generating a bottom-up mode of democratic decision making potentially counter to some of the constraints on state-citizen relations typically embedded within e-governance projects during the neoliberal era (e.g. see Chadwick & May (2003)). Nonetheless, our understanding of the radical potential of citizen participation projects must be tempered by an appreciation for the increasing interest in participatory governance by key institutions of the neoliberal global governance networks discussed above, in particular the World Bank (see <http://go.worldbank.org/FMRAMWVYV0>, date accessed: 18/07/12). It is critical, therefore, as discussed in the previous chapter (for example in section 5.3), to appreciate the difference between empowering forms of grassroots participation and restricted forms of participation promoted by the global elite in an attempt to generate legitimacy.

Whilst many civil society interviewees framed their activity as being about empowering citizens, most advocates' articulation of a restricted political sphere was not generally contextualised within a critique of the structural conditions of neoliberal "new constitutionalism". Indeed, some advocates were keen to use the regulatory frameworks of neoliberal capitalism to their own advantage:

"The other key thing is that if it is under the Public Sector Information [Regulations]....the rule there is that you can't price discriminate - which then means you've got to be able to tell people what the price is. So, you can see

that there's two ways into this..." (Interviews: Peripheral Civil Society/Business Interest).

Frequently, advocates' arguments were grounded in a critique of information asymmetry between citizens and dominant political economic actors. Thus, many advocates tended to echo the arguments of the following core OGD advocate:

"The central thing is at the moment we have huge amounts of asymmetries of information. The amount of information - for you to effect something in government in a consultation, whether it's to do with a planning application in local government or things like that" (Interviews: Core Civil Society/Business Interest).

Some advocates' arguments were grounded in personal experiences and frustration with trying to engage with decision makers in local authorities and national governments. For example, one advocate, reflecting on his experiences working in community development in a heavily deprived neighbourhood in the North of England, pinpointed restricting access to information as a key tactic in local attempts to prevent communities engaging in decision making processes on issues that directly affected them:

"There was a very asymmetrical information gap... It is social engineering - they [public bodies/local authorities] don't want people in the way, they don't want people to have access to the same amount of information, and it's so obvious... I think creating parity and equality as far as having access to information and data, is essential in that, because it will enable people to

stand up for themselves” (Interviews: Peripheral Civil Society/Business Interest).

Other advocates highlighted examples of information asymmetry related to more common grievances such as issues around the power of supermarket chains in the UK’s planning process relative to local communities:

“When Tesco...wants to move into an area...it’ll know way more about that area than the council will know itself - about the traffic flows, about the shopping, about the demographics, about the affluence and so on. It will know more about the councillors... more about the case law... So the asymmetries of information there - forgetting Big Society individuals and so on - but just between those and the council - it’s absolutely huge” (Interviews: Core Civil Society/Business Interest).

For some advocates, therefore, the key determining factor of an undermined democracy was perceived to be asymmetrical access to information. Whilst these advocates did not present OGD as the entire solution to the issue of political disempowerment, their emphasis on information asymmetry did tend to avoid other sources of asymmetrical political and decision making power within contemporary neoliberal capitalist societies. For example, when considering the anti-democratic nature of the neoliberal project it is important to contextualise information asymmetry in the structure of a global political economy which empowers economic elites relative to citizens and restricts the space for meaningful political activity at a local level regardless of the level of information asymmetry. Further, it is

important to recognise the potential link between work on “information asymmetry” in economics (see for example Stiglitz (2001)) and its effect on producing inefficient market outcomes, and those OGD advocates who draw strongly on a discourse of “information asymmetry”. There is a sense that some of these OGD advocates might be holding on to a neoliberal belief in the equilibrium of markets (whether economic or political), and attempting to remedy apparent inefficiencies and injustices through a focus on minimising information asymmetry, rather attempting to produce a counter-hegemonic alternative.

Putting aside the structural conditions of neoliberal governance temporarily, it is also important to consider the relationship that OGD advocates perceived between increased accessibility of public data/information and democratic participation. Whilst some OGD advocates appeared to perceive a causal relationship between OGD and increased citizen participation, other advocates, albeit a minority, recognised that further structural obstacles were present that restricted democratic participation:

“To find a mechanism in which data and participation fit together... is actually quite challenging... when you get down to it actually the skills to do that [use OGD] are not equally distributed, are not distributed amongst those who perhaps have most cause to hold services to account” (Interviews: Peripheral Civil Society).

This OGD advocate recognised a further asymmetry in relation to equality of opportunity in data usage; an issue that is also addressed by Gurstein (2011), and more briefly by Coleman (2011) and Halonen (2012). A further advocate also highlighted the limits of OGD leading to democratic forms of governance within current structural conditions:

“There is a problem with the assumption that open data automatically leads to open government, and open government automatically leads to better participation and democracy...The state is not just a benign entity...But the potential for a state to be benign through participation is not going to happen just by transparency” (Interviews: Peripheral Civil Society).

As discussed in section 2.4.3, Birkinshaw (1997) reminds us in his analysis of the potential for “open” participative governance in the EC/EU, “the Community, as presently structured, is not built for participatory democracy”, and attempts to institute such participation without tackling the embedded structural conditions could lead to abuse and domination by elite groups. Further, as discussed in section 5.3, such projects might also be aimed at fostering legitimacy rather than empowering citizens.

Some OGD advocates were highly aware of some of the structural barriers to the more participative democratic spaces they aimed to develop. However, for others, the perception of a causal relationship between OGD and a more participative form of democracy, it is argued, left them potentially open to reproducing a more restrictive, elite led form of democratic participation within a neoliberal framework. These issues regarding the

development of democratic participation are relevant not only to the case for OGD and its contribution to the polis, but also to the governance of the OGD community itself as discussed in the previous chapter. In particular, it is critical when promoting participative forms of governance at any level to understand and act to counter the social and structural barriers to participation that restrict some citizens/community members more than others, and to challenge projects aimed at building consent rather than empowered citizens. Failure to engage in this process simply reproduces, rather than challenges, elitism and social inequity.

6.3.3. Political Crises

A further significant feature within the ideational domain of some OGD advocates was in relation to what can be perceived as an accumulation of crisis events in the UK's political establishment over the last decade. Such concerns were articulated more frequently amongst peripheral advocates, suggesting that some more recent involvement in OGD activity may have been partially triggered as a result of a fermenting breakdown in trust between political elites and citizens. These responses to political crises can be understood as part of broader fracturing of neoliberal hegemony within the UK during this period, as discussed in the section 3.6, and the analytical framework suggests that in such circumstances political elites might respond by developing strategies of *trasformismo* aimed at reconstituting consent for the neoliberal project..

Events during the UK's invasion of Iraq in 2003 were cited by one advocate as the point when they realised they could no longer have faith in British democracy:

“I saw that happening in 2003 and I realised this country - I don't know what people think, but this is not true - this is not a democratic country at all. And the media – may well be good media, respectable, dadada, but they're not telling you the truth. And they can't. And so nobody's telling me the truth - isn't that terrible!” (Interviews: Peripheral Civil Society).

More recently, the Parliamentary Expenses Scandal – in which significant numbers of MPs in the UK Parliament were found to be abusing, in some cases illegally, their expenses system - was also cited by four peripheral advocates as an important factor in either their own, or others, perception of the importance of OGD:

“Two years ago there was this huge, huge scandal about the parliament MPs...expenses. Yeah, so that's similar - you'd like to know whether they've spent your money smartly, or they've been trying to take money for themselves rather than for the public good” (Interviews: Peripheral Civil Society).

The political response to the economic crisis beginning in 2008 was also significant for some advocates who voiced concern about the public sector funding cuts and the Coalition's connection of OGD to this agenda:

“The new government ... in a way they’ve kind of hijacked the transparency agenda to kind of....pull apart the public sector, in a way” (Interviews: Peripheral Civil Society/Business Interest).

Interviewees that discussed these issues around economic policy tended to focus on the response of political elites to the economic crisis; however, their comments tended to be contextualised within a general critique of economic inequality suggesting they were expressing a deeper political economic critique of neoliberalism than might be garnered from reading such comments in isolation.

A further political scandal to arise in the UK has been around ‘phone hacking’ and media ethics. This issue affected large media corporations including Rupert Murdoch’s NewsCorp, senior Politicians and the Metropolitan Police force and was investigated through the Leveson inquiry in 2012. Although this crisis emerged after interviews were undertaken, one OGD advocate did express concern with the media during interviews:

“The media machine, which serves the political machine, which serves the business machine, and there is no place for people there. And this is what I rebel to and find disgusting... Do you people realise? You English? Because the Brits are supposed to be the one whose got the best democratic system in the world, and the media’s supposed to be the smartest and the coolest, right... You know - and it’s not” (Interview: Peripheral Civil Society).

Further, other advocates reported engagement in activities, and support for, forms of citizen and hyperlocal journalism suggesting more widespread concern with the media establishment.

These crisis events can be understood as contributing to a sense of unease and distrust between some OGD advocates and political and economic elites. However, as one advocate stressed:

“Government transparency is all very good, but it’s not the same as Open Government. And Open Government I perceive more as about participation. So, making data - making government transparent with a view that you are still creating an opposition between government and citizenship and you are saying well ... the government we are going to make transparent, so you can more or less throw tomatoes at your politicians, you know, literally if they don’t do things. But that I don’t think is very useful, and quite a few people have said that - some of the smarter people that I have met in the open data - they see through that very clear, you know” (Interview: Peripheral Civil Society).

There is, therefore, a perceived risk for some advocates that a breakdown in trust between citizens and politicians, potentially intensified by transparency, can in some ways further “hollow out the state” (Interview: Peripheral Civil Society). For these advocates, expanding political participation, rather than exacerbating a dichotomous and antagonistic relationship between the state and citizens, was therefore critical to reclaiming the polis.

6.3.4. Public Sector Governance

OGD advocates also articulated significant concerns regarding the governance of public sector bodies. These criticisms centred on quality management, decision making processes, and hierarchical management. In general, they might be understood as a critique of aspects of New Public Management – the neoliberal form of public sector governance which became popular in the 1980s and which emphasised the internalisation of target driven ‘modernisation’ and market principles in the management of the public sector. The relationship between OGD advocates and NPM is also discussed by Coleman (2011) and Longo (2011) who warns that OGD risks the re-empowering of the NPM agenda.

Interviewees discussed concerns regarding what they perceived to be the decisive factors in how the public sector was managed and public services were provided. One advocate complained of a tendency to focus on means, rather than social ends, by some public bodies:

“A project has been a success not if it made people’s lives better, but if everyone followed the process” (Interviews: Core Civil Society/Business Interest).

Of course, such a point might equally be turned back on some OGD advocates (across all sectors), who have tended to focus on the process and presumed ends of opening data, rather than the actual impact on people’s lives.

Other advocates drew attention to quality management tools utilised by public bodies and argued that their approaches to assessing success were too short term:

“Unfortunately the project’s then wrapped up into that, and so the KPI [Key Performance Indicator] becomes – ‘how many young people have come to that event as a result of what you’ve done?’ - and often in that tone of voice ... The department need to know - we could just say ‘42,000’, and they go ‘oh [posh voice] 42,000’, and we say ‘yeah but 40,000 of those are rubbish’” (Interviews: Peripheral Civil Society/Business Interest).

Beyond issues of quality management, OGD advocates also criticised decision making processes within the public sector. A number of advocates perceived that a tendency towards quantification, hierarchical institutional structures and a culture of (small c) conservatism limited the ability of those employed within the public sector to make decisions:

“We had no way of measuring a metric of how if something which does not exist suddenly existed, what value would this have... it’s the problem of innovation culture in this country, is that it kind of has to quantify everything, which makes it very inflexible” (Interviews: Peripheral Civil Society/Business Interest);

“People are put in their positions...so that they can perform a task... they’re just push the buttoners... They actually have no role, no decision making - they cannot make quality decisions - qualitative changes - they have to go there and do what they’re told, even if we’re looking at a system which is supposed to be transformative” (Interviews: Peripheral Civil Society);

“Civil servants are incentivised to make superiors look good, not making things on the ground better” (Interviews: Core Civil Society/Business Interest);

“I don’t think decisions are actually made. I don’t think a decision is made - there’s the default situation which is - as is - and no one’s able to make the decision” (Interviews: Peripheral Civil Society/Business Interest).

These findings, therefore, indicate that current models of public sector management, which are still largely shaped by the New Public Management model, are largely counter-intuitive to the OGD advocates. However, one advocate did propose that a benefit of OGD was the citizen-consumer choice of NPM that Longo (2011) warns about, and thus the disruptive potential of the OGD initiative to hegemonic neoliberalism should not be overemphasised:

“Interviewee: ... the crime rate, or the school performance, and you’d like to know how well the students in your local school have been doing. That’s a kind of useful piece of information as well.

Interviewer: How do you think you’d use that kind of information? Or how do you think people would use that information?

Interviewee: For buying and selling houses

Interviewer: By choosing schools for their children do you mean?

Interviewee: Yeah. Yeah something like that” (Interviews: Peripheral Civil Society).

Further, such a critique of public sector governance can feed into a reactionary discourse regarding the public sector, potentially resulting in a reformed New Public Management model based upon further outsourcing and marketisation of the public services that the public sector is deemed no longer fit to manage. This for some OGD advocates was problematic, as one interviewee stated in a discussion about outsourcing:

“I mean the thing is it’s not about efficiency... there is no limit to make an overhead and the overheads that they want are like 20%, 50% ... It’s like those profits have to come from somewhere” (Interview: Peripheral Civil Society).

However, for other OGD advocates the outsourcing model was not questioned. These issues are partially addressed by Longo (2011) who argues that there is a “possible effort to revive some aspect of NPM using some of the same tools from DEG [Digital Era Governance] - systems which are seen to be in opposition” (p. 44). In response to this issue one German OGD advocate stressed on the Open-Government mailing list that:

“Most Transparency advocates would reject the ideas of outsourcing and privatisation we now have to realise that some people argue for exactly this under the name of open government...I think the Open Government / Transparency / Open Data Movements should be clear that our demand for an open Government, for Open Data and more Transparency and Participation is not the same than others’ advocacy for outsourcing and privatisation in the name of Government efficiency under a neoliberal agenda”

(Daniel Dietrich, OKFN, Open-government mailing list – 26/08/11,
<http://lists.okfn.org/pipermail/open-government/2011-August/001448.html>,

Date accessed: 30/08/11).

As this OGD advocate recognises, therefore, the arguments of OGD advocates regarding participation and openness overlap with similar arguments drawing on a strongly neoliberal paradigm which favours market, rather than public, provision of goods and services. Whilst advocates exhibited frustrations regarding public sector management, much interview data triangulated with the above statement by Dietrich and affirmed that OGD advocates do not, in general, advocate a neoliberal model of replacing public provision with market based provision:

“I’m a bit cautious about marketisation’s ability to drive reforms in areas which are not traditional market goods, and which also everyone’s entitled to” (Interviews: Core Civil Society);

“They’ve kind of hijacked the transparency agenda to kind of....pull apart the public sector, in a way” (Interviews: Peripheral Civil Society/Business Interest).

However, for some OGD advocates their perception of neoliberal marketisation was relatively favourable, arguing that only ‘true’ public goods should be managed outside the logic of capitalist markets:

“The reason we have essentially a public sector and government is for those things where the market - and where business models - don’t work” (Interviews: Core Civil Society/Business Interest).

Further, some argued for a more pragmatic approach of achieving social 'benefit' through the most efficient means. For one of these advocates, marketisation was not a particular problem since he perceived many other public goods such as the utilities had been "successfully" marketised, and therefore he could see no reason why PSI should not also be (Interviews: Core Civil Society).

6.3.5. Promoting Innovation

One of the critical economic arguments made in favour of OGD is that marginal cost and openly licenced PSI will enable significant innovation both within the digital economy and elsewhere within the production process:

"The biggest value of open data is around innovation...it's about 'what's a better route to get to work?' that kind of thing, 'how shall I insulate my house?', 'where do I go to the best doctor?' - all those kinds of decisions" (Interviews: Core Civil Society).

This argument is frequently articulated in the policy literature around PSI, as discussed section 2.3, and is central to the claims made by Pollock (2009; 2010) regarding OGD's potential £6billion economic contribution to the UK economy (see Appendix 3 for a critical analysis of the £6 billion claim). Whilst many OGD advocates were not overly familiar with the specific economic arguments, a discourse regarding OGD's contribution to innovation within the digital economy did emerge within interviews and mailing list analysis, and was also strongly evident during event observations. OGD advocates were

keen to see OGD based innovations across various economic sectors including the public sector, social enterprises, startup businesses and other micro/small businesses, and innovations from those engaged in these areas of the economy were frequently showcased at OGD events, alongside developments from more established firms such as Talis and Google.

In general, there was a sense amongst many advocates that innovations developed using OGD could help address a range of social issues from the provision of public services, to promoting economic growth, to finding solutions for significant global problems such as climate change. For example, Pollock (<http://blog.okfn.org/2011/09/15/open-data-a-means-to-an-end-not-an-end-in-itself>, date accessed 18/07/12) has addressed the contribution OGD might make to “understanding and addressing climate change [and] finding better ways to cure and prevent disease”, a sentiment supported by a further core advocate:

“developing ideas... and processes to sort out the acute problems - which we have got plenty of in the world - we’re running out of water, running out of food, all these things require intellectual capacity and one thing it does need in my view is you must share information” (Interviews: Core Civil Society).

Some advocates also argued for the promotion of “a kind of innovation culture” (Interviews: Peripheral Civil Society/Business Interest) in which smaller entities such as citizen groups, social enterprises and micro/small businesses were able to engage in the development of innovations, rather

than such processes being monopolised by established institutions such as public sector bodies, government departments and corporations.

Innovation in public services was a key objective for many OGD advocates, and a number were critical of the progress made in this field. These issues were framed primarily within a critique of the public sector's innovative capacity in general, and its engagement with digital innovation more specifically. One core advocate expressed his concern that innovative approaches to problem solving were hindered within the public sector due to a fear of failure and attempts "to solve really big problems as really big problems" (Interviews: Core Civil Society/Business). Instead, following the path developed by New Public Management, this advocate proposed a more business orientated approach for the public sector which embraced the benefits of failure for innovation and problem solving:

"When you're in business, you come from - and also when you're innovating I think, and when you're an entrepreneur - you come from a different perspective, which is that failure is not just likely, in many ways it is inevitable" (Interviews: Core Civil Society/Business Interest).

A further core OGD advocate agreed that public bodies were not successful innovators; however, he expressed his sense that an innovation culture was not suited to the public sector due to its responsibility in upholding service provision:

"If you listen to them [public bodies] they would say that they are the first players, but in reality that has never been the case in large structures,

especially ones that are doing service delivery... you can't take too much of a risk, because otherwise you stop the water supply, or the hospital stops, or - it has some catastrophic effect... So in a way, one wouldn't expect them necessarily to innovate. It doesn't mean to say they don't have innovative ideas, and they might try to procure innovatively, but by and large the innovation is coming from elsewhere" (Interviews: Core Civil Society).

Interviewees also pointed out a number of examples of perceived inefficiency within the public sector that was hindering innovation by citizen groups. For example, one interviewee claimed that energy usage data which could be used to help tackle climate change was being collected by his local authority, but nothing was being done with it, nor was it available for others to re-use (Interviews: Peripheral Civil Society/Business Interest). Other OGD advocates highlighted issues of perceived inefficiency due to the public sector duplicating the innovations and work of civil society groups and businesses. The Power of Information review (Mayo & Steinberg 2007, p. 24), for example, reports that operators of user-generated websites such as NetMums and Patient Opinion complained of the public sector duplicating, or copying, their services in the design of new government websites and recommends against such practices. The perception that public bodies were competing with civil society groups was also suggested by a core civil society advocate who argued that the public sector should no longer be spending money on Ordnance Survey mapping services because citizens were now collectively producing their own mapping service, Open Street Map (Interviews: Core Civil Society).

Many OGD advocates tended to perceive that the UK's public sector was problematically limited in its ability to innovate in service provision, particularly within the digital domain, relative to other productive sectors. This sense that civil society and business could 'do it better' in the field of digital innovation was also encouraged by the UK government through its 'Show Us a Better Way' competition (2008) and engagement with groups such as Rewired State. It was also a theme which was pushed within the development stages of the OGD community. For example, during a key formation discussion titled "Defining Open Data" on the Open-Government mailing list, Jonathan Gray (OKFN Community Coordinator) poses the question:

"Also are we saying that governments should do social stuff on PSB websites, or do [we] also want to enable and encourage innovation from outside government? A major point in Tom Steinberg/Ed Mayo's excellent Power of Information report"

(Jonathan Gray, Open Government mailing list - 19/10/10,

<http://lists.okfn.org/pipermail/open-government/2010-October/000309.html>,

date accessed 14/07/11).

As one OGD advocate articulated, this model for enabling innovation in public service provision marked a departure from the outsourcing/privatisation model of neoliberal New Public Management:

"It's not privatisation, because the thing is now it's a bit more complicated. What you are seeing - this is an enmeshing of private sector and the state -

it's not outsourcing, but it's bringing the private in...It's going to be interesting" (Interviews: Peripheral Civil Society).

Indeed, whilst still retaining the primacy of a business logic in the governance of public services, this model is more closely aligned with the notion of co-production that has been promoted by civil society organisations such as NESTA (http://www.nesta.org.uk/areas_of_work/public_services_lab/coproduction) and the New Economics Foundation (<http://neweconomics.org/publications/co-production>).

Control of the production of value-added information by government departments, local authorities and those firms that can afford licence fees is problematic, particularly in the case of public information that contributes to the democratic and civic spheres. However, drawing on the previous chapter there are also significant questions to be asked about the social backgrounds of those that are empowered and enabled to innovate through re-use of OGD, and how open production in data re-use can become sustainable without resorting to value-added information being shaped by the requirements of commercial sustainability. Further, as one OGD advocate argued:

"It's an 80/20 split problem that you can deliver 80% of a public information service in 20% of the time, or 2% of the time. But the nature of public service is you can't choose your customers, you need to be accessible, you have all sorts of legal obligations ... And, actually when you see that application you need to really critically ask, well what will it really take to get that to be a

public service as opposed to a nice iPhone app for people who can afford their iPhones, and where's that universal service?" (Interviews: Peripheral Civil Society).

6.3.6. Equality in the Domain of Economic Production

A key theme emerging in interviews with OGD advocates was around equality in the domain of data access and re-use. Advocates perceived that many people were unable to afford licence fees and were restricted in their ability to navigate the licensing and legal frameworks around public data re-use, thus they argued access and re-use rights were restricted to public data holders and economically powerful entities such as corporations.

"What I do strongly object to is when private sector companies get access to government information that no one else can have, that troubles me a lot" (Interviews: Core Civil Society/Business Interest).

Further, a common concern was that when public services were outsourced, access to data and information that was once subject to legislation and regulations covering public bodies could become restricted.

Equality between different groups (e.g. citizens, SMEs and larger companies) in their ability to re-use public data was a site of convergence in the arguments of OGD advocates. However, there were two key, sometimes overlapping, rationales behind this argument. The first aimed to enable a competitive marketplace and innovation within the digital domain. This argument is, therefore, constructed within the logic of a competitive liberal

market economy. Interviews and observations suggested that some OGD advocates appeared to perceive this competitiveness to be about enabling innovative start-ups, micro enterprises and SMEs within the digital economy, and breaking monopolies and oligopolies that neoliberal economic policy has encouraged in both the public and private sectors. Such a discourse is also strongly evident in the re-use of PSI literature which has promoted marginal cost pricing for public data - see for example the Cambridge Study (Newbery et al. 2008) - and is also more broadly visible in some of the mainstream business literature such as Tapscott and Williams' (2008) Wikinomics books.

The second rationale behind the argument for equality in the domain of public data re-use was one of equitable and open access to the means of production. Unlike the competitiveness argument, this discourse potentially has significant disruptive qualities with regard to the more general logic of informational capitalism. From this perspective opening up data was perceived as opening up a critical means of production for citizens, and micro and social enterprises. Further, it was argued, it would enable the growth of an 'information commons' in which OGD was interoperable with other socially produced information and cultural resources such as Wikipedia and Open Street Map, which have developed counter to the proprietary logic of neoliberal capitalism. In effect, this would create a publicly funded "data commons" accessible and useable directly by all producers, without them having to be dependent upon the purchasing power of larger companies or public institutions. As one interviewee stated:

“[The commons] is not the language that the sector is using, or the movement is using, yet it’s the only one I can see that really justifies - no sorry, it’s one of the only ones I think from a democratic perspective that justifies allowing commercial re-use” (Interviews: Peripheral Civil Society).

As Jonathan Gray - Community Coordinator at the OKFN - further articulates:

“[Commercial re-usability] is really important for an interoperable data commons (e.g. combining things with Wikipedia, Open Street Map, etc). Otherwise we have a two tier eco-system: one tier for commercial operators and one for everyone else”

(Jonathan Gray, Open Government mailing list - 20/10/10,

<http://lists.okfn.org/pipermail/open-government/2010-October/000324.html>,

date accessed: 14/07/11).

These various arguments suggest that within the OGD initiative notions of the commons and markets appear to interconnect and overlap within the domain of the information economy. As one OGD advocate argued:

“There is this very strange hybrid - there is really a very, very strange socio - social economic and political space out there” (Interviews: Peripheral Civil Society).

Whilst in the broader literature on social production a variety of authors have either argued the case for the phenomena as a form of information communism (Bauwens 2009) *or*, rejecting such notions, an emergent form of liberal capitalism (Tapscott & Williams 2008; Mueller 2008), the more critical

literature has tended to recognise a more complex relationship between the two. The case of the OGD initiative appears to uphold this more complex and uncertain interpretation of what is occurring in the production relations within the information economy, and what the likely outcomes are. This uncertainty was articulated by some of the OGD advocates, such as the one above who described it as a “very strange hybrid”, and the following advocate who attempted to reconcile the ideological frameworks of neoliberal capitalism with the development of commons-based production:

“The anti-intellectual property movement or the commons movement ... advancing both an ideological and an economic rejection of intellectual property regimes. So, it is interesting that some would probably argue - well, actually that is justifiable within classical economic theory - that actually what we have allowed is a perversion of that theory by allowing IP regimes. Others might argue IP regimes are necessary to that theoretical kind of interest... Benkler, and obviously others, are against that... It's interesting isn't it, because ... I think people like Benkler are interesting on that, in that they are sort of caught between the notion of markets and commons - they're trying to create this space beyond markets” (Interviews: Peripheral Civil Society).

As discussed in the literature review chapter, this site of intersection between commons and markets has been the subject of much academic and activist discussion, particularly in relation to F/OSS and other ‘commons’ based production with which OGD advocates are tightly interconnected.

6.4. Reform or Radical Change?

As the above discussion evidences, the ideational space of the 'organic intellectuals' of the UK's civil society OGD advocates is complex. It is certainly differentiated at the level of the "collective imaginary" of OGD advocates i.e. their views on "the nature and legitimacy of prevailing power relations, the meanings of justice and public good" (Cox 1981, p. 136); however, their "intersubjective" domain, or how they understand the "nature of social relations" (Cox 1981, p. 136), tends to be less differentiated and less critical of deeply embedded historical structures within the UK's system of liberal democratic capitalism. In that sense although criticism of prevailing power relations is visible within the civil society OGD community, culturally embedded common notions of technological innovation, market based production and public sector reform are called upon as part of the solution to perceived problems.

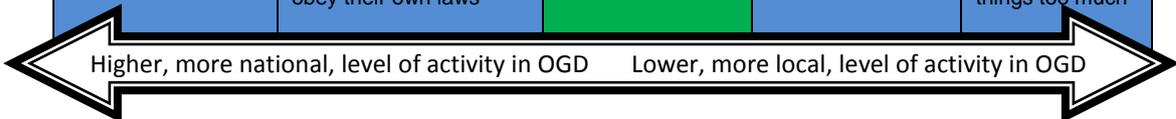
Table 13 below aims to bring together the various ideational constructs of these 'organic intellectuals', in order that we might better appreciate the location of different political positions within the governance of the civil society OGD community. In terms of the sample of interviews undertaken for this research there was a marked political distinction between core advocates to the left of the table (i.e. those that have acted as advisors on OGD/PSI to government and public bodies), more active OGD advocates outside the core to the centre of the table, and less active peripheral

advocates to the right of the table. It is noticeable that core advocates tend to be more politically reformist with regard to hegemonic neoliberalism, whereas the more active peripheral advocates were more likely to express somewhat radical and even counter-hegemonic sentiments. Further towards the periphery, however, political expression was vaguer yet generally constrained within the hegemonic 'common sense' of neoliberal capitalism.

These findings are particularly interesting as they express something of an internal struggle within the OGD community. Critically, what these data seem to suggest is that whilst the UK state's selection of advisors tends to favour more reformist OGD advocates and these same advocates tend to be favoured by the "meritocratic" governance of the civil society community, there is also a more radical political energy within the initiative that struggles to be heard publicly, but is nonetheless active in pushing for OGD and attempting to shape the agenda. These patterns suggests the possibility that absorptive processes of *trasformismo* might be at work in the relationship between these 'organic intellectuals' and some parts of the state which could draw the initiative onto a path more in line with neoliberal state interests. This potential for processes of *trasformismo* within the UK's OGD initiative will be explored more fully in the following chapters, and the thesis will come back to these more radical advocates, exploring their position within the OGD initiative and their potential strategies moving forward, in Chapter 9.

Table 13 – The differing ideational constructs of Civil Society OGD Advocates

<p>Core interviewee</p> <ul style="list-style-type: none"> - Regulation should be based on achieving clearly defined ends (economic and social value over the long term) - Flexibility and pragmatism in relation to means - Businesses, not social enterprises, will be the way forward - they have the money - Empower citizens in relation to state 	<p>Core interviewee</p> <ul style="list-style-type: none"> - Emphasis on problem solving, entrepreneurial spirit, pragmatism, concrete over abstract - Transparency, information equality, democratic oversight and jurisdiction - Empower citizens in relation to state/corporate powers - Public sector only in areas of market failure 	<p>Peripheral interviewee</p> <ul style="list-style-type: none"> - Make the state benign through citizen participation - Citizens making real decisions - Commons beyond information - Critique of privatisation, marketisation and "hollowing out of state" - Co-production as private groups/citizens, non-profit, involvement in the state - Against citizen-consumer model of engagement 	<p>Peripheral interviewee</p> <ul style="list-style-type: none"> - Anti-politics: politics is an instrument for governing society - Civic duty - Civic freedoms: speech, expression - Decision making should be holistic, fact based and accountable /auditable - Economic egalitarian 	<p>Peripheral interviewee</p> <ul style="list-style-type: none"> - Citizen-consumer choice - "Bugging" public servants - SMEs can make money - Competitive businesses
<p>Core interviewee</p> <ul style="list-style-type: none"> - Critical of the marketisation of public goods and services as a route to reform and improvement of public services - Emphasis on innovation and decision making tools to make peoples' lives easier - Businesses can make money out of opening data - Freedom (to re-use code, data) 	<p>Core interviewee</p> <ul style="list-style-type: none"> - Progress, innovation, invention, cooperation orientated to deal with social problems - Pragmatism about whether private sector or public sector, but marketisation has happened elsewhere - so why not PSI - Emphasis on collaboration and change as motivators - Volunteerism and philanthropy are a source of value - Taxation and fair prices required to pay for standard of living desired - Information and knowledge should be a shared not a private resource – share-alike - Hierarchies should be flattened and society should be led rather than dictated to - Government should obey their own laws 	<p>Peripheral interviewee</p> <ul style="list-style-type: none"> - Civic and democratic engagement and social justice - Egalitarian: need to overcome social divisions (including around data literacy) and critique power relations - Information commons as justification for commercial re-use: markets on top of a commons can promote freedom - Collective /community definition of freedom (rather than individual) - "We are the state" 	<p>Peripheral interviewee</p> <ul style="list-style-type: none"> - Emphasis on innovation and the evolution of urban environments - Representative democracy and centralised power with elected mayor - Concern with public sector cuts - Progress and efficiency can lead to job losses: need to accept - Equal access to information is basis for more egalitarian society - Empower the most disadvantaged 	<p>Peripheral interviewee</p> <ul style="list-style-type: none"> - Information production and interpretation should not be monopolised by state – open all data, anti-monopoly - Concrete over abstract - Social entrepreneurial, innovation, networks - Community, grassroots, bottom up - Freedom (to re-use code, data) - Concern about public sector cuts - Liberty and freedom - Happy go lucky: don't think about things too much



Key

Reformist

Radical

Outside of this active, radical space, there appears to be a less active zone of less politically engaged advocates whose interpretations tend to draw on the 'common sense' of neoliberalism: competitiveness, citizen-consumerism, entrepreneurship, and freedom. However, these same advocates also expressed support for empowering the grassroots and concern about corporate and state power, their political positions are therefore relatively vague; somewhat critical, but caught up within the logic of neoliberalism. Observations of the broader civil society OGD community suggest that many of the more peripheral supporters of OGD are more likely to align with these advocates to the right of the table, rather than those more politically engaged advocates to the left. As time evolves, it will be interesting to observe if any of these peripheral advocates become more engaged and to which sections of the more active community they begin to align.

6.5. Conclusion

The aim of this chapter, as discussed in the introduction, was to meet subsection c) of Objective 4. That is, it aimed to analyse:

- 4c. The ideas and intentions of civil society OGD advocates in relation to neoliberal capitalism.

The empirical evidence presented in this chapter suggests that the civil society OGD advocates in the UK share a complex ideational space with varying relations to the UK's neoliberal form of capitalism. A range of themes

emerged in interviews with civil society advocates including the sense that advocates perceived themselves to be working in the collective, rather than an individual, interest towards some broader social end. Common frustrations were also expressed by civil society advocates regarding:

- Limited democratic participation and the impact of information asymmetry on democratic and civic engagement
- Political crises such as the MPs Expenses Scandal
- Public Sector governance particularly in relation to quality management, decision making and, for some, outsourcing, marketisation and privatisation
- Restricted innovation due to a lack of data and poor innovation management
- Inequality in the domain of re-use of public data.

Whilst individual advocates' specific interpretations of these issues differed, there was some consensus amongst advocates regarding a perception of problems in these areas. Where the data became more interesting, however, was in relation to the civil society advocates' ideational relationship to hegemonic neoliberalism. Here we see that core advocates (i.e. advisors to government and public bodies) expressed more reformist and less critical positions with regard to liberal capitalism, whilst the more active peripheral advocates tended to be more radical and critical in their relationship with neoliberalism. Less active peripheral advocates, on the other hand, tended to frame their ideas and interpretations within the

constructs of neoliberalism. Thus, there appears to be some form of underlying political struggle within the OGD community itself; however, due to the efforts of OGD advocates (in each of these categories) to actively avoid critical public discussion during the period in question (see Section 0), this struggle, as yet, tends to remain private and relatively understated.

CHAPTER 7: BUILDING ALLIANCES ACROSS SECTORS AND THE IDEATIONAL CONSTRUCTS OF STATE AND INDUSTRY

7.1. Introduction

As neo-Gramscian researchers have argued, during conditions of *passive revolution* or a breakdown in consent for the hegemonic project, strategies of *trasformismo* are likely to occur which aim to absorb potentially disruptive or ‘counter’-hegemonic forces into the elite led framework for action. As discussed in the analytical framework chapter, these processes or strategies are likely to encompass two critical elements: firstly, the incorporation of leaders of potentially counter-hegemonic social forces into the institutions of the ruling class (Femia 1981); secondly, processes of “ideational distortion” in which elite forces domesticate potentially disruptive ideas, adopting the language if not the intent of a social movement, in order to build legitimacy for the elite-led project across the base of the ‘movement’ (Paterson 2009). The previous chapter presented evidence suggesting the potential for absorptive strategies of *trasformismo* to be active within the initiative. This chapter aims to begin exploring more fully the potential for strategies of *trasformismo* to be present in the case of the OGD initiative.

Whilst the previous two chapters focused specifically on the activities and ideas of the civil society OGD advocates, this chapter analyses the relations

between civil society OGD advocates and incumbent actors in the state and industry, and the ideational constructs of these incumbent actors. It should be stipulated that this chapter is about those in the state and industry who hold favourable positions with regard to OGD and why they have taken up this position. There are many others within state and industry who, for varying reasons, are less supportive. Therefore, the ideas expressed here should not be generalised to a perception of a unitary construct of OGD within either the state or industry.

Whilst no work has so far been undertaken on the ideational constructs around state and industry support for OGD, there has been some discussion about the evolving relationships between the state and civil society OGD advocates. This work has been overwhelmingly positive about the relationships that have developed. For example, the OGD initiative has been cited by Coleman (2011) and Halonen (2012) as an example of a move towards a more progressive and participative framework for policy development, which has actualised the participative ideal of many of the OGD advocates. Halonen (2012) argues that even though the number of actual data re-users is low, there has been some success in enhancing public participation in policy making and this success has been based upon the “high level of mutual trust between authorities and developers” (p. 93) in cases such as the development of the London Datastore and the Open Data Manchester initiative. He goes as far as to claim that,

“Open data has arguably already transformed the traditional culture of bureaucracy, moving it a bit towards the ideal of collaborative democracy” (p. 93).

Coleman (2011), who at the time was Director of Digital Projects at the Greater London Authority and responsible for the development of the London Datastore, also reports on the participative methods utilised in the development of the Datastore, and argues that the project,

“demonstrates that the use of the internet and reaching out by the state in a public and open way provides a different communicative sphere and gave them [civil society OGD advocates] access to participation in policy debate they were previously denied” (p. 41).

This chapter will unpack these claims in more detail, presenting an analysis of the different networks of participation between civil society advocates and the state and how they emerged, and contextualising them within the earlier analysis of the OGD community’s governance structures.

This chapter, therefore, aims to meet subsections d) and e) of Objective 4. That is, it will analyse:

- 4d. The relationship between civil society OGD advocates, state based OGD advocates and the PSI re-use industry
- 4e. The ideas and intentions of OGD advocates in UK local and national government and the PSI re-use industry.

The data analysed in this chapter is primarily drawn from interviews conducted with civil servants, local government employees, and PSI industry representatives during the period February - July 2011. It is complemented by desk research, observations of relevant actors at OGD events, and interviews with civil society OGD advocates.

The chapter begins by offering a visualisation of the types of networks that have evolved between civil society and state based interviewees and government institutions based upon interview and observational data. It then goes on to discuss the relations between OGD advocates and the Cabinet Office, relevant regulatory bodies, the Department for Business, Innovation and Skills, local authorities and industry. The ideational constructs of some of the OGD advocates within these incumbent institutions are then discussed, prior to a comparison of the overarching ideational frameworks that emerged from interviews with civil society and incumbent OGD advocates.

7.2. Alliances with Government Institutions

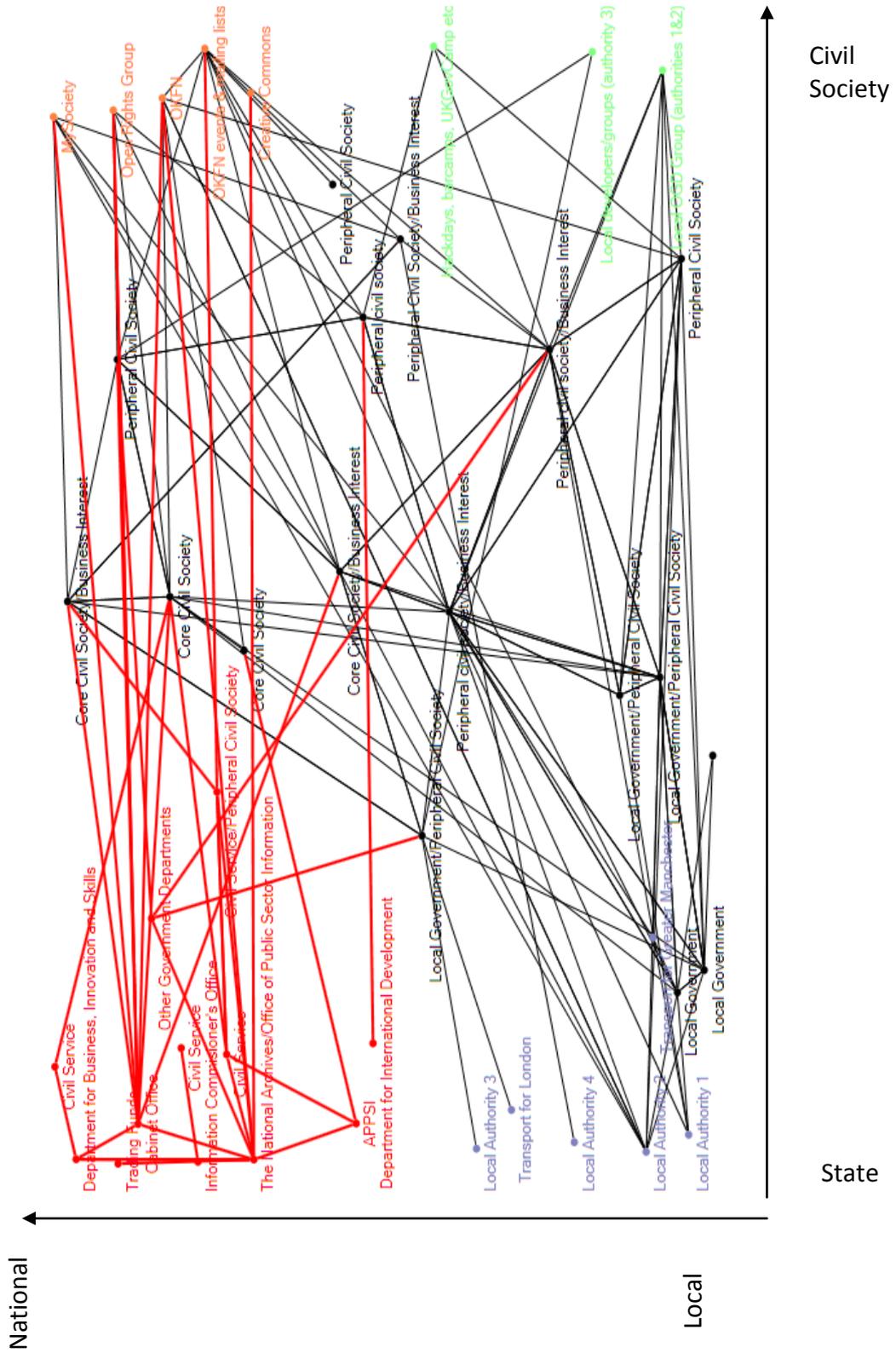
In order to understand better the engagement between civil society OGD advocates and government institutions, and thus the possibility of cases of *trasformismo* within the initiative, reported and observed engagement between interviewees and state institutions was visualised using NodeXL (see section 0). Connections were mapped if a working relationship between institutions and/or individuals was reported in interviews or observed in

practice, or if an interviewee reported that an individual or organisation had had a significant impact on their work e.g. via research or a report.

These network graphs are limited in their depiction of relations between OGD advocates, both in terms of the informality of the data collection methods (i.e. data arose without direct questioning in interviews and observations), their presentation of the OGD advocates as a closed network, and their lack of any qualitative understanding of the nature of these relations. In spite of these limitations, the graphs indicate the following patterns of engagement between civil society and state based OGD advocates:

- Civil society's engagement with national government appears to be limited to core OGD advocates who have been invited by national government to act as advisors on OGD/PSI.
- Peripheral advocates with a relationship with national government departments tend to be dealing with non-OGD specific Departments (e.g. Education) or working on a specific project e.g. the Department for International Development's open data initiative.
- In some regions strong links have been forged between local authority and local civil society OGD advocates.
- Core OGD advocates have the broadest connections across all levels of the state. They are connected to national government, primarily via the Cabinet Office, The National Archives and the relevant advisory boards

Figure 12 - Network Graph of Civil Servants (National government level)



connected to these two institutions. They have also forged links within local authorities. However, as discussed below, these links are often the result of commercial agreements between local authorities and the national organisations the core advocates are connected to.

- Core advocates' connections with local civil society OGD advocates are relatively limited and this pattern fits with the analysis of social relations within the community presented in section 5.2.2.3.

These network graphs present a more complex participative space than has been described in previous research. They suggest that a relatively small group of 'core' advocates, selected and promoted by state actors working on the OGD agenda, may have come to form an elite policy community which experiences a certain amount of disconnection from the more locally active and peripheral OGD advocates. This pattern points further to the possibility of absorptive strategies of *trasformismo* being active within the initiative. The connections between the OGD advocates and state institutions at the local and national levels will therefore be explored in more detail, focusing first on the national government (Figure 12) and then on the local government level (Figure 13). Whilst UK based OGD advocates have also made connections at the European Union level and with international organisations such as the World Bank, the emphasis in this research is focused on the national context and, as such, these relationships will not be analysed here.

7.2.1. The Cabinet Office

At the national level, the Cabinet Office is the government department with the highest and most varied levels of engagement with OGD advocates. The Department's overall purpose is to "make government work better" (<http://www.cabinetoffice.gov.uk/content/about-cabinet-office>, date accessed: 02/06/12), and digital engagement and e-government has been one aspect of this mission. The onset of the Cabinet Office's initial engagement with the idea of re-use of public data is often positioned as 2007, when Cabinet Office Minister (2006-7) Hilary Armstrong MP commissioned Tom Steinberg (mySociety) and Ed Mayo to produce the Power of Information review (Mayo & Steinberg 2007). This led to the establishment of the Power of Information Taskforce by Parliamentary Secretary for the Cabinet Office (2008-9) Tom Watson MP in 2009.

However, during the early 2000s, the Cabinet Office was home to Her Majesty's Stationery Office (HMSO) during the negotiations around the development of the European Directive 2003/98/EC on the Re-use of PSI [2003] OJ L345/90EU. As the responsibility for re-use of PSI became increasingly embedded in the work of this Cabinet Office team, its name was changed to the Office of Public Sector Information (OPSI), prior to a Departmental move into The National Archives in 2006. The context in which the Cabinet Office understand re-use of PSI can, therefore, be viewed as encompassing both the political and economic aspects outlined in the literature review.

More recently it has made a number of senior appointments which draw on both of these aspects. In 2011, Tim Kelsey was appointed Executive Director of Transparency and Open Data at the Cabinet Office for a period of 6 months. Kelsey was founder of the highly successful Dr. Foster, a company which provides information and analytics on local health service quality. He left Dr Foster in 2010 to join McKinsey, a global management consultancy company which a recent article in Red Pepper tied strongly to the push to privatise the NHS, asserting that “much of [the health bill] is thought to have been drafted by McKinsey staff...[many of whom] regularly take senior jobs inside government” (Player & Leys 2012). Further, 2011 also saw the appointment of Emer Coleman as Deputy Director of Digital Engagement.

The Cabinet Office has engaged with OGD advocates in various ways. At the highest levels there is something of a revolving door between the key OGD advocates and the civil service. Tom Steinberg, for example, prior to founding mySociety in 2003, worked in the Prime Minister’s Strategy Unit (2001-03 - Labour Government) and, since 2009, has worked as an advisor to the Conservative Party. As well as being commissioned to produce the Power of Information review by the Cabinet Minister, he has sat on the Cabinet Office based Public Sector Transparency Board since it was established in 2010. Further, Emma Mulqueeny, founder of Rewired State, was an advisor on digital communication strategy at the Cabinet Office prior to beginning Rewired State in 2009, and Andrew Stott has sat on the Public

Sector Transparency Board with other civil society advocates since retiring as the Cabinet Office's Director of Transparency and Digital Engagement in December 2010. This 'revolving door' is representative of what Coleman (2011) refers to as the "Goverati" at the core of the OGD initiative, and their ranks have been complemented by other civil society actors who have been invited by the Cabinet Office to join advisory boards such as the Public Sector Transparency Board and the Local Public Data Panel:

"3-4 months after launching it I got a call from the Cabinet Office saying we like what you're doing will you sit on this Panel - you know, helping us open data" (Interviews: Core Civil Society/Business).

The Cabinet Office has therefore been keen to observe the activities of OGD advocates in order to locate potential sources of engagement, both online and offline. As one OGD advocate reported, this has included attending meetings of civil society groups active in the OGD field:

"We actually had people from the Cabinet coming to [the] workshop - totally incognito more or less" (Interviewee: Peripheral Civil Society).

The Show us a Better Way competition in 2008, an outcome of the Cabinet Office initiated Power of Information Taskforce, was also an important engagement initiative allowing government officials to observe potential re-uses of PSI by civil society advocates, and to provide a financial bonus to civil society groups engaging in OGD such as the Open Knowledge Foundation:

“Well to some extent when we were starting out we started - we were volunteers... the Open Spending/Where Does My Money Go? was initially funded - we won a competition the Cabinet Office had funded that gave a small amount of money to a prototype” (Interviews: Core Civil Society).

Further, during the period January 2008 to June 2009, Tom Watson MP (Labour) was Parliamentary Secretary for the Cabinet Office, and used his position to further build up links between OGD advocates and the Cabinet Office. As part of these activities, he presented at the 5th Communia workshop (a European Commission funded network focusing on the Digital Public Domain) in March 2009, which was co-organised by the OKFN and the London School of Economics.

More recently, the Cabinet Office’s engagement with the civil society advocates has been most firmly established through the formation of the Public Sector Transparency Board by the new Coalition government in June 2010. This Board, which consists of civil society OGD advocates Tim Berners Lee, Nigel Shadbolt, Rufus Pollock, Tom Steinberg and Andrew Stott, sits within the Cabinet Office and is chaired by Minister for the Cabinet Office, Francis Maude MP. The formation of this board can be understood as a key element of an absorptive strategy of *trasformismo*, which aims to draw key advocates into a more restricted institutionalised structure directed at more neoliberal ends than those intended by the broader collective of OGD ‘organic intellectuals’. One Transparency Board member reported a positive experience of engagement via this model:

“What I do know is, it has been very positive in that I’ve been very impressed personally - to where with Francis - I don’t think it’s all kind of - you know [laughs] clashing with Francis ... Francis Maude and even the Prime Minister and therefore his advisors seem even more committed to this agenda of openness and something like transparency than I am” (Interviews: Core Civil Society).

The Cabinet Office also worked with the Open Knowledge Foundation to host the high profile ‘Open Government Data in the UK’ event at which the media announcement regarding the opening up of data on Departmental spending over £25,000 took place. This event was held during the OKFN’s first ‘Open Government Data Camp’ in London during November 2010, and all OGD Camp attendees were sent personal invitations by the Cabinet Office to attend the announcement. Again, this kind of activity can be understood as an attempt by the Cabinet Office to draw OGD advocates into its more restricted, institutional logic about OGD.

It is clear, therefore, that the Cabinet Office has been keen to observe and absorb some of the energy and ideas being generated by the OGD community, during a period in which it has been seeking ways to respond to the political crises being faced by the neoliberal state. As will be explored later in the chapter, the opportunities identified in OGD have, however, generally been quite different from those envisaged by many of the civil society OGD advocates.

Whilst the Cabinet Office appears to be engaging in a form of participative policy making and engagement with OGD advocates, the nature of the model is relatively restricted and elite, an issue which emerged strongly with the controversial announcement of the formation of a Public Data Corporation (discussed in Section 8.3.2.1):

“With the Public Data Corporation, where there was no voice for the open data movement really. I mean even the people in the transparency board - we were told - your voice as a movement is in the Transparency Board [by] people in the Cabinet - and people in gov - politicians” (Interviews: Peripheral Civil Society).

The Cabinet Office’s engagement with peripheral OGD advocates was, therefore, limited during this controversial policy decision although an online questionnaire was developed after policy consultation workshops were initiated by civil society advocates:

“We wrote several times actually to the Cabinet Office and in view of the lack of information we started our own consultation and that seemed to ... have an effect on Cabinet Office organising their own [engagement], and starting the whole process off - trying to define the Public Data Corporation” (Interviews: Peripheral Civil Society).

Whilst there were some strong connections between civil society OGD advocates and the Cabinet Office, this department was nevertheless perceived by some civil society advocates to be relatively weak; a claim which ties in with Morton’s (2007, p. 125) assertion that at the level of the

nation-state, those government departments closer to domestic, rather than global economic, policy making have become relatively weaker during the neoliberal era. Resultantly, they argued, this relationship still left civil society advocates somewhat distanced from many key decision makers within government and thus restricted in their ability to influence policy:

“The Cabinet Office is not very strong; the power sits with the vertical - the House, Treasury, these people - and the Cabinet Office, well, pfh [dismissive sound]” (Interviews: Core Civil Society);

“The Transparency Board was sitting in Cabinet Office shielded from the rest of Government” (Interviews: Peripheral Civil Society).

This interpretation of the position of the Transparency Board within the Cabinet Office evidences clearly the restrictive nature of the institutional environment these OGD advocates were being absorbed into and suggests a classic case of *trasformismo* by institutional absorption.

7.2.2. The Regulators: The National Archives and the Information Commissioner’s Office

The two key regulators in the OGD policy field are The National Archives (TNA) as regulators of re-use of Public Sector Information and the Information Commissioner’s Office (ICO) as regulators of Freedom of Information and Data Protection. TNA have been engaged in the OGD initiative since it began, and have been regular attendees at Open Knowledge Foundation events:

“We go along to most of the Open Knowledge Foundation events... There’s a range of people that would go” (Interviews: Civil Service/Peripheral Civil Society).

Further, they have engaged in consultancy based relationships with OGD related organisations such as the OKFN and Creative Commons in the development of their new Licensing Framework, of which the Open Government Licence is a part.

“In terms of us circulating drafts, we worked fairly closely with Creative Commons and we also, we were in contact with people who run the OKFN - Open Knowledge Foundation project - so, yeah” (Interviews: Civil Service/Peripheral Civil Society);

“We’ve had dealings with people like Jordan Hatcher [OKFN]. He was extremely helpful to us in terms of the development of the Open Government licence... There’s also of course Rufus Pollock, who is also a member of Francis Maude’s team of people on the Transparency team...we’ve had reasonable dealings with him” (Interviews: Civil Service).

These close advisory relationships again point to the restricted institutional environment that some of the ‘organic intellectuals’ of OGD are working within, and which must have a significant influence upon their ideas and activities around OGD.

The TNA were also engaged with the civil society advocates through reading research undertaken by advocates that was commissioned by the government:

“This also goes back to Rufus Pollock’s report of course, you know, the concept that if you make information available at marginal cost then the benefits flow back to the economy by stimulating the re-use industry, publishing and - but it does actually take a bit of a leap of faith to get to that point” (Interviews: Civil service);

“If you go back to The Power of Information review, you’ve got things like the idea of communities of people coming together to improve and create public services” (Interviews: Civil Service/Peripheral Civil Society).

The ICO, however, for various reasons, including a significant backlog of work and lack of statutory responsibility, has been less engaged with the OGD initiative:

“We are still exploring it. I think it’s still developing... I’ve certainly met a number of people over the last few years, and a number of other people in the office have, so we are just starting to build up contacts, which will become more and more as they - we have as a stakeholder map, to use the jargon... previously open data advocates weren’t that strongly on our stakeholder map, but increasingly they are - and they are increasingly important to us” (Interviews: Civil Service).

7.2.3. The Department for Business, Innovation and Skills

The Department for Business, Innovation and Skills (BIS) has also had limited engagement with OGD advocates. However, one key line of engagement has been the joint commissioning of the report, ‘Models of Public Sector Information Provision via Trading Funds’ better known as “The

Cambridge Study” (Newbery et al 2008) by HM Treasury and the then Department for Business, Enterprise and Regulatory Reform. A key author of this report was the OKFN co-founder Rufus Pollock in his position as Mead Fellow in Economics at Cambridge University. This study appears to be the main line of connection between BIS and the OGD advocates, however acceptance of its arguments – or “the Pollock line” - within BIS has been mixed (Interviews: Civil Service). Civil Society advocates also reported limited, if any connection with BIS:

“The people that we really need to influence are Business - The Department for Business - you know, they were too far away” (Interviewee: Peripheral Civil Society).

This sense of disconnect between OGD advocates and BIS is a key example of the restricted policy making environment that the civil society OGD advocates had been drawn into. The disconnection was particularly stressed by civil society advocates in relation to the Shareholder Executive’s (the body that acts as the government shareholder of the Trading Funds, and which is part of BIS) development of policy around the Public Data Corporation:

“They are not clear, the Shareholder Executive are not clear - there’s no clear articulation with it as to what it [PDC] is meant to do” (Interviews: Core Civil Society).

Further, a senior civil servant supported the civil society OGD advocates’ perception that the Transparency Board were “consulted but not listened to”

by the Shareholder Executive during the Public Data Corporation policy making process (Interviews: Civil Service).

7.2.4. Local Authorities

Whilst the interconnections between OGD advocates and the key national policy making departments and regulatory bodies tended to be restricted to core OGD advocates and national organisations such as the OKFN, at a local level engagement was much more diverse with both peripheral and core OGD advocates engaging with the small number of local authorities active in the OGD domain. As one local government employee keen on fostering public engagement articulated:

“I’m connected because I engage and I need that outside influence to help me deliver my agenda” (Interviews: Local Government/Peripheral Civil Society).

Interestingly, this local government actor stipulated a personal agenda that they wish to deliver on the back of such participative processes. It is therefore questionable whether engagement and participation less advantageous to their agenda would be similarly encouraged. Indeed, references to the “loony left kind of problem” in local government by the same interviewee would suggest not.

This engagement between OGD advocates within local government and civil society emerged from a number of sources, including online social networking, attendance at local groups and consultancy/advisory roles being

undertaken by OGD advocates in local authorities. For some advocates Twitter was a critical site of interaction between local government and civil society OGD advocates:

“After I’d started someone ... said look you really want to get on Twitter, because there’s loads of local government people on there, and there’s loads of open data people on there, and actually where the two meet is Twitter essentially, and that’s been enormously useful” (Interviews: Core Civil Society/Business Interest);

“I don’t think the [OGD project] would work without Twitter. I mean it is a crucial cog...It’s like a hinge really - really you just wouldn’t have the discourse that it’s capable of generating. Or, the knowledge that comes back. So, we pick up lots of stuff on Twitter around Open Data” (Interviews: Local government/Peripheral civil society).

Further, online interactions also took place between local government and civil society OGD advocates on local OGD mailing lists such as the Open Data Manchester Google Group (groups.google.com/group/opendatamanchester).

Local groups such as Open Data Manchester, which meets on a monthly basis, were also sites of interaction for peripheral OGD advocates, local developers and businesses, local government and other public sector employees who met regularly to discuss new data releases and efforts to open data at a local and, sometimes, national level. Further, local government interviewees reported that their independent attendance at OGD

related events had sparked their interest in OGD and led to projects being developed in their own local authorities. Coleman (2011) further reports on her team's efforts at the Greater London Authority to engage local developers and OGD advocates in the development of the London Datastore:

"The London Datastore data release model is predicated on the involvement of digital disrupters and media – part of those included in the Goverati. While this group may well be viewed as those with ample opportunity to engage in public policy debates, many of those engaged with the London Datastore had tried for many years, with no success, to get public agencies in London to release their data. That they had failed to succeed in the past in doing so they attributed to the fact that they were outsiders with no ability to engage public officials and no real ability for them to exert the necessary pressure on public officials to change. The invitation for them to come to City Hall therefore and work collaboratively with the state on releasing data was seen as a key factor in unblocking bureaucracy and giving them a meaningful way to engage in public policy development around open data" (p. 39).

Core OGD advocates were also engaging with local authorities via their work in national organisations such as MySociety and the OKFN; however, these relationships often had a commercial basis:

"Well Tom Steinberg from - was pestering me last week because I think - because they're a charity they need funding and local authorities we report potholes in the street and stuff, and I think - I get the impression they want

to engage more with local authorities, so that we can pay MySociety to do that” (Interviews: local Government/Peripheral Civil Society);

“Rufus Pollock, from Open Knowledge Foundation ... there are connections with [Local Authority project] - we’re using his [sic] software - the CKAN software” (Interviews: Local Government/Peripheral Civil Society).

The more qualitative evidence presented in this section thus appears to support the suggestions of the network diagrams presented above. It suggests that a subsection of core OGD advocates are engaged at the level of national government, primarily with the Cabinet Office, and also are attempting to engage with local authorities - although these local relationships tend to be more commercially orientated. Peripheral OGD advocates, on the other hand, are more likely to be engaging with local authorities which have been early adopters of OGD. Further, these local relationships tend to be fairly collaborative and have produced active cross-sector spaces, both online and offline, where those interested in OGD can connect and push the agenda forward. Areas of disconnection appear to be between key civil society advocates acting at the national level and more peripheral OGD advocates, and between civil society OGD advocates and key government departments such as the Department of Business, Innovation and Skills, which includes the Shareholder Executive. What is clear within these collaborative and advisory relationships is that the ‘organic intellectuals’ of the OGD initiative have been working in environments that have opened them to significant influence from the state based advocates

that they have been engaging with, whilst also positioning them in institutional environments where their own influence is relatively restricted.

7.3. Alliances with Commercial Re-users

Similar to the variability in relations between civil society advocates and state institutions and employees, the relationships and awareness between OGD advocates and the commercial PSI re-use industry varied between advocates. At a local level, peripheral advocates were frequently engaged with SMEs, such as Talis, Iconomical and ITO World, in both OGD groups and in developing OGD re-use projects. Connections with the corporate PSI re-use lobby, however, were more apparent amongst those OGD advocates working at the national level. Indeed, many peripheral OGD advocates were unaware of the PSI industry lobby, although some reported this began to change as policy development processes unfolded:

“I think things like the Public Data Corporation are making people realise all these other organisations out there using data, so I think there’s been a perception of some people that the main users of open data are these hacker developer types, and they’re now recognising there are people making use of government data and building big businesses off it for a long, long time often through exclusive agreements and so on. So things like the Public Data Corporation discussions are bringing a bit more of that to the fore, because they’re bringing out all the different actors associated with data use” (Interviews: Peripheral Civil Society).

OGD advocates with a high level of awareness about the PSI re-use industry reported limited connections between OGD advocates and the PSI lobby within the UK, perceiving it as “culturally, and historically... a very different beast” (Interviews: Peripheral Civil Society). Strong connections were, however, reported at the EU level:

“Well - we haven't really.....We haven't got a very close relationship, but we do have some contact with like Locus Association⁶, and with other - with some of the groups... So, most of the PSI people that I've met, in contact with, are actually in the European level. In the UK I've met some through the PDC [Public Data Corporation], but it's a very, very different - I don't know maybe it's when you are abroad - things seem a bit more chilled, as you can sit with... proper business people from LexisNexis, or... from the European Association of PSI - like total corporate... Come across here, we've been sitting with people like Intelligent Addressing, and it's just like an embarrassing family occasion - this thing with your uncles ... or something strange like that- and there it's like - there is no - it's much more difficult to connect in the UK. But people in the European level it seems a lot easier to see the continuity from the PSI... so there is more of a shared space there” (Interviews: Peripheral Civil Society).

Interestingly, the UK PSI industry represented by the Locus Association, has had little difficulty building connections with the UK civil service. Indeed,

⁶ The Locus Association represents the PSI re-use industry in the UK, and is a founding member of the PSI Alliance which represents industry interests at the European Union level. These organisations' members are drawn from both UK/EU based companies and multinationals with business interests in the UK/EU.

some civil service interviewees were keen to emphasise their relationship with the Locus Association's former Chair, Michael Nicholson. As well as his connection to Locus, Nicholson is also the former Managing Director of Intelligent Addressing Ltd - a private PSI related firm acquired by the state in 2011; Deputy Chair of the PSI Alliance (EU PSI lobby); and expert member of the UK government's Advisory Panel on Public Sector Information (APPSI), which he joined shortly after his PSI related complaint against Ordnance Survey was overturned by APPSI in 2007. Nicholson is also known for arguing that the state ought to be rolled back to areas of market failure and statutory requirement, and proposing marginal cost re-use of PSI *procured* (not collected) by the state to meet its requirements for 'good government' (Nicholson 2009).

A PSI industry interviewee confirmed this perception of strong links between civil society OGD advocates and the PSI industry at the EU level, stating that PSI re-use industry firms "have been aware of [the OGD initiative] since day one", and there were lots of connections between the two groups at the European level. However, these connections tended to be around engaging in similar conferences and sharing platforms, rather than being "a day to day" relationship (Interviews: Business Interest). Examples of such conferences include those co-organised by the OKFN such as the 5th Communia workshop, at which Michael Nicholson spoke, or the Open Knowledge Conference which had speakers from Google on the agenda.

These connections, and the relatively positive interpretation of them by some of the 'organic intellectuals' of the OGD initiative, suggests something of a de-politicisation of some corporate interests, particularly where interests around OGD might overlap, and echoes the community efforts to present a non-critical public discourse discussed previously. This tendency towards de-politicisation in order to push forward the OGD agenda is also visible in some of the funding relationships that the advocates have secured. Some of the national OGD groups such as the OKFN, for example, have strong funding relationships with the philanthropic foundations of the contemporary capitalist class. Such funding includes:

- A \$750,000 grant to the OKFN in 2011 from the Omidyar Foundation, the philanthropic foundation of Pierre Omidyar, founder of e-bay (<http://blog.okfn.org/2011/09/19/omidyar-network-support-okf-to-go-global> - date accessed: 23/03/12, date accessed: 23/03/12);
- A \$575,000 grant to MySociety from the Omidyar Foundation in 2010 to build organisational capacity and provide expertise to build open source websites for Africa (<http://www.mysociety.org/2010/07/02/omidyar-network/>, date accessed: 23/03/12);
- A fellowship worth \$366,118 in 2011 for Rufus Pollock from the Shuttleworth Foundation, the philanthropic foundation of South African open source entrepreneur Mark Shuttleworth

<http://www.shuttleworthfoundation.org/fellows/dr-rufus-pollock>, date accessed 19/07/12);

- Travel bursaries to the 2011 OGD Camp provided by the Open Society Institute (the philanthropic foundation of financial market investor George Soros).

Further, the civil society OGD advocates have also attracted funding and investment from a number of other capitalist interests, including:

- A \$1million venture capitalist investment in Scraperwiki by Enterprise Ventures and Blue Fountain in 2012;
- Sponsorship for food at the of Open Government Data Camp 2011 by Google and Microsoft;
- IBM and Siemens working as partners of Open Knowledge Festival 2012.

These relationships suggest that whilst the civil society OGD advocates might have had difficulty developing relationships with the PSI re-use lobby at the UK national level, there has been less difficulty in fostering relationships at the level of transnational corporations and with the philanthropic foundations of the economic elite.

The suggestion is, therefore, that there might be something specific about OGD that is of significant interest to transnational capitalists. The borderless nature of OGD as a resource is a potentially lucrative site of exploitation by transnational capitalist interests, whose flexibility in relation to space allows

them significant room for manoeuvre in terms of regulatory and taxation constraints. It will be interesting to observe how the shaping of the re-use domain around OGD plays out in relation to these issues.

The alliances between civil society, state and industry OGD advocates are, therefore, complex and multi-layered. In particular, the difference between more local and peripheral civil society advocates and national and core OGD advocates is relatively marked, with the latter being far more interconnected with central government departments and transnational capitalist class interests, and the former engaging more at the local government and SME level. The alliances developed and the apparent de-politicisation of corporate interests by some of the OGD advocates in fostering these relations, as with the relationships developed with some state based actors, creates an environment in which there is scope for significant influence of corporate interests in the evolving 'common sense' and activities of the 'organic intellectuals' of OGD. Whilst for some it might be a pragmatic move given the limitations of current structural conditions, the influence must still no doubt shape the path OGD advocates move along.

In neo-Gramscian terms, these complex relations between OGD 'organic intellectuals' and advocates in the state and industry are indicative of processes of *trasformismo* which aim to domesticate the OGD initiative and make it more amenable to hegemonic interests. The following section outlines some of these interests, exploring the ideational constructs presented by OGD advocates within the state and industry, and compares

them to those of the civil society OGD advocates explored in the previous chapter.

7.4. Ideational Constructs Supportive of OGD in the State and PSI Re-Use Industry

It is clear that the alliances developed between the ‘organic intellectuals’ of the UK’s OGD initiative and certain interests within the state and industry are significant, and are likely enhancing the power of state and corporate interests to exert influence on the agenda of OGD advocates. In accordance with the analytical framework, it is therefore critical to understand better the ‘common sense’ of OGD advocates in the state and industry, and how this relates to the ideas of the ‘organic intellectuals’ that are pushing the initiative forward from civil society.

Whilst ideas about increasing workplace efficiency and enabling digital innovation did arise for some local authority OGD advocates, the more common thematic concerns for state based OGD advocates were around generating citizen trust, citizen participation and engagement, enabling citizen-consumer choice, and liberalising the PSI re-use markets. For the PSI re-use industry, the main concern was simply further liberalisation and marketisation of the PSI markets. There were, therefore, some overlaps between the ideational spaces of civil society OGD advocates and those supporters of OGD in the state. However, the ideational constructions of state based OGD advocates were more firmly entrenched within the

neoliberal agenda, unlike the critical perspectives of *some* civil society OGD advocates. Whilst it is not argued that these were always fully articulated neoliberal ideological constructs, the hegemonic ‘common sense’ of neoliberalism was potently evident amongst many state and industry interviewees. Some state based OGD advocates also articulated concerns around balancing privacy and access as examined by O’Hara (2011) and the need for improved information management processes across the public sector. However, these concerns are not the focus of this study and will not be taken further.

7.4.1. Trust in Politicians and the State

A discourse of trust was one that emerged strongly in interviews with, and observations of, state based OGD advocates at both a local and national level, particularly amongst those agencies more deeply engaged in democratic processes such as local authorities, the ICO and the Cabinet Office.

“It’s fundamentally a political initiative, driven in large part by elected politicians’ view that trust in government can only be maintained these days if government is more open and transparent, and that’s why politicians are prepared to be so masochistic about it” (Andrew Stott, former Director for Transparency and Digital Engagement, Cabinet Office, “Challenging Openness” session FutureEverything conference, Manchester, 2011);

“Trust is a big one - because I think we can ultimately as an organisation, from a working point of view, you can build up trust in the local community if you open, if you’re open about information, and open about what it is you do” (Interviews: Local Government/Peripheral Civil Society);

“I think public bodies have taken it [FOI] seriously, but it’s moving it beyond just an acceptance that it’s a law we have to comply with from a public body’s perspective, but it’s a law we can actually use to our advantage in terms of trying to improve trust, and not necessarily say a law to use to our advantage in terms of spinning, in terms of disclosing information.... [Trust] - It’s really important ... it is central and underpin[s] ...the real benefits of FOI ... We are very interested in it, and it helps us understand the public interest more which is what we are about” (Interviews: Civil Service);

“And again the trust there, if we can say that we are being totally frank with people then they’re more likely to get engaged - than us sending out some of the propaganda that you might call it that councils do put out, where every single figure or every single statistic has a particular analysis or spin put on it to make it look like a good one” (Interviews: Local Government).

This sense of a need to generate trust between public bodies and citizens was perceived by some OGD civil society advocates as a response to the political crises, such as the MPs Expenses Scandal, discussed in sections 3.6 and 6.3.3:

“The crisis of legitimacy, and that I think is a fundamental backdrop to all of this from a political perspective. And, that I certainly - I was very interested in the meeting on Wednesday to hear people who have just been working very

closely with government reiterating that still as a motivation for the current government and the current actors - that in the last couple of weeks [February-March 2011] that's been said as motivation" (Interviews: Peripheral Civil Society).

As argued in section 2.4.2, these conceptions fit within a traditionally liberal (top-down) model of generating citizen trust and "informed consent". Whilst legitimacy and trust are different concepts they do overlap, particularly within the context of liberal political economies. For example, John Locke (1980), in his second treatise on government, recognises that government is only legitimate if those that are governed consent to being governed. More recently, Fukuyama (1995) has argued that whilst he believes neoliberal free market economists were eighty percent right with their rationalist, self-interest model "about the nature of money and markets" they missed the cultural aspect of a successful political economy. He goes on to argue that "a nation's well-being, as well as its ability to compete, is conditioned by a single, pervasive cultural characteristic: the level of trust inherent in the society" (p. 7). These notions of trust, legitimacy and consent intersect with the Gramscian notion of hegemony. However, the neo-Gramscian approach pushes the analyst to look more critically at what specifically "consent" – or trust, or legitimacy – is being generated for. Drawing on Fukuyama's arguments, it is clear that the desire of the state to reach out and build trust and consent amongst citizens is not necessarily a progressive move, but one which could act to reinforce the crisis ridden status quo of neoliberal capitalism and the austere state.

Whether trust will, or even can, be manufactured through transparency is a fundamental question, although it was not one articulated by state based interviewees interested in trust promotion. It is interesting to consider, however, how this ‘trust’ heavy discourse coming from state based OGD advocates might have functioned in generating the high level of “trust” that Halonen (2012, p. 93) observes in some of the collaborative alliances discussed above, and which furthers the scope for state influence on the ideas and activities of the ‘organic intellectuals’.

7.4.2. Citizen Participation and Engagement

Related to the desire to generate citizen trust in public authorities, a number of state based interviewees discussed efforts to increase citizen engagement and participation with public bodies:

“So yeah, that is the only - that for me is really the only thing that should drive us, is better engagement with the public, getting people on board, and opening things up...” (Interviews: Local Government);

“We need to have more engagement - have a conversation rather than just broadcast” (Interviews: Local Government/peripheral civil society).

In some cases this engagement was in relation to the development of public services:

“We’ve become much more dependent upon the public accepting that we can’t deliver services the way we did anymore. If they don’t come on board and join in with us in developing the future services, we will suffer as a

result” (Theresa Grant, Acting Chief Executive of Trafford Council, “Challenging Openness” session, FutureEverything conference, Manchester, 2011);

“It’s about developing listening public agencies, agencies that are prepared to listen to what the public think of their services driven by data and are prepared to change as a result – otherwise it’s not worth doing at all” (Andrew Stott, former Director for Transparency and Digital Engagement, Cabinet Office, “Challenging Openness” session, FutureEverything conference, Manchester, 2011).

In other instances, participation appeared to be constructed as active citizens holding public bodies to account, for example, through scrutinising spending data:

“It’s about developing the army of armchair auditors, those people who are actually going to go to OpenlyLocal every day, see what’s new about their authority and take action about it, go and organise around it” (Andrew Stott, former Director for Transparency and Digital Engagement, Cabinet Office, “Challenging Openness” session, FutureEverything conference, Manchester, 2011).

To a lesser extent participation was more closely linked to citizen (or, more specifically, “digital disrupter”) engagement in policy development, for example, in the case of the interaction between developers and public officials in the development of the London Datastore (Coleman 2011). However, for one local government OGD advocate, some types of citizen (in

particular, those employed by local authorities) were perceived to be a hindrance to the interviewee's agenda for change:

"I think local authorities are far more full of it than central government, because I suppose they're closer to what they do, they're closer to their communities - most people that work in local authorities - many of them - actually come from where they work. It's kind of - there's not that move around of people, there isn't the kind of refreshing of values and of perspectives - and I think it all impacts on something that you have to do quickly, that's very different like this" (Interviews: Local Government).

It is important to read and understand these constructions of participation within the broader political economic context. In terms of citizen engagement in the development of public services, citizen and worker participation in service design does offer scope for the democratic and continual improvement of, for example, health services and education. However, in reality these services are suffering significant funding cuts, jobs losses, marketisation and anti-democratic outsourcing of decision making to private bodies and away from local authorities (i.e. the Academies and Free Schools policies). Thus, in the current context, citizen participation risks being co-opted into marketisation agendas and a deepening of the neoliberal project, rather than democratic service development.

In relation to the democratic construct of participation the critical questions have to be participation for whom, in which decisions and in what overarching framework? It is notable, for instance, that these calls for increased participation are taking place within a context of increasing political

and management pressure to restrict collective participation via Trade Unions, through attacks on bargaining and strike rights (Milner 2012). Further, for one state based interviewee, whilst citizen engagement in decision making was encouraged for some issues, this participation was perceived to be necessarily restricted:

“The whole debate around participatory budgeting is a farce...[Politicians] need to come to those decisions in consensus with those people who elect them...then there are some times, just times when that’s not possible. And, that can be a resource restriction, and that’s why I think when it’s not possible consultation should not be sought...you can say this whole bunch of stuff is regulated by statute ... and there’s nothing we can do... So, it’s about honesty... Saying to people - so there may be things that the state has to do, that only it can do and it has no choice over whether it’s regulation or legislation, and it should be honest about those things, and it should be judged on the validity of those things” (Interviews: Local Government/Peripheral Civil Society).

Whilst this interviewee does argue that the state should be judged on the validity of the regulatory structures around decision making, in reality there is very limited awareness of the regulatory frameworks that states function in and, further, that much of the regulatory framework is constructed at a supranational level with limited democratic oversight. Claims of increased democratic participation thus have to be contextualized by an understanding of the institutional limits of neoliberal capitalism and the austere state that these participatory paradigms are developing within. The participatory ideas

being generated by these state based OGD advocates therefore seem to distort the more transformative participatory constructions articulated by some of the civil society 'organic intellectuals'. This pattern suggests processes of *trasformismo* by "ideational distortion" being active within the initiative.

7.4.3. Citizen-Consumer Choice

Amongst some local authority OGD advocates, the promotion of choice underpinned their support for OGD. One local authority employee elaborated that,

"It's opening up the choice for people... there's an app...where you've got all the care homes and you can go on there and you can check what was the last rating of this? and, how clean is it? and, what are your chances of getting MRSA in a particular hospital? and that coupled with - again - some of the government legislation on opening up choice to people, so you can go to the hospital you want to, you can go to the doctor you want to"
(Interviews: Local government);

"What they [the public] want is information, they don't see it as data...they want to know what's the best school for their kids, and they want to know if they have equitable access into the schools in the area, and is it easier or better somewhere else..." (Teresa Grant, Acting Chief Executive Trafford Borough Council, "Challenging Openness" session, FutureEverything conference, Manchester, 2011).

This interpretation was also articulated by a senior civil servant, who supported the release of prescription data so that “consumers” (or, patients) could compare the data (Interviews: Civil Service). This construct of choice for citizens aligns closely with the notion of the citizen-consumer, in which users of public services are expected to act as consumers of market goods, using information to make decisions on their use of a range of competing public services:

“I mean the economic competitiveness comes back to that thing of choice with people - if a particular service is poor then someone else can come up there and say well we can offer it better, can offer you a better outcome, at the end of it” (Interviews: Local government).

Such advocates of OGD argued that such competition would drive up standards in public service provision:

“Interviewer: Do you think the choice thing you mentioned - do you think that has a potential of affecting the quality of services if people have that ability to choose?

Interviewee: Oh - of course! Yes! ... if you look on your app or computer and find out that the hospital down the road, 50% of people going there are coming out with MRSA then you’re unlikely to want to go to it aren’t you? And so, inevitably, or you would hope that you would drive up standards there and create better public services from it...” (Interviews: Local government).

For this interviewee, these improvements were not expected to create an equality of service provision. However, it was expected that it would lead to improvements across the board:

“If you’re down at the bottom your expectations aren’t as high as somebody who’s at the top. So, I don’t think it would go as far as creating equality in public service delivery, but it would certainly I hope improve things in relation to where they were...” (Interviews: Local government).

However, for other local authority OGD advocates this informed choice in public services was hoped to generate equality in public service provision:

“We should be using data as an enabler to drive our services and improve them. So all of our schools should be good schools, it shouldn’t be a question of providing data so people can choose the best one. We should be using the data to drive us as public servants to make sure that all of them are good schools and all are first choice” (Teresa Grant, Acting Chief Executive Trafford Borough Council, “Challenging Openness” session, FutureEverything conference, Manchester, 2011).

In this particular local authority, such ideas of a competitive market for public services provision had been put into practice. For example, in the education system, which also still runs a grammar school system, the local authority has only retained decision making powers for admissions and management responsibilities in one community high school which it recently tried to close down, the remaining 17 high schools being Foundation Schools, Academies or voluntary aided religious schools. As Keri Facer, has argued, this kind of information driven choice is “embedded in market democracy rather than a

participatory democracy” (Keri Facer, “Challenging Openness” session, FutureEverything conference, Manchester, 2011).

What is critical to appreciate in these constructions of competitive citizen-consumer choice is that rather than democratically producing an egalitarian public service, such a model is likely to exacerbate inequalities and enhance the powers of vested interests including socially privileged service users and profit seeking firms. This is because in any competitive process there are by definition winners and losers, and those already experiencing relative social privilege are more likely to benefit from such models of choice. Furthermore, it is crucial to consider the impact of these competitive processes on the working lives of those providing the services and on ‘undesirable’ service users; the quantitative nature of the tools being used to judge the outcomes of public services; the construction of value embedded in the different measurements used to judge the quality of a public service; where the democratic space is to engage citizens in the development of public services; and, how to deal with problems arising when the data are not perceived to match the experience of service users and providers. Thus, even though OGD advocates across all sectors are pushing for change in relation to public sector governance, processes of ideational distortion of some of the civil society advocates more democratic and transformative ideas appear to be active.

7.4.4. PSI Re-use Market Liberalisation

For those state based OGD advocates that were active in the field of commercial PSI re-use their discourse was strongly in favour of further liberalisation, or the removal of barriers for commercial re-use, of public sector information markets:

“Public sector information is a valuable commodity, you need to make the [re-use] processes as easy as possible... to remove obstacles to re-use wherever possible” (Interviews: Civil Service).

However, some of these civil servants did not necessarily challenge the current regulatory framework which allows charging for re-use in limited circumstances under the Exceptions to Marginal Cost Pricing policy, which sanctions charging if a public body needs to generate revenue in order to continue producing the data. Thus, whilst much PSI has been available free of charge for a long time,

“It still remains the policy at the moment that charging is still appropriate in certain cases, particularly when we talk in terms of the Trading Funds” (Interviews: Civil Service).

This perspective was also apparent in other parts of the civil service, as described by a local government interviewee:

“I had an exchange with the senior civil servant around the Public Data Corporation at a meeting, and she said well it’s all about making data more freely available - and I said are you making a distinction between free and

freely available, and she said - “well yes I am”” (Interviews: Local government/Peripheral Civil Society).

This distinction overlaps somewhat with the position of the PSI industry lobby. Firms in the re-use market have been pushing for a reduction in charges from average cost to marginal cost in order to promote private re-use markets and cut out the public sector. However, unlike OGD advocates they are happy with a marginal cost pricing framework that may involve some charges:

“Some companies are very happy to pay for data, because they realise that they want to have a quality product - pay for it. But what they want is a marginal cost, which stops the public sector from competing in the market, because they are not supposed to compete, they are supposed to just provide the information” (Interviews: Business Interest).

However, some smaller UK firms wanted no changes to the current regime which their business models were based upon (Interviews: Civil Service). For these firms, change meant a need to invest resources and a potential risk to the success of their business models.

Whilst this current regulatory framework might soon be changed as a result of potential amendments to the charging rules stipulated in the EU PSI Directive, the current policy and regulatory framework allows for average cost charging. Therefore, the intention of state based OGD advocates in the UK was to liberalise re-use within the current regulatory and policy framework through amendments to licensing:

“Our Click-Use licence back in 2001, which was trying to make the whole process of licensing that much easier - trying to remove some of those obstacles” (Interviews: Civil Service);

“[We] wanted a licence that was non-transactional, because the existing system which was called Click-Use had a transactional element. People had to register and go through an application process, and even where that was fairly minimal it was still felt to be too much. And the other - that’s on the demand side. And on the supply side, the Click-Use system needed other [public sector] organisations to sign up to it explicitly, if they weren’t part of Central Government already... quite a lot of the content has actually been free for a long time. It’s just - the Open Government Licence has just made it easier for people to use” (Interviews: Civil Service/Peripheral Civil Society).

To this end, The National Archives are developing a new UK Government Licensing Framework for Public Sector Information, of which the new Open Government Licence is a key part. This new framework also includes a new Non-Commercial Government Licence, and work on a new Charged Licence is currently underway (<http://www.nationalarchives.gov.uk/information-management/uk-gov-licensing-framework.htm>, date accessed: 12/12/12).

Whilst the OGD advocates have been pushing for the use of Open Licences, in most cases in accordance with the Open Definition, the PSI re-use industry tends to want contracts and licences that guarantee their supply whilst advocating for reform in order to simplify the licensing framework and create a “fair and level playing field” (Interviews: Business Interest):

“Licensing conditions are often pretty inconsistent and they’re complex. They’re favouring certain partners or certain people, or certain users [?] while discouraging others... licences are really very important, so if they’ve got a contract with an end-user who are going to pay them x amount of Euros or pounds a year, they want to get - they want a promise that they can deliver the dataset the next month, or the next day - or there’s going to be a continual daily feed, or however their business model is” (Interviews: Business Interest).

These differences between OGD advocates and the PSI re-use industry, one industry representative stated, have generated,

“A slight underlying tension between PSI re-users for commercial use and open data users for apps... but it’s a slight tension, really - it’s still - they’re both part of the same wave, in terms of they both want better access to information (Interviews: Business Interest).

The PSI re-use industry is engaged in developing a wide range of products for both business and consumer markets often utilising high level skills to work with complex datasets such as legal, geographical, and business data. Unlike in some industries, the large PSI re-users tend to be in alignment in their lobbying approach because they tend not to compete directly with one another (Interviews: Business Interest). Interestingly, some civil service interviewees working in the field of commercial re-use perceived that the OGD model would have a limited impact on large commercial re-users of big public datasets:

“Whether or not it [OGD] is stuff that’s useful for them [big businesses] is another question... I suppose they would often fall into the charged category as well, in that they’ll be taking information from some of the bigger information traders - so, maybe it’s Experian or something getting information that would be used for credit references....whereas the SME category is probably more likely to be using the open data. It’s probably a bit of a too trite a categorisation...the charge stuff can go to both ends of the spectrum. But you probably won’t find quite as much big business interest in visualising government expenditure data or something like that” (Interviews: Civil Service/Peripheral Civil Society).

However, others working in non-regulatory roles were more optimistic about the potential of the OGD agenda for large commercial re-users. Asserting a “total faith in markets”, one senior civil servant complained that the current regulatory and licensing regime was too restrictive for commercial re-users, and a model of taxpayer funded, marginal cost, well managed OGD that others could re-use would benefit a range of data dependent industries (Interviews: Civil Service). In particular, a desire was articulated about enabling transnational financial and corporate interests to fully exploit public data, including through the development of weather derivative products and SmartCities initiatives (Interviews: Civil Service).

In relation to the SmartCities initiatives, whilst many independent and civic developers have taken advantage of open public transport data, the significant issue here is in relation to further corporate takeover of the infrastructural systems that urban services and utilities are based upon. As

The Future of Cities, Information and Inclusion report states, in a section labelled “Battle for the Smart City”:

“Managing rapid urban growth and global warming will give rise to a multi-trillion dollar global market for smart cities and infrastructure...Industry leaders will have clear visions for the growth of cities—and will promote those agendas with city officials” (Institute for the Future, 2010).

Whilst this is billed as a 10-year forecast it is already a present reality in the UK with TNCs’ (e.g. Cisco, IBM, and Oracle) Smart City visions receiving support within the state. These TNCs are keen to take over and develop new ‘Smart’ integrated urban infrastructures, such as public transport systems. In order to develop such systems they need access to - and the ability to integrate - the same types of databases that independent developers and OGD advocates are pushing to get opened (Interviews: Civil Service). There is, therefore, a significant risk of corporate monopolisation of the shaping of urban infrastructures, something which, among other issues, risks profit seeking, rather than sustainability and local governance, shaping their development.

A further significant issue is around the development of a UK based weather derivatives market (See Table 14 below). In the UK, there has been significant lobbying by the financial industry to get better access to UK weather data so that it is able to compete in the weather derivatives market. Groups such as the Lighthill Risk Network, of which Lloyds of London are a member, have lobbied government for better weather data so that they can

develop risk based weather products (Department for Business Enterprise and Regulatory Reform 2008). Similarly, the insurance industry has requested real time information on the pretext that they might respond more quickly to extreme weather events such as flooding (Department for Business Enterprise and Regulatory Reform 2008).

Beyond licensing changes, a critical regulatory tool in the attempt to open up the PSI re-use market is defining the concept of the 'public task'. In relation to the current scrutiny and cutting of public services, concerns may be raised about the desire to push public bodies to define their 'public task'. The Advisory Panel on Public Sector Information, in which TNA participates, proposes that there is,

“a dichotomy between public task in the narrow context of public sector information and information trading, on the one hand, and the broader philosophical issues of public services and national policy on the other...if the project and principles get embroiled in the latter it would be difficult to reach any conclusion” (APPSI 2011).

However, such reductionism in order to more easily reach a conclusion is problematic. Removing the discussion from the context it exists within could provide a backdoor to force the privatisation of public services and further scaling back of the public sector. Beyond ideological differences, further cuts to the public sector would also have a significant, immediate and detrimental socio-economic impact outside of London where employment has been more dependent upon public sector jobs since manufacturing industries moved to

Table 14 - The weather risk management and derivative industry

The weather risk management and derivatives industry first emerged in 1997 with transactions between Koch Industries and Enron (http://www.wrma.org/risk_history.html, date accessed: 04/01/12). The idea is that because weather conditions can impact on a significant proportion of economic activity firms should buy weather risk management products that offset some of this risk. Products are popular in the utilities industries, but also agriculture, retail, construction, transportation and other industries. The kinds of weather events traded on tend to be temperature (most popular), precipitation, wind, sunshine, growing days and humidity (least popular) (http://www.wrma.org/risk_trading.html, date accessed: 04/01/12). These weather risk products are then managed by the finance industry in much the same way as other risk based products such as credit, mortgages and extreme events – that is they are restructured and repackaged to (supposedly) distribute the risk (http://www.wrma.org/risk_trading.html, date accessed: 04/01/12).

At present most of these transactions are done through the Chicago Mercantile Exchange and are managed by weather trading operations, trading desks of financial institutions and utilities companies, hedgefunds, commodity traders, and insurance companies (http://www.wrma.org/risk_trading.html - date accessed 04/01/12). This weather risk management market far outweighs the USA's commercial weather products market which in 2000 was estimated at approximately \$500 million a year (Kelly 2001).

Price Waterhouse Coopers estimate the total value of the weather risk management market grew from \$2.5 billion in 2000-2001 to \$45.2 billion in 2005-06; a 5-fold increase from \$9.7 billion in 2004-05 (data for the period since 2006 is not public) (http://www.wrma.org/members_survey.html, date accessed: 04/01/12). The 2006 figures also evidence that over 1 million contracts were traded on the Chicago Mercantile Exchange during 2005-06, up from 223,139 in 2004-5 and most of these contracts were based on US meteorological data (<http://www.wrma.org/wrma/library/PwCSurveyPresentationNov92005.ppt>, date accessed: 04/01/12).

These weather data are freely available from the US National Weather Service, and this free availability has been cited by a number of authors as the reason for the growth in the weather derivatives industry in the USA. Weiss (2002), for example, bemoans the fact that limited access to weather data in the EU had by 2002 resulted in a weather risk management industry 13.5 times smaller than the nascent US industry which by this date had built up \$9.7 billion dollars of contract value over 5 years.

countries with cheaper labour as capital became more globally mobile in the 1980s (see Tomlinson 2012).

The discourse of OGD advocates within the state was, therefore, one of “remov[ing] obstacles to re-use wherever possible” (Interviews: Civil Service), and this overlapped with the construction of the PSI industry’s discourse:

“They come across various different barriers to re-use which is what the Directive - the PSI Directive - is supposed to tackle, and hasn’t yet” (Interviews: Business Interest)

For the PSI industry, however, the construction of its position was also framed within the concept of “fairness”:

“The objective... [is] basically to achieve a fair and level playing field in the PSI marketplace...for them to be more transparent, and more fair... barriers are sort of blocking the fair and level playing field” (Interviews: Business Interest).

This discourse of “fairness” is commonplace within the relationship between industry and the public sector, as articulated in the CBI’s (2006) report on “competitive neutrality” in the UK public service market. This report argues that,

“The government is to be commended for its commitment to the wider use of market instruments: [however] the time has come to re-address their fairness.... unfair competitive advantages are most often enjoyed by public or partly privatised bodies...government should not discriminate between

operators with different ownership structures... make sure there is a fair field and no favours... where it will serve the public interest, public sector providers should face competition from private and voluntary providers” (CBI 2006).

The discourse of the “fair and level playing field”, is, therefore, one of marketisation and privatisation, not simply in the PSI re-use markets, but more broadly across the whole of public service provision, and it should be contextualised as such. Further, it can be understood as another example of ideational distortion within the OGD initiative, this time in relation to some of the OGD advocates’ demands for “equality” in the domain of public data re-use.

The idea of liberalising PSI re-use is a very interesting case, since democratically speaking the process of converting data into information should be open to anyone. However, within the current political economic context, this process is influenced by a number of factors and vested interests. The liberalised model being promoted at its most extreme – and by some OGD advocates – is a model whereby all public data are opened as an infrastructure for all to re-use as they wish. In some of the less radical models, charging would remain on some datasets – although in the future this may be regulated against via the proposed EU Directive amendment. What is interesting in the more radical OGD proposal is that it aims to almost remove the entry barriers through opening up re-use to those that cannot pay fees, including social producers and civil society groups who share their

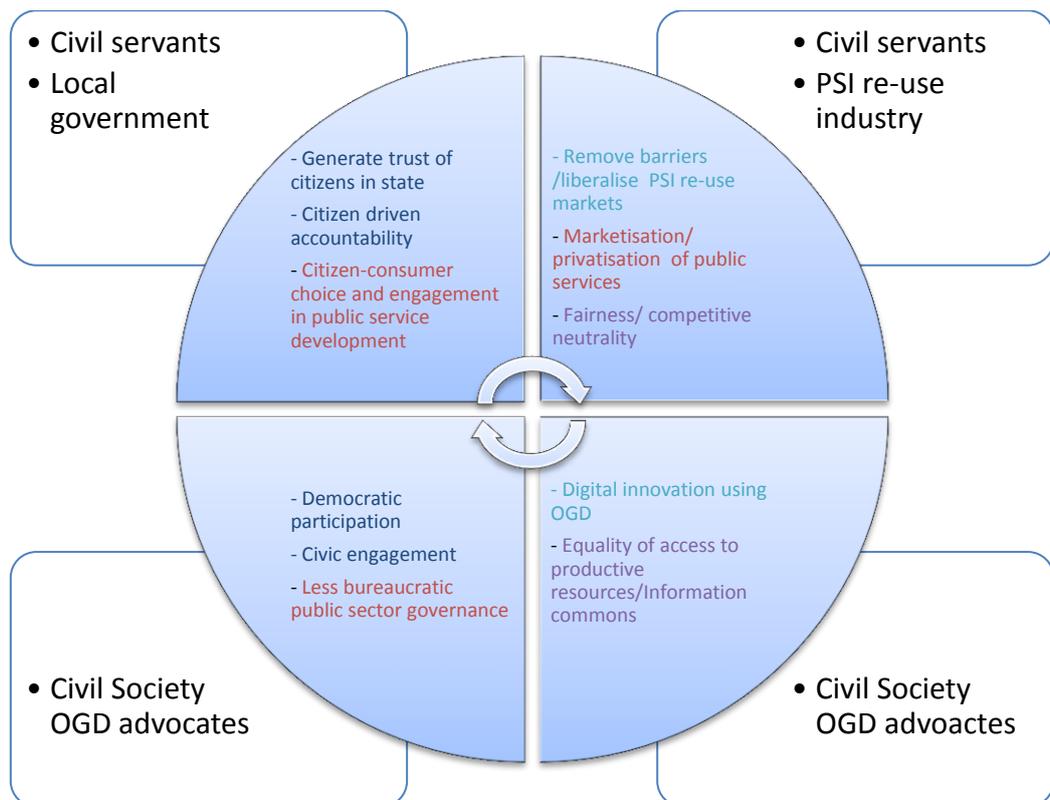
information products and/or aim to use OGD to inform the public sphere. However, as discussed in section 2.2.2, it is uncertain how these forms of social production intersect with neoliberal capitalism and which types of products and demographics of re-users will be financially sustainable in the longer term. These forms should not be perceived as essentially 'counter'-hegemonic methods of production as a consequence. Also, due to the mobility of capital, recovering taxation from commercial re-users of open data may not be possible within the current structural conditions which generate opportunities for tax avoidance. Finally, the intersection of PSI market liberalisation with other policy trends, such as the push to deepen the marketisation of public services, the austere state, and efforts to restrict the public sector from acting in some markets, must be drawn together in analysing the framework being constructed by incumbent actors within the state and commercial re-use sectors.

7.5. Ideational Constructs of OGD at the Intersection of Civil Society, State and Industry

The empirical data presented and discussed so far indicates that civil society OGD advocates have made some strong connections and working relationships with state based OGD advocates, as well as within parts of the commercial PSI re-use industry. Further, it emerges that there are some potentially overlapping ideational constructs between all these different sectors. At times in fact, they appear to be speaking the same language of citizen participation and engagement, transforming public sector governance,

and creating equality and fairness in the use of economic resources, as well as the more general concepts of openness and transparency which have been adopted by all sectors. As is demonstrated in Figure 16 below, through mapping the different ideational spaces it is possible to perceive – via the colour coding – the overlapping concepts that are being used, albeit in some cases to differing ends, by civil society, state and industry OGD advocates. In some cases, there is significant overlap between the meanings of civil society advocates and those in the state. However, more generally, when OGD advocates’ deeper understanding of these concepts is analysed

Figure 16 - Comparing ideational constructs of civil society, state and industry OGD advocates



significant differences surface in the ideational constructs of civil society and state based OGD advocates. Many civil society advocates appear to be promoting a more radical, bottom up vision of democratic participation and a sharing based information economy, whilst state based advocates are more likely to be seeking to generate trust and civic engagement in top-down constructs more closely aligned with neoliberal capitalism.

In neo-Gramscian terms, it is this combined space – political society plus civil society - that makes up the “integral state”. It is within this integrated terrain that the hegemonic form of OGD will be shaped. The following chapter will explore in detail the materialisation of OGD policy within this overarching ideational framework, prior to a fuller examination of the processes of *trasformismo* already introduced being presented in the penultimate chapter.

7.6. Conclusion

The aim of this chapter, as discussed in the introduction, was to meet subsections d) and e) of Objective 4. That is, it aimed to analyse:

4d. The relationship between civil society OGD advocates, state based OGD advocates and the PSI re-use industry

4e. The ideas and intentions of OGD advocates in UK local and national government and the PSI re-use industry.

The empirical evidence presented in this chapter suggests that there is a more complex relationship between civil society, state and industry based OGD advocates than suggested in previous research. In particular, the difference between more local and peripheral civil society advocates and national and core OGD advocates is relatively marked, with the latter being far more interconnected with central government departments and transnational capitalist class interests, and the former engaging more at the local government and SME level. Further, reflecting the results presented in section 0 about the governance of the OGD community, disconnection was apparent between national and local level OGD advocates.

In terms of the specific institutions of the UK state engaging in the OGD initiative, the Cabinet Office was most engaged at the national level in terms of policy development and engagement with OGD advocates, particularly through the Public Sector Transparency Board. Although, The National Archives were also engaged and had worked with civil society OGD advocates on licence development. At the local level, some early adopting local authorities had built strong links with local advocates, and were also in commercial relationships with some national OGD advocates and organisations. The interpenetration of these different groups of actors undoubtedly has opened significant scope for the interests of state and corporate interests to influence the ideas the civil society 'organic intellectuals', whilst also drawing some civil society advocates into relatively restricted working relationships within the neoliberal state in a manner indicative of *trasformismo* by institutional absorption.

The chapter then went on to produce a thematic analysis of the ideational constructs of state and industry based OGD advocates. Four themes of trust, participation and engagement, choice and liberalisation were explored and critiqued with regard to their relationship to the neoliberal state. Finally, these ideational constructs were compared to those of the civil society OGD advocates discussed in the previous chapter. It was concluded that whilst there is an overlapping conceptual framework at this site of interaction between “civil society” and “political society” OGD advocates, deeper analysis evidences some divergence within the underlying frameworks for action being advocated by some civil society and some state/industry based OGD advocates that are suggestive of processes of *trasformismo* by ideational distortion.

Drawing on the findings presented in section 5.2.1 regarding the presentation of a non-critical public discourse, it is argued that whilst some of these ideational differences are apparent to some civil society OGD advocates they are rarely articulated due to the strategy of restricting critique and presenting a united public front. Therefore, political struggle amongst OGD advocates, in the neo-Gramscian sense, is not always visible within the public sphere, and instead the notion of struggle is more likely to be publicly constructed as a simple dichotomous struggle between advocates for OGD and those resisting the OGD initiative for whatever reason.

In conclusion, this complex participative and ideational terrain points to possible processes of *trasformismo* by institutional absorption and “ideational distortion” being active in the UK’s OGD initiative. At both a local and

national level, UK based civil society OGD advocates are seen to be working in collaborative OGD networks with local and national government institutions supportive of some form of OGD agenda. In engaging in these relationships, OGD advocates are attempting to leverage change by working partially through the structural confines of the state. This mode of engagement suggests a potential for *trasformismo* by absorption into the restrictive institutional and ideational space of the neoliberal state. Further, the complex ideational terrain is suggestive of a process of “ideational distortion” in which political elites adopt the language of “popular movements” (Paterson 2009, p. 47), and engage in the “domesticating of potentially dangerous ideas by adjusting them to the dominant coalition” (Cox 1983, p. 166-7). These arguments are fully explored in section 9.4.1. The following chapter examines the materialisation of the UK’s OGD policy out of this complex ideational and participative space.

CHAPTER 8: OGD POLICY MATERIALISATION AND INSTITUTIONALISATION AT THE UK NATIONAL LEVEL

8.1. Introduction

Whilst an array of ideational constructs might be in circulation, the neo-Gramscian framework argues that those which materialise fully into the historical terrain are shaped by the structural conditions of their emergence. In the case of the OGD initiative, these structural conditions are those of neoliberal capitalism which has been the dominant political economic framework for action over the last thirty years in the UK. This chapter will explore how the idea of opening up government data, and the complex ideational space that this idea came from, has been actualised into the policy and legislative frameworks of the UK's neoliberal capitalist state.

Whilst there is a significant body of research on PSI re-use policy, relatively little research has so far been undertaken on the specifics of the OGD policy domain. Exceptions include the work of Janssen (2011a; 2011b) who examines the relationship between the UK's OGD initiative and the EU Re-use of PSI regulations, Saxby (2011) who overviews the recent history of developments in the re-use of PSI policy, McClean (2011) who has argued that the political impact of OGD has been overstated as a result of the

“unrealistic expectations” of OGD advocates and policy makers, and a doctoral thesis on the development of UK government policy on citizens’ access to public sector information during the period 1996-2010 (Buckley-Owen 2011).

This chapter aims to direct a more critical lens at the development of OGD policy in the UK than this earlier body of work and contextualise these policy developments within the broader policies of the UK’s Conservative-Liberal Coalition government which came to power in 2010. To this end, it aims to meet subsection f) of Objective 4. That is, it aims to analyse,

4f. The materialisation of OGD related government policy in the UK.

The data analysed in this chapter is primarily based upon desk research, including the analysis of government policy documents, press releases and other announcements. This is complemented by some observational data and some interview evidence.

The chapter begins by providing an overview of the data release patterns that are evident in the initiative, before moving on to examine the broader policy frameworks that these data releases are connected to: public services marketisation, economic growth and the establishment of a Right to Data.

8.2. Data Releases

Since the beginning of January 2010 there have been a series of data releases by the national government, local authorities and other public

bodies, such as the Greater Manchester Public Transport Executive. This section will focus specifically on the data releases and announcements that have resulted from action at the level of national government. In addition to these releases, there have also been releases by some local authorities of a variety of data including public service location data and the mandated release of public spending data.

The National Audit Office (2012) reports that government departments have not monitored the costs of the data releases; however, it estimates that “additional staff costs of providing standard disclosures of pre-existing data range from £53,000 to £500,000 annually by department” (p. 8). Further, where information has been repackaged to add value, for example in the case of the police crime map, further costs have been reported as £300,000 set-up costs and running costs of £150,000 annually (p. 8). The overall costs of opening data across all government departments, local authorities and other public bodies could therefore be substantial, even prior to any potential loss of income from reduced commercial exploitation of data. The potential impact on the provision of public services when budgets are also being cut on the grounds of austerity is therefore uncertain. Indeed, it is also reported that the Cabinet Office “did not prepare an overall policy impact assessment at the outset” and “has not yet systematically assessed the costs and benefits of the Government’s specific transparency initiatives” (National Audit Office 2012, p. 6). The Government thus appears to be keen to adopt an

OGD policy even given the context of austere budgets and without a wide range of evidence to support its agenda.

Between January 2010 and December 2011, the programme of data releases can be broken down into four key stages: experimental, transparency, public services marketisation and economic growth (see Table 15 below). The new Coalition government came into power between stage 1 and 2, when the data releases moved from an experimental to a more directed approach. The following section will now move on to discuss how these stages of data release are embedded into the broader neoliberal policy agenda of the UK government.

8.3. Coalition Policy and Legislative Framework

Whilst bundled by the Coalition government as a Transparency Agenda, policy and legislative developments around OGD can be broken down into three constituent parts: marketisation of public services, liberalisation of the PSI re-use market, and state transparency aimed at generating citizen trust in governing institutions. These areas of policy development overlap with the stages of data release outlined in table 15 (below) and the ideational constructs of many state and industry based OGD advocates discussed in the previous chapter.

The first part of this policy framework is focused on the marketisation of public services via the Open Public Services agenda. This is connected to stage three of the data release programme (Public Services data) and is

Table 15 - Stages of data release by UK national government

Stage	Category of data released	Date of announcement	Description
1	Experimental	Jan - April 2010	Data.gov.uk and London Datastore launched <ul style="list-style-type: none"> • Lots of statistics (e.g. crime, economy, education, health) • Some environmental, meteorological, and transport data • Some public service data (e.g. performance, staffing, service information and location) • Some core reference data including mapping, postcode, road names, bus stop and station locations from Ordnance Survey
2	Transparency	May 2010 announcement by Prime Minister Data releases proposed for June 2010- January 2011	These data releases were primarily aimed at promoting transparency in public spending and some aspects of public sector management <ul style="list-style-type: none"> • Public spending - Coins (Combined Online Information System) Treasury spending database, National government departments spending over £25,000, local government spending over £500, International development projects over £500 • National and local government contracts • Data about levels of senior civil service pay • Organograms (organisational chart) for all central government departments and agencies that include all staff positions • Also, some public service data – street level crime data
3	Public services reform	July 2011 announcement by Prime Minister	These data releases were primarily aimed at enabling citizen-consumer choice, measuring performance of public services, and transport efficiency. Data being opened: <ul style="list-style-type: none"> • NHS - GP clinical outcomes, prescribing, hospital complaints, clinical audit, NHS staff satisfaction, postgraduate medical education quality • Education – teaching effectiveness at different abilities, school performance, education spending, Ofsted reports, pupil cohort • Crime – sentencing, reoffending rates, performance • Transport – road works, cycle routes, car parks, real time road network, rail performance/ complaints, rail timetable • Also, some transparency data - procurement card spend
4	Supply side economic growth policy	November 2011 announcement by Chancellor of the Exchequer (Autumn Statement)	These data releases announced in the Chancellor's Autumn Statement were aimed at boosting the analytics and life sciences industries, supporting the development of high value data businesses, making travel more efficient and enabling consumer choice, welfare reform and management of labour force sickness rates. Data being opened: <ul style="list-style-type: none"> • Health - linked primary-secondary healthcare, prescribing, social care, health care • Transport – timetable, real time, rail fares, aviation performance, real time road network • Labour force – fit note, welfare, universal credit • Core reference – Key core reference datasets from the Meteorological Office, Ordnance Survey, Land Registry and Companies House

outlined in the policy documentation on the Open Data consultation (HM Government 2011c; HM Government 2012b) and the Open Public Services agenda (HM Government 2011d). The second part of the policy framework is centred on HM Treasury's Growth Review and aims at enabling commercial re-use of public data as part of a supply side economic growth strategy, and is connected to data released in Stage 4 of the data release programme. The third part is aimed at generating citizen trust in governing institutions through state transparency initiatives and includes a legislative amendment to the Freedom of Information Act in order to incorporate a right to re-use data. This policy focus is connected to the earliest data releases of the new Coalition government i.e. Stage 2 transparency data releases on public spending, pay and contracts. The following section will examine each of these policy/legislative areas in turn.

8.3.1. Public Services Marketisation: the Open Public Services agenda

The Making Open Data Real (MODR) consultation, positioned the opening of data and transparency as “maybe the most powerful levers of 21st century public policy” (HM Government 2011c, p. 8), and went on to frame OGD within the Coalition's broader Open Public Services agenda. The Open Public Services White Paper (HM Government 2011d), which is now a national government policy agenda (<http://www.openpublicservices.cabinetoffice.gov.uk>, date accessed: 23/07/12), proposes to open the provision of all public services apart from the judiciary and the security services to competition from the private and

third sectors. Within the MODR consultation paper, OGD was framed heavily as being data about public services:

“This paper proposes to cover data relating to provision of ‘public services’ (footnote: in line with the recent Open Public Services White Paper)” (HM Government 2011c, p. 14)

The consultation paper proposed that “all data relating to the provision of public services” would be opened, and this would include data on “access to services, user satisfaction, spending, performance and equality” (HM Government 2011c, p. 13).

The MODR consultation paper (HM Government 2011c) highlighted six “thematic opportunities” in the suggested approach: accountability, choice, productivity, quality and outcome, social growth and economic growth. These themes have significant overlap with some of the ideational constructs of civil society, state and commercial OGD advocates discussed in the previous two chapters.

8.3.1.1. Accountability

In relation to “accountability”, the MODR consultation proposes that,

“The expectation is that modern, democratic government shares information with the society it governs to demonstrate freedom from corruption and appropriate use of public funds” (HM Government 2011c, p. 19).

This is an extremely limited view of the democratic relationship between government and citizens, and falls some way short of the more participatory ideas expressed by some civil society OGD advocates, and even some state

based OGD advocates. Within this construction the state is positioned as a dominant force, which must simply evidence minimal corruption and fiscal discipline. Citizen participation in governing institutions apparently absent of corruption and evidencing fiscal discipline is, therefore, presumed to be limited to voting in elections, which general observations suggest many perceive to be an anti-political non-choice.

Whilst a vision of a “collaborative democracy” which combines “openness and modern technology to bring the people’s expertise together in the policy-making process” (p. 8) is mentioned in a footnote in the Executive Summary of the MODR consultation, this gives the impression of being little more than a sound bite for OGD advocates. Further, it appears to be simply referring to a form of pluralist technocratic policy development, rather than addressing the amelioration of state-citizen relations at a deeper level.

8.3.1.2. Choice

Whilst democratic choice and citizen engagement remain limited within the policy proposals, the notion of choice in relation to public services is encouraged. The MODR consultation proposes a “vision for putting people in control” (HM Government 2011c, p. 19), in an ideational construct that largely restricts the construction of the citizen to one of a consumer of public services. The implication here is that it is only as a consumer, within the free market for public services proposed in the Open Public Services reforms, that the “citizen” can become sovereign. The MODR consultation states that, OGD can help introduce “meaningful... more informed choice” and “an

understanding of variation” in public service quality (p. 19). It is illuminating that such benefits from OGD are not perceived by the government to exist within the democratic domain.

Such a construct overlaps significantly with some of the local government OGD advocates. However, in relation to the civil society OGD advocates this was not generally part of their rationale for supporting OGD. Many even exhibited concern about OGD being co-opted into such an agenda. Whilst some reports - i.e. National Audit Office (2012) - have suggested that citizens are more interested in receiving information about public services than democratic processes, this should be understood in relation to the social construction of the citizen and political process, rather than an essential feature of the state-citizen relationship.

8.3.1.3. Productivity

Whilst there were differences between many civil society OGD advocates and the state in relation to notions of citizen engagement in democratic processes and use of public services, in relation to productivity and efficiency within the public sector there were overlaps. Both deemed, perhaps correctly, that problems with information management in the public sector were hindering effective decision making and leading to inefficiencies. However, whilst the MODR consultation couched its analysis in relation to enabling better performance management and “healthy competition between service providers” (HM Government 2011c, p. 20), many OGD advocates placed more emphasis on improved information flows leading to more

efficient work flows due to easing the discoverability of data and information by public sector workers (Interviews: Peripheral Civil Society/Business).

8.3.1.4. Quality and Outcome

Similarly, the MODR consultation (HM Government 2011c) proposes that improvements will be made to quality and outcomes of both data collection and public services through a combination of open “benchmarking data on comparative costs and quality of services”, “peer-based competition” and “public scrutiny” (p. 20). Further, and critically, OGD is claimed to be a “pre-requisite of outcomes-based commissioning” (p. 20).

The MODR consultation, therefore, overlaps with some local government OGD advocates, in terms of the argument that increased competition in public service provision will improve quality of services. Yet, there is no discussion of the definition of a good “outcome”, or, as discussed in section 7.4.3, the appropriateness of the techniques for measuring quality, the budget pressures on public bodies aiming to compete in these new markets, and the issues inherent in profit-driven investment in public service provision by the private sector. Further, there is no recognition of the negative impact this type of competition can have on the lives of workers within the public sector, and on service users being forced into inappropriate activities, such as inappropriate training, ‘workfare’, jobs, and medical treatments, in order to generate the appearance of a ‘successful outcome’.

8.3.1.5. Social Growth

The MODR consultation (HM Government 2011c) further proposes that “social growth” might be enabled through OGD. Yet, disappointingly this is defined as something comparable to online banking, and empowering individuals to “self-serve” via online health and education records (p. 20). The enabling of “more informed public debate” is also mentioned vaguely and briefly in relation to social growth (p. 20). This is framed as equipping the public to hold the government to account; however, as discussed above the general notion of democratic engagement and accountability proposed by the consultation is very limited. A broader approach to social growth might, for example, be to explore how OGD could be utilised alongside other resources, to understand how society might collaborate at a global scale to overcome our multiple current crises, and develop into a sustainable, democratic global society based on egalitarian principles.

8.3.1.6. Economic Growth

The final point made by the review is in relation to economic growth, an argument utilised to some extent by civil society OGD advocates and which necessitated the inclusion of commercial re-use in the Open Definition. It appears, however, that the civil society OGD advocates’ understanding of the economic value of OGD is relatively vague, and tends to be focused on SME activity and the conclusions of research on the potential economic value of OGD developed by economists such as Pollock (2009; 2010). Nevertheless, some civil society experts, such as Pollock, do have

substantial understanding of the wider PSI re-use industry, and a similar understanding is present amongst some of those interested in liberalisation of the PSI market within national government.

Within the MODR consultation (HM Government 2011c), the government positions the re-use industry for OGD as focused primarily within large and powerful sectors of the economy: pharmaceuticals, finance, education, logistics, insurance, health, media and consumer technology (p. 21; p. 52-5). The proposal is, therefore, that public funding should be utilised to subsidise profitable industries, at the same time as public funding for the most vulnerable is being cut and taxes on profitable corporate interests are reduced⁷. It should also be noted that some of the critical issues and areas of growth for industry are proposed to be “homeland security, climate change, disaster management, energy and food security... [and] weather risk management” (HM Government 2011c, p. 53). These developing areas of economic growth thus mark a concerning expansion of capitalism into the exploitation of risks which are, in many cases, produced or exacerbated by the hegemonic model of global neoliberal capitalism in the first place. The government’s OGD policy is aimed at propelling this expansion forwards, rather than using OGD, as some civil society OGD advocates have suggested, to contribute to the resolution of some of these pressing issues.

⁷ The main rate of corporate tax in the UK in 2010 was 28%, which was reduced to 26% in 2011, 24% in 2012 and is proposed to be 23% in 2013 (<http://www.hmrc.gov.uk/rates/corp.htm>, date accessed: 23/07/12)

8.3.1.7. Outcomes and Response to the MODR Consultation

These policy documents suggest a substantive effort by the UK government to institutionalise an OGD policy aimed at leveraging decidedly neoliberal ends, quite removed from some of the more transformative ideas of some of the civil society 'organic intellectuals'. The response of the civil society advocates to the MODR consultation was mixed. The consultation was opened at the same time as the Public Data Corporation consultation, which generated a lot of anger within the civil society OGD community (discussed in section 8.3.2.1 below). Thus, for many advocates, the MODR consultation, with its commitment to opening up some data, was seen in a relatively favourable light.

Nevertheless, it is notable that the Open Rights Group, in consultation with its expert advisory board and civil society OGD advocates via online and public meetings, made the following consultation response, arguing that aligning OGD with the government's neoliberal agenda of public service marketisation was neither useful nor desirable:

"The consultation makes clear that open data is designed to support the Open Public Services White Paper, which introduces the principle that "any willing and qualified provider" - state, business or non-profit - should be able to deliver public services. Our view is that these two approaches for improving public services - public accountability with open data and marketization - should each be assessed and implemented on its own merits, and not be introduced as a package. Citizens should always have

access to information about performance and costs of public services, but the mechanism for intervention could be other than market choice. We do not wish to engage with the merits of marketisation and the Open Public Services agenda. Our concern is the risk of generating hostility to open data if it is perceived by sectors of society as simply an instrument for privatisation. Wider engagement from civil society in the transparency agenda could help lower this risk, but a clearer separation of Open Data and Open Public Services would be important” (<http://www.openrightsgroup.org/ourwork/reports/open-rights-group-consultation-response:-making-open-data-real>, date accessed: 27/07/12).

The government stated in the MODR consultation that a full impact assessment of the costs and benefits of OGD alongside a full strategy and consultation response would be published in autumn 2011. However, it was not until June 2012 that an Open Data White Paper (HM Government 2012b) was finally published which drew somewhat on the results of the consultation; and, as reported by the National Audit Office (2012) a full costs and benefits analysis has not been forthcoming. During the intervening period, OGD policy development has been more focused on the data releases discussed above and the development of a governance structure for data release decision making. Further, the deepening of the Open Public Services agenda to which the MODR consultation was linked has been a key vehicle for taking the MODR agenda forwards despite the lack of consultation response or impact assessment. These intervening developments will be addressed in more detail below in section 0.

The new Open Data White Paper (HM Government 2012b) moves forward this policy agenda with a focus on developing both supply and demand side policies to enhance access to OGD. Similar to the earlier consultation paper and the ideational constructs of state based OGD advocates, OGD is seen as an enabler of choice in public services (p. 15), transparency in public spending (p. 15), economic growth (p. 15) and trust in government (p. 31). However, in relation to trust in government, this paper also emphasises a need for a fine balance between openness and individual privacy and state confidentiality concerns (p. 31-2). Further, this paper also sees an expansion of the policy domain into the demand side of OGD, announcing a forthcoming Developer Engagement Strategy, a redesign of data.gov.uk to make it more user-friendly and a desire to harness user engagement through the new Open Data User Group (discussed in section 0 below). This increasing emphasis on the demand side of OGD, perhaps suggests a concern that OGD re-use had not taken off quite as envisaged, as reported by the National Audit Office (2012).

8.3.2. The Economic Growth Strategy: public data and the Autumn Statement

As evidenced in the Conservative Party Manifesto which predicts “a £6 billion boost to the UK economy” from opening up government data (The Conservative Party 2010b, p. 69), there is support within the current government for some of Pollock’s (2009; 2010) most extreme conclusions on modeling the potential contribution of OGD to the economy (see Appendix 3 for a critical analysis of this claim). Accordingly, in his Autumn Statement of

November 2011 (HM Government 2011b), the Chancellor of the Exchequer, George Osborne, announced Phase 2 of the government's Growth Review, and positioned OGD as central to generating economic growth within the UK.

This policy is focused on:

- Boosting data re-use businesses through the release of some core-infrastructural data and big datasets useful to the analytics and life sciences industries;
- Boosting data re-use businesses through the development of business support services such as the new Open Data Institute to be built near "Silicon Roundabout" in Shoreditch, London and directed by Sir Tim Berners Lee and Nigel Shadbolt;
- Releasing data which appears to be aimed at enabling development in the domain of labour market efficiency (welfare and sickness management) and more efficient use of transport systems.

Evidently, this part of the UK government's growth strategy appears to be focused on boosting profitable corporations and industries, enabling digital start-ups particularly those based near "Silicon Roundabout" in London, and increasing pressure on the productivity of labour.

The following sections will examine the framework for governing the release of key economically valuable datasets that has evolved during the period 2011-2012. This policy framework began with the proposal for a Public Data Corporation in January 2011, which after going through a process of consultation, evolved into the announcement in the Autumn

Statement 2011 of three new bodies – a Public Data Group, a Data Strategy Board and an Open Data User Group – the latter two of which will advise Ministers on opening up Trading Fund data.

8.3.2.1. The Public Data Corporation and the Consultation on Data Policy for a Public Data Corporation

In January 2011, the government announced the formation of a Public Data Corporation (PDC), and, in July 2011, three Trading Funds, Ordnance Survey, the Met office and HM Land Registry, were moved under the responsibility of the Department for Business, Innovation and Skills (BIS) in preparation for the establishment of the PDC. The stated objective of the PDC was to,

“Bring together Government bodies and data into one organisation and provide an unprecedented level of easily accessible public information and drive further efficiency in the delivery of public services” (<http://www.cabinetoffice.gov.uk/news/public-data-corporation-free-public-data-and-drive-innovation>, date accessed: 05/05/12).

The Cabinet Office ran an initial online “public engagement” about the PDC from 14 February to 11th March 2011 after pressure from civil society advocates, and then a formal consultation was opened on 4th August 2011 which closed on the 27th October 2011. Significant OGD announcements relevant to the PDC were made during the Chancellor’s Autumn Statement on the 29th November 2011, including the opening of key core reference data and the formation of a Public Data Group (PDG) and Data Strategy Board

(DSB). An official response to the Consultation was published by the government in March 2012, which suggested that the PDG and DSB were a first step in delivering the PDC agenda. However, the Public Data Corporation Ltd was officially dissolved on the 29th May 2012 and policy development for core infrastructural data now appears to be focused on the PDG and DSB.

The Public Data Corporation plans brought about significant resistance from the civil society OGD advocates, who deemed the proposals as a measure to resist the opening of core reference data from Trading Funds. The consultation - a Consultation on Data Policy for a Public Data Corporation (CDPPDC) - was focused on data produced by those public bodies whose “primary purpose is collecting, managing and disseminating data and providing value-added services based on that data” (HM Government 2011a, p. 11), including Trading Funds such as Ordnance Survey, the Met Office and HM Land Registry. The CDPPDC stated its objectives as examining the possible models for charging, licensing and regulation of PSI, constrained by a requirement for “balancing the desire for more data free at the point of use whilst ensuring affordability and value for taxpayers” (p. 6), and “consistent with the objective of facilitating private investment into a PDC” (p. 21).

The licensing options for charged for data suggested by the consultation were limited to the development of:

- a use-based portfolio of licences where the licences for a dataset “would be standardised for a particular market” to avoid discrimination between re-users taking out licences for the same purpose;
- an overarching PDC licence agreement with additional schedules specific to certain uses, datasets or products underneath the overarching agreement;
- or, a single PDC licence covering all charged for use and re-use.

Some of these options, therefore, appear to be more aligned with the PSI lobby’s demands for simplified licensing arrangements. However, the charging options considered (outlined in Table 16 below) do not go as far as the marginal cost proposals of industry, even though some offer more consistency. In relation to the civil society OGD advocates’ demands, however, the proposal to charge for some Trading Fund data was deemed counter to the OGD model. Further, the desire by government to attract private investment into the PDC was met with some concern from civil society OGD advocates. As one senior civil servant perceived, there appeared to be no logic behind creating a publicly-owned corporation other than as a precursor to privatisation (Interviews: Civil Service).

8.3.2.2. Response to the Consultation on Data Policy for a Public Data Corporation

The civil society response to the CDPPDC was overwhelmingly critical, although the collectively produced responses were relatively reformist, rather than radical, in approach. The Open Rights Group, for example, after

discussions with their expert advisory board and consultation with civil society OGD advocates both online and at public meetings, made a number of points regarding privatisation and private investment in data collection and processing:

“It remains unclear how beneficial privatisation would be for the public purse in the longer term, as the biggest consumer of public data in most cases is the state itself. Putting basic data provision completely outside state control would potentially negate any opportunities for more efficient use within public bodies. We are told that the aim of the PDC is to attract private investment at every level of the data process, including basic data collection and production, not just refined value added services. Although less dangerous than an irreversible privatisation, this is potentially very problematic, and would require extremely careful governance” (<http://www.openrightsgroup.org/ourwork/reports/our-view-on-the-public-data-corporation>, date accessed: 27/7/12).

They also put forward an alternative to the charging options suggested in the consultation:

“Datasets could be put up for pledge auction and businesses that want the data to exist would pledge to pay for it until enough funds are raised. The critical aspect here is to ensure the data remains open for everyone after its sustainability has been reached...For data that is absolutely required for core government tasks the model advocated elsewhere of public funding and taxation seems the best option, as seen in the evidence contained in the references” (<http://www.openrightsgroup.org/ourwork/reports/our-view-on-the-public-data-corporation>, date accessed: 27/7/12).

Similarly, Open Data Manchester, rejected the proposed charging options, arguing,

“They [the charging options] fail to take into account what is needed to create a sustainable, innovative and disruptive data ecosystem. Disruptive innovation in emerging fields needs to have a low barrier to entry and the creation of an ecosystem where ideas can be tested, fail and succeed with marginal cost” (<http://opendatamanchester.org.uk/2011/10/>, date accessed: 27/07/12)

The policy around Trading Fund data is still in formation. Whilst a response to the CDPPDC consultation has been published, the policy around charging for such data is not likely to be decided until the end of 2012 (HM Government 2012a, p. 9). Nevertheless, key decisions have been made regarding the process for opening such data and the governance of the decision making. Critically, the government has moved towards a policy of a “case-by-case” consideration for opening public data produced by Trading Funds, with the objective of balancing “affordability, value for money and the economic and social impact” (HM Government 2012a, p. 8). This approach, therefore, challenges the civil society OGD advocates’ strategy of pushing for OGD as a whole in order to avoid complex struggles with vested state and corporate interests over single datasets:

“[If] you’re saying well we’re going to have to fight this battle with vested interests, and so on, on a dataset by dataset case - we don’t want to be doing that, so we’re going to try and fight that vested interest battle for open data as a whole” (Interviews: Peripheral Civil Society).

The governance processes being developed, therefore, potentially place the civil society OGD advocates in an overstretched position in terms of their ability to advocate for the opening of important data sets, and within an

Table 16 - Charging proposals suggested in the Consultation on a Data Policy for a Public Data Corporation (HM Government 2011a)

Data Utility Model	Harmonisation and simplification	Freemium	Status quo plus commitment to more free data	Profit Maximisation Model
Rejected at present due to affordability and market failure concerns	Feasible option	Feasible option	Feasible option	Rejected due to going against commitment to more free data and other policy guidance
Public sector limited to data collection activities, all data opened for free re-use, no public sector engagement in value added information production, public sector would buy back information products	“ A single fee for a particular PDC dataset” produced as part of the PDC body’s “public task”, which amounts to no more than “full cost recovery including an appropriate rate of return” but with some and increasing commitment to free data (p. 23)	Some basic data offered for free, but charges in place on “advanced features, functionality, or related products or services” (p. 23) or volume of data	Commercial model with charges decided in constituent parts of the PDC – no consistent approach to charging across PDC. Commitment to make “more freely” available data	Fully commercialised approach: incentivise PDC “to fully commercialise all its products and services”
“Such an approach is not currently affordable. There may also be risks that the market would not guarantee supply of essential value-added products and services, and that over time the quality and accessibility of data made available from the data utility would degrade due to lack of investment” (p. 22)	Retains the commitment to some free data, but within the limits of affordability	Retains the commitment to some free data, but within the limits of affordability	Retains the commitment to some free data, but within the limits of affordability	“Aligned with a strategy focused purely on maximising value for the taxpayer, [but] such a model is unlikely to be consistent with Managing Public Money guidance and delivering on a commitment to free data” (p. 22)

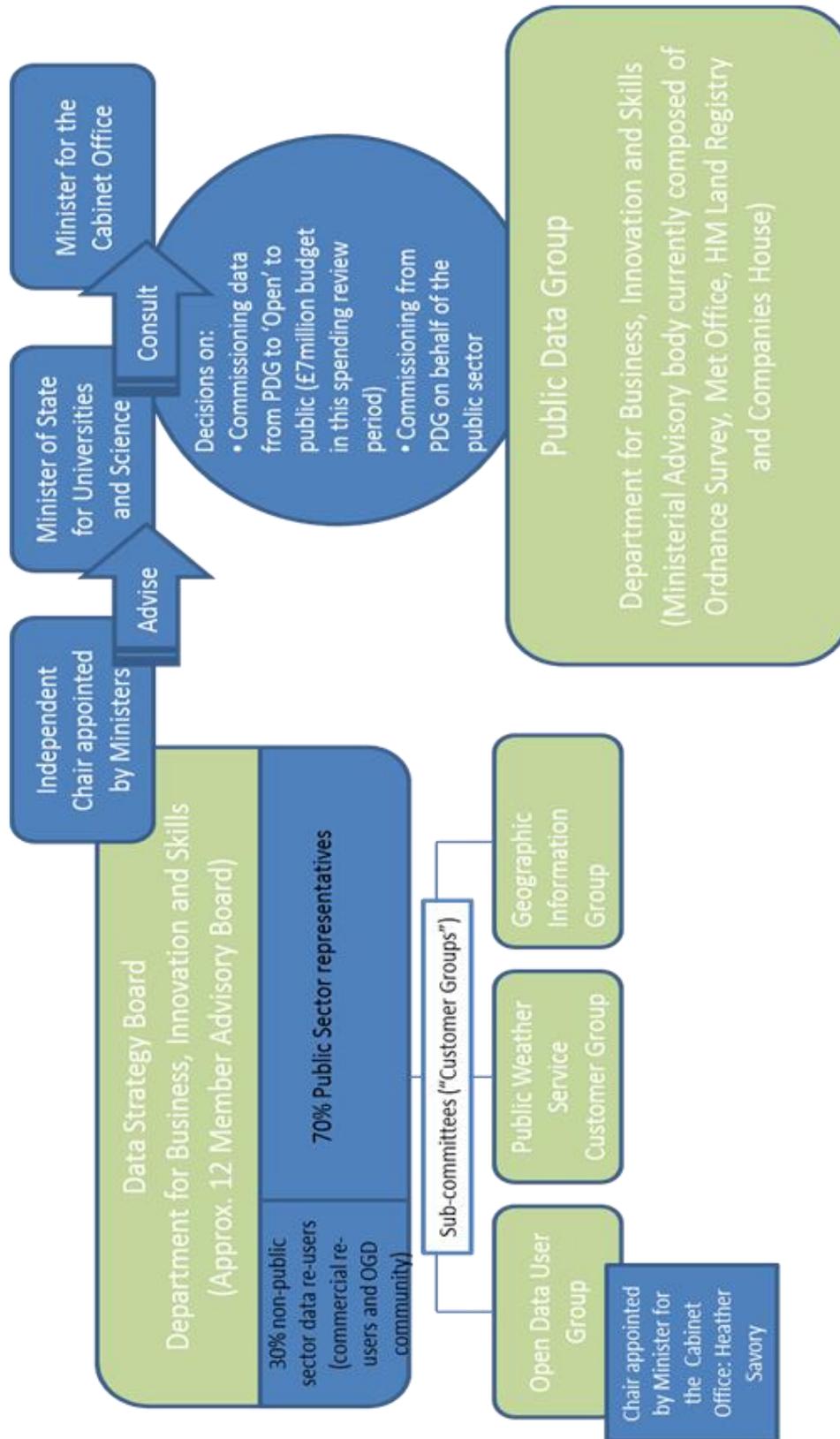
institutional structure that will likely have different criteria for evaluating whether a dataset should be opened.

8.3.2.3. From the Public Data Corporation to the Public Data Group

The new decision making process around opening up datasets is based upon a commissioning model, whereby advisors based in the new Data Strategy Board (and its sub-committee the new Open Data User Group) will advise Ministers to commission data from the new Public Data Group (currently Ordnance Survey, Companies House, Met Office and HM Land Registry) and potentially other public bodies, which can then be opened up for free re-use (see Figure 17). A similar process will also be utilised for commissioning data for public sector re-use. In the current spending review period the budget for commissioning OGD from the Public Data Group is £7 million. As a comparative measure Ordnance Survey in 2010-11 received £20.6 million from licensing re-usable data and £95 million from licensing data to be used internally (Ordnance Survey 2011, p. 76 & p. 73). Therefore, how far the £7 million budget will stretch, and the impact this could have on some Trading Fund revenue streams is as yet unclear.

The advisory structure for opening up public data is based upon a 12 member Data Strategy Board which advises, via a Chair, the Minister for the Cabinet Office (currently Francis Maude MP) and Minister of State for Universities and Science (currently David Willets MP) on the commissioning of data. The 12 members of the Data Strategy Board will be made up of a

Figure 17 - Governance process for opening Trading Fund data



minimum of 30% (i.e. 4) non-public sector individuals including a representative of commercial re-users, a representative of re-users in general and a representative of Open Data campaign groups. The slot taken by the OGD campaign groups has been filled by a newly formed group, the Coalition for a Public Interest Data Policy. This civil society group elected Chris Yiu as their representative in July 2012. Yiu is Research Director for Digital Government at the think tank Policy Exchange. Policy Exchange is a think tank founded in 2002 by the current Minister for the Cabinet Office, Francis Maude, and the current Secretary of State for Education, Michael Gove, to promote “free market and localist solutions to public policy questions” (<http://www.policyexchange.org.uk/about-us>, date accessed 02/08/12). Prior to the election of the Coalition government, the Guardian newspaper argued Policy Exchange’s ascendancy was comparable to that of the Institute of Economic Affairs which “built the intellectual foundations for Thatcherism in Britain” during the mid-twentieth century. It went on to describe it as:

“The thinktank closest to the government-in-waiting of David Cameron, a hothouse for many of its likely personnel, and the deviser of much of what the Conservatives are likely to do in office” (<http://www.guardian.co.uk/politics/2008/sep/26/thinktanks.conservatives>, date accessed: 27/07/12).

The election of Chris Yiu by the new civil society Coalition for a Public Interest Data Policy thus marks a significant departure from the more radical

ideational framework of some of the OGD advocates outlined in Chapter 6, and a centralisation of power around the centre-right of those active in the OGD initiative. In relation to the process of *trasformismo*, Yiu's election also represents a significant absorption of neoliberal ideas and political actors by the OGD 'organic intellectuals', highlighting the multi-directional nature of some of the absorptive processes at work.

The DSB will also include the Chair of the new Open Data User Group, Heather Savory, who was recently appointed by Francis Maude (Minister for the Cabinet Office) (<http://www.cabinetoffice.gov.uk/news/chair-open-data-user-group-appointed>, date accessed: 27/07/12). Savory's background is not in the field of OGD. She has previously worked as a senior civil servant in charge of various regulatory teams at the Department of Business, Innovation and Skills and in various senior roles in the business advisory industry (<http://uk.linkedin.com/pub/heather-savory/0/55b/630>, date accessed: 27/07/12).

The new Open Data User Group which Savory will chair will act as a 12 member advisory sub-committee of the Data Strategy Board and its members (see Table 17) have been selected by the Chair following an open application process. The selection process for appointing members of the Open Data User Group was by application with decisions on appointees being based on a requirement that the members of the group "collectively cover certain skill sets and ... represent particular types of organisations and industry sectors" (<http://odugmembersapplication.questionpro.com/>, date

accessed: 27/07/12). The appointments made again reflect a move to the centre-right in terms of the represented composition of OGD advocates, with significant representation of private firms including TNCs and national firms of various sizes, further restricting the ideational space that 'absorbed' OGD advocates are functioning within. Only one individual (Mackenzie) has been selected who represents the civil society 'organic intellectuals' that have pushed this agenda forwards even though a number of individuals applied. Instead, a further civil society place has been allotted to the centre-right Taxpayers' Alliance. It is, therefore, apparent that despite the expansion of sites of engagement in the OGD policy making space, the civil society OGD advocates discussed in this research have been largely cut out of the decision making process. Whilst the Transparency Board positions have been retained, out of the 26 new advisory positions on the new DSB and ODUG, only Andrew Mackenzie and Jeni Tennison might be understood as connected to the original civil society push for OGD. This process of developing governance structures around OGD decision making can, therefore, be understood as a *trasformismo* strategy of presenting the appearance of a governance space somewhat more open to participation from non-state actors, whilst simultaneously developing institutions which aim to domesticate those that engage and restrict the power of civil society advocates within the decision making process.

These new governance structures around OGD therefore evidence a number of barriers restricting the influence of the civil society OGD

Table 17 – Members of the new Open Data User Group
(<http://www.guardian.co.uk/government-computing-network/2012/jul/10/francis-maude-open-data-user-group>, Date accessed: 20/07/12)

Name	Company/Organisation	Type	Sector	Notes
Robert Barr	Manchester Geomatics	SME	Geographical	
Jennie Campbell	MeteoGroup Ltd	TNC	Weather	Press Association Group is parent company of Meteogroup Ltd
Mick Cory	UK Location User Group	Public Sector	Location	
Sarah Hitchcock	Sainsbury's	Large national enterprise	Retail and Banking	
Dominique Lazanski	Taxpayers' Alliance	Civil Society	Public spending	Campaign for a 'low tax society' (Centre-right)
Andrew Mackenzie	Open Mercia	Civil Society	Open Data advocate	Mackenzie is a civil society OGD advocate
Paul Malyon	Experian QAS	TNC	Address management	Wholly owned subsidiary of Experian
Christopher Royles	Pitney Bowes Software	TNC	Location intelligence, data management	A division of Pitney Bowes Inc, a USA based TNC
Gesche Schmidt	Local Government Association	Public Sector		
Jacqui Taylor	Flying Binary	SME	Data analytics and cloud computing	
Roger Taylor	Dr Foster	SME founded 2000 (joint venture with Department of Health since 2006)	Health informatics	Taylor co-founded Dr Foster with Tim Kelsey the new Executive Director of Transparency and Open Data at the Cabinet Office
Jeni Tennison	Jeni Tennison Consulting Ltd	Consultant	Linked Data/ Programming	Tennison is a well-known technologist in the OGD community
Adam Tickell	University of Birmingham	Universities	Academia	Tickell is pro-Vice-Chancellor for Research and Knowledge Transfer

advocates, introduced in Chapter 7, that have become engaged with state institutions on OGD policy making in recent years. These barriers are further suggestive of a process of *trasformismo* by “institutional absorption” which

aims to absorb and restrict the radical potential of the OGD initiative, and adapt it towards ends more conducive to the reproduction of neoliberal capitalism. This argument will be fully articulated in section 9.4.2 below.

8.3.2.4. Public Data Group Privatisation

A further critical issue in the new governance structure for public data is in relation to the desire to further involve the private sector in the delivery of the public data infrastructure. As discussed above, this was voiced as a key objective in the CDPPDC consultation, and aspects of it were strongly critiqued by civil society advocates. Nevertheless, this desire for private sector involvement has remained and the government is pushing ahead with its plans to,

“Consider, on a case by case basis, the options for greater involvement of the private sector in the longer term delivery of these public services. This could take the form of partial sale, joint ventures with commercial partners, accessing private capital to support investment or the introduction of alternative management structures or expertise to drive efficiency. The Government will also consider the advisability of alternative delivery models such as turning any of its member Trading Funds into Companies Act companies” (HM Government 2012a, p. 26-27).

Some of these options perhaps overlap with the Open Rights Group’s recommendation of a “pledge auction” whereby private businesses could pledge money to invest in the development of sustainable open datasets. However, the plans also raise significant risks highlighted by the ORG in

relation to other modes of private sector involvement. Further, whilst the issues around restricted access and re-use of core infrastructural data exist currently, there is no reason to suggest that these issues would be resolved under a model with increased profit-seeking involvement of the private sector; they could likely get worse. There is also the risk that the model for public data production moves further towards Michael Nicholson's (2009) proposal that the state should procure data from the private sector, rather than collect data directly.

8.3.3. Transparency and a 'Right to Data'

A further change in OGD related policy are the legislative changes to the Freedom of Information Act which were passed by Royal Assent on 1st May 2012 as part of the Protection of Freedoms Act 2010-12 (<http://services.parliament.uk/bills/2010-12/protectionoffreedoms.html>, date accessed: 27/07/12). These legislative changes mark the beginning of a convergence of access and re-use legislation around Public Sector Information. Whilst the Freedom of Information Act protects access to information, the new amendment to the bill will provide people with a legislative tool that guarantees the right to both access and re-use raw datasets underlying public information available via the Freedom of Information Act.

However, as Janssen (2012) has argued in a recent paper, these amendments to the FOIA must be analysed alongside the Justice Select

Committee inquiry - Post-Legislative Scrutiny of the Freedom of Information Act - which took place in the first half of 2012. This inquiry has raised significant threats to the scope of the FOIA, particularly around information regarding policy formulation, advice and discussion. There are already exemptions in the FOIA for information about “formulation or development of government policy... Ministerial communications... provision of advice by any of the Law Officers or any request for the provision of such advice... [and] the operation of any Ministerial private office” (<http://www.legislation.gov.uk/ukpga/2000/36/section/35>, date accessed: 02/08/12). However, some Ministers, including Transparency Agenda leaders Francis Maude MP and Prime Minister David Cameron, have spoken out against aspects of the FOIA, alongside senior Civil Servants such as Gus O’Donnell, arguing that FOI is restricting honest and recorded discussion between Ministers and advisors (see for example <http://www.guardian.co.uk/politics/2012/jul/16/david-cameron-freedom-of-information>, date accessed: 02/08/12).

The issue arises that a shift in focus to data, rather than information, in the discourse of state transparency could aggravate threats to FOI. Specifically, there appears to be a government agenda of promoting the OGD initiative as a transparency initiative, whilst simultaneously attacking the basic principles of government transparency via the back door. The wish to restrict access to information on the basis of freedom of expression within government appears to be predicated on a desire to reproduce, rather than

ameliorate, structural inequalities in the relationship between state and citizens. Whilst certain critical issues such as private media power are problematic in the interpretation and understanding of complex political processes within the public sphere, the notion that citizens cannot handle political nuance, conflict and ideas appears to be a convenient excuse to limit citizens' right to engage in informed democratic participation.

Further, there is also a concern that the shift to data represents a shift towards an increasing emphasis on quantitative methods in better understanding issues of relevance to citizens. Whilst of course quantitative methods are useful for answering some types of questions and problems, there is a risk of reductionist and positivist methods of analysis becoming increasingly dominant if the quantitative approach expands to crowd out a more qualitative understanding of the political economic system. Indeed, efforts to restrict access to information about the policy development process would tend to suggest such a pattern. If such a tendency prevails it is likely to further deepen the restrictive project of neoliberal capitalism, rather than open it up for critique and democratic change.

Nonetheless, the extension of Freedom of Information to include a right to data could have some benefits for the democratic information sphere. For example, the Campaign Against the Arms Trade was engaged in a struggle over the last two years to get the data behind the government's Strategic Export Controls website. After multiple requests for the data via the government's data "unlocking service" were ignored, activists have now

scraped the data from the government's website, and used the raw data to produce their own, far more useful, database of UK arms export licences (<http://www.timdavies.org.uk/tags/arms-trade/>, date accessed: 02/08/12). The right to data could, therefore, potentially have saved them a lot of effort in sourcing the data in the first place.

8.4. Conclusion

The aim of this chapter, as discussed in the introduction, was to meet subsection f) of objective 4. That is, to analyse:

4f. The materialisation of OGD related government policy in the UK.

The evidence presented suggests a tightening of the OGD initiative's governance and potential impact, and a centralisation of power in the shaping of the initiative towards the centre-right. In particular, it is evident that the vaguer and more experimental policy space around the early data releases under the Labour government has become increasingly constrained by the broader policy developments of the Coalition government. The Coalition's 'Transparency Agenda', it was demonstrated, can be broken down into three core areas: the full marketisation of public services, a neoliberal economic growth policy and an effort to increase citizen's trust in governing institutions through publishing data, whilst at the same time as threatening the basis of state transparency through Ministerial attacks on the FOIA.

For the first two policy objectives, OGD is perceived by the UK Government to be a decisive enabler as it will provide critical data for markets to function and for commercial interests to exploit data produced by public bodies. For the third policy objective, there appears to be a push towards a more quantitative formulation of transparency at the expense of a more qualitative understanding of the political and ideological processes that decisions are made within.

In relation to the materialisation of policy around the governance of decisions to open public data, there has also been a concentrating of the centre-right's ability to shape the future agenda. This is particularly the case in terms of the appointments to the new Data Strategy Board and Open Data User Group. Here, we see a range of commercial interests from TNCs to SMEs being appointed as advisors on OGD, and civil society representation being narrowed to a spectrum of largely centre-right interests, including, representatives of the centre-right Policy Exchange and Taxpayers' Alliance. The grouping of active civil society OGD advocates with more critical positions on OGD and neoliberal capitalism, discussed in Chapter 6, thus appears to have been filtered out of the governance process, its ideas and demands still lacking full articulation and acknowledgement. As argued above these developments are suggestive of a strategy of *trasformsimo* by institutional absorption and "ideational distortion", which has limited the counter-hegemonic potential of some groups of actors within the OGD initiative. The next chapter will explore this argument in more depth, and offer

a number of suggestions for those wanting to develop OGD as part of a counter-hegemonic challenge to neoliberal capitalism.

CHAPTER 9: TRASFORMISMO AND 'COUNTER'-HEGEMONIC POTENTIAL IN THE UK'S OPEN GOVERNMENT DATA INITIATIVE

9.1. Introduction

This chapter will draw together the results of the empirical research and discuss them in relation to both the neo-Gramscian framework and the previous literature. It therefore aims to meet objective 5 of the research aims and objectives:

5. From the results of the empirical research, to draw on the neo-Gramscian analytical framework to provide a new conceptual understanding of the relations between the various social forces and interests attempting to shape the OGD initiative, and offer suggestions for potential counter-hegemonic responses to these developments.

The aim of the chapter is not to rigidly apply a neo-Gramscian framework to the case of OGD in the UK, but, as Stuart Hall (1987) advises, to “think in a Gramscian way” about the political processes at work within the OGD initiative. The following discussion, therefore, aims to take the following theoretical proposals, reproduced from the analytical framework (section 3.7), into account:

- The *historical structure* (or, *framework for action*) is the interrelated forces of material capabilities, ideas and institutions;
- Social structure is perceived as a series of differentially embedded structures which agents confront, and agency is perceived to be limited by historically constituted foundational structures and the continued productive capacity of capitalist social relations;
- Ideas tend to become actualised in material (e.g. systems, architecture) and institutional forms; it is important to consider why (in relation to the structural conditions) some ideas are actualised and others are not;
- ‘Hegemony’ – consent to the *historical structure* or *framework for action* – has three levels: integral (full), decadent (fragile) and minimal;
- In situations of minimal hegemony, conditions of *passive revolution* can occur which aim at a ‘top-down’ restoration of an elite agenda;
- In conditions of *passive revolution*, elite-led strategies of *trasformismo* (co-optation, assimilation, domestication and ideational distortion of potentially counter-hegemonic elements) tend to be generated;
- The identification of collective actors, whilst taking into account the fundamental capitalist classes, should be drawn from the empirical context rather than only abstract categorisations;
- The ideas and activities of those engaged in civil society ‘movements’ are important to understand in order to appreciate to which social classes they are organically tied;

- The governance and organisation of civil society ‘movements’ are important, and democratic governance is normatively preferable to elite or technocratic governance.

The chapter begins by discussing the historical role of OGD advocates as a collective of *organic intellectuals* containing an internal ideational struggle around the ends to which the advocates are working, and which reproduces significant social inequalities in its governance. Some of the structural forces shaping the UK’s OGD initiative are then discussed, and positioned as a challenge to those OGD advocates active within the initiative that embody some form of counter-hegemonic potential. The aforementioned neo-Gramscian concepts of *trasformismo*, *ideational distortion* and *institutional absorption* are then drawn on to develop an explanatory framework outlining some of the political processes active within the initiative that are restricting these OGD advocates’ political agency. Issues with the neo-Gramscian framework are then discussed, prior to a number of proposals being presented – both theoretical and policy based - which aim to contribute to guiding those OGD advocates with counter-hegemonic intentions through this impasse.

9.2. The Historical Role of OGD Advocates

The identification of the OGD advocates as a new collective of actors active within the political economic domain was the initial step in the

development of the research project. In the analytical framework chapter, a number of different approaches for researching this group of collective actors were explored, including defining OGD advocates as political actors i.e. as a form of social movement, or defining them as economic actors i.e. as producers engaged in 'open' forms of production relations. It was proposed that a neo-Gramscian approach which draws together the political and economic strands of the OGD initiative in an integrated fashion would be beneficial to the analysis.

This neo-Gramscian approach was taken forward into the empirical chapters, and in section 6.2 it was argued that Gramsci's concept of the "organic intellectual" was useful to aid our understanding of the historic role of the OGD advocates. To recap, the concept of the "organic intellectual" is based on the perception that every social group emerging due to a change in economic production (in this case the development of "open" production methods within the digital economy),

"creates together with itself, organically, a rank or several ranks of intellectuals...at least an elite among them must have the technical capacity (of an intellectual nature) to be organizers of society in general, including its whole complex body of services right up to the state" (Gramsci 1992b, p. 199).

The previous chapters demonstrated that as the demand for OGD has grown within civil society an ad-hoc community has formed with a common interest in OGD, which appears to have produced "organically", in most cases, "several ranks of intellectuals". Problematically, however, the formation of

such ranks, as explored in the earlier chapters, has been shaped by, and perhaps exaggerates, the elitist and male dominated power structures prevalent elsewhere in the UK. There was, therefore, a strong sense of disconnect within the “ranks” of the OGD community and, observations suggest, between OGD advocates and wider society. Critically there is no evidence, other than travel bursaries for international conferences, of efforts being made to overcome structural barriers to participation that one might expect from a group in which at least some participants are orientated towards more egalitarian democratic ends.

In the OGD community, rather, competition and self-confidence (tending at times to egotism) appear to be the core structuring principles. Of further concern is the lack of democratic accountability within the community as OGD advocates begin to engage more deeply in the political process at the local, national and supranational levels. Nevertheless, the research presented in the previous chapters demonstrates that both core and peripheral civil society OGD advocates are still engaging as ‘organic intellectuals’ in the production of ideational constructs which aim to gain support for the OGD agenda and in the generation of technical and community development capabilities required for the production of an open data infrastructure.

As discussed in Chapter 6 the ideational constructs of civil society OGD advocates tended to evidence an internal struggle within the OGD ‘community’ which is not always publicly articulated. Indeed, some civil society OGD advocates tended to have relatively radical and potentially

'counter'-hegemonic ideas critical of neoliberal capitalism, whilst others were working within a more reformist model. There is, therefore, a lot of uncertainty about the social role of civil society OGD advocates, and this is exaggerated by the general lack of public articulation of those ideational frameworks more resistant to neoliberal capitalism within the community.

Further, in attempting to garner resources – as those Resource Mobilisation theorists introduced in section 3.2 would argue are necessary for the kind of attention the OGD advocates have received – the civil society OGD advocates have tended to build alliances with a range of elite political and economic interests at the heart of the neoliberal project. These alliances include significant engagement with senior centre-right politicians, international organisations such as the World Bank and European Commission, transnational corporate interests such as Google, IBM and Siemens, and the philanthropic institutions of the global capitalist elite. Further, recent developments have witnessed civil society OGD advocates in the newly formed Coalition for a Public Interest Data Policy elect Chris Yiu of the centre-right Policy Exchange think tank to be their representative on the newly formed Data Strategy Board. Thus, whilst there have been some efforts to build alliances with Trade Unions and some OGD advocates are working more at the local civil society level (e.g. on youth projects, allotments, co-operatives and international development), there is a concern that the civil society OGD advocates have exhibited a tendency to gravitate towards the formation of alliances with core sites of political economic power within the global economy.

It is important to consider directionality at this site of alliance formation. In neo-Gramscian terms it is difficult to perceive whether OGD *initially* marks the site of the collective interests of a new class of 'open' producers and citizens attempting to move beyond some of the restrictive practices of neoliberal capitalism, or the collective interests of (a subsection) of dominant political and economic actors attempting to reproduce the neoliberal project. Nevertheless, it appears that these various forces have combined to some extent, in order to move the logic of OGD through its most "patently political phase" and prevail as the dominant logic beyond these initial "corporate" groups (Gramsci 1992b, p. 179). Whilst the argument might be made that OGD would not happen without this alliance building, there is nonetheless a longer term concern that co-optation into the process of neoliberal globalisation will be the likely outcome.

Further, it is uncertain whether some of the business models developing around OGD re-use and infrastructure projects are likely to evolve into fully fledged capitalist business models, orientated towards expansion and appropriation of the value generated by various forms of paid and voluntary labour for private gain. This is particularly so in the case of privately owned companies such as Chrinon Ltd and Pushrod Ltd both owned by Chris Taggart (Open Corporates and Open Charities), as well as other better known companies such as Scraperwiki Ltd. These evolving business models and the labour relations they depend upon will be an important avenue of future research into the political economy of Open Data.

9.3. Structural Barriers Experienced by Potentially Counter-Hegemonic Elements of the OGD Initiative

As outlined in the analytical framework, the historical structure, which is constituted through the interrelations of ideas, material capabilities and institutions, limits the actualisation of ideas within the historic process. The OGD community in the UK, whilst publicly devoid of overtly critical discourse regarding the Coalition government's agenda and dominated by a largely white, male, highly educated and technically orientated culture, contains a range of political orientations, from libertarian left to libertarian right, green left, Marxist, social democratic and liberal. Unlike the diverse political makeup of the OGD community, however, the government's response to the crises it has found itself embroiled in has remained firmly embedded within the logic of neoliberal capitalism. It is argued that those OGD advocates with a more critical, and potentially counter-hegemonic, interpretation of neoliberal capitalism have, therefore, met significant structural barriers in terms of being able to actualise their ideas around OGD. Some of these barriers are broadly external to the OGD advocates, for example, historically constituted political economic structures. However, as discussed above, some are also internal to the OGD initiative, such as the socio-cultural inequality that is reproduced within the OGD community and which has shaped the leadership of the civil society community and the appointment of government advisors.

Thus, the more critical OGD advocates find themselves in a situation where what appears to them as a seemingly good idea is contorted by the structural conditions of its emergence to potentially do precisely the opposite of what was intended, i.e. to maintain the neoliberal project and empower elite interests. What is critical to appreciate, however, is that it is not OGD per se, but the wider context which is the problematic construct. As an infrastructural project, OGD, whilst offering the potential for micro-level and localised disruption of specific policy areas, will ultimately be shaped by - and will likely contribute towards - the reproduction of the political economic context in which it exists. For example, decisions on the release (and production) of data will likely be based upon the criteria and priorities of capitalist production and reproduction, which includes generating public consent for the neoliberal mode of accumulation. Whilst this might result in spill over, opening up data that also enables those engaged in more radical political projects, it is likely that the kind of data required by such activists will be the most difficult to source, if it exists at all.

In the case of the UK, for example, decisions to open data are being prioritised based upon the enabling of marketisation of public services and enabling a key element of an economic growth strategy that benefits capitalist interests, whilst doing little to alleviate - and in some cases increasing - economic pressure on the many. Critically, and most concerning, there has also been a push by government to leverage the OGD agenda to enable the further expansion of capitalism into the exploitation of emerging social risks including “homeland security, climate change, disaster

management, energy and food security... [and] weather risk management” (HM Government 2011c, p. 53). Further, OGD is being used as a political tool to present a neoliberal state persona that is more transparent and open to intervention from citizens. Such a project, it is argued, is critical for the UK’s neoliberal state at this historic moment in order to rebuild the consent of socially elite and politically engaged citizens, such as the OGD advocates. Whilst some observers have perceived the OGD advocates’ engagement with the state as a move towards a more participative form of governance (Halonen 2012), it might better be interpreted as an attempt to domesticate some of the OGD advocates as a new elite policy community.

Small numbers of OGD advocates are active amongst a range of disenfranchised communities and, in rare cases, are attempting to embed OGD in engagement at this level. However, the structural barriers generated by the neoliberal context (e.g. market-orientation, privatisation and individualisation) will likely restrict actions being taken that are not conducive to the reproduction of neoliberal capitalism or reshape such initiatives into a more neoliberal mould. For example, there is a risk that projects will become shaped by the desire to generate a competitive marketplace for service provision for disenfranchised groups, and that outcomes will be defined in accordance with the requirements of the neoliberal agenda (e.g. skills for employability programmes). Further, in terms of informing communities in order to make collective demands on the state, the ability of local groups to successfully push demands will remain limited, regardless of the amount of

information, if the structural conditions of neoliberal capitalism remain intact. For example, the demand to build more social housing or improve and reduce the costs of public transport, regardless of obvious need, is not going to be met within the structural conditions of neoliberalism. As Gramsci presciently warns:

“The explosion of political ‘passions’ that have accumulated during a period of technical transformations which are not paralleled by adequate new forms of juridical organization is confused with the substitutions of new cultural forms for the old” (Gramsci, 1992a, p. 129).

It is therefore critical to appreciate Birkinshaw’s (1997) warning that contemporary political institutions are not built for grassroots participation, and therefore measures to encourage participation risk being co-opted by elite groups within society. This is a critical issue, which points to the need not just to inform and empower disenfranchised groups, but also to revolutionise the political economic structure in its entirety. Without such a deep shift away from the structural hold of neoliberal capitalism, all initiatives to counter some of its more socially unappealing results will eventually be drawn back into its logic.

Having outlined some of the structural barriers faced by the more critical and potentially counter-hegemonic “organic intellectuals” connected to the OGD initiative in the UK, the chapter will now go on to discuss some of the political processes of co-optation that are evident in the development of the

OGD initiative as it has become increasingly integrated into the structural conditions of neoliberal capitalism.

9.4. Political Processes in the Co-optation of OGD

The political economic crisis that the UK's neoliberal state finds itself in provides a critical context for the development of the OGD initiative. As argued in the analytical framework (section 3.6), the Coalition government's response to the crisis of the neoliberal project and the intersecting national political scandals and crises, can be understood as a form of *passive revolution*, which is attempting to reconstitute 'business as usual' for a neoliberal project which is likely to result in systemic failure and for which consent is fracturing. To reiterate, conditions of *passive revolution*, neo-Gramscian theorists argue, can occur during periods of hegemonic crisis, or when there has been a failure of elites to gain popular consent. As Moore (2007) describes, *passive revolution* is "a function of unstable elites who seek to consolidate and perpetuate hierarchies that capitalism requires" (p. 2). *Passive revolution* is a restorative, top-down form of social change aimed at (re)generating broad-based consent for reconstituted capitalist social relations, but without embracing the interests of non-elites classes and social groups (Morton 2007, p.64). Whilst most commonly applied to studies of peripheral economies during the period of neoliberal globalisation, it was argued in the analytical framework chapter that the concept of *passive revolution* is also useful for thinking about the current political economic

conditions in the UK and the government's response to the multiple crises in faces.

Given conditions of *passive revolution* and the acknowledgement of elite led and exploitative modes of economic development which have heightened in response to the economic crisis, our attention thus turns to the political processes of *trasformismo* that Gramsci observed emerging in such conditions. Paterson's (2009) work on the policy of *trasformismo* at the World Bank in response to the alter-globalisation protest movements is a particularly useful study from which to extrapolate a better understanding of some of the process of *trasformismo* that might be at work in the OGD initiative. Paterson, drawing on the work of Cox (1983), argues that beyond the absorption of oppositional leaders into the hegemonic institutions, a more "sophisticated" strategy of *trasformismo* is a process of "ideational distortion" (Paterson 2009, p. 47) in which elites engage in the "domesticating of potentially dangerous ideas by adjusting them to the dominant coalition" (Cox 1983, p. 166-7). This "ideological strategy", Paterson (2009) argues, is broader than simply restricting the political manouverurability of leaders by drawing them into dominant institutions, but also aims to "win over the protesting popular movements as a whole so they come to consent to the dictates of existing political institutions" (p. 47).

9.4.1. Ideational Distortion

The critical overarching discourse of the Coalition government's policy around OGD is of 'Openness' and 'Transparency'. The terminology of 'openness', it is argued, is an attempt by the neoliberal state to domesticate the productive logic of civil society 'open' initiatives for its own – and those of elite economic interests - ends. Whilst the notion of 'openness' is certainly not a new term in the political economic lexicon, its current usage at the core of the Coalition's policy agenda is new. Here we see not only the high level push for *Open* Government Data, but also the *Open* Public Services policy and the new *Open* Government Partnership, as well as a more generalised political discourse about the benefits of "*openness*". A similar phenomenon is apparent in relation to the discourse of "transparency", which has become strongly intertwined with the push for "openness". Here, we have the formation of a *Transparency* Board, and the overarching *Transparency* Agenda under which all of these *open and transparency* policies and discourses find their home. What is interesting about this discourse of openness and transparency, however, is that whilst it draws on the discourse of two critical and potentially disruptive civil society interest groups – the 'open' production and access to information communities – it attempts to leverage the ideas produced within parts of these communities in order to enable a strictly neoliberal agenda. This agenda is one which aims to enable and inform the opening of capitalist markets (or, new spaces of capital accumulation) via opening (or, making transparent) data produced by public

bodies, at the same time as attempting to (re)generate consent and legitimacy for the political economic system via a discourse of transparency and openness.

Whether adoption of such a discourse was a purposeful, if clunky, strategy, it is not possible to say without further research. Such research would, however, likely prove difficult given current efforts to restrict access to internal discussions within government as discussed in section 8.3.3. However, whilst at a surface level such exhortations by government regarding their 'open' and 'transparent' intentions might draw some, perhaps less politically savvy, OGD advocates into the folds of the neoliberal state, it can also be argued that as a political strategy such obvious "ideational distortion" is rather weak. Much of the OGD community, with their feet integrated firmly into the broader networks of 'open' initiatives, are no strangers to the politics of discourse; for example, in relation to the fraught debates between the "free" and "open source" software communities (see Berry 2004). Therefore, naivety on such issues is likely to be limited, particularly amongst the more experienced advocates. As USA based OGD advocates, Yu and Robinson (2012), have recently articulated:

"'Open government' used to carry a hard political edge: it referred to politically sensitive disclosures of government information...Today, a regime can call itself 'open' if it builds the right kind of website – even if it does not become more accountable or transparent" (p. 178).

What is more concerning, however, is a form of “ideational distortion” that is apparent beneath the glossy surface of the government’s “openness” and “transparency” agendas. Here, it is possible to perceive a potentially less purposeful form of distortion which emanates from conceptual overlaps within the discourses and ideational frameworks of the political left and right. Whilst this form of distortion is perhaps less purposeful, the conceptual fluidity provides increased scope for insidious modes of co-optation of OGD advocates, whilst admittedly offering some limited scope for political opportunism for the more critically aware, particularly at the local level. Whilst a small number of the civil society interviews suggested an awareness of the conceptual distortions at this level, most did not; and, the nuances of such discourses can be difficult to unpack even for those that are critically aware. In particular, areas of concern include the following themes that arose in the empirical chapters:

- Citizen participation
- Improving public sector governance
- Fairness and equality in economic production
- Encouraging innovation.

For many civil society advocates, for example, ideas around OGD enabled citizen participation were expressed in terms of a bottom-up form of democratic and civic governance which, for some, was integrated with a form of critique of the hollowing out of the state. State based OGD advocates, on the other hand, tended more towards a neoliberal notion of participation in

terms of a consumer driven model of competitive, marketised public service provision. Further, the broader turn to a neoliberal form of 'localism' – or, 'the Big Society' - within centre-right thinking also has overlaps with more radical notions of participation, yet is routed within a firmly neoliberal logic of efficient markets and minimising the size of the state. In relation to these differing notions of informed participation, it is also important to point out that whilst increasing amounts of data have been released, with variable usefulness in relation to democratic processes, the Justice Select Committee inquiry: Post-Legislative Scrutiny of the Freedom of Information Act has simultaneously threatened access to the softer, and perhaps more insightful, information about political process at the core of government.

The overlap between some state-based advocates' discourse of the citizen-consumer model of public sector governance and the broader desire amongst OGD advocates to improve public sector governance also needs unpacking. Whilst both argue that OGD can improve public sector governance, and therefore there is an appearance of overlapping ideational constructs, in actuality the citizen-consumer model simply represents a deepening of the logic of neoliberalism, rather than any kind of radical change based upon egalitarian and democratic principles. Further, the perception of some advocates that OGD will enable more efficient information flows within the public sector, needs to be contextualised within the neoliberal push for efficiency through competitive processes, process monitoring and funding cuts. Whilst improved information flows would in the

short term undoubtedly be welcomed by many workers allowing them to focus on more meaningful tasks, the broader context suggests that any potential qualitative gains in productivity would be offset by the unremitting 'more for less' logic of the neoliberal efficiency drive.

The economic discourses around OGD are also both overlapping and divergent. For example, civil society advocates' discourse of "equality" in re-use has significant semantic overlap with the PSI industry's and civil servants' discourse of "fairness". However, the construction of the argument in terms of "equality" for PSI re-users through the production of a "data commons" which prevents monopolisation of PSI re-use based upon ability to pay, potentially leads us in a more progressive ideological direction than the discourse of enabling "fair" competitive markets aimed at restricting public sector participation. That those advocating "equal" re-use and a "data commons", also at times draw on the regulatory terminology of "non-discrimination" and "competition" points to an uncertain ideological terrain, which is open to significant ideological adaptation and absorption into the neoliberal project.

The arguments around innovation are also important here, since innovation is not a neutral process. Thus, whilst supporters of OGD across the political spectrum might advocate for OGD on the basis of innovation, there is a significant gap in the discourse about what sort of innovation they are talking about. For example, innovations in tools and resources that generate significant social benefit for large numbers of people or for

disempowered groups (e.g. some of the mobile weather services being developed for rural farmers in Africa) are more desirable than innovations which empower elite groups (for example, weather derivatives which aim to exploit uncertainty in weather systems for profit). That is, there is a difference between innovations which are geared towards private capital accumulation and those geared towards producing a social good.

The discourse of trust is also a significant area of potential distortion. Here we see the engagement of civil society and state based OGD advocates leading to trust-based and consensual relationships around the opening up of government data (Halonen 2012). These relationships, furthermore, are contextualised within a discursive environment in which enabling “trust” is a core issue for state based actors. As civil society advocates build empathetic ties with state based actors through their working relationships, there is a likelihood that this discursive environment might draw civil society advocates into more trusting relationships with those state based actors promoting a neoliberal agenda, and indeed could encourage them to absorb some of the neoliberal ideational constructs and begin to promote consent formation in relation to the neoliberal state.

These examples evidence that whilst some of the ideational constructs produced by some civil society OGD advocates have quite radical counter-hegemonic potential, the slipperiness of many of the concepts leaves such OGD advocates open to manipulation and co-optation by dominant interests and their representatives. Whilst it can appear that there is significant overlap

in the ideational constructs of OGD advocates across civil society, the state, and industry, in reality there are many deep ideological differences and long term intentions that might be made more visible.

What is also critical to appreciate is that it is this ideational milieu that acts as a framework and justification for the practical activity of developers, politicians, institutions etc (Bieler & Morton 2008, p. 118). Without clear cut distinctions, it is easy to imagine those ideational frameworks sympathetic to the neoliberal project coming to dominate the framework for action. Already this kind of process is visible in the framing of OGD re-use competitions by institutions such as the World Bank and the European Commission. It is also present in the types of needs developers are attempting to meet using OGD as a resource. As discussed in section 5.3, beyond those resources that better aim to understand political, economic and environmental processes, and which are often supported by the institutions mentioned above, many resources produced using OGD are geared towards a middle class, largely urban, market. This suggests that the broader context of market-orientated neoliberal capitalism is shaping the activities of developers who depend upon finding a market for their products (or, winning a competition) in order to ensure their financial stability. Thus, it is in the resources produced by OGD that the dominant neoliberal ideational framework that it exists within becomes tangible.

9.4.2. Absorption of Key Individuals into Hegemonic Institutions

A further, and more standard, process of co-optation is in relation to neoliberal institutions absorbing key individuals from the civil society OGD community. In his discussion of international organisations, Cox (1983) argues that absorption takes place not only in relation to the distortion of “potentially counter-hegemonic ideas” (p. 173), but also through bringing talented individuals from peripheral countries into international organisations such as the IMF, World Bank, OECD and ILO. This practice, he argues, has been a process of co-optation “in the manner of *trasformismo*” (p. 173). He argues that although individuals may enter the institutions with the intention of changing the system from within, in reality they are “condemned to work within the structures of passive revolution” (p. 173). Participation in such institutions, Cox (1983) argues, is only a useful counter-hegemonic strategy where,

“representation...is firmly based upon an articulate social and political challenge to hegemony – upon a nascent historic bloc and counter hegemony...The co-optation of outstanding individuals from the peripheries renders this less likely” (p. 173).

Whilst Cox and Paterson are discussing processes of *trasformismo* at the international level, similar arguments might be constructed regarding the OGD advocates’ absorption into institutions of the UK state and into “positions that ensure they will not be able to activate change” (Paterson 2009, p. 47).

Whilst some have claimed that the engagement between OGD advocates and state institutions marks a shift towards a more participative democracy, it is argued that given the context of *passive revolution*, the process of engagement is more representative of a form of *trasformismo* by absorption. The type of engagement that fits with such a pattern is visible across multiple arenas, including:

- The selection and invitation by state institutions of socially privileged, elite individuals to act as advisors on the Transparency Board and Local Open Data Group;
- The invitation to civil society OGD advocates to apply to be members of the new Data Strategy Board, to which they responded by creating a new Coalition for a Public Interest Data Policy and electing Chris Yiu of centre-right think tank Policy Exchange to be their representative;
- The invitation to OGD advocates to apply to be members of the new Open Data User Group which will advise ministers on opening core infrastructural data, to which a number of civil society OGD advocates responded although only one was appointed;
- The development of alliances and networks between OGD advocates and local authority technicians, policy makers and Executives.

These processes of engagement therefore evidence a seemingly restricted participative space for OGD advocates. Most obviously, the participative space opened to OGD advocates is one in which the neoliberal state dominates the selection of participant-advisors; showing a preference

for those OGD advocates that might be perceived to be the most ideal candidates for absorption into a technocratic policy development space. The structure of this participative environment, it is argued, has restricted the political maneuverability of OGD advocates and promoted the importance of individuals with more reformist intentions within the 'meritocratic' leadership structures of the civil society community. Further, whilst the invitation to participate on newly formed advisory boards has been opened to anyone, the resulting appointments evidence that the restrictive logic moving through the participative process has not changed.

Interestingly, the election of Chris Yiu to the Data Strategy Board by civil society OGD advocates connected to the new Coalition for a Public Interest Data Policy evidences a complexity in the processes of *trasformismo* at work in the OGD initiative. In this case, it appears that there has been a significant absorption of neoliberal interests into this civil society group, highlighting a multi-directional absorptive process at work in the development of the initiative. Whilst further research is needed, it appears that the civil society advocates who voted for Chris Yiu as their representative have internalised this restricted participative logic, offering an individual likely to smooth the process of absorption rather than offer any challenge to the neoliberal shaping of OGD.

Those in the liberal pluralist tradition might argue that these developments are still relatively positive, following the lead, for example, of Ruggie's (2002) analysis of the influence of the alter-globalisation movement

on the United Nations adoption of a corporate social responsibility policy. However, this uncritical participative environment – combined with the OGD advocates’ own tactic of restricting critical discourse (see section 0) – has significantly disabled any critically minded OGD advocates from being able to activate change. Further, the absorption of many of these individuals into a political environment shaped by elite interests (both within and outside the civil society community) renders the ability of those advocates with potentially counter-hegemonic tendencies unable to articulate the strong “social and political challenge to hegemony” that Cox (1983, p. 173) argues any participation must be based upon. Thus, whilst such engagement with high levels of government and supranational organisations might appear to be empowering to OGD advocates, in reality their position must be interpreted in the context of neoliberal *passive revolution* and strategies of *trasformismo* which aim to restrict the political manoeuvrability of OGD advocates both at the core and the periphery. Further, there is a significant risk that some of the individuals that have been engaging at the higher levels will become absorbed into what Cox describes as the *nebuleuse*:

“the unofficial and official transnational and international networks of state and corporate representatives and intellectuals who work towards the formulation of a policy consensus for global capitalism...something which has no fixed and authoritative institutional structure, but which has emerged out of bodies like the Trilateral Commission, the World Economic Forum meetings in Davos, the regular meetings of central bankers of the OECD,

IMF, World Bank and WTO, and the G7 and G8 summit conferences and their preparatory meetings” (Cox & Schechter 2002, p. 33).

9.5. Issues with the neo-Gramscian Analytical Framework

Whilst some of the obvious limitations with a strictly (neo-)Gramscian framework have been outlined elsewhere (e.g. Morton 2009) - for example Gramsci's emphasis on 'the Party' as the site for initiating counter-hegemonic projects - these more problematic areas of Gramsci's thought were not developed in the analytical framework and, thus, will not be addressed here. The specific neo-Gramscian framework drawn on in this thesis, however, whilst it has proved useful for thinking through some of the social forces and interests at work in shaping the OGD initiative, nonetheless has a number of limitations. Some readings of Gramsci, for example, would stress that conditions of *passive revolution* only occur during minimal forms of hegemony (e.g. Femia (1981)). In such conditions, one would likely see high levels of coercion from the state apparatus, due to the breakdown in consent. However, the present condition of neoliberal capitalist hegemony in the UK is not minimal to this extent. As argued above, consent in the UK is fractured amidst multiple political and economic crises; there is, therefore, a risk of further breakdown in consent dependent upon how these current crises play out. The work in this thesis therefore appears to suggest that processes of *trasformismo* are also engaged when there is a *threat* of

(further) breakdown in consent, particularly amongst those with the potential to lead the 'organic intellectuals' of a counter-hegemonic project.

Further, whilst Paterson (2009) argues that "*trasformismo* appears to capture a deliberate strategy to prevent popular participation and systemic change" (p. 47), the evidence presented in this thesis suggests that *trasformismo* is not always a deliberate strategy. Rather, it seems to occur more as a political process which unfolds in the complex and overlapping discursive terrains of multiple and opposing ideational constructs. The supposed 'post-ideological' context, in which there is fluidity in the interpretation of political concepts and little public dialogue about the political economic belief systems that are being drawn on by social actors perhaps goes some way to explain this. However, it is also recognised that for some of the more highly political and ideologically aware OGD advocates within the state more deliberate strategies of *trasformismo* might also be in play.

Further, it is important to reconcile the framing of *trasformismo* as being about blocking popular participation and the stated participative logic within the neoliberal interpretation of the OGD initiative. Recent developments in the neoliberal hegemonic project, including those discussed here, appear to have a more nuanced relationship with popular participation than a simple 'blocking' mechanism – and this appears to be partially the result of the conditions of *passive revolution* it finds itself in. This thesis has shown that it is important for neo-Gramscian researchers working in this field to engage with developing models and discourses of participation, including the

relationships between popular participation, elite-led participation and consent building efforts within global civil society.

9.6. The Scope for Counter-Hegemonic Political Agency in Conditions of Passive Revolution

There is a sense that the privileged backgrounds of many of the OGD advocates have left at least sections of the community relatively confident in their own individual and collective agency. Whilst much of their agency is funnelled through pragmatic strategies, there is a sense that some of those engaged in OGD are working in the longer term towards a much deeper and broader vision. Indeed, some of them appear to be engaging as “organic intellectuals” in an attempted “War of Position”; or, a form of activity which “slowly builds up the strength of the social foundations of a new state” (Cox 1983, p. 165). However, at times the transformative potential of OGD appears to be significantly over imagined. As Bieler and Morton (2001) argue, even if it is plausible that every action, for example the opening of a dataset, in some way modifies the historical structure,

“we would have to distinguish between changes of deep structural properties, that are important for the conditioning of action, and changes in micro-structural properties, which have no, or a less, significant impact on the framework of action” (p. 10).

Thus, OGD as a micro-structural issue is unlikely to have a significant impact on the overarching framework for action on its own. Indeed, as discussed

above, OGD might work to further embed the overarching framework of global neoliberal capitalism.

Nevertheless, whilst the structural conditions shaping the OGD initiative and its potential impact are strong, there is still room for those social agents with counter-hegemonic intent to engage as “organic intellectuals” within the historical process. This section will consider the scope for political agency in terms of the overall strategy and direction of those OGD advocates with the potential to engage as “organic intellectuals” in the development of a political project counter to neoliberal hegemony. It will then move on to raise particular policy issues around the OGD initiative that need to be considered given the conditions of *passive revolution* and *trasformismo*.

As argued by Cox (1983), participation in the institutions of the hegemonic system risks adaptation to the demands of that system unless it is in the context of a strong “social and political challenge” to the hegemonic project. This is a critical point. Whilst the notion of OGD itself might be counter to the hegemonic proprietary model of commercialised and restricted PSI that was developed during the last thirty years of neoliberalisation, this does not mean that OGD is essentially counter-hegemonic to neoliberal global capitalism. Indeed, as this research has evidenced some models and contexts of development for OGD might enable the deepening of the neoliberal hegemonic project. Whilst OGD advocates have been keen to participate and engage with the institutions of neoliberal capitalism, some amongst them have purposefully restricted their articulation of a strong “social and political challenge” to neoliberal hegemony and the misplaced

alliances and processes of co-optation within the initiative (see section 0). Instead, they have attempted to do precisely what Cox warns against, to change the system from within through participating in and collaborating with elite neoliberal institutions, but without the support of a well-articulated counter-hegemonic political agenda.

However, the position that those OGD advocates more critical of neoliberal capitalism find themselves in is not solely of their own making. The fragmentation of the left in the UK is a problematic context for any individual or group with tendencies counter to neoliberal capitalism to articulate a strong “social and political challenge” to neoliberalism in its various guises. It is proposed, therefore, that those OGD advocates hoping that OGD will disrupt the hold of neoliberal capitalism would be better placed to move away from alliances with dominant interests in order to work with others with similar long term social and political agendas, and to integrate OGD within the proposed policies and activities of such a counter-hegemonic political project. In order to enable such integration, however, a number of critical points would need to be embedded into the understanding of the potential of OGD. These include:

- Recognition that the information, industrial and agricultural economies are not separate phenomena, but are a single integrated economy (Webster 2006, p. 32-59) in which information (including OGD) is used to inform business processes which contribute to precisely those things many OGD advocates claim to be challenging through opening up data: inequality, injustice, corporate and state power. It is therefore

important to appreciate and be critical about the uses to which OGD might be put, and to develop regulatory frameworks that prohibit certain types of business models that are not in the public interest e.g. appropriating value from weather risk via financial instruments such as weather derivatives.

- Data are not the starting point within social relations; opening data will not lead to macro-level social change. The overarching historical structure, or “framework for action” – which is comprised of the intersecting domains of ideas, material capabilities and institutions - will ultimately shape how the OGD process unfolds. Whilst OGD might disrupt some aspects of the early neoliberal framework which emphasised the rapid expansion of Intellectual Property Rights and information commodification, the contemporary neoliberal framework is more nuanced in its understanding of the benefits of private and common property in the information economy. Further, as May (2008, p. 91) discusses, the dependence of ‘open’ licences on the Intellectual Property system means they should be understood as a form of “localised action”, rather than an indication of significant macro-level social change. Thus, it is unlikely that increasing interest in open production will lead to any significant disruption to the overall logic of neoliberal capitalism; it is perhaps just a ‘correction’ to the original logic. Simply opening more data will not change this, only embedding some form of OGD into a broader political project counter to neoliberal capitalism has the potential to do this.

- In order to articulate a strong “social and political challenge”, some conceptual clarity is required. The processes of “ideational distortion” discussed above leave OGD advocates that are counter to neoliberal capitalism vulnerable in conditions of “passive revolution”. The radical intent of their words is quickly lost as the words are adapted and re-constituted in a form that often makes them easier to digest for other social forces embedded within the ‘common sense’ of neoliberal capitalism. Vague, yet appealing, sound bites drawing on notions of ‘openness’ and ‘participation’ make for a disjointed and confusing political space, which is open to the more insidious forms of political manipulation by elite actors. In order to do this, it will also be necessary to challenge the ‘non-critical’ discursive norms that have developed within the OGD community.
- It is important to appreciate that generating consent for a hegemonic project is a function of civil society as well as the state. Too often OGD is constructed politically as a means of freeing data from the grip of the state, in order that civil society might step forwards and instigate transformative change. This is problematic as it betrays an uncritical interpretation of civil society actors, who might equally be working to construct and build consent for the neoliberal capitalist project.
- Any transformative political project counter to neoliberal capitalism must challenge the socio-cultural inequalities that are produced in competitive, unequal and class-based capitalist societies. In its present form the ‘meritocratic’ governance of the OGD initiative does

not do this, and in many cases it appears to be amplifying significant inequalities present within contemporary society. The challenging of such inequalities would involve positive deliberate action; not simply a discourse of toleration and merit.

Whilst the long term development of a counter-hegemonic project would be a broad-based, democratic and participatory process, and thus will not be addressed here, shorter term proposals are required to deal with the current co-optation of the idea of a public data commons by political and economic elite interests. The following policy proposals are thus put forward by the researcher:

- Advocating open licences for commercial re-use of Public Sector Information for private gain is problematic in its construction of the relationship between the state and the interests of private capital. Some argue that firms have already paid for data production via their corporate taxes, so should not pay again to re-use it commercially; others have argued that data should be perceived as a public infrastructure, like roads, requiring public investment and free re-use to promote economic growth and, resultantly, increased tax revenues. However, it is difficult to perceive most commercial re-use of OGD as little more than a subsidy to a range of private capitalist interests from the local and to the global. This is particularly so in the current context of decreasing corporate taxation rates and widespread tax avoidance strategies which the structures of global capitalism engender.

It is argued that the Open Definition is potentially flawed in its commitment to universal commercial re-use. Instead, the adoption of an adapted version of Kleiner's (2010) Peer Production Licence should be explored. This licence stipulates that re-use rights are only granted for commercial purposes on the condition that the re-user is "a worker-owned business or worker-owned collective; and all financial gain, surplus, profits and benefits produced by the business or collective are distributed among the worker-owners". The licence prohibits "any use by a business that is privately owned and managed, and that seeks to generate profit from the labor of employees paid by salary or other wages" (http://p2pfoundation.net/Peer_Production_License, date accessed: 06/12/12). It is also proposed that commercial re-use rights for public data should also be granted to publicly-owned organisations.

Any organisations or business that want to re-use public data commercially, but that don't fall within these criteria, could be charged at some rate (that might be reduced in particular cases through industrial policy) which takes into account the profitability and capital holdings of the firm. Only data available under the Peer Production licence should be made available, at a charge, to these other commercial re-users. Any surpluses earned by public bodies should be channelled into redistributive and democratic programmes.

- The incumbent and developing re-use markets around PSI should be thoroughly researched, and – as should happen in other industries

also – any practices which are deemed not to be conducive to the public good should be regulated against. Initial candidates for such regulation would be the growing markets which aim to exploit social risks around “homeland security, climate change, disaster management, energy and food security” (HM Government 2011c, p. 53); models of pharmaceuticals marketing and procurement in the NHS which might evolve to exploit recently opened prescriptions data and new NHS governance structures; further privatisation of public transport infrastructures via the new SmartCities initiatives; and, the development of public service markets including the opening of almost all public service provision in the UK to competition from the private sector.

- Significant investment is required in the potential democratic and civic space around OGD. This would require significant structural change, including cultural, institutional and regulatory changes; many of which would need to be implemented internationally to succeed. Investment in such a space should be found via increased corporate and individual taxation for large profits, high incomes and capital assets on the basis of a rebalancing of political economic power away from economic elite interests. Tools to prevent tax avoidance by TNCs should be developed, and if corporations are unwilling to pay increased taxes they should lose their right to operate. A range of institutional structures for democratic and civic participation informed

by public data, and other sources of information, should be explored including citizen juries and public service information institutions.

- It is evident that market orientated information products do not meet the needs of all in a society. Thus, publicly funded institutions, with regulated public service duties and accountable to the public rather than the state or market, would be encouraged to add value to data resources, producing content and software available under Peer Production licences. Important public service duties might be to develop techniques using public data and other data/information sources which enable citizens to visualise and engage with critical issues related to environmental, economic and other concerns.

9.7. Conclusion

The aim of this chapter, as discussed in the introduction, was to meet objective 5:

5. From the results of the empirical research, to draw on the neo-Gramscian analytical framework to provide a new conceptual understanding of the relations between the various social forces and interests attempting to shape the OGD initiative, and offer suggestions for potential counter-hegemonic responses to these developments.

The chapter drew on the neo-Gramscian framework outlined in chapter Chapter 3. It was argued that the OGD advocates' historical role was as yet

uncertain, primarily due to their complex relationship with neoliberal capitalism and the reproduction of unequal social relations within the community. This uncertainty is embedded in the underlying political tensions within the community, the lack of public articulation of those ideational frameworks more resistant to neoliberal capitalism within the community, and the tendency to build alliances with a range of elite political economic interests.

The OGD initiative was then discussed in relation to the historical structural conditions shaping its development. It was argued that the emergence of OGD onto the public stage was largely shaped by the opportunities presented to it by broader political processes. Further, the shaping of the OGD initiative within conditions of a neoliberal *passive revolution* has tended to contort the idea of OGD articulated by those advocates with egalitarian political tendencies into something counter to their original intentions.

The chapter then went on to draw on the neo-Gramscian concept of *trasformismo* in order to articulate a critique of the processes of “ideational distortion” and “absorption” present in the shaping of the initiative. In relation to forms of “ideational distortion”, a multi-level process was identified, in which at its most basic and obvious level, government was seen to adopt the language of ‘openness’ and ‘transparency’. However, a more insidious process was also perceived in which the discursive space of the political left and right was seen to be sharing the same concepts, thus confusing the

political terrain around OGD. In relation to the absorption of OGD advocates into hegemonic institutions, it was argued that the appointments and selection processes for OGD advisors across a number of Advisory Boards aimed to give the impression of participation and engagement, but in fact restricted the civil society advocates politically and allowed state based actors to intervene in the shaping of the 'meritocratic' leadership of the civil society community.

The potential for political agency counter to these processes of *trasformismo* was then discussed. It was argued that those OGD advocates aiming to challenge neoliberal capitalism should integrate OGD into a broader counter-hegemonic political project taking into account a number of critical issues. These issues include recognition of the integrated nature of the economy, the need for enhanced conceptual clarity, and the necessity for action to overcome social inequalities; and, greater awareness that data are not the starting point in social relations and that civil society is the site where consent is developed for a hegemonic project, not simply where hegemony can be resisted. Finally, a number of initial OGD policy suggestions were made that might be incorporated into the development of a political project counter to aspects of neoliberal capitalism. These included the application of a Peer Production licence to public data and charges for commercial re-use by private capitalist interests; regulation to prevent OGD re-use that is not conducive to the public good; significant investment in the potential democratic and civic space around OGD re-use; and, the development of

publicly funded institutions which add value to OGD to inform to the public sphere.

CHAPTER 10: CONCLUSION

10.1. The Politics of OGD in the UK: a neo-Gramscian Analysis

This thesis set out to understand better the social forces and interests that have been working to shape the UK's OGD initiative and to what ends. Whilst significant interest and activity had been generated for OGD within the UK, prior to undertaking the research many questions still remained unanswered (and unasked) about the developing logics supporting the initiative. Indeed, a review of the literature evidenced that although there were significant literatures on the background topics of re-use of PSI, access to information and 'open' production, there was very little on OGD. Further, much of the OGD literature available was reports and unpublished theses which had not been through peer-review. Given growing interest in OGD and the policy developments of the UK's new Coalition Government from 2010, it was perceived to be an important time to ask critical questions about the shaping of the initiative and the various interests involved. In particular, it was perceived as important to understand better how OGD might intersect with developments in the hegemonic neoliberal framework for action that had entered a period of deepening political and economic crisis.

The empirical data collected and analysed as part of this research has produced a number of insights that enable us to understand and conceptualise better the social forces that have been acting to shape the OGD initiative. In particular, it has illuminated the diverging interpretations of OGD by those who are active in this arena. It has evidenced a strongly neoliberal interpretation of OGD which is prevalent amongst some local and national policy makers who are supportive of OGD in the UK. For these advocates of OGD, opening up certain types of public data will enable the marketisation and privatisation of public services, enable the expansion of capitalist markets into new areas of exploitation of social risks such as climate change, and rebuild trust in the neoliberal state. Whilst these neoliberal advocates might be over imagining the potential of OGD for their agenda, those are their intentions nonetheless, and it is through this lens that policy developments in the UK are being constructed.

In addition to these state based advocates' constructs of OGD, the thesis also outlined some of the commercial pressures on the production and distribution of public data that are coming from all levels of business. These commercial interests want re-use of public data to be liberalised in order to generate open, competitive markets preferably devoid of public sector activity. Importantly, the research also evidenced variation in the civil society OGD advocates' ideational constructs around OGD. Whilst many of the civil society advocates had some underpinning interest in empowering citizen participation, improving public sector governance, promoting innovation and

generating equality in the domain of information production through instituting a data commons, they also had diverging political economic rationales. Core OGD advocates, for example, tended to exhibit more reformist political ideas and some peripheral advocates were relatively vague in their political intentions. However, there was a band of active peripheral advocates who had more radical intentions with regard to challenging neoliberal capitalism. Nonetheless, as a result of the non-critical discourse and the social inequalities prevalent within the community, these more critical ideas tended to be less established within the public sphere.

The neo-Gramscian framework, despite its limitations in some areas, was able to illuminate some of these processes and enable a better understanding of the social forces shaping the OGD initiative in the UK. Specifically, drawing on the neo-Gramscian framework, it was argued that new ideas, such as opening government data, are shaped by the historical structural conditions that they emerge into; only some ideas – or, more specifically, some interpretations of some ideas – are likely to be actualised within the historical process and form the basis of new forms of “integral state” (political and civil society combined) (Gramsci 2011c, p. 9 & 75). The historical structural conditions shaping the development of OGD in the UK are at the deepest level a capitalist mode of production, which in its contemporary condition in the UK is facing the converging political and economic crises of the neoliberal state and economic model. It was argued that due to an increased fracturing of consent for this hegemonic framework

for action and the elite-led efforts to move through this historic period, the neo-Gramscian concept of *passive revolution* is useful for thinking about current political conditions in the UK. Drawing on the empirical research it was argued that processes at work in the shaping of the initiative resemble strategies of *trasformsimo*, in which neoliberal 'political society' based actors through processes of "ideational distortion" and absorption and elevation of "leaders" within the OGD community have restricted the political maneuverability of potentially counter-hegemonic tendencies within the OGD community. However, it was also recognised that this restrictive environment was also being produced by the civil society community itself. In particular, these restrictions were being produced through the normalisation of a strategy of presenting a non-critical public discourse by the community, and through an exaggerated reproduction of unequal social relations which favoured a small class of socially elite, white men to be elevated within the 'meritocratic' structures of the community. These processes evident within civil society are an indication that, as argued by Gramsci, civil society is a critical site of hegemonic reproduction.

As stated above, it was nonetheless perceived that some of the 'organic intellectuals' active in OGD, were engaged as part of a longer term effort aimed at producing transformative social change based on egalitarian principles counter to neoliberal capitalism – in Gramscian terms a "war of position"; or, activity which "slowly builds up the strength of the social foundations of a new state" (Cox 1983, p. 165). It was argued that in order to

overcome the restrictive conditions of *passive revolution* and *trasformsimo*, these OGD advocates need to work with others to build a broad based political project counter to neoliberal capitalism which integrates OGD into its demands and activities. Such a project, it is argued, would need to develop an institutional and ideational framework – i.e. through regulatory and institutional development - in which shared resources such as OGD would be used for the public good, rather than for private gain at the expense of the majority. Initial suggestions for the development of such a framework were put forward in section 9.6.

10.2. Contribution to Knowledge, Implications and Limitations of the Research

The research undertaken thus makes a significant contribution to our understanding of the social forces and interests that have been working to shape the UK's OGD initiative and to what ends. This was accomplished both through the collection and analysis of empirical data that was previously missing from our knowledge of the field, and through the application of a neo-Gramscian analytical framework which enabled the social forces and interests struggling to shape the initiative to be illuminated.

This thesis aimed to be cross-disciplinary in nature, taking a framework for understanding developed within the disciplines of Political Science and International Relations, and applying it to the evolution of a policy domain relevant to Information Science. The thesis's contribution to Information

Science can therefore be understood as providing a deeper critical understanding of the political economic domain which structures the discipline and its subject of interest at the most fundamental levels. Whilst some individual researchers in Information Science, for example Schiller (2010), have argued for such approach, it is far from the norm within the discipline. In terms of the thesis's contribution to Political Science, this is the first utilisation of neo-Gramscian International Political Economy to draw insight into the complex political processes that have unfolded in one specific 'open' initiative as the struggles around 'open' initiatives have unfolded. In particular, it is the first neo-Gramscian analysis that considers the adaptation of neoliberal capitalism to the logic of 'openness'.

The thesis evidences a far more complex political economic space around OGD than is often assumed. It is, therefore, envisaged that the contribution of the thesis will lead to further research and the potential application of new ways of understanding within the field. In its concluding effort to think about strategies for collective political agency which aim to try and integrate OGD into a political project which resists neoliberal capitalism, the thesis aims to challenge those OGD advocates who claim OGD in its current state as a contribution to such a project. It is recognised that most of the policy suggestions will not be adopted by neoliberal institutions. The implications of the research are, therefore, dependent upon much broader historical processes than this research is able to influence.

Whilst the thesis has made a significant contribution to knowledge it does nonetheless have its limitations. In relation to scope, the thesis focused on the OGD initiative in the UK during the period 2010-2012. This single case was chosen in order to generate an in depth understanding of the social forces shaping the initiative in this particular moment; however, a comparative study would also have been a useful approach to take and might have further illuminated the political economic processes shaping the initiative. Further, even though a single case approach was selected, some of the issues raised by the study could only be briefly addressed given the range of other issues that needed to be covered. For example, the social relations within the 'meritocratic', networked communities around OGD would benefit more specific further analysis. Further, whilst the thesis aimed to better understanding the social forces and interests shaping the initiative, the researcher was only privy to information disclosed in interviews or available in the public sphere. Whilst a significant body of evidence was forthcoming from these two areas, and interview anonymisation it is believed aided the disclosure process, there are still likely to be many decisions and discussions that the researcher is not aware of that are relevant to the research aim. Finally, the research design prioritised interviews with those that were in favour of OGD; to also include some of those public servants challenging the OGD agenda would have added a different and broader appreciation of the complex struggles and tensions within the domain.

10.3. Recommendations for Further Research

It is thus proposed that there is a range of potential areas for further research emerging from this thesis. In relation to scope, it is proposed that significant research activity would be fruitful in terms of both research based in comparative studies analysing the shaping of OGD initiatives in different locales whether the comparison be at the level of city, region or nation. Further, it is proposed that a significant research project should be undertaken in the adoption of the OGD initiative by International Organisations (IOs) including incumbent IOs such as the World Bank and new IOs such as the Open Government Partnership, of which the UK was an early co-Chair. It is proposed that an analytical approach based in neo-Gramscian IPE would also be useful for better understanding processes at this level. It is also suggested that more in depth research on the socio-cultural structures of the OGD community and how they might be open to co-optation and takeover by dominant groups would be of interest. Finally, in relation to policy, it is proposed that significant research needs to be undertaken into the developing patterns of re-use of OGD and other public data. It is critical that new business models are understood and that recommendations for regulations against practices that are not conducive to the public good are developed and enforced. Further research also needs to be undertaken on how the OGD policy might be integrated within a political

project counter to the neoliberal project presently being asserted by political and economic elites.

10.4. Final Thoughts

This final chapter concludes the presentation of the research conducted during 2011-12 on the social forces and interests shaping the UK's OGD initiative. Through drawing on a neo-Gramscian analytical framework, applied to data collected via means of interviews with OGD advocates, observations of OGD events, mailing list and other online documentation analysis, it was concluded that there has been significant domestication of the OGD initiative by neoliberal interests. The neoliberal interpretation of the potential of OGD aims to leverage OGD to enable the UK government's agenda of public service marketisation and rebuilding consent for neoliberal modes of economic production and political governance, and is significantly counter to the more egalitarian and democratic ideas that are articulated by some sections of the civil society OGD community. Further, it is this interpretation of OGD that is being actualised and enabled within the OGD policy domain in the UK. It is argued that those civil society OGD advocates who reject these developments and wish to counter this appropriation ought to collaborate with others outside the OGD domain to build a broad based political project which incorporates OGD and fundamentally challenges the neoliberal project in favour of instituting a more egalitarian form of political economy.

It is proposed that, whilst recognising the limitations of the thesis and requirements for further research outlined above, the resulting insights and conclusions might be useful for those actively promoting OGD, practitioners aiming to better understand and make decisions in this domain, and those outside the OGD field who are interested in how data policy might intersect with other policy and regulatory domains.

In conclusion, it is argued that the aim of the research, which was to better understand the social forces and interests that have been working to shape the UK's OGD initiative and to what ends, has been met, and that a significant contribution to knowledge has been made, which may have implications for those active in both the practice and research arenas around Open Government Data, other 'open' initiatives and the broader political economic and socio-cultural contexts that such initiatives are developing within.

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Appendix 1: Licence Clauses of Open/Free/ Peer production licences

Non-commercial

The license allows others to re-use the work non-commercially

Share alike

The license allows others to re-use the work as long as if they make modifications to the work they license the new work using the same license terms as the original

Attribution

The license allows others to re-use the work as long as they credit the author

No Derivatives

The license allows copying and redistribution of the work but the work cannot be changed and must be whole.

Public Domain

All rights are waived by the 'owners' of a work and it is placed in the public domain

Copyfarleft/Peer production

Commercial re-use is only allowed by worker owned businesses or worker owned collectives, and all financial gain, surplus, profits produced by the business or collective are distributed amongst the worker-owners (See Kleiner 2010)

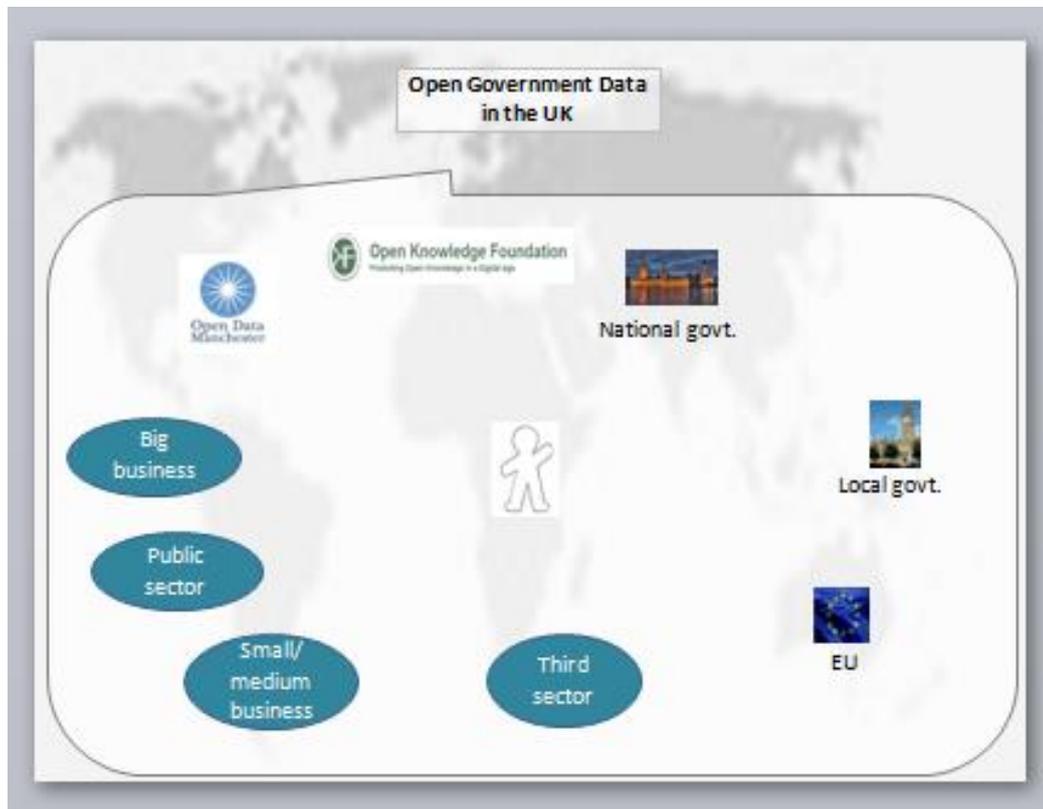
Appendix 2: Interviews

2.1 Interview guide used for semi-structured Interviews

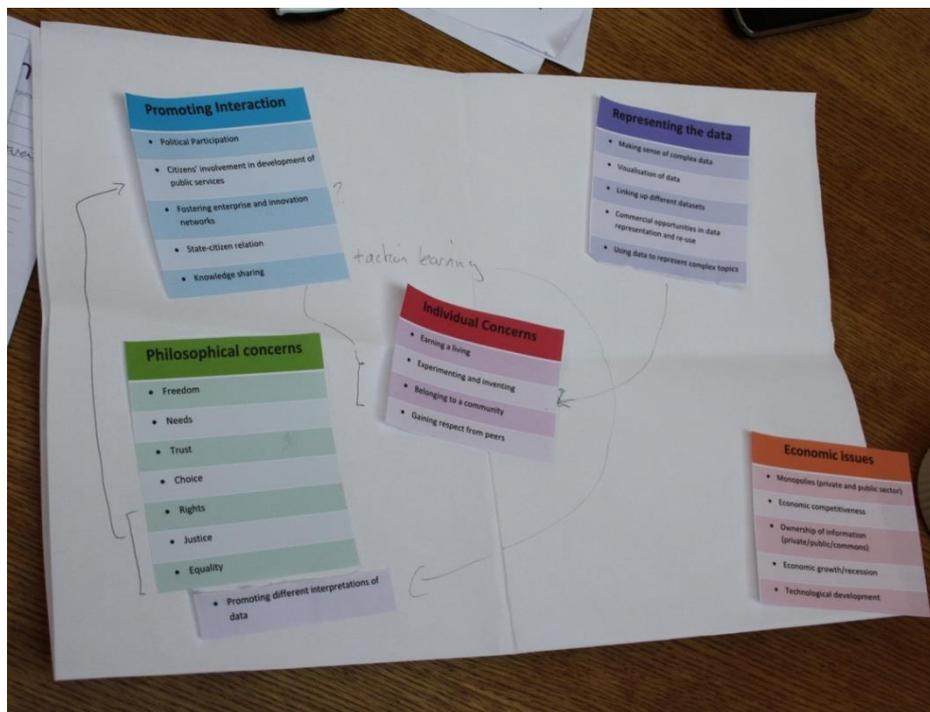
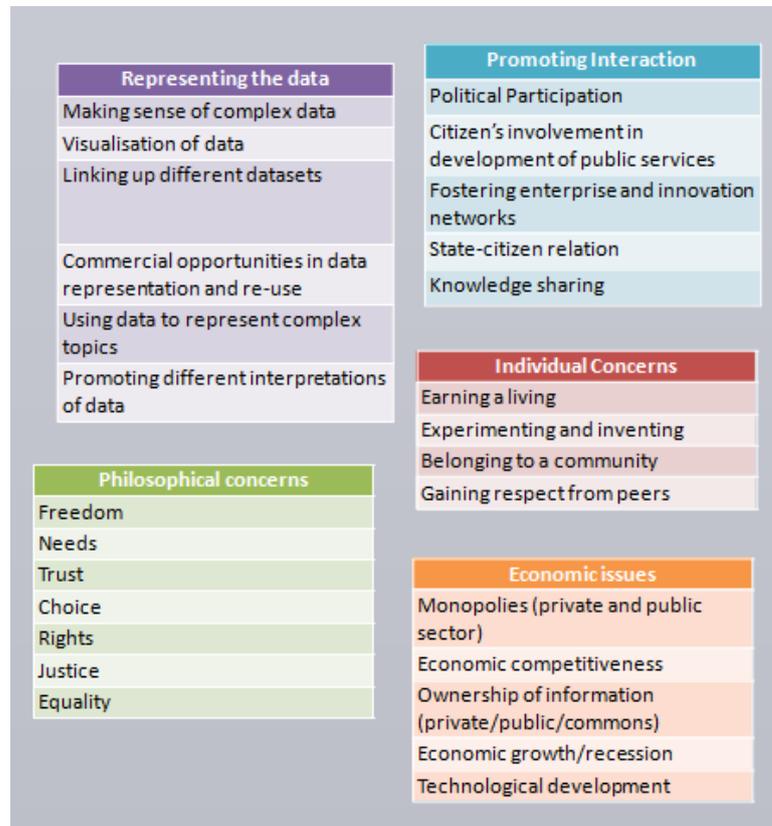
Areas for discussion
<p>Background</p> <ul style="list-style-type: none"> • When they heard about open data • How they got involved • Why they decided to get involved
<p>Build a map of the OGD networks from their perspective Discuss</p>
<p>Group relations</p> <ul style="list-style-type: none"> • How do they perceive the relations between groups/individuals in the network • Any tensions/differences? • What similarities/common purpose?
<p>Intentions</p> <ul style="list-style-type: none"> • What specifically they hope to achieve through their involvement • What are their broad intentions • How do they perceive the intentions of other groups in the network?
<p>Their ideas/reasons behind engagement</p> <ul style="list-style-type: none"> • Task - Ask them to order the cards to represent the broad ideas behind their engagement in open government data • Discuss – including differences between their ideas and others in the initiative
<p>Their activity</p> <ul style="list-style-type: none"> • Using map2 ask where they prioritise their actions - they can add priority areas not on the map <ul style="list-style-type: none"> • Discuss why they prioritise their actions in this sphere rather than others? • Would they like to get involved in activity in other areas? What prevents them doing so?
<p>Shaping the scope of openness and other areas Discuss the activity of groups trying to shape outcomes in the 'scope of openness' sphere:</p> <ul style="list-style-type: none"> • What groups and individuals do they perceive to be attempting to shape the 'scope' field – both pushing forward and challenging the OGD agenda? • How do the groups try and take on a leadership role? • Why do they think different groups are taking on a leadership role? • Discuss if there are areas of tension between those who take on a leadership role and others involved in the initiative - how these are handled <p>Discuss shaping of specific issues i.e. Public Data Corporation, commercial re-use, Open Definition, Open Government Licence</p>
<p>Relations between movement and the general public Place the 'public' card</p> <ul style="list-style-type: none"> • discuss the relations between the public and OGD movement
<p>Evaluation</p> <ul style="list-style-type: none"> • If not already covered - discuss their current evaluation of OGD at each of the three levels • Discuss if they think others in the movement share the same assessment
<p>Future</p> <ul style="list-style-type: none"> • How do they imagine the future with open government data • How are they planning to act to achieve it?

2.2 Tasks

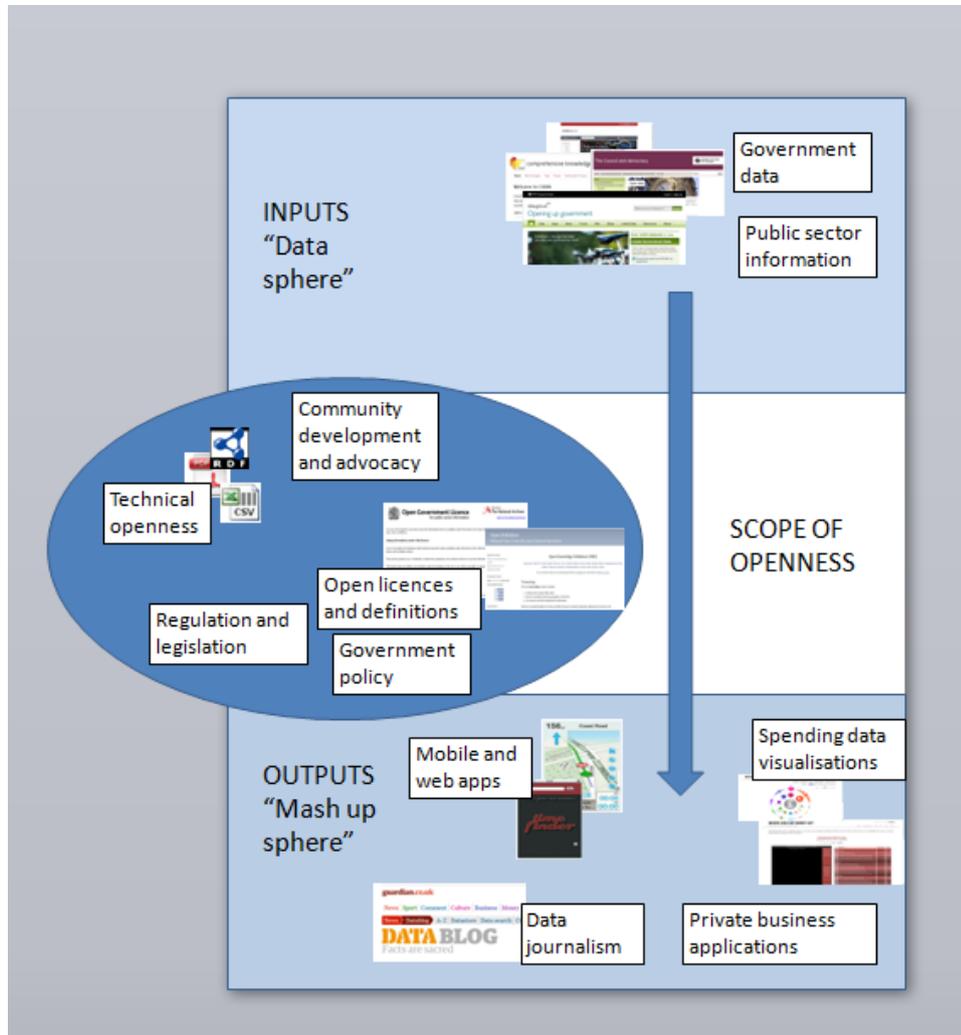
Task 1: Some interviewees (see appendix 2.3) were asked to draw a network map of actors engaged in the OGD initiative from their perspective



Task 2: Some interviewees (see appendix 2.3) were asked to order the cards to represent the broad ideas behind their engagement in open government data



Task 3: This process map was used with some interviewees (see appendix 2.3) to focus discussion on the activity of groups trying to shape outcomes in the 'scope of openness' sphere, and help them discuss which areas of activity they prioritised their actions in.



2.3 Interview details

Interviewee	Date of interview	Location of interview	Length of interview hh:mm	Structure of interview
1	27/01/2011	MMU	1:27	Semi-structured template, tasks (1,2,3)
2	01/02/2011	Interviewee's office	1:33	Semi-structured template, tasks (1,2,3)
3	10/02/2011	MMU	1:38	Adapted semi-structured
4	04/03/2011	Cafe	1:40	Adapted semi-structured, tasks (2,3)
5	21/03/2011	Interviewee's office	1:28	Semi-structured template, tasks (1,2,3)
6	21/03/2011	Interviewee's office	0:20	Adapted semi-structured
7	21/03/2011	Interviewee's office	1:07	Semi-structured template, tasks (1,2,3)
8	23/03/2011	Cafe	0:44	Adapted semi-structured
9	24/03/2011	Cafe	1:28	Adapted semi-structured
10	29/03/2011	MMU	1:04	Adapted semi-structured
11	18/04/2011	Interviewee's office	1:25	Semi-structured template, tasks (1,2,3)
12	28/04/2011	Cafe	1:47	Adapted semi-structured
13	10/05/2011	Interviewee's office	1:42	Adapted semi-structured
14	10/05/2011	Interviewee's office	1:24	Adapted semi-structured
15	11/05/2011	Telephone	0:31	Adapted semi-structured
16	13/05/2011	Telephone	0:53	Adapted semi-structured
17	26/05/2011	Cafe	1:30	Adapted semi-structured Interview not recorded by request, but notes taken
18	01/06/2011	Cafe	2:28	Adapted semi-structured
19	06/06/2011	Telephone	0:23	Adapted semi-structured
20	09/06/2011	Interviewee's office	0:53	Adapted semi-structured
21	04/07/2011	Telephone	00:21	Adapted semi-structured

2.4 Mailing list content analysis codes

2.4.1 Relationship code

Code	Description
Request for information	The primary objective of the message is to solicit information from list members
Sharing information with the list (in response to request)	The message provides information to list members either in response to a question, or as a factual contribution to a discussion
Sharing information with the list (unsolicited)	The message provides information to the list without any prompt from prior contributions
Community discussion	The message is part of a discussion that involves more than simply sharing information i.e. it is more subjective or analytical
Acknowledgement of contribution	The message is to thank another contributor for their input
New community project started/suggested	The message aims to get others involved in a new project to be developed by the community
Request for contributions to the community	The message aims to get others to make a contribution to the community i.e. writing a blog post, coding an application etc
Agreement to contribute	The message is a contributor agreeing to take on some form of activity
New project development	The message is part of a discussion aimed at developing a community project i.e. an event, a website etc
Introduction	The message is a new member introducing themselves to the list
Other	The message does not fit into one of the above codes

2.4.2 Topic code

Code	Description
PSI industry	The message was about the incumbent public sector information industry
OGD activity	For example messages about new projects, conferences, competitions about OGD or a related topic e.g. gov2.0, open government, access to information. Declarations of support for OGD. All messages coded as OGD activity were positive about OGD. State based activity on OGD was coded as policy/legal
Strategy	Messages about how the advocates were going to achieve their objectives, including working out arguments to convince public bodies
OGD issues	Messages that dealt with any issues and problems faced by the advocates, critique of OGD, barriers to OGD, discussions about the context that OGD exists in
OGD literature	Links to blog posts, research, reports, bibliographies, research being undertaken on OGD. Messages about broader literature that has informed advocates
Developing community's position	Messages and discussion about what the advocates are trying to achieve Assertions of the community's position (e.g. telling another contributor their licence isn't open or asking them to add an open licence to their work)
Evidence building	Messages aimed at gathering evidence in support of the community's position e.g. figures about potential economic impact
Policy/legal	Any information provided or topics discussed about policy or state activities
Mapping the initiative	Discussion about projects aimed at mapping the spread of OGD initiatives, policies, projects etc
Community Communications	Discussion about newsletters, deciding how communications should be done, requests for blog posts, website development, spreading the word, network development, looking for contacts, campaigning, sub group formation, new meet-ups
Governance	Discussions about the governance of the OGD community or about governance more broadly i.e. liberalism, democracy, state governance
Technical	Discussion about formats, code, systems, programmes etc
Information management	Discussion about quality, provenance etc

Appendix 3: The £6 billion claim

A critical piece of 'evidence' in the argument for OGD has been the claim that opening up public data would produce a £6billion gain for the UK economy. This figure was produced by Rufus Pollock, and has been cited in government consultations (HM Government 2012a, p. 17), Conservative Party Manifestos (2010a; 2010b) and OGD advocates. Although observations of OGD events suggest that some advocates are skeptical of the claim, and are wary of making the argument for OGD in potentially dubious economic terms.

However, analysis of Pollock's work suggests his figure of £6 billion is much exaggerated even by his own admission. This analysis will not go into the detail of Pollock's production of the equation behind the calculation or the methodological approach adopted, rather it will simply highlight using Pollock's own arguments that the £6 billion figure is exaggerated. In his 2009 paper Pollock produces an equation for calculating the "welfare difference between average and marginal cost regimes" where welfare is in relation to government funds. The equation produced is:

$$\text{Gains} = (2/5)F\lambda\epsilon$$

Where:

F = revenue under average cost and in the UK is estimated at £400-550m

ε = Elasticity of demand (% increase in demand for 1% reduction in price)

and is estimated at:

Low: 0-0.5 (Midpoint = 0.25)

Medium: 0.5 – 1.5 (Midpoint = 1.0)

High: 1.5 – 2.5 (Midpoint = 2.0)

λ = Multiplier (the likelihood of spill over welfare gains)

Low (no effect): 1

Medium: 1-3 (Midpoint = 2)

High: 3 – 9 (Midpoint = 6)

In Pollock's 2009 paper he argues that in terms of estimating the elasticity of demand, the "evidence is currently limited and often displays quite a range" (2009, p. 36); however current evidence suggests it is > 1 for PSI products and therefore, "medium or high range would be the most appropriate" choice. Similarly, for the estimation of the multiplier, Pollock argues that there is only theoretical and a little anecdotal evidence that a multiplier is necessary, and any assignment of a multiplier would be "substantially speculative" and exactness would be "clearly impossible" (p. 39). Therefore, he argues, for robustness all results should be checked using a multiplier of 1 (no effect), to ensure that it is "not driving the results" (p. 39-40).

In his critical 2010 paper, which the government and OGD advocates have used to base their £6 billion claim on, Pollock references the earlier 2009 paper for his choice of selection of values for elasticity and the multiplier - "For λ and ϵ there is a summary in Pollock (2009) of likely ranges" (2010, p. 2) – prior to stating that his chosen values are therefore:

- Upper estimates: $\lambda = 8$ and $\epsilon = 3.5$ (Very high multiplier and above high range elasticity)
- Middle range estimates: $\lambda = 5$ and $\epsilon = 2$ (High multiplier and high elasticity)

These figures produce estimated welfare gains of:

- Upper end: \$4.5bn-6bn a year
- Middle range: \$1.6-2bn a year

Therefore, the £6 billion figure is the upper estimate in a calculation based on highly questionable input figures. No reference is made to the reasoning behind the values assigned to these “highly uncertain” parameters (2009, p. 40). Further, they appear to counter Pollock’s own advice in his 2009 paper which suggests that elasticity is probably in the middle to high range, and since the multiplier is “speculative” it should always be calculated at $\lambda = 1$ as well as any assigned value in order to ensure “robustness”. Under these conditions, estimates become reduced to:

- Upper estimate: (using midpoint values $\lambda = 6$ and $\epsilon = 2$)
= £1.9-2.6bn a year welfare gain
- Lower estimate: (using midpoint value $\epsilon = 1$ and “robustness” check $\lambda = 1$)

= £160-220m/year welfare gain

Further, these figures also appear to be based upon tax revenue generated from commercial re-use, and therefore problems with corporate tax revenue collection in the UK should also be factored into the calculation. Neither do the figures consider the type of economic growth that such welfare gains might be predicated upon, for example, is it that potential for spill over is highest in the financial derivatives markets, and if so is this actually socially beneficial?

Nonetheless, these are not insubstantial economic welfare gains; however, they are significantly different from the figures produced by Pollock (2010) which have been used as evidence in the case for OGD by both government and civil society advocates. Unless an explanation for the choice in input figures is forthcoming, it is perhaps better to consider the £6 billion figure as part of a process of OGD myth building within both the civil society OGD community and the government, rather than the product of “independent economic analysis” as it is often claimed (Vickery, 2011, p. 27; also The Conservative Party 2010b, p. 69).

